National Park Service
U.S. Department of the Interior

Boston National Historical Park
Charlestown Navy Yard



Charlestown Navy Yard Historic Resource Study

Volume 1 of 3

2010

Front Cover:
This aerial photograph of the Charlestown Navy Yard was taken by Airphoto of Wayland, Mass., on Apr. 10, 1971. At this time, the Charlestown Navy Yard was still a fairly busy facility, with all three dry docks being occupied and a variety of ships found at the yard's piers. The LSD at Pier 7 West is possibly USS *Pensacola* (LSD-38), commissioned at the yard in March 1971. *BOSTS-13344*

CHARLESTOWN NAVY YARD HISTORIC RESOURCE STUDY

Recommended: Martin Blatt 8/9/10

Chief of Cultural Resources/Historian — Date
Boston National Historical Park

Approved: [signature] 8/10/10

Superintendent, Boston National Historical Park — Date

Author's Note

The bulk of this report was completed during 2008 and reflects developments and conditions as of that year. Certain subsequent developments, however, have been incorporated into the text relating to individual resources.

Charlestown Navy Yard Historic Resource Study

by

Stephen P. Carlson

Volume 1 of 3

Produced by the Division of Cultural Resources
Boston National Historical Park
National Park Service

U.S. Department of the Interior
Boston, MA

2010

Boston National Historical Park
Charlestown Navy Yard
Boston, MA 02129

www.nps.gov/bost

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Library Cataloging-in-Publication Data

Carlson, Stephen P., 1948-
Charlestown Navy Yard historic resource study / by Stephen P. Carlson.
v. cm.
"Produced by the Division of Cultural Resources, Boston National Historical Park, National Park Service."
Includes bibliographical references and index.

1. Boston Naval Shipyard (Boston, Mass.)—History. 2. Charlestown Navy Yard (Mass.)—History. 3. Boston National Historical Park (Boston, Mass.). 4. Historic buildings—Massachusetts—Boston. 5. Boston (Mass.)—Buildings, structures, etc.
I. Boston National Historical Park (Boston, Mass.). Division of Cultural Resources. II. Title.
[VA70.B68C37x 2010]

Statement Of Significance
Charlestown Navy Yard

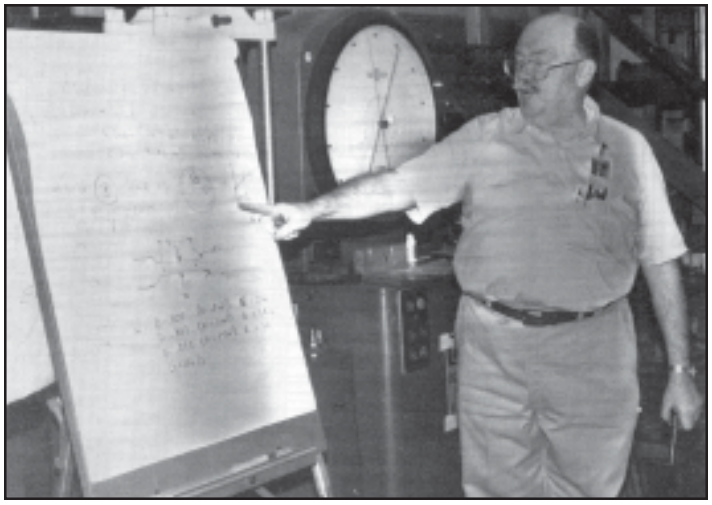
The Charlestown Navy Yard is significant for its role in the construction, repair, and servicing of vessels of the United States Navy for the entire period of its existence from 1800 to 1974. It is also significant as the site of one of the first two naval dry docks in the United States, the location 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, civil engineering, and technology.

Dedication

This study is dedicated to the memory of

Laurence M. Blanke, Jr.
(1937-1995)

Larry, a well-respected and valued employee of Portsmouth Naval Shipyard, was a good friend who freely shared his knowledge of how naval shipyards worked.



Larry Blanke explains the principles of one of the Portsmouth Naval Shipyard's Materials Engineering Branch's testing machines to a group of visitors in this image which appeared in the Jan. 21, 1994, issue of Portsmouth's employee newspaper, *The Periscope*.

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Illustrations & Style

THE VISUAL RECORD of the Charlestown Navy Yard is extensive. There is no way of determining how many official photographs of the yard were taken, let alone those by private parties. While the Boston Naval Shipyard Photo Collection in the park archives includes over 70,000 negatives, prints, and transparencies, this is probably less than a tenth of those taken. This is made clear through the only available log for the Photographic Labratory which reveals that in 1972 alone it exposed 17,366 images and the fact that perhaps only one out of ten images in the yard's internal newspaper are found in the collection.

This visual record, along with contemporary photographs taken for this and other studies, form an important element of this Historic Resource Study (HRS). Thus, this report contains the largest collection of images associated with the Navy Yard ever contained in a single publication. It is also the first document to reproduce color images in color.[1] Because of the extensive number of illustrations, the traditional numbering and listing of illustrations has been omitted.

The photographs and drawings have been presented for their informational content, not as archival documents. Thus, they have been cropped to focus in on the main subject or to highlight buildings in the background of larger images. While the word "detail" is generally used in the case of architectural drawings or other plans, the cropping of other images has not been noted. The full digital versions of all images scanned for this report will eventually be available to researchers through the park's web site.

The majority of the photographs are organized into galleries arranged either by time period or subject throughout both the text and appendixes. While most galleries relate to the physical development of the yard, they also provide material of value to other interpretive themes. All photo galleries have colored backgrounds to distinguish them from the text.

The vast majority of images have come from those in the Boston Naval Shipyard Photo Collection. Most of these images originated with the U.S. Navy.[2] These items are credited here by the National Park Service catalog number for the lot including the image (BOSTS-xxxxx). In the few instances where a photograph has been accessioned but not yet cataloged, the accession ("acc.") number is used. Because this collection was assembled by park curators based on subject content and at different times, the same image is sometimes found in several different lots. Similarly, related images were unfortunately separated into multiple lots, often with other items which are not part of the same series. Images found only in the yard's newspaper are cited by the catalog number of the newspaper (BOSTS-13352).

Images from official Navy photographic collections held by either the Naval Historical Center (NHC) or the National Archives and Records Administration (NARA) are cited by the acronym of the institution and the image number or other location indicator. Images from other institutions or collections are cited by the name of the institution or collection.

Post-1975 images have yet to be accessioned into the formal park collection. These are credited as "BNHP" and will show the photographer when known. Images taken by the staff of the Olmsted Center for Landscape Preservation (OCLP) in conjunction with the Cultural Landscape Report for the yard have been credited as "OCLP." Images acquired from private individuals or web sites are credited as appropriate. Digital copies of all such images have been included in the HRS project file, although for copyright reasons they are not available to non-NPS researchers.

Many of the original photographs (prints but not negatives) in the park collection are stamped "Official Photograph – Not to be Released for Publication" or bear formal security classification markings. Because all of the images are over 30 years old, it has been assumed that all such classification markings and restrictions no longer apply.

In some cases, the dates found in collection catalog records will differ from those found here. This may be because the date in the catalog record is that on which the yard's photographers made the copy negative or print (about a third of the collection was cataloged under guidelines which emphasized the date of the physical item rather than that of the item's content) or because the research for this study has enabled photographs to be more closely dated than had been possible at the time of their original cataloging. In all cases of discrepancies in dates, those found in this HRS should be considered definitive.

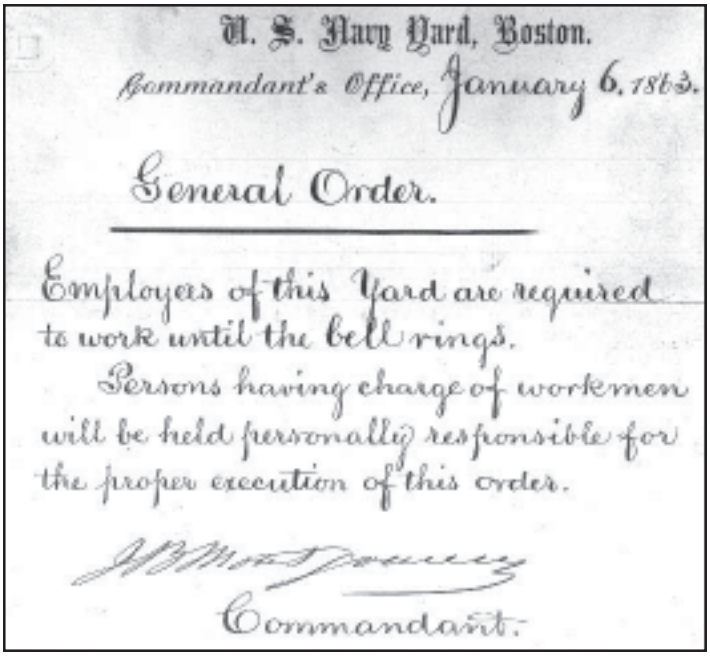
Nomenclature

This study primarily uses the term Charlestown Navy Yard to refer to what was officially first the U.S. Navy Yard, Boston (or Boston Navy Yard) and, after November 1945, the Boston Naval Shipyard. Although it has been widely assumed that the official name had been Charlestown Navy Yard prior to the 1874 annexation of Charlestown by the City of Boston, the historical record indicates that was not the case, although the designation was used both informally and semi-officially throughout the yard's history.[3]

[1] The earliest color image of the Navy Yard is an 1800 watercolor of the area at the time of its acquisition. The earliest known color photograph is an aerial from 1945. While color photographs were taken at other navy yards, most notably New York and Mare Island, during World War II, there are few official color images of the Charlestown Navy Yard before the early 1960s.

[2] For a discussion of the Navy Yard's in-house photographic operation, see Barbara A. Bither and Boston National Historical Park, *Charlestown Navy Yard*, Images of America (Charleston, S.C.: Arcadia Publishing, 1999), p. 9-10.

[3] For a more detailed analysis of the yard's various names, see Stephen P. Carlson, *What's The Name*, July 12, 2004. Most other navy yards also had dual names, one based on its official location (e.g., New York) and the other on its actual geographic location (e.g., Brooklyn).



U. S. Navy Yard, Boston.

Commandant's Office, January 6, 1863.

General Order.

Employers of this Yard are required to work until the bell rings.

Persons having charge of workmen will be held personally responsible for the proper execution of this order.

Commandant.

This Jan. 6, 1863, order clearly illustrates that the yard's official name was U.S. Navy Yard, Boston, long before Charlestown became part of the city. *BOSTS-9031*

Style

During the 174-year existence of the Charlestown Navy Yard the spelling of many terms evolved. In particular, compound words have gone from two separate words (ship house) to words separated by hyphens (ship-house) to single words (shiphouse). For consistency, except in direct quotations from contemporary sources, the current form has been used. In most cases, the Glossary (Appendix D) provides earlier or alternative forms of words. Plural designations of buildings, shops, etc., omit any possessive apostrophe often found in contemporary sources (e.g., Joiners Shop, not Joiners' Shop).

The capitalized term "Navy Yard" refers to the Charlestown Navy Yard. For clarity, names of military services, government departments and agencies, and bureaus within such departments are capitalized even if in shortened form. Similarly, titles of senior positions in the Navy Yard and in the Navy Department are capitalized (e.g., Commandant, Secretary of the Navy), as are senior government officials such as the President of the United States. The word "and" in institutional names has generally been given as an ampersand (e.g., Bureau of Yards & Docks).

Names of buildings, facilities, shops, etc., in the Navy Yard are generally those applied to them at the time under discussion. Names of such facilities are capitalized, as are the words "Building" and "Quarters" when used with their number or letter as a name. Building number references refer to the current building numbering system, adopted in 1868.

Ship names use conventional italicized form rather than the all-capital form found in official sources, except in quotations. Names of Navy ships are followed by their hull numbers in parentheses. These numbers are those borne at the time of mention, or, for pre-1920 ships, those assigned when the official nomenclature system was implemented in that year. Thus, USS *Constitution* is followed by her hull number in references to her prior to September 1976, when the number was cancelled.

Hull numbers follow the conventional publication style of using a hyphen between the type designation and the number (e.g., IX-21) rather than the original official form without a space (IX21) or the current form with a space between the two elements of the classification (IX 21).

Military ranks shown are those held by the individual at the time of mention and use conventional form rather than the all-capital form often used in official documents. Designations of services (USA, USN), reserve status (USNR), specialized corps (CEC, MC), etc., often found after an officer's name are omitted. In most cases, the context will clearly indicate if an officer belonged to a service other than the Navy.

Abbreviations

Abbreviations used throughout this report are generally spelled out in full the first time the terms are used in each chapter. The exception to this rule involves the standard abbreviations for naval ranks used in captions and ship prefixes (e.g., USS). In general, modern style of omitting periods within abbreviations has been followed. Most specialized abbreviations and acronyms are also defined in the Glossary (Appendix D).

The following abbreviations appear in footnotes and photo credits:

BNHP	Boston National Historical Park
Cat. No.	Catalog No.
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
LC	Library of Congress
NARA	National Archives & Records Administration[4]
NHC	Naval Historical Center[5]
NPS	National Park Service
RG	Record Group[6]
Stat.	U.S. *Statutes at Large*
TIC	Technical Information Collection

[4] Unless otherwise noted, references to NARA RG 181 are to the Northeast Region (Boston) in Waltham, Mass.

[5] In December 2008, as this report was being completed, the Naval Historical Center became the Naval History & Heritage Command.

[6] Sub-groups are identified by decimal numbers, e.g., RG 1.4.

Acknowledgments

THE AUTHOR'S INVOLVEMENT with this Historic Resource Study (HRS) began in mid-2001 when he was asked by Boston National Historical Park Chief of Cultural Resources/Historian Dr. Martin Blatt to prepare a "brief" historical summary of the Charlestown Navy Yard intended to serve as background and context for chapters of the HRS then being prepared by others. Once underway, the project took on a life of its own, and, over time, the author assumed responsibility for the preparation of the entire document. Throughout this lengthy process, Marty has provided constant guidance and support. The author has also benefited from the input of previous park historians Dr. Paul O. Weinbaum and Louis P. Hutchins.

A study of this nature cannot be undertaken without the assistance of others. In particular, Museum Specialist Phil Hunt was most helpful in dealing with items in the park's museum collection. Also providing valuable input were Historical Architect Bill Barlow and Park Planner Ruth Raphael. The staff of the Olmsted Center for Landscape Preservation (OCLP), especially Margie Coffin-Brown, Chris Stevens, and Lee Terzis, have made valuable contributions as the original OCLP chapter for this study morphed into a stand-alone Cultural Landscape Report for the Navy Yard. Consultant Jane Carolan made significant contributions with her original analysis and assessment of character-defining features and architectural integrity, as well as with her existing conditions photography.

The author is also indebted to all of his current and former colleagues who over the years have, without realizing it, helped him to obtain a greater understanding of the workings of the Navy Yard, both as an active military installation and as a civilian mixed-use facility. Special thanks are due to Marcy Beitel, Orville Carroll, Arsen Charles, William Daly, Eric DeLony, William Foley, Kevin Foster, Victor Jorrin, Alisa McCann, Edward Melanson, Steven Pendery, Dave Rose, Peter Steele, Deborah Szarka, and Nancy Tansino. Contract photo cataloger Barbara A. Bither's detailed work in processing the park's extensive photograph collection made dealing with that key resource immeasurably easier.

The author would also like to thank the following individuals associated with other government agencies for their assistance: David Carlson (BRA); Marla Cumming, Larry Mammoli, and Dolores Fazio (BRA/EDIC); Joan Gearin (National Archives & Records Administration, Waltham); Amy Probsdorfer (Naval Facilities Engineering Command, Norfolk); Scott Kavanagh (Navy Fleet Support Office Boston); James Dolph and Andrea Pierce (Portsmouth Naval Shipyard); James Morocco, Sally Rigione, Rachael Sawyer, and Stephen Umbrell (U.S. Army Corps of Engineers); and Robert M. Browning (U.S. Coast Guard). Also providing information and assistance were Kate Lennon Walker and Sarah Watkins of the USS Constitution Museum.

Kyle Zick of Carol R. Johnson Associates coordinated the preparation of the existing conditions maps. Paul McGinley of McGinley Kalsow & Associates provided access to the firm's files on work done at the Navy Yard for the BRA and located the original Loammi Baldwin drawings of Dry Dock 1 at the University of Michigan. Nancy S. Seasholes of Boston University made available drafts of her book dealing with the subject of landfill in Boston. Jack Glassman of Bargmann Hendrie + Archetype made available slides and other materials dating from his time at the BRA. Captain Richard Leonhardt, USN (Ret.), provided access to his collection of color slides of the Navy Yard from the late 1950s and early 1960s. Other individuals who have supplied photographs have included Richard Chase (material from the late Earle M. Chase and Warren Fuller), Bradley H. Clarke (material from the late Charles A. Duncan and Foster M. Palmer), John P. Harris, Joseph Lombardi, Bob Morales, Robert Norville, and Paul M. Paulsen.



This seal for the Boston Naval Shipyard was adopted in late 1957 and was based on the winning entry in a contest sponsored by the *Boston Naval Shipyard News*, the Navy Yard's employee newspaper. It features USS *Constitution* and a modern destroyer flanking the Bunker Hill Monument, surmounted by a shield containing the founding date of the yard.

BOSTS-9128

Chapter 1

Management Summary

THIS HISTORIC RESOURCE STUDY of the Charlestown Navy Yard has been undertaken to fulfill a need for baseline information on the Charlestown Navy Yard unit of Boston National Historical Park. Because that unit includes only a portion of the historic Boston Naval Shipyard, which is a National Historic Landmark (NHL), this study addresses the entire shipyard property, albeit with special emphasis on the portion included within the national park.

National Park Service Director's Order 28 (DO-28) defines the historic resource study as follows:

> A historic resource study (HRS) provides a historical overview of a park or region and identifies and evaluates a park's cultural resources within historic contexts. It synthesizes all available cultural resource information from all disciplines in a narrative designed to serve managers, planners, interpreters, cultural resource specialists, and interested public as a reference for the history of the region and the resources within a park. Entailing both documentary research and field investigations to determine and describe the integrity, authenticity, associative values, and significance of resources, the HRS supplies data for resource management and interpretation. It includes the preparation of National Register nominations for all qualifying resources and is a principal tool for completing the Cultural Landscapes Inventory and the List of Classified Structures. The HRS identifies needs for special studies, cultural landscape reports, and other detailed studies and may make recommendations for resource management and interpretation.
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> HRSs will vary in scope depending on management needs. Relevant information readily available in other sources need not be included except by reference. Additional HRSs are appropriate to address themes, resource types, and other subject matter not originally covered. Although the HRS is interdisciplinary in character, the principal investigator is usually a historian.[1]

While a full administrative history of the creation of Boston National Historical Park has yet to be prepared, the Scope of Work for this study is probably correct in its assertion that "the Charlestown Navy Yard appears to have been an add-on to legislation that was really focused on Boston's role in the American Revolution." The Scope of Work goes on to define the specific purposes and needs that this study is intended to fulfill:

> Without a strong lead from the legislative mandate, park planning and research efforts focused on technological, architectural, and operational history. Draft historic structures reports were produced on many individual buildings, but nothing ever looked at the existing architecture in a comprehensive way. Several massive volumes were written on the "history" of the site, but these again focused on operations and ships built at the yard and never addressed the surviving resources, their treatment, and significance. Moreover, these reports examined individual shops, generally disregarding the connections and relationships between buildings and operations. This approach was probably necessary to get the Park up and running. However, the result is a lack of scholarly information relating to the cultural resources themselves. There is no comprehensive document for the site. Most of the reports prepared before 1985 are out of date.

The park's General Management Plan for the Charlestown Navy Yard (revised 1987) states that all surface areas and structures within the National Historical Park will be included in a "historic zone." The primary preservation goal in this area is to maintain the "20th century industrial character of the Navy Yard as it existed in 1973 prior to transfer to the National Park Service." And yet, the yard today bears only marginal resemblance to the industrial facility run by the United States Navy. In fact, since the Navy's departure 25 years ago, whole buildings, along with stairs, covered walks, and ephemeral additions, have been removed, roadways inserted, landscape features altered, and contextual fencing and barriers eliminated. The park is no longer preserving the "industrial character" present in 1973, but a cleaned-up version of what the yard once was. Moreover, the general experience for visitors is not cohesive or easily understandable. For example, Pier One is perceived as a large parking area devoid of shade and seating for the public—not as an access corridor or staging ground for ship repair and servicing. The National Register Nomination and Landmark documentation must be revised to reflect the actual status of preservation at the site. Once significance is assessed and revised, it will serve as a jumping off point for the impending revision of the General Management Plan for the Charlestown Navy Yard. There is general recognition that the Navy Yard is nationally significant and deserves recognition. This document will help the park understand that significance better and provide needed information for future resource management decisions.

A new level of scholarship is needed to assess site architecture, the cultural landscape, collections, and the redevelopment areas. Over the past few years, there has been an effort to shift site interpretation (in the NPS managed areas of the yard) towards telling the story of the working Navy Yard. The technical innovations that happened in Boston are highlighted for those visitors that actually take a Navy Yard walking tour (a very low percentage of visitors) and several new waysides highlight specific features of the area. However, most visitors get off a bus and snap a picture of USS *Constitution*. Perhaps they take a tour of the ship and maybe even board USS *Cassin Young*. Very few see the park's exhibit about the Navy Yard and even fewer venture outside of the iron gates to the parts of the yard where the Ropewalk and Chain Forge facilities are located. There are, of course, buildings throughout the yard that are being altered, redeveloped, and even razed without discussion of the impact on the historic yard as a whole. The documentation does not exist in a form that can provide in-depth analysis. Simply put, it is not clear exactly what the resources are, and as a result, it is impossible to place them in context or judge their significance.

[1] National Park Service, *Cultural Resource Management Guideline*, Release No. 5 (1997), p. 25-26.

> … The study must document and assess the cultural resources of the Charlestown Navy Yard. There are several operational histories of the Navy Yard, which cover the period from 1800, when the yard was first created, to the yard's closure. Existing material needs to be reviewed and synthesized, and additional research is required to record and analyze significant changes that have occurred since the yard's closure. Research efforts will focus on the industrial, ceremonial, and residential resources located within the park's boundaries, but may include facilities not currently part of the park. The industrial resources appear to be the least understood and the most at risk. The museum collection associated with the yard will also be evaluated.
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> Synthesizing all the documentation, the HRS will evaluate the integrity and significance of the property, placing the yard within its broader historical and material culture contexts. As appropriate, this analysis will be used to revise the National Register Nomination form to include additional descriptive information, new contexts, and an expanded Statement of Significance.[2]

The scope of work included no archeological overview. A *Cultural Resources Inventory: Potential Archeological Resources, Charlestown Navy Yard, Boston National Historical Park* was prepared by Audrey R. Marie in March 1980.[3] This document covered only those portions of the Navy Yard included within the boundaries of the national park. A somewhat similar report covering the Buy Parcel Area was prepared by Michael S. Raber and Matthew W. Roth for the Boston Redevelopment Authority in February 1981.[4] Neither of these documents address two of the most significant portions of the yard, the Historic Monument and Public Park areas. Nor do they address more recent field experience with both Navy Yard resources and resources in Charlestown outside of the yard boundaries. A key recommendation of this study is that a comprehensive archeological overview and assessment meeting the standards of DO-28 be undertaken, and a project statement for that study has been entered into the NPS Project Management Information System (PMIS).

Chapter 2, *Historical Overview*, and Chapter 3, *South Boston Annex*, provide a history of the yard in support of the various historic contexts identified in Chapter 4, making use of the park's extensive photographic archives to illustrate that history. In addition, Chapter 2 provides a brief overview of the historic development of naval shipyards. Because of the nature of an HRS, it concentrates on the physical development of the facility rather than its administrative history, a topic covered by other studies.[5]

As a part of HRS project, the staff of the NPS Olmsted Center for Landscape Preservation (OCLP) prepared a draft Cultural Landscape Overview chapter. Since the preparation of the draft, OCLP has undertaken the preparation of a Cultural Landscape Report (CLR) for the national park portion of the Navy Yard.[6] Because this supersedes the HRS draft, the park decided to omit the landscape overview from this document. Information from that draft, however, has been incorporated into both Chapter 2 and Appendix A, *Navy Yard Chronology.*

Chapter 4, *Overview and Assessment*, provides information on the significance and historic context of the yard, especially with regard to the Department of Defense National Military Context; develops historic sub-periods and themes; identifies character-defining features; and makes recommendations for the management of the yard and for additional studies. It incorporates, with revisions, material prepared by Jane Carolan under contract to the NPS relating to both character-defining features and integrity.[7]

Chapter 5, *Resource Inventory*, provides more detailed descriptions of individual buildings, structures, and other features of the yard. It draws in particular from the 1978 draft National Register nomination prepared by Edwin C. Bearss and Peter Snell and the 1995 List of Classified Structures forms prepared by Jack I. Glassman and Patrick B. Guthrie. In addition, the chapter updates information on the relative historical significance of extant structures found on the March 1978 Historical Base Map.

Appendix A, *Navy Yard Chronology*, provides a detailed chronology of the Navy Yard, including information placing the yard into its larger historical context. It draws from separate chronologies prepared as part of the original drafts of the historical and cultural landscape overviews.

Appendix B, *Ships Built by the Navy Yard*, provides an alphabetical listing of ships built, showing key construction dates and their ultimate fate.

Appendix C, *Navy Yard Collections*, provides a brief summary of the scope and contents of the Boston Naval Shipyard Collection held by the park, as well as a brief discussion of Navy Yard records and related material found in the National Archives and elsewhere.

Appendix D, *Glossary*, provides definitions of both specialized maritime and naval terms and the vocabulary of the historic preservation community.

Appendix E, *Bibliography*, provides a guide to both technical reports and secondary sources consulted in the preparation of this document.

Appendix F, *Existing Conditions Maps*, show the current conditions of the Boston Naval Shipyard National Historic Landmark.

Statement Of Significance

The following statement of significance for the Charlestown Navy Yard represents a synthesis of information developed during this study:

> 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

[2] "Historic Resource Study, Charlestown Navy Yard, Boston National Historical Park, Scope of Work," p. 1-3. Original footnotes omitted.

[3] Audrey R. Marie, *Cultural Resources Inventory: Potential Archeological Resources, Charlestown Navy Yard, Boston National Historical Park* (Denver: Denver Service Center, 1980), TIC 457/D1555.

[4] Michael S. Raber and Matthew W. Roth, *Boston Naval Shipyard: A Plan for Cultural Resource Management in the Buy Parcel Area* (New Haven, Ct.: Raber Associates, 1981), TIC 457/D6154.

[5] Edwin C. Bearss, *Charlestown Navy Yard, 1800-1842*, 2 vols. (Denver: National Park Service, 1984), TIC 457/D26; Frederick R. Black and Edwin C. Bearss, *The Charlestown Navy Yard, 1842-1890* ([Boston: Boston National Historical Park], 1993), TIC 457/D6307; and Frederick R. Black, *Charlestown Navy Yard, 1890-1973*, Cultural Resources Management Study No. 20, 2 vols. (Boston: Boston National Historical Park, 1988), TIC 457/D6162A.

[6] Christopher Stevens, et al., *Cultural Landscape Report for Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts* (Boston: National Park Service, 2005), TIC 457/D154.

[7] The work, originally submitted as four separate chapters (4 to 7), was prepared by Ms. Carolan as subcontractor to Heritage Partners. See Task Order 105, Sept. 9, 1999, NPS Contract No. 1443-CX4520-96-008. The revised National Register forms specified in the original task order were deleted by the NPS.

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, civil engineering, and technology.

It should be noted that neither of the two National Historic Landmark naval vessels berthed at the Charlestown Navy Yard are referenced in this statement. Although USS *Constitution* has had a long historical association with the Navy Yard (and her presence was a key impetus for the preservation of a portion of the yard as a national park), the significance of the yard stands independent of the ship. Similarly, USS *Cassin Young* (DD-793) is but an example of the numerous ships which the yard built and serviced in its last half century as an active naval shipyard.

Period Of Significance

The Charlestown Navy Yard served as a naval shipyard from August 1800 to July 1974. Within that period of significance, there are several sub-periods which reflect not only the history of the facility but the broader history of naval shipyards. The following periods represent the historical development of the yard:

Establishment (1800-1828)

From the establishment of the Navy Yard, through the War of 1812 and the start of shipbuilding, up until the issuance of the 1828 master plan.

Early Nineteenth-Century Growth (1828-1853)

From the 1828 master plan up until the appointment of Joseph Billings as the yard's first permanent Civil Engineer. Includes the construction of Dry Dock 1 and the Ropewalk Complex.

Development in the Age of Steam (1853-1869)

From the appointment of Joseph Billings as Civil Engineer through the modernization of the yard to handle steam-powered vessels and the Civil War up to the 1869 master plan.

The Post Civil War Period (1869-1890)

From the 1869 master plan through the proposed conversion of the yard to a manufacturing facility to the resurrection of the yard to handle steel warships.

The Yard Resurrected (1890-1919)

From the start of plant modernization and the Spanish-American War through the major modernization campaign of the early 20th century and the start of steel shipbuilding up to the end of World War I.

The Stagnant 1920s (1920-1931)

From the end of the World War I programs up until the first orders for destroyer construction.

The Yard Revitalized (1931-1939)

From the start of destroyer construction through the WPA modernization of yard facilities up to the outbreak of World War II.

World War II (1939-1945)

From the declaration of national emergency in 1939 through the end of World War II and the yard's redesignation as Boston Naval Shipyard.

The Cold War Era (1945-1974)

From the end of World War II through the Korean War, Cold War, and Vietnam War until the yard's closure.

The precise definition of particular periods is somewhat arbitrary, being keyed to significant events, and there is an overlap between most of them. In addition, the periods could be further broken down. For example, while the Civil War could have been considered as a separate period, it has been included within the larger period from 1853 to 1869 since it represented more of an acceleration of developments already in progress than new directions for the yard.

Although the post-1974 period may achieve significance in its own right under the themes of historic preservation and the conversion of military facilities to other uses, these developments are still too new to allow the development of appropriate historic contexts. Thus, while post-1974 structures and features are included in this study, none are recommended as contributing resources at this time.

Historical Themes

The statement of significance recognizes that the yard encompasses a variety of historical themes. In 1978, four primary themes were used to evaluate all extant buildings and features of the yard. These themes were:

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 general themes remain valid. While it is possible to subdivide these themes into more specific subjects, such a division was not within the scope of this resource study. The general assessment in Chapter 4 and the individual building and feature descriptions included in Chapter 5, however, address major sub-themes as appropriate. They also rank the relative importance of each of the themes to the individual Navy Yard resources.

National Register Status

The Boston Naval Shipyard was designated as a National Historic Landmark in 1966, resulting in its automatic listing on the National Register of Historic Places and the Massachusetts State Register of Historic Places. While the designation included the "entire" shipyard, only the Charlestown facility is considered to have been covered by it. As this study points out, the South Boston Annex was an integral part of the shipyard. Thus, this study recommends that a new National Register nomination for the entire Boston Naval Shipyard be prepared.

While the integrity of individual resources in the Navy Yard varies, as a whole the yard retains its basic integrity, 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 and from which an understanding and appreciation of those patterns may be gained."[8]

The Navy Yard meets all four major criteria for listing on the National Register of Historic Places:

A. That are associated with events that have made a significant contribution to the broad patterns of our 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 have yielded, or may be likely to yield, information important in prehistory or history[9]

Perhaps the least documented of these criteria is Criteria B, relating to significant figures associated with the Navy Yard. In addition to its association with naval officers who were major figures in the history of the Navy, particularly in the period prior to the Civil War,[10] the yard is associated with a number of significant individuals in the fields of architecture, engineering, technology, and even the fine arts. These include, for example, Loammi Baldwin, Alexander Parris, and Allan Rohan Crite. Full assessments of the significance of 20th-century yard employees who were involved with—and hold patents for—technological innovations in the area of chain and ropemaking have yet to be done.

It is not recommended at this time that any specific studies of individuals be conducted. However, future studies of technological aspects of the yard should include focus on individuals such as David Himmelfarb and Carlton G. Lutts as well as on the processes and products they were involved with.

Historical Context Study

In the mid-1990s the Department of Defense undertook a contextual study focusing on the physical resources of all military installations for the period through World War II.[11] This National Military Context (NMC) forms one basis for evaluation of the Navy Yard. However, because the yard was also an industrial plant and a community unlike traditional military posts, it also has contexts outside of the National Military Context. Thus, the NMC is not a substitute for thematic contextual studies which take a more specialized approach to a subset of military facilities. Nor does it take into account post-1945 developments.

Thus, it is a primary recommendation of this report that the National Park Service, in conjunction with the Navy and others, contract for the preparation of a specific context study for naval shipyards, past and present. Such a study will allow a better understanding of the significance of the Navy Yard with respect to both National Register and National Historic Landmark criteria.

The resultant study should provide a consistent, national base for making assessments of the significance of both individual structures and features and entire shipyards under Sections 106 and 110 of the National Historic Preservation Act. One of the major results of a contextual study will be revisions to existing and additional National Register nominations, as well as revised or additional National Historic Landmark designations. It would also be a vehicle for finalizing various informal determinations of eligibility made during the various base closure programs of the 1980s and 1990s.

Character-Defining Features

Character-defining features are defined as prominent or distinctive aspects, qualities, or characteristics of a property that contribute significantly to its physical character and which must be retained in order to preserve that character. Character-defining features of the Charlestown Navy Yard include those of a maritime industrial facility, as well as a military installation in general and a naval installation in particular. The specific features which are identified in Chapters 4 and 5 as important in defining the yard include:

1. Navy Yard Boundary Wall and Fence surrounding the yard and separating it from Charlestown; pedestrian and vehicular gates.
2. Grid circulation pattern, with predominately rectangular buildings arranged parallel to the grid; paving materials: asphalt, brick, granite, and wood block.
3. Division of the yard into ceremonial/residential; working waterfront; and production and manufacturing areas.
4. Marine Barracks and Parade Ground.
5. Landscaped and open spaces, including laydown yards.
6. Large scale industrial buildings and smaller scale residential structures; building materials: brick, granite, concrete, and wood.
7. Industrial facilities representing the yard's manufacturing activities: Ropewalk Complex (Building 58 and 60) and Forge Shop (Building 105), including in-situ equipment.
8. Dry docks and piers.
9. Railroad and crane tracks.
10. Large scale structures such as cranes; grit hoppers; floodlights; aboveground utility lines; and the remains of Shipways 1 and 2 and the Marine Railway.
11. Small scale features such as trash receptacles, monuments and memorials, and identification and safety signage; use of historically-accurate colors for crosswalks, dry dock railings, hydrants, bollards, etc.

Maintaining the integrity of the character-defining features of a facility as complex as the Charlestown Navy Yard is a task that must balance the needs of current uses of the facility with an understanding of how changes to accommodate such needs impact those fea-

[8] U.S. National Park Service, *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, rev. ed. (Washington: National Register, History and Education, Cultural Resources, National Park Service, 1997), p. 50.

[9] Ibid., p. 2.

[10] A full list of such individuals has not been compiled, but it would include all yard commandants who have been regarded as significant enough by the Navy to have been honored by having naval vessels named for them. It should also include staff officers such as George Dewey and Alfred Thayer Mahan.

[11] R. Christopher Goodwin & Associates, *National Historic Context for Department of Defense Installations, 1790-1940: Final Report*, 4 vols. (Baltimore: Baltimore District, U.S. Army Corps of Engineers, 1995); R. Christopher Goodwin & Associates, *Historic Context for Department of Defense Facilities: World War II Permanent Construction* (Frederick, Md.: Goodwin, 1997).

tures. While "freezing" the yard's appearance to the end of its period of significance is as impractical as restoring it to any past period, changes should respect the essential character-defining features and be as sympathetic as possible in their treatment of historic fabric. In particular, efforts should be made to retain the industrial overlay of pipes, conduits, etc., rather than to restore a pristine appearance that a structure probably never had.

Recommended Approach To The Yard[12]

While changes since 1974, particularly in the non-National Park Service portion of the Navy Yard, have severely reduced the integrity of the industrial facility the yard once was, much still exists, albeit in smaller pockets. The desire to "clean up" areas such as the laydown space around the Grit Hoppers needs to balance the need not to accummulate inappropriate materials with a recognition that a working shipyard—and the Navy Yard remains a working shipyard—requires places for materials and equipment to be stored. Such laydown spaces should be managed, not eliminated.

With a few exceptions, this study recommends that the general approach to the Navy Yard should be that identified in the Secretary of the Interior's Standards for the Treatment of Historic Properties as rehabilitation. Unlike preservation, restoration, or reconstruction treatments, rehabilitation "includes an opportunity to make possible an efficient contemporary use through alterations and additions" while protecting and maintaining a property's character-defining features.[13]

Because so much of the industrial yard has disappeared, wayside and other exhibits become important in helping to convey this theme to visitors, most of whom come to the yard only because of USS *Constitution*. The relocation of the primary Navy Yard exhibit to the new Navy Yard Visitor Center in Building 5 exposes greater numbers of visitors to the history and significance of the yard. Although large numbers of visitors will not go beyond the immediate area of Pier 1, the National Park Service and the Boston Redevelopment Authority (BRA) should actively pursue the development of interpretive waysides throughout the Navy Yard for the benefit of those who do, as well as for the thousands of workers and residents in the yard who have little awareness of its historic significance. In particular, Dry Dock 2 and the Pump House (Building 123) should be interpreted for the commuters and tourists who pass these structures each day.

The National Park Service and the Boston Redevelopment Authority should work together to ensure that actions by either agency within the Navy Yard take into consideration the historic character of the area. In particular, the BRA should take steps to ensure that its lessees conform to the preservation guidelines, especially with regard to the retention and maintenance of historic signage. While regrettable, past deviations from guidelines, especially those relating to the groundplane, cannot be easily corrected. However, the BRA and the NPS need to emphasize to tenants and to other agencies of the City of Boston that the Navy Yard buildings and streets are not simply urban buildings and streets but contributing features of a nationally-significant historical resource. Deviations from standard practices which do not compromise vehicular or pedestrian safety to maintain the yard's historic industrial character should not be rejected simply because they "do not meet code" or are not aesthetically pleasing. Many such actions, such as the use of historically-accurate colors for dry dock railings and crosswalks, have no cost impact.

From the outside, it would appear that the fact that two different National Park Service offices interface with the Boston Redevelopment Authority is counterproductive. While this could be simplified by the delegation of the responsibility for the oversight of the deeds of transfer, now vested in the Northeast Regional Office in Philadelphia, to the Superintendent of Boston National Historical Park, such a transfer may create a tension between the park, as a regulator, and an agency with which it needs to work cooperatively to promote and interpret the Navy Yard to the American people. Therefore, this study recommends that the lines of communication between the various NPS offices and both the BRA and the wider historic preservation community be improved and that the preservation guidelines be reviewed and updated comprehensively to take into account both a better understanding of the history and significance of yard features and the evolution of historic preservation philosophy and practices over the three decades since they were put into place.

The National Park Service, the Boston Redevelopment Authority, and other interested parties should work together to produce a master plan for the development of the Navy Yard as a whole which reflects a rehabilitation treatment for the yard. Where economically feasible, the BRA and other stakeholders should be encouraged to utilize historic precedents and treatments rather than standard, off-the-shelf contemporary approaches. While it is totally impossible to create a seamless yard, every effort should be made to reinforce the fact that, while now used for differing purposes, all areas of the yard share a nationally-significant historic heritage.

As a part of this master plan effort, the NPS and the BRA should review the boundaries of the park in the vicinity of Buildings 58, 60, 105, and 107. For example, it may be desirable from both a maintenance and law enforcement perspective to include the area between the Ropewalk and Chelsea Street within park boundaries. Any changes recommended in the master plan could be handled under existing NPS legal authority to make minor boundary changes without requiring specific Congressional action.

Recommendations For Physical Treatment

The following is a summary of the recommendations for the physical treatment of the Navy Yard. These recommendations should help inform the comprehensive management plan for the yard discussed above which recognizes the yard's historic nature while allowing for future development for other uses.

These recommendations highlight major actions needed to maintain the character-defining features of the Navy Yard. They do not include most projects to stabilize, preserve, or rehabilitate indi-

[12] Because the NPS has no preservation responsibilities, either directly or through oversight, for the South Boston Annex, this discussion is limited to the Charlestown Navy Yard portion of the Boston Naval Shipyard NHL.

It should be noted that most of the recommendations herein referencing the Boston Redevelopment Authority reflect either BRA obligations under the deed of transfer or proposals which appear in various planning documents prepared by that agency.

[13] Charles A. Birnbaum with Christine Capella Peters, eds., *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (Washington: Historic Landscape Initiative, Heritage Preservation Services, Cultural Resource Stwardship and Partnerships, National Park Service, 1996), p. 50.

vidual structures or other elements within the national park currently identified in the NPS Project Management Information System (PMIS) or the specific treatment recommendations contained in the Cultural Landscape Report which should, with minor exceptions such as the preservation rather than removal of the Building 198 foundation, be implemented. Where existing PMIS projects are closely related to the recommendations, they are shown in parentheses. The individual project statements should be consulted for further detail, as well as for cost information.

(1) Maintain the Historic Grid Circulation Pattern of the Yard and Associated Viewsheds. The grid pattern established by the 1828 Baldwin master plan, while compromised in a few areas, remains largely intact. Since this grid governed the growth of the yard, it should be maintained. In particular, new development should be inserted within the existing grid pattern. Views along both First and Second Avenues, the primary yard thoroughfares, should be preserved. Views along the north-south streets extending to the harbor should be preserved.

(2) Maintain the Navy Yard Boundary Wall and Fence (PMIS 73612). The Navy Yard Boundary Wall and Fence are character-defining features of the yard as a military installation. The NPS should repoint the Boundary Wall, while the BRA should repair the Boundary Fence parallel to the Ropewalk.

(3) Maintain the Boston HarborWalk through the Navy Yard. The Boston HarborWalk is an effort to provide public access along Boston's inner harbor, an area historically inaccessible to the general public. Portions of the HarborWalk have already been constructed within the Public Park and New Development Areas. While security considerations mean that the HarborWalk through the national park cannot follow the western edge of Pier 1, an alternative routing along First Ave. and 3rd St. to the south end of Pier 1 is possible. The NPS and the BRA should work to create a safe pedestrian route across the caisson for Dry Dock 1, the site of the Marine Railway, and Dry Dock 2 to connect the HarborWalk on Pier 1 to the remainder of the HarborWalk in the yard.

(4) Retain Dry Dock 1 as a Working Dry Dock (PMIS 152558, 75135). Dry Dock 1 is the most important historic structure in the Navy Yard since it not only is one of the first two dry docks in the United States but also the most characteristic of the industrial nature of a naval shipyard. Dry Dock 1 should be rehabilitated in accordance with the recommendations of the recent historic structure report, and should be used for the drydocking of appropriate historic ships. Use of the dock by non-federal vessels should be allowed only with sufficient guarantees that such use will not encumber the dock in the same manner as occurred with SS *Nobska*.

(5) Retain Portal Cranes. Portal cranes are a character-defining feature of a shipyard. The three existing portal cranes should be retained and repositioned in ways which enhance their interpretive value while minimizing restrictions on active ship repair activities. The NPS should pursue the formal transfer of Portal Crane 30 from the Navy and restore its original number as Portal Crane 63.

(6) Restore Remaining Navy Yard Piers (PMIS 151177). The NPS and the BRA should move ahead to complete the restoration of Piers 2 and 3. The BRA should ensure that development at the eastern end of the yard does not preclude the future use of Pier 11 for berthing of visiting ships.

(7) Dredge Piers 1, 2, 3, 4, and 11 for Visiting Ships (PMIS 2099). Visiting ships reinforce the maritime nature of the Navy Yard and attract visitors to the yard. Both the NPS and the BRA have been active in promoting scheduled harbor ferry and harbor tour boat service between the yard and downtown Boston. Such vessels, however, do not require the same depths of water as do larger visiting ships. The NPS and the BRA should, in association with the Army Corps of Engineers, Massport, and other partners, dredge the berths at Piers 1, 2, 3, 4, and 11 to provide sufficient draft to accommodate visiting ships, especially American and foreign naval vessels and tall ships.

(8) Stabilize and Interpret the Marine Railway (PMIS 88432). The NPS should stabilize the remaining portions of the Marine Railway and interpret the facility, including the machinery room in Building 24, to the public as a part of the HarborWalk.

(9) Preserve Small-Scale Features (PMIS 12892, 88437, 116758, 124804). The NPS should ensure the preservation of the remaining industrial features of the yard such as the Grit Hoppers and Light Towers, as well as the smaller-scale buildings such as Buildings 110 and 124. The remaining Light Towers on Piers 4 and 6 should be retained by the BRA.

(10) Complete Restoration of the Muster House (Building 31). The Muster House (Building 31) was restored to appearance at the conclusion of the construction of the third floor in 1871. However, the brick walls are currently bare brick. During the entire period prior to the demolition of the building's canopy around 1929, it was painted (or otherwise coated). The walls should be painted with historically accurate colors.

(11) Review Existing Preservation Guidelines and Amend as Appropriate. The NPS and the BRA should review the existing preservation guidelines to ensure that they have been complied with or to amend them to reflect better information on the history of the structure being treated. The NPS should work with the BRA to enforce guideline provisions which are being ignored by tenants (such as maintenance of historic building signage). New groundplane guidelines for the entire yard should be developed in accordance with the Cultural Landscape Report for the non-NPS portion of the yard.

(12) Rehabilitate and Interpret the Ropewalk and Tarring House (PMIS 71089). The Ropewalk and Tarring House are two of the most significant buildings in the yard yet to be redeveloped. The NPS and the BRA should move forward to amend the current guidelines to reflect a more modest exhibit component in any future development. The physical treatment of the building, including interpretive exhibits, should be in accordance with the guidelines or amendments made in response to specific programmatic needs.

(13) Rehabilitate and Interpret the Chain Forge (PMIS 16850, 19802, 70250). The Chain Forge should be rehabilitated following the completion of hazardous material abatement. This should include conservation of in situ equipment and development of interpretive exhibits. The NPS and the BRA should review and amend the curent guidelines to balance the preservation of the yard's only intact industrial shop with the spatial needs for successful rehabilitation. The World War II additions to the structure should be maintained and restored.

(14) Rehabilitate and Interpret the Dry Dock Pumphouse (Building 123). The BRA should be encouraged to rehabilitate the Dry Dock Pumphouse in a manner which allows public viewing of in situ pumping equipment.

(15) Maintain Historic Signage (PMIS 16704). Existing his-

toric signage in the yard, including building numbers and identification signs, street signs, safety signage, etc., should be maintained in accordance with NPS policies and the transfer guidelines. The NPS and the BRA should consider replacement of the Safety Shoe Sign in its historic location at the west end of Building 36. Within the national park, minor signage such as utility location stencils should be maintained (and updated where appropriate).

(16) Treat Streetscape Features in Accordance with Historic Precedents. Streetscape features, including crosswalks, fire hydrants, and dry dock safety railings should be painted in historic colors in accordance with 1973 photographic evidence and the provisions of the Navy's manual on *Color for Naval Shore Facilities*.[14] The BRA and other property managers within the non-national park portions of the yard should be encouraged to utilize trash receptacles which duplicate historic Navy Yard trash receptacles.

(17) Develop Comprehensive Interpretive Waysides. The NPS and the BRA should work together to develop a comprehensive system of interpretive waysides, especially along the route of the HarborWalk. These waysides should be of a uniform design so as to reinforce the concept that the yard was historically a single property. While the NPS standard waysides can form the basis for the new waysides, the NPS should not refuse to consider variant designs simply because of policy.

(18) Manage Laydown Spaces. Because the NPS portion of the yard remains an active shipyard, laydown spaces are essential. The NPS should work with the Navy to ensure that defined laydown spaces do not spill over into other areas of the yard and do not become dumping grounds for obsolete equipment and materials.

Recommendations For Further Studies

The following is a summary of the recommendations for further study or other actions as a result of this report. Most of these projects have been included in the National Park Service's Project Management Information System (PMIS). The individual project statements should be consulted for further detail, as well as for cost information.

(1) Prepare Contextual Study of Naval Shipyards (PMIS 81068) — The evaluation of the significance of the Charlestown Navy Yard in its larger contexts of both naval shipbuilding and technology has been difficult because of the lack of a comprehensive study of naval shipbuilding policies and practices. It is recommended that this study, as discussed above, be undertaken in partnership with the Navy. The study should be coordinated with the appropriate State Historic Preservation Officers so that it can inform the completion of National Register nominations for both shipyard properties already identified as eligible and those so identified during the study. While it is probably still too early to evaluate the reuse of shipyard properties,[15] reuse plans should be examined to the extent that they impacted decisions made as part of the closure process.

(2) Revise National Register Documentation (PMIS 16784) — The existing National Register documentation for the Navy Yard consists primarily of a 1978 draft document never officially accepted, although distributed by, the National Register. Because it was drafted before extensive research had been conducted into Navy Yard records, it contains numerous factual errors. This documentation should be updated to both correct those errors and to reflect current conditions, as well as to include the entire Boston Naval Shipyard. The study should also look at the possibility of preparing individual National Register nominations for Dry Dock 1 (which should be combined with the existing NHL designation of Norfolk Dry Dock 1 as a multi-property thematic nomination for the Navy's first two dry docks), Dry Dock 3, and the Ropewalk. (This work could be incorporated into the broader contextual study recommended above.)

The PMIS project is broader than just the Navy Yard, encompassing all sites within Boston National Historical Park. As a part of this larger effort, the existing documentation for USS *Cassin Young* (DD-793) should be reevaluated in terms of the role of the vessel during the Cold War in the 1950s, the period which the physical fabric of the ship represents and the period where it has a close association with the Navy Yard's primary mission of modernizing and overhauling naval vessels.

Since the former Boston Army Base property is not proposed to be within the revised boundaries of the Boston Naval Shipyard NHL, the Boston Landmarks Commission should be encouraged to undertake the necessary work to nominate the Boston Army Base to the National Register. This study should include consideration of proposing the property for nomination as a National Historic Landmark in its own right.

(3) Complete HAER Documentation, Charlestown Navy Yard (PMIS 119094) — At the time of the closure of the Boston Naval Shipyard in 1974, documentation of the yard to the standards of the Historic American Engineering Record was begun, but that effort has never been finalized. Only limited material has been processed and transferred to the Library of Congress. This project would locate and organize HAER photographs taken in 1973 and 1976 by Eric DeLony and Jack Boucher of the HABS/HAER staff, those taken in 1977 by the Boston Redevelopment Authority (BRA) as mitigation under various deeds of transfer, and subsequent documentation prepared under the auspices of the Army Corps of Engineers and private developers. In addition, it will make copies to HAER archival standards of photographs taken by Navy Yard photographers in 1973 and 1974 intended to document the conditions of the yard at the time of its closure.

(4) Update List of Classified Structures (PMIS 100030) — The existing entries in the List of Classified Structures (LCS) should be updated to reflect the information developed in this report. The descriptive fields of this document should identify the character-defining features of each structure to the extent that they have been developed in historic structure reports (HSR), and the LCS should be subsequently updated as further HSRs are completed.

As a part of this project, structures outside of the national park boundaries but which are subject to preservation restrictions under the deeds of transfer, which have been created as drafts in the "shadow" LCS database, should be completed and incorporated into the LCS database so that all resources in the Navy Yard can be monitored in the same way.

[14] Naval Facilities Engineering Command, *Color for Naval Shore Facilities*, NAVFAC P-309 (Washington: Naval Facilities Engineering Command, 1971).

[48] To date, studies on the reuse of naval shipyards have dealt only with Boston, Philadelphia, and San Francisco (Hunters Point). See Catherine Alison Hill, *The Political Economy of Military Base Redevelopment: An Evaluation of Four Converted Naval Bases* (Ph.D. dissertation, Rutgers, 1998); Ron Hess, et al., *The Closing and Reuse of the Philadelphia Naval Shipyard*, MR-1364-Navy (Santa Monica, Calif.: National Defense Research Institute, RAND, 2001).

(5) Prepare Archeological Overview and Assessment (PMIS 100018) — The current archeological overview dates to 1980 and represents an assessment based solely on documentary materials. A more detailed overview and assessment, taking into account the findings of archeological work in and adjacent to the yard, should be prepared. Ideally, this project should be done in cooperation with the Boston Redevelopment Authority and include the entire Charlestown Navy Yard within its scope. This project is currently funded for FY 2010 under the regional archeological resources inventory (SAIP) program.

(6) Complete Cultural Landscape Report (PMIS 16796) — The remaining phase of the project for the Navy Yard cultural landscape report, covering non-NPS areas of the yard, should be undertaken. In developing treatment guidelines for this portion of the Navy Yard, the project should engage the park, the Boston Redevelopment Authority, local community groups, and other stakeholders in a visioning process and landscape character study of this portion of the yard as it transitions from predominantly industrial to institutional and residential uses. The result of this study will be used to develop revised groundplane treatment guidelines for the Historic Monument Area.

(7) Complete Draft/Prepare Historic Structure Reports (PMIS 12449, 16786, 74409, 74774, 144744) — The Historic Structure Report (HSR) provides essential information regarding the history of individual structures, identifies their character-defining features, and makes recommendations for their ultimate treatment. Most HSRs completed to date for Navy Yard structures have been done as part of the preliminary planning process for major rehabilitation projects. The most recent of these have been ones on Building 24, Building 125, and Dry Dock 1.

In the earliest years of the park, a number of HSRs were begun but never completed. These draft HSRs in the park's Technical Information Collection should be reviewed, and those which represent sound research should be finalized. Currently, statements exist for finalizing the HSRs on Quarters G (PMIS 16786) and the Chain Forge (PMIS 144744) and undertaking HSRs on Building 22 (PMIS 12449), Building 265 (PMIS 74774), and the Marine Barracks (PMIS 74409). A systematic program for the preparation of additional historic structure reports should be instituted.

(8) Prepare Administrative History (PMIS 12450) — The administrative history of Boston National Historical Park, especially as it relates to the creation of the park and the decision to include the Navy Yard in it, should be undertaken as soon as possible, while it is still possible to interview individuals involved in that process. This project is currently programmed for funding in FY 2014 under the regional cultural resources preservation program. Because this document may be of value in the preparation of the new General Management Plan for the park currently underway, it may be expeditious to explore working with the public history community to encourage graduate students to undertake it as a thesis/dissertation project.

(9) Prepare Labor History Studies — While the administrative, architectural, and technological history of the Navy Yard is fairly well represented in existing studies, special history and other studies are required to provide more information on the yard work force, its relationship to the Charlestown community, and how its composition changed over time, including women and minority workers. Since NPS funding for such studies is unlikely to be obtained in the near future, it is recommended that the park work with the public history community to encourage graduate students to adopt them for thesis/dissertation projects.

(10) Revise/Update Scope of Collections Statement and Collection Management Plan (PMIS 90812) — The current Scope of Collections Statement (SOCS) was prepared in 1985, while the Collection Management Plan (CMP) was approved in 1994. Both documents are outdated and not in compliance with current NPS standards for those documents. A project to produce a new CMP for the park is currently underway. An update of the SOCS is currently scheduled for FY 2011.

(11) Prepare Comprehensive Finding Aid, Boston Naval Shipyard Archival Collections (PMIS 108004) — The current finding aids for the Boston Naval Shipyard Archival Collections are outdated, both in terms of changes to the organization of the collection since the original finding aid was prepared in 1981 and in terms of including all Navy Yard-related collections. This project will provide a comprehensive and consistent finding aid for the Records of the Boston Naval Shipyard, the Boston Naval Shipyard Related Collections, the Boston Naval Shipyard Oral History Project, and the Boston Naval Shipyard Photo Collection.

(12) Digitize Photographs to Provide Access to Collection (PMIS 16841) — The Boston Naval Shipyard Photo Collection and the architectural drawing files in the Records of the Boston Naval Shipyard are among the most-utilized material in the Boston National Historical Park Archival Collection. To facilitate access to this material, it is recommended that portions of these collections be digitized and made available to researchers in electronic form through the Internet. Among the series of items which should be digitized first are general views (including aerial photographs), exterior views of significant structures, selected views of ships (including USS *Cassin Young* and USS *Constitution*) and material from the two ship history files relating to them, and the annual yard site plans. The yard newspaper, *Boston Naval Shipyard News*, has previously been microfilmed. It is recommended that this microfilm be converted to digital format and made available in electronic form as well. As an initial step, pending creation of archival-quality scans, the images digitized for this report should be made available.

Chapter 2

Historical Overview

THE CHARLESTOWN NAVY YARD served the United States Navy from its founding in 1800 until its closure in 1974, and, through the Naval Historical Center Detachment Boston's Maintenance & Repair Facility, continues into the 21st century to perform its historic function of providing maintenance support to active naval vessels even while most of its buildings have been adaptively reused either as historical monuments (in the British sense of the term) or commercial and residential facilities. This chapter is intended to provide a brief overview of the history of the yard in support of the various historic contexts that will be developed in detail elsewhere in this report. It is drawn largely from previous yard histories[1] and to a lesser extent on original Navy Yard archival materials in the collection of Boston National Historical Park and elsewhere.[2] Because the period up to 1974 has been well covered in existing studies, it has been treated in a more summary fashion as has the post-1974 era, with emphasis on the physical development of the yard and on activities which contribute to the yard's historical significance.

United States Naval Shipyards

Although its ships represent its most significant asset, the United States Navy could not operate without a series of shore-based facilities to support its operations. The shore establishment existed to provide overall management and direction of naval affairs; locations for berthing, construction, and repair of warships; depots for the collection and issuance of the numerous supplies necessary for ship operation; and facilities for training and housing sailors not actively employed at sea. The original navy yards established in the early 1800s undertook all of those responsibilities. Over time, as the Navy grew in size and technical complexity, many of the more specialized functions were relocated to facilities specifically devoted to a particular activity.

Until the 20th century, the naval shore establishment was largely located along the coast and, to a lesser extent, major interior waterways. Throughout its existence, the administration of the shore establishment has been a complex mixture of administrative and operational lines of authority. While the history of naval administration is beyond the scope of this study, the subject-oriented bureaus within the Navy Department in Washington have played a major role in the way that naval facilities have physically evolved. For the most part, the shore establishment workforce consisted of civilian employees rather than military personnel.

The creation of the naval shore establishment was driven by both military and political considerations. Communities sought to have naval bases located in them, and actively opposed proposals to relocate or close existing bases. Throughout the 19th century, boards of naval officers were created to review both the status of existing yards and the desirability of establishing new ones. Efforts to consolidate naval activities at fewer locations achieved little success, again due to a combination of politics and the limitations of naval vessels based at only a few places to meet perceived threats to America's lengthy coastline.

The Charlestown Navy Yard was one of six navy yards established between 1799 and 1801 along the east coast of the United States. Located near existing maritime centers to take advantage of available skilled workforces, they were intended as facilities where the six 74-gun ships-of-the-line authorized by Congress in 1799 could be built. While none of those vessels were constructed due to a change in naval policy by the Jefferson administration, the yards at Portsmouth, Boston, New York, Philadelphia, Washington, and Norfolk survived.

Over the past two centuries, some of the original yards have closed and others established. At the end of World War II there were eleven shipyards (Portsmouth, Boston, New York, Philadelphia, Norfolk, Charleston, Puget Sound, Mare Island, San Francisco [Hunter's Point], Long Beach [Terminal Island], and Pearl Harbor); as of 2008, that number was down to four (Portsmouth, Norfolk,

[1] The most comprehensive yard history is the Historic Resource Study by Edwin C. Bearss and Frederick R. Black, published in three parts: Edwin C. Bearss, *Charlestown Navy Yard, 1800-1842*, 2 vols. (Denver: National Park Service, 1984), TIC 457/D26; Frederick R. Black and Edwin C. Bearss, *The Charlestown Navy Yard, 1842-1890* ([Boston: Boston National Historical Park], 1993), TIC 457/D6307; and Frederick R. Black, *Charlestown Navy Yard, 1890-1973*, Cultural Resources Management Study No. 20, 2 vols. (Boston: Boston National Historical Park, 1988), TIC 457/D6162A. Black's volume on 1890-1973 has been called "the best 'in-house' history" of a United States naval shipyard. See Jeffery M. Dowart with Jean K. Wolf, *The Philadelphia Navy Yard: From the Birth of the U.S. Navy to the Nuclear Age* (Philadelphia: University of Pennsylvania Press, 2001), p. 225 n. 1.

The earliest published history of the yard is George Henry Preble, "The Navy, and the Charlestown Navy Yard," in Justin Winsor, ed., *The Memorial History of Boston, Including Suffolk County, Massachusetts, 1630-1880*, 4 vols. (Boston: James R. Osgood & Co., 1881), 3:331-68. This is a condensation of a history of the yard Preble wrote for the Navy Department. For the original manuscript, see George Henry Preble, *History of the Boston Navy Yard, 1797-1874*, Microcopy M118 (Washington: National Archives, 1947).

For other histories of the yard, see P.W. Hamlin, comp., *History of the Boston Naval Shipyard (formerly Boston Navy Yard), 1800-1937* (Boston: Boston Naval Shipyard, 1948), TIC 457/D6171; George O.Q. Mansfield, *Boston Naval Shipyard (formerly Boston Navy Yard) Historical Review, 1938-1957* ([Boston: Boston Naval Shipyard, 1957]), TIC 457/D6087; Bettina A. Norton, *The Boston Naval Shipyard, 1800-1974* (Boston: The Bostonian Society, 1975); and U.S. National Park Service, Division of Publications, *Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts*, Official National Park Handbook 152 (Washington: U.S. Dept. of the Interior, 1995).

For a pictorial record of the yard, drawn from the park's extensive photographic collections, see Barbara A. Bither and Boston National Historical Park, *Charlestown Navy Yard*, Images of America (Charleston, S.C.: Arcadia, 1999). See also *The Boston Naval Shipyard, Boston, Massachusetts* (Reprint from U.S. Naval Institute *Proceedings*, vol. 86 [Oct. 1960]).

[2] For a brief guide to these records as well as other collections relating to the Navy Yard, see Appendix C of this report.

19th Century Navy Yards: A Gallery

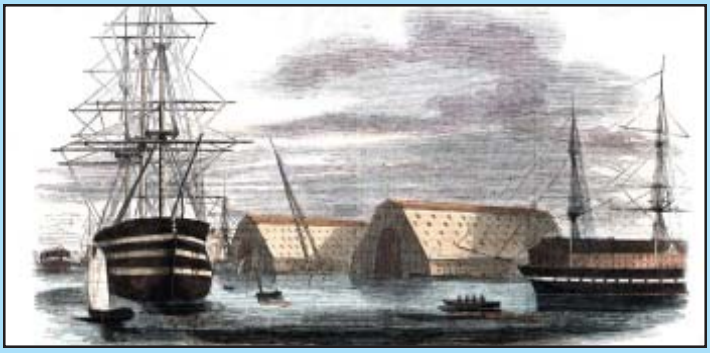
THESE VIEWS of 19th century navy yards show how the waterfront of the earliest yards was dominated by massive shiphouses, which originated at Portsmouth in 1813. The view of New York, in particular, also shows how the yards were originally placed in urban areas, which ultimately limited expansion. Indeed, the limitations of the Philadelphia site seen here were such that the yard was moved to a new, less congested site in the mid-1870s.



Portsmouth (Kittery) Navy Yard, ca. 1886
NHC NH-58947



Philadelphia Navy Yard, 1870
Historical Society of Pennsylvania



Norfolk (Gosport) Navy Yard, 1861
Harper's Weekly, *Mar. 16, 1861*



Mare Island Navy Yard
Vallejo Museum



New York (Brooklyn) Navy Yard, 1879
Brooklyn Navy Yard



Washington Navy Yard, 1861
NHC NH-51928-KN



Sacketts Harbor Navy Yard, 1835
American Forts Network



Pensacola Navy Yard, 1861
Harper's Weekly, *June 22, 1861*

Puget Sound, Pearl Harbor). There are no comprehensive histories of naval shipyards, making placement of the Charlestown Navy Yard in the context of the overall development and history of Navy shipbuilding and repair difficult.[3]

Navy yards developed and prospered, or languished, in direct correlation to role of the Navy at the time.[4] Thus, for their first decade, as the Navy concentrated on coastal defense, little real development occurred. The War of 1812 brought growth to the yards, a growth that continued slowly over the next three decades. The administration of President John Quincy Adams in the late 1820s marked the first time that navy yards had been considered on a systematic basis, and also marked a commitment to the upgrading of facilities. The Navy's first two dry docks, at Charlestown and Norfolk, were authorized at this time, being completed in 1833.[5]

In 1827 Congress mandated the preparation of master plans for the development of the nation's navy yards, which had grown by one with the authorization of a new yard on the Gulf of Mexico at Pensacola, Fla., in 1826.[6] In developing these plans, Secretary of the Navy Samuel L. Southard and the Board of Navy Commissioners instituted the concept of industrial specialization.[7] Under this concept, particular yards became production centers for materials utilized not only locally but also throughout the Navy. For example, the Washington Navy Yard specialized in the manufacture of ordnance, while, as will be seen, Boston produced most of the rope used by the Navy for well over a century. In the 20th century, Boston manufactured anchor chain, while the anchor castings themselves came from Norfolk. Following World War II, some yards began to specialize in work on particular types of ships. For example, Portsmouth became almost exclusively a submarine yard, while Boston concentrated on destroyers, although continuing to service most types of surface ships.



This map shows the original six naval shipyards (red) together with those established later (yellow). *Cornerstone Spatial Design*

The physical development of the individual navy yards in their earliest days was controlled locally. While the Navy Department in Washington made the final decisions on what facilities would be built through the 1828 master plans and its control of funding, design of buildings was largely left to local naval agents and architects. By the time that the Navy embarked on a major modernization of its shore establishment in the 1890s, many buildings would be constructed to plans prepared not by local architects but by the Bureau of Yards & Docks in Washington. Thus, it is possible to see similar structures at several yards. In the absence of detailed historical surveys of all yards, however, the full degree of commonality between facilities cannot be ascertained.

More changes to the shore establishment came in the 1840s and 1850s, in response both to the Mexican War and to the introduction of new propulsion technology in the form of steam engines. The acquisition of California and Oregon, as well as expanded interests in the Pacific, led in 1854 to the creation of the first West Coast navy yard at Mare Island in San Francisco Bay. Responding to a call for a navy yard on inland waters, Congress authorized a new yard at Memphis in 1844; a decade later, the facility, which had only developed as a rope manufacturing site rather than as a shipyard, was transferred to the city.[8]

The Civil War brought rapid growth, as a key element of federal policy was a naval blockade of the South. To support this blockade, navy yards both converted merchant vessels into warships and built modern vessels, including ironclads. For the first time, the majority of naval vessels ordered were assigned to private yards for construction, a reflection of both the need to spread the work over as large a workforce as possible and the fact that private shipbuild-

[3] For a brief, if uneven, overview of American naval shipyards, see Robert J. Winklareth, *Naval Shipbuilders of the World: From the Age of Sail to the Present Day* (London: Chatham Publishing, 2000), p. 133-66. See also "Part I, United States Navy Yards," in Society of Naval Architects and Marine Engineers, *Historical Transactions, 1893-1943* (New York: The Society, 1945), p. 7-35; Paolo E. Coletta, ed., *United States Navy and Marine Corps Bases, Domestic* (Westport, Ct.: Greenwood Press, 1985); Federation of American Scientists web page, *Military Analysis Network: Shipyards* [http://www.fas.org/man/company/shipyard], last updated Oct. 27, 1999, accessed Feb. 8, 2008. Most of the published works on individual yards listed in the bibliography of this report (Appendix E) tend to be either provincial in outlook and/or pictorial in nature.

[4] Among the more recent naval histories, focusing on naval strategy and policy, are Kenneth J. Hagan, ed., *In Peace and War: Interpretations of American Naval History, 1775-1984*, 2nd ed. (Westport, Ct.: Greenwood Press, 1985), and Kenneth J. Hagan, *This People's Navy: The Making of American Sea Power* (New York: Free Press, 1992). See also Jennifer Speelman, "Revitalizing a Neglected Past: U.S. Naval History," Organization of American Historians *Magazine of History*, vol. 22, no. 4 (Oct. 2008), p. 31-34. The Naval Historical Center maintains extensive bibliographies on all aspects of naval history. See Naval Historical Center, "Publications," *Naval Historical Center* [web page] [http://www.history.navy.mil/publications.html], accessed Feb. 8, 2008.

[5] On the history of naval dry docks, see Richard D. Hepburn, *History of American Naval Dry Docks: A Key Ingredient to a Maritime Power* (Arlington, Va.: Noesis, 2003).

[6] The Pensacola Navy Yard was actually the second permanent yard added to the original six. The Sacketts Harbor Navy Yard on Lake Ontario, which originated during the War of 1812, saw little development, however, largely due to postwar agreements between the United States and Great Britain to disarm the Great Lakes. It was nothing more than a caretaker for an incomplete ship-of-the-line, being redesignated as a naval station shortly after the end of the Civil War. From just before World War I until officially closed in 1955, it was used for training of the New York Naval Militia. See Coletta, *United States Navy and Marine Corps Bases, Domestic*, p. 543-45. The War of 1812 had also seen a small shipyard built at Presque Isle, Pa., on Lake Erie, but it was closed in 1825. See ibid., p. 502-4.

[7] Hagan, *In Peace and War*, p. 64. Under the initial plans, the primary yards for refitting ships were Charlestown, Brooklyn, and Norfolk.

[8] Coletta, *United States Navy and Marine Corps Bases, Domestic*, p. 308.

ers were more advanced in the construction of steamships and their machinery than were government yards. Early in the war, the two southern yards—Norfolk and Pensacola—had fallen to Confederate forces, but they had both been recovered by mid-1862. To support its fleet on inland waters, the Navy in 1862 leased property at the confluence of the Ohio and Mississippi Rivers at Mound City, Ill.; the Mound City Naval Station was disposed of in 1874.[9]

The two decades following the Civil War are widely regarded by naval historians as perhaps the darkest hours in American naval history. The fleet declined to a shadow of its wartime size, and budgetary restraints both ended nearly all shipbuilding and helped reinforce the attitudes of senior naval officers in continuing to rely on sail rather than steam power. The period saw the closure of one of the six original yards as the Philadelphia facility moved from its cramped urban site at Southwark to a new location at League Island south of the city. A new yard authorized at New London, Ct., in 1867 never developed as a shipyard, becoming a coaling station in the 1890s and the Navy's principal submarine base in the 1910s.[10] Throughout the period, as will be discussed later, there were numerous studies done as to the necessity of maintaining all of the Navy's shipyard facilities.

Change in naval fortunes came in the early 1880s, when Congress was persuaded to appropriate money to build new warships of steel. While total reliance on auxiliary sail power would not be eliminated for another decade or more, modernization was assured when Congress placed riders on naval appropriations preventing expenditures on the maintenance of wooden vessels except under limited circumstances.

Congress mandated that the new shipbuilding program be divided between private contractors and government yards, as well as directing that ships be constructed on the Pacific as well as the Atlantic coast. This directive, as well as the need to catch up with years of deferred maintenance, led to considerable increases in the appropriations for the yards' physical plant. At first, Charlestown did not benefit from these efforts, but by the late 1890s the yard was receiving funding to update its facilities and construct new ones to help maintain the new steel fleet. Not until the 1910s would the yard receive its first order for a modern steel naval vessel, although it had built steel-hulled service craft starting in the early 1900s.

Two new yards—Puget Sound and Charleston—were authorized in this period, although Pensacola, never extensively developed as a shipyard, would close in 1911 and become the Navy's primary base for aviation.[11] The Navy also acquired bases at Pearl Harbor and at Cavite as a result of the acquisition of Hawaii and the Philippines; both of these installations included facilities traditionally if not formally termed navy yards. It also developed limited ship repair capacity at the New Orleans Naval Station in Algiers, La.[12]

World War I brought naval activity to a point not seen since the Civil War. Hundreds of new warships were authorized, and the Navy took over numerous merchant vessels for conversion to serve as part of the "bridge of ships" needed to support the American Expeditionary Force in France. Navy yards participated in this work, as well as in the tasks of supplying and maintaining the fleet. New facilities were added to yards that were just completing their modernization under the turn-of-the-century program. Unlike most military construction during the war, which involved temporary wooden structures not intended to last beyond the duration of the conflict, the industrial nature of naval facilities required more permanent construction.[13] While most development occurred within existing yards, the Navy did acquire some additional property, the most significant of which was the large dry dock being constructed by the Commonwealth of Massachusetts at South Boston.

The economic boom of the 1920s did not include the Navy or its shore establishment to any great extent. Indeed, national policy focused on naval disarmament, and numerous modern vessels were either cancelled or scrapped under the terms of the Washington and London treaties. What little work remained involved the modernization of pre-war and wartime battleships. Few changes were made to the physical plant of navy yards in this era.

Naval rearmament began in the early 1930s both in response to the growing threats of expansionism by both Japan and Germany and as part of the efforts to help bring the nation out of the Great Depression. Not only did the yards resume shipbuilding. Navy yard facilities were modernized and replaced using workers from the Works Progress Administration (later Work Projects Administration) (WPA).

By the end of the decade, the United States had abandoned the treaty restrictions of the 1920s and 1930s, and embraced a "Two-Ocean Fleet" policy. Ship construction became an important element of navy yard work as civilian shipbuilders were taxed to capacity not only with naval work but also with merchant vessels being built under the auspices of the U.S. Maritime Commission. To cope with the need for shipbuilding ways, navy yards expanded by acquiring annexes, often transferring conversion and repairs to those satellite facilities while concentrating on new ship production in the main yard.

World War II saw naval shipyards reaching their most productive periods. In addition to building up the existing yards, the Navy in late 1941 acquired property for new naval dry docks in California at Hunters Point in San Francisco and Terminal Island at Long Beach; earlier that year it had begun construction of a new dry dock at Bayonne, N.J. (see Figure 2-1). Significant repair facilities were also developed at the destroyer base in San Diego, Calif., and the submarine base at New London, Ct., as well as at Roosevelt Roads in Puerto Rico.[14] Thousands of workers, for the first time many of them women and minorities, toiled around the clock to build new ships, resupply and modernize existing ones, and repair the damage inflicted by the enemy. By the time Japan surrendered in September 1945, the United States Navy was unsurpassed in the world.

[9] Ibid., p. 327-28.

[10] Ibid., p. 329-30; David J. Bishop, *Naval Submarine Base New London*, Images of America (Charleston, S.C.: Arcadia, 2005), p. 7, 33, 39.

[11] Charleston replaced the Port Royal Naval Station, which dated to the Civil War and which had begun to be developed as a shipyard with the construction of a wooden dry dock, capable of docking the Navy's new steel battleships, in the early 1890s. After several years in a caretaker status, the facility on Parris Island was turned over to the Marine Corps in 1908. See Coletta, *United States Navy and Marine Corps Bases, Domestic*, p. 415-19.

[12] Originally acquired in 1849 for a naval depot, the New Orleans property had been leased for agricultural use until the 1890s. See Coletta, *United States Navy and Marine Corps Bases, Domestic*, p. 337-39.

[13] R. Christopher Goodwin & Associates, *National Historic Context for Department of Defense Installations, 1790-1940*, 4 vols. (Baltimore: Baltimore District, U.S. Army Corps of Engineers, 1995), 1:67.

[14] U.S. Navy, Bureau of Yards & Docks, *Building the Navy's Bases in World War II: History of the Bureau of Yards and Docks and the Civil Engineer Corps*, 2 vols. (Washington: U.S. Govt. Printing Office, 1947), 1:169-207.

Table 2-1 shows the employment (divided by type of work being done) at the nation's navy yards and naval dry docks in 1943.[15] As can be seen, the East Coast yards devoted more resources to ship construction, while those on the West Coast were more oriented towards repair work. The other work listed included manufacturing activities as well as outfitting and supply of vessels either newly-delivered from private shipbuilders or returning from active service.

A major reorganization of naval shore facilities occurred in November 1945. The term "navy yard" was replaced by "naval shipyard"; at the same time, the naval dry docks at South Boston and Bayonne were formally made annexes to their associated shipyards and those at Hunters Point and Terminal Island were elevated to shipyard status. In the course of this reorganization, responsibilities for other naval activities such as hospitals, prisons, and supply and ammunition depots, duties performed by yard commandants since the earliest days of the Navy, were transferred from the yards to a new umbrella organization known as a "navy base," which was in turn administratively responsible to the commandant of the naval district in which it was located.[16]

As in the past, the immediate postwar period saw the decline of the active fleet. New construction also came to a virtual halt, as hundreds of new ships rode at anchor in reserve, or "mothball," fleets. Shipyard piers echoed not to the sound of hammer and torch but to the hum of dehumidification equipment. Nuclear weapons raised the idea that navies were outmoded; the future, many claimed, lay with air power as projected by the newly-independent United States Air Force. Work at naval shipyards declined; Long Beach Naval Shipyard, in fact, was inactivated on April 1, 1950.[17]

The Korean War changed that perspective dramatically. While the on-going Cold War with the Soviet Union remained focused on strategic weapons and their delivery systems, limited wars on foreign shores required more traditional naval forces. Navy yards began to take wartime vessels out of reserve and retrofit them for continued service. Electronics, in the form of radar and sonar, became even more important, and shipyards began to fit guided missiles to ships in place of guns to counter new threats from jet aircraft and submarines.

The postwar era also saw major changes in the military's way of procuring equipment. From the earliest years of the republic, both the Army and the Navy had developed manufacturing facilities to produce weaponry and other materials required by them. The massive requirements of World War II meant that neither the Army's arsenals nor the Navy's manufacturing plants could fill the need for weapons and equipment; as a result, a large number of existing companies entered the military equipment business, and new firms were created for the purpose. After the war, these industries placed great pressure on the government to close down its own facilities and order all equipment from private industry.

Table 2-1
NAVAL SHIPYARD EMPLOYMENT, 1943

Shipyard Location	Ship Building	Repair Work	Other Work	Total Employees
Navy Yards				
Portsmouth	12,432	405	5,187	18,143
Boston[1]	22,128	16,578	4,135	42,841
New York[2]	24,246	15,370	19,398	59,014
Philadelphia	17,013	7,874	20,610	45,497
Norfolk	12,748	19,199	19,820	42,678
Charleston	9,702	8,241	4,311	22,254
Puget Sound	3,509	10,701	7,535	22,745
Mare Island	10,000	20,000	7,500	37,500
Pearl Harbor	779	10,291	27,934	41,154
Naval Dry Docks				
South Boston[3]	—	—	—	—
Bayonne[4]	—	—	—	—
Hunters Point	606	4,848	1,073	6,523
Terminal Island	0	1,851	0	1,851
San Juan	0	598	67	666
U.S. Coast Guard Yard				
Curtis Bay	680	1,400	430	2,510

Source: U.S. Navy, Bureau of Yards & Docks, [*Berthing and Ship Repair Facilities*], Jan. 1, 1944.
[1] Includes Naval Dry Dock South Boston
[2] Includes Naval Dry Dock Bayonne
[3] Included in Boston Navy Yard
[4] Included in New York Navy Yard

In the mid-1950s this process of privatization became official policy, although both the Ropewalk and Chain Forge at the Charlestown Navy Yard would, as will be seen, be granted at least temporary reprieves. But the concept that shipyards were valuable for their manufacturing role no longer existed, and would not, as it had in the lean years of the 1880s, be a reason for their retention.

The 1960s were a crucial decade in the development of naval shipyards. In 1961, President John F. Kennedy appointed former Ford Motor Company executive Robert S. McNamara as Secretary of Defense. McNamara began to apply management analysis to defense operations, and concluded that the nation had far too many naval shipyards. "I know damn well we've got too many yards, and we ought to take out Philadelphia, Boston, and New York," he told President Lyndon Johnson on Pearl Harbor Day 1963.[18] While politics would not allow him to carry out his full program of cuts, the New York Naval Shipyard closed in 1966.[19] Only the Norfolk, Charleston, Puget Sound, and Long Beach yards were considered to be core facilities under McNamara's policies, which also emphasized phasing out new construction in government yards and relying on private shipbuilders. Focus on conflict in Southeast Asia further weakened the position of East Coast navy yards.

[15] U.S. Navy, Bureau of Yards & Docks, [*Berthing and Ship Repair Facilities*], Jan. 1, 1944. The copy of this volume in the author's personal collection lacks a title page. It provides plans of all navy yards, naval stations, and miscellaneous facilities, together with detailed lists showing the characteristics of all dry docks (graving and floating), marine railways, piers, weight handling equipment (floating, hammerhead, portal, and locomotive cranes and shears); square footages of shops engaged in ship construction and/or repair; and employment levels.

[16] Julius Augustus Furer, *Administration of the Navy Department in World War II* (Washington: Naval History Division, 1959), p. 540-44. In this same reorganization, the Washington Navy Yard, which had ceased to function as a shipyard in the 1880s, officially became the U.S. Naval Gun Factory. See ibid., p. 313 n. 2.

[17] B.A. Cornfeld, "Long Beach Supports Ships and People," *All Hands*, no. 796 (May 1983), p. 21; Coletta, *United States Navy and Marine Corps Bases, Domestic*, p. 295. The yard was reactivated on Jan. 4, 1951.

[18] Michael Beschloss, ed., *Taking Charge: The Johnson White House Tapes, 1963-1964* (New York: Simon & Schuster, 1997), p. 96.

[19] McNamara also mandated the phase-out of Portsmouth over a ten-year period, but that closure never materialized.

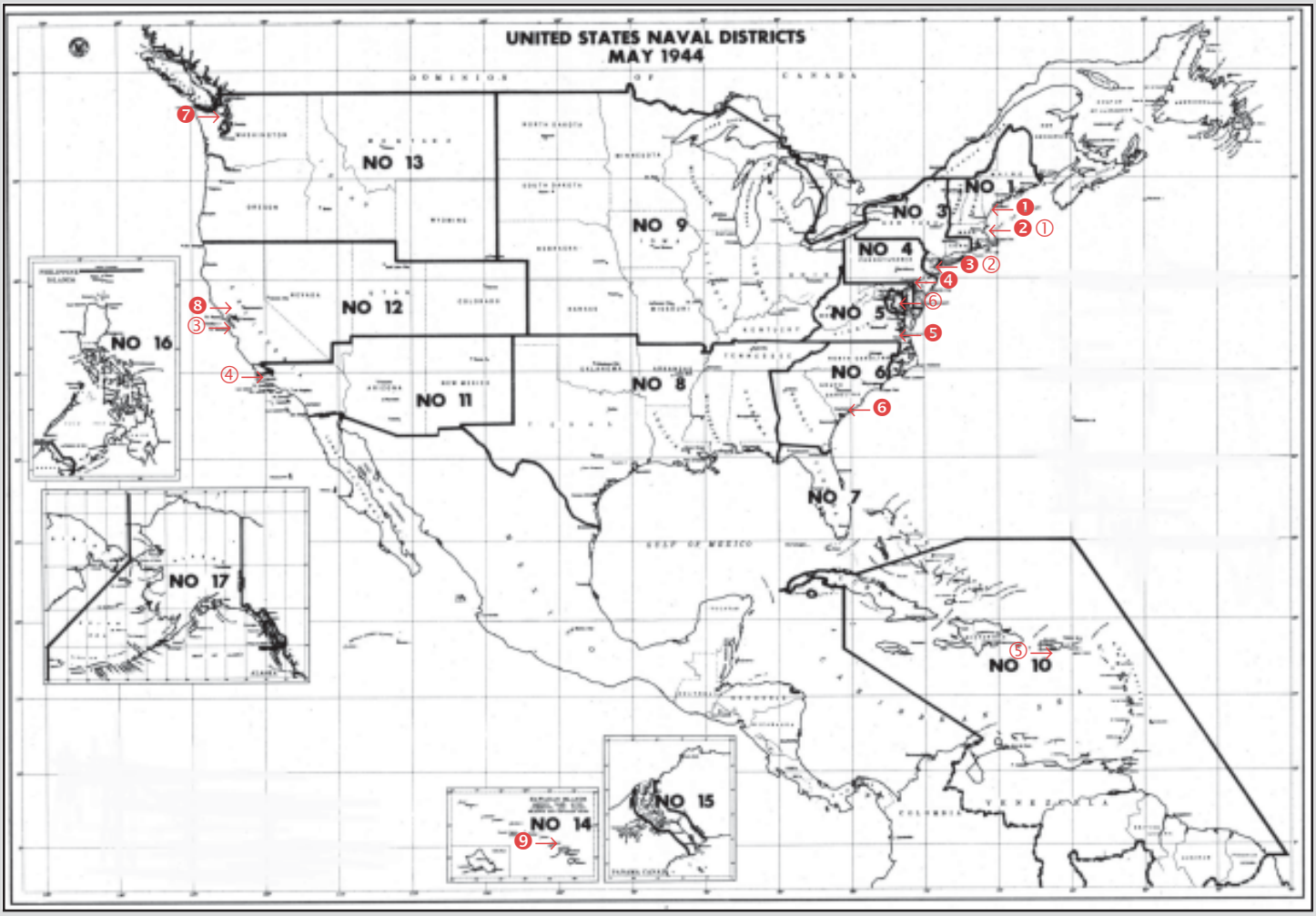


Figure 2-1 – United States Naval Shipyard Facilities, 1944

This May 1944 map showing the boundaries of the various naval districts has been annotated to locate naval shipyards and dry docks. Not shown are the destroyer repair base at San Diego, Calif., and the submarine base at New London, Ct.

Furer, Administration of the Navy Department in World War II

NAVY YARDS

1. Portsmouth (NH) (Kittery, ME)
2. Boston (Charlestown, MA)
3. New York (Brooklyn, NY)
4. Philadelphia (PA)
5. Norfolk ((Portsmouth, VA)
6. Charleston (SC)
7. Puget Sound (Bremerton, WA)
8. Mare Island (Vallejo, CA)
9. Pearl Harbor (HI)

NAVAL DRY DOCKS

① South Boston (MA)
② Bayonne (NJ)
③ Hunters Point (San Francisco, CA)
④ Terminal Island (Long Beach, CA)
⑤ San Juan (Roosevelt Roads, PR)

COAST GUARD YARD

⑥ Curtis Bay (MD)



During World War II, in addition to its navy yards and naval dry docks, the U.S. Navy created extensive floating ship repair facilities at advance bases in the Pacific. Here, the battleship USS *Idaho* (BB-42) is docked in USS *ABSD-3*, a nine-section floating dry dock, off Guam, in August 1945. Note the large number of support barges surrounding the dry dock. *NavSource*

The 1970s saw the Navy turn increasingly to private industry for warship overhauls and modernization, the core business of the naval shipyards. Thus, shipyards became even more vulnerable to budget-conscious officials in Washington. The closure axe would fall on Boston and San Francisco in 1973. Although naval buildup (the so-called "600-ship" Navy) was a key plank in the Reagan administration defense program in the 1980s, navy yards played little role in those efforts beyond modernization of existing battleships and aircraft carriers.

With the end of the Cold War following the fall of the Berlin Wall in 1989 and the breakup of the Soviet Union in the early 1990s, the Navy again began to shrink. A Base Realignment and Closure (BRAC) process designed to remove politics from the decision-making loop came down hard on naval shipyards. As a result, the mid-1990s saw Philadelphia, Charleston, Mare Island, and Long Beach all close down. Today, only four naval shipyards remain: Portsmouth and Norfolk on the East Coast, Puget Sound on the West Coast, and Pearl Harbor in Hawaii. The Navy also has two quasi-shipyards to support its ballistic missile submarines at Kings Bay, Ga., and Bangor, Wash.

Before The Charlestown Navy Yard

Little is known about the usage of the southeasterly reaches of the Charlestown peninsular prior to the arrival of English settlers in the 1620s. There is no recorded evidence of Native American occupation within the area now encompassing the Navy Yard, although, given the geography of the area and discoveries elsewhere in Charlestown, it is likely to have occurred.[20] Much of the development of Charlestown occurred to the west of the site that would become the Navy Yard. There is some evidence that the site was used as a source of clay for the brick and pottery industry that flourished in Charlestown, and that there may have been brick kilns on the property.[21]

The site first attained significance during the American Revolution. On the evening of April 18, 1775, Paul Revere came ashore just west of the yard's historic boundaries (but within the limits of Boston National Historical Park) to start his famous ride to Lexington to warn of the British troop movements in that direction. Two months later, British troops landed on its shores as they moved against colonial forces entrenched on nearby Breed's Hill. Because of the subsequent development of the Navy Yard, there are no remains of the British landing sites or evidence of the battle. The British landing sites, as marked by plaques on Buildings 5 and 105, are considered as defining features of the Bunker Hill Battlefield in the American Battlefield Protection Program's survey of that site, although they no longer are on the actual shoreline.[22]

In the words of Civil War era Assistant Secretary of the Navy Gustavus V. Fox, the first navy yards were "bought without express authority from Congress."[23] The act of February 25, 1799, which authorized the construction of six 74-gun ships-of-the-line, did not specifically authorize the creation of navy yards to build them. Secretary of the Navy Benjamin Stoddert, however, chose to interpret it as allowing the government to acquire such sites, and surveys were made of locations along the coast. As a result of this decision, the Navy's first six shipyards came into being in 1800 and 1801.[24] They were spread geographically both for political and practical reasons; only Massachusetts had two yards (because what is today Maine was still part of Massachusetts). One was on Seavey Island at Kittery, just opposite Portsmouth, N.H., and officially known as the Portsmouth Navy Yard. The second was at Charlestown, opposite Boston. (The other four yards were at Brooklyn, N.Y.; Philadelphia, Pa.; Washington, D.C.; and Norfolk [Gosport], Va.)

At the time that the Navy began to look at potential sites in Boston Harbor for a Navy Yard, the Moulton's Point section of Charlestown was largely open pasture or marsh fronting on tidal flats at the confluence of the Charles and Mystic Rivers at the upper limit of Boston Harbor. Individual plots were separated by post-and-rail fences. Only a couple of buildings stood on the extreme southwest corner of what would become the Charlestown Navy Yard, while an early artist's view and plan of the property shows the location of brick kilns along the northern edge of the yard.[25] The town of Charlestown, rebuilt after being burned by the British during the Battle of Bunker Hill, lay largely to the west of the site. The site's location, which was considered easy to fortify and defend, led to it being favored over the more exposed Noddles Island site also looked at by the Navy. (Noddles Island has since been incorporated into what is today East Boston.)

Establishment Of The Navy Yard

President John Adams on May 9, 1800, agreed to the establishment of a navy yard at Charlestown and directed that land acquisition begin. Working through Dr. Aaron Putnam, whose home overlooked the site to the north, the federal government began to purchase the land (see Table 2-2).[26] The first deed was recorded on

[20] Native American sites have been discovered in Charlestown to the west of the yard. See Brona G. Simon, "Massachusetts Bay," in Ann-Eliza H. Lewis, ed., *Highway to the Past: The Archeology of Boston's Big Dig* (Boston: Secretary of the Commonwealth, 2001), p. 10-11.

[21] Michael S. Raber and Matthew W. Roth, *Boston Naval Shipyard: A Plan for Cultural Resource Management in the Buy Parcel Area* (New Haven, Ct.: Raber Associates, 1981), TIC 457/D6154, p. 9, 15; Audrey R. Marie, *Cultural Resources Inventory: Potential Archeological Resources, Charlestown Navy Yard, Boston National Historical Park* (Denver: Denver Service Center, 1980), TIC 457/D1555, p. 44-46. Some archeological work has been done regarding the colonial settlement in the area of Charlestown immediately to the west of the Navy Yard. See Steven Roger Pendery, *Symbols of Community: Status Differences and the Archaeological Record in Charlestown, Massachusetts, 1630-1760* (Ph.D. dissertation, Harvard University, 1987), p. 120, 131-140, 230-261; Rita Reinke, "Charlestown," in Lewis, *Highway to the Past,* p. 22-26.

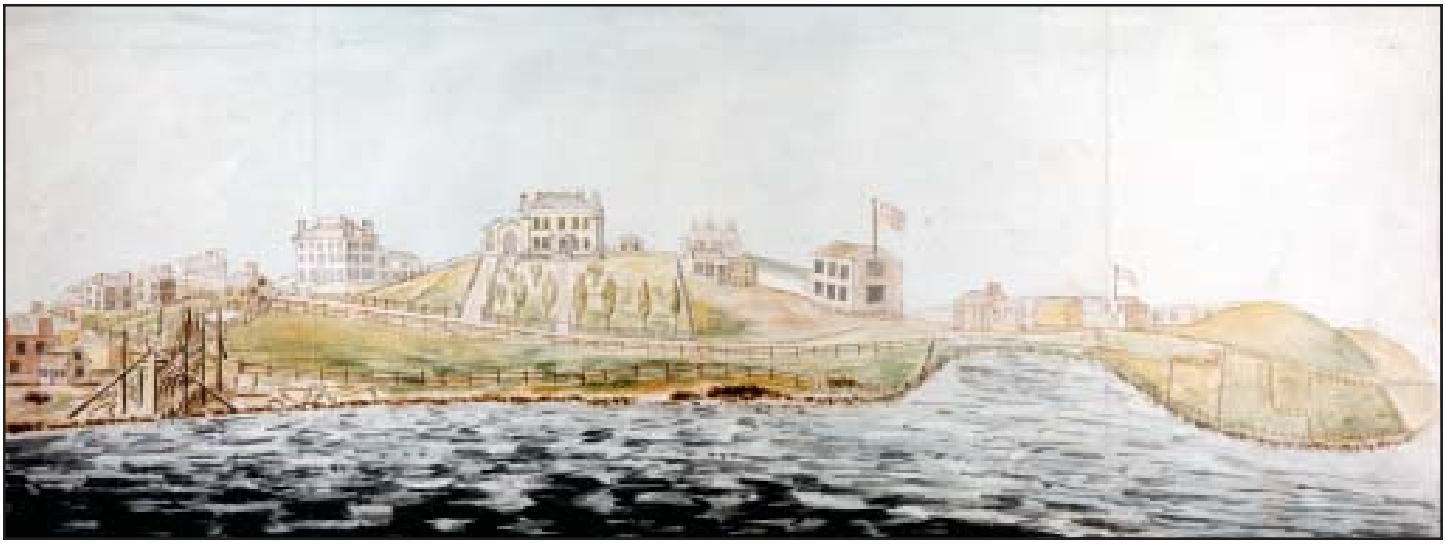
[22] American Battlefield Protection Program, Battlefield Survey Form, MA202, Bunker Hill, May 24, 2002, Division of Cultural Resources, BNHP.

[23] A New England Man [Gustavus F. Fox], *Advantages of League Island for a Naval Station,Dockyard, and Fresh-Water Basin for Iron Ships, and Other Vessels of War …* (Philadelphia: Sherman & Co., 1866), p. 29, quoted in Dowart with Wolf, *Philadelphia Navy Yard*, p. 234 n. 15.

[24] Secretary of the Navy to the President, Apr. 25, 1800, *American State Papers: Naval Affairs*, 4 vols. (Washington: Gales & Seaton, 1834-1861), 1:86-87; U.S. Navy, Bureau of Yards & Docks, *Federal Owned Real Estate Under the Control of the Navy Department* (Washington: U.S. Govt. Printing Office, 1937) [hereafter *Federal Owned Real Estate*], p. 197.

[25] Bearss, *Charlestown Navy Yard, 1800-1842*, 2:1075, 1077, 1081.

[26] Ibid., 1:15-27; U.S. Navy, *Message From the President of the United States, Transmitting … a Communication … From the Secretary of the Navy, in Relation to the Title by Which the United States Holds the Land Now Occupied as a Navy-Yard at Boston, Mass.*, Aug. 4, 1882, Senate Ex. Doc. No. 195, 47th Cong., 1st sess. (Washington: U.S. Govt. Printing Office, 1882) [hereafter *Land Now Occupied as a Navy-Yard at Boston*].



The proposed site of the Navy Yard is seen in this March 1800 watercolor by D. Roynerd entitled "A Northwest View of that part of Charlestown proposed for the United States Dock & Navy Yard." *NARA RG45*

August 26, 1800, the date the Navy Yard considered to be its official birthday. There was no formal commissioning ceremony for the facility. Rather, after surviving a review by the incoming Jefferson administration, it began to take shape with the appointment of Captain Samuel Nicholson as the yard's first superintendent and Samuel Brown as naval agent in early 1801.[27]

In April 1802, in response to an order from Secretary of the Navy Robert Smith, Osgood Carleton was hired by Brown to prepare a plan of the yard (see Figure 2-3). This document not only showed the existing conditions of the site but also contained an ambitious plan for its development. Few of the improvements envisioned would ever be funded.[28] The first improvements to be made to the site involved the construction of a cobb (or wood crib) wharf to create a timber dock for the storage of live oak timbers, a couple of storehouses, and a barracks for the Marine guard. The only significant construction to occur in the yard's first decade began in 1805, with the start of a home for the superintendent. This is today's Commandant's House (Quarters G).

Captain William Bainbridge characterized the yard he became commandant of in 1812 as "in a state of perfect chaos" after years of "mismanagement and neglect."[29] He urged Washington to fund improvements of the yard, especially as he looked to the task of laying down the keel for the first ship to be built in Charlestown, the 74-gun ship-of-the-line USS *Independence*. His most important contribution to the physical plant of the yard involved the erection of a massive shiphouse over the building ways so that construction would not be halted by winter weather. The shiphouses would dominate the Navy Yard waterfront until swept away by the modernization campaign of the 1890s and early 1900s.

Only three existing yard structures date to the War of 1812 period or before. In order of construction, these are the Commandant's House, the Marine Barracks (Quarters H-I-K), and the Navy Store (Building 5). All have undergone modifications over the years, although the basic form of all three remains. The Marine Barracks is considered to be the oldest Marine barracks building in the United States.[30] For many years, Building 5, erected in 1813, was erroneously considered to have been the yard's oldest structure, being confused with an 1803 wooden storehouse.[31]

Table 2-2
NAVY YARD LAND ACQUISITION, 1800-1801

Tract[1]	Grantor	Date	Acres	Cost
1	Richard Boylston	8/26/1800	1.50	$ 600
2	Aaron Putnam	8/29/1800	4.00	$ 3,001
3	William Calder	8/29/1800	2.50	$ 1,000
4	Catherine Henley et al.	8/30/1800	3.25	$ 1,500
5	John Harris[2]	11/29/1800	8.75	$16,587
6	John Larkin	12/2/1800	3.00	$ 1,016
7	John Harris[2]	2/6/1801	0.75	$ 500
8	Ebenezer Breed	2/21/1801	7.00	$ 3,894
9	Ebenezer Breed[2]	2/21/1801	3.00	$ 1,950
10	Aaron Putnam	4/3/1801	0.50	$ 7,300
	Total		34.25	$37,348

Source: Middlesex Deeds, bk. 137 p. 208; bk. 137, p. 209; bk. 137, p. 210; bk. 141, p. 51; bk. 141, p. 52; bk. 141, p. 48; bk. 141, p. 49; bk. 141, p. 39-41; bk. 141, p. 38-39; bk. 141, p. 168

[1] Tract numbers assigned in chronological order of acquisition.
[2] Eminent domain taking

The Yard Becomes Home To Other Government Entities

Since the Navy in the early 1800s was not utilizing all of the Charlestown property, other government agencies took advantage of the opportunity to establish themselves there. In 1802 the Navy

[27] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:31-33, 44-46.

[28] Ibid., 1:41-44, 2:1081. The Carleton plan superseded one prepared by Peter Tufts, Jr., the year before (see Figure 2-2). See ibid., 2:1077.

[29] William Bainbridge to Paul Hamilton, Apr. 16, 1812, quoted in Bearss, *Charlestown Navy Yard, 1800-1842*, 1:101.

[30] Edwin Simmons, Director of Marine Corps History, to Edwin C. Bearss, July 11, 1976, cited in Bearss, *Charlestown Navy Yard, 1800-1842*, 1:91.

[31] H. Thomas McGrath, Jr., and Anne Booth with Terry Wong, *Historic Structure Report, Architectural Data Section, Buildings 4 and 5, Charlestown Navy Yard, Boston National Historical Park, Charlestown, Massachusetts* (Denver: Denver Service Center, 1983), TIC 457/D2092, p. 3-4.

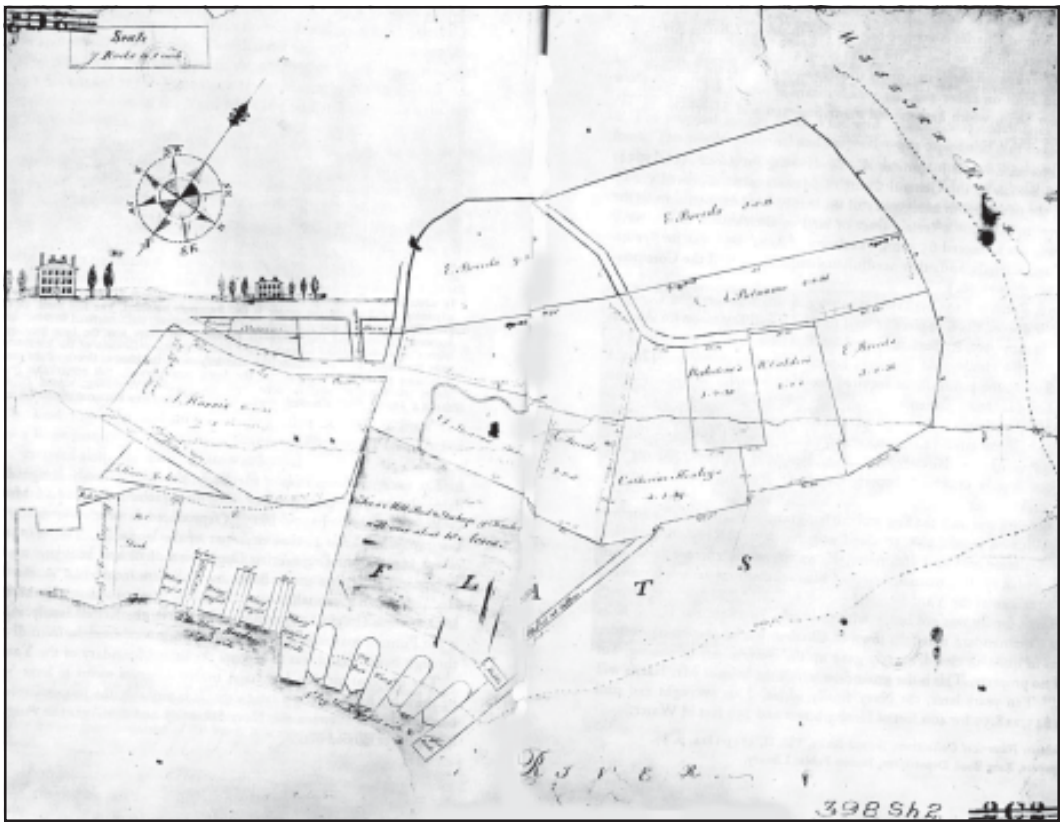


Figure 2-2 – Plan of Navy Yard, 1801

This plan prepared by Peter Tufts, Jr., in 1801 shows the original property acquisitions and proposed development, including three shipbuilding ways and four dry docks.

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Figure 2-3 – Carleton Plan of Navy Yard, 1802

"A Plan for the Navy Yard in Charlestown" by Osgood Carleton in 1802 showed existing conditions and proposed improvements, including a timber (wet) dock and three dry docks.

BOSTS-13494

agreed to the request of the Treasury Department for the transfer of about five acres of land for the purpose of erecting a Marine Hospital. This reservation was located at the northeastern corner of the yard. In December 1820, Commandant Isaac Hull began efforts to reclaim the land. These efforts dragged on over the next few years, and it was not until April 1825 that, following payment to the Treasury Department for the value of the hospital buildings, the yard took possession of that property. [32]

In 1809 the U.S. Army established an earthen Half-Moon Battery holding eight 10-pound guns near the eastern end of the yard and erected a powder Magazine and a Gun House. The Magazine and Gun House were shared between the Army and the Navy. In the summer of 1812, the Army and the Navy formalized the arrangements for the Army reservation, which was then fenced off. The Army would, following the establishment of an arsenal at Watertown, relinquish its reservation in the yard in August 1821, although it continued to have use of the former Blacksmith Shop (Building 6) and a wharf for another five years. [33]

The Marine Corps And The Navy Yard

To provide security for the yard, a permanent Marine Corps detachment was ordered there in May 1802. Marines would continue to guard the yard until May 1, 1974, shortly before the yard closed.[34] Through the years, the size of the detachment varied widely, both benefiting from the arrival of Marines from ships being placed out of service and suffering from being a source of personnel to fill out ship's companies for vessels departing for active duty.

The initial Marine Barracks, which was converted from an existing lime shed, was replaced by a new structure to the north in 1810 and 1811. Constructed largely by the Marines themselves, it consisted of a single-story central section containing enlisted men's barracks and three-story wings at each end housing officers. Over the years, this structure has undergone considerable modifications. In February 1861 Congress authorized repairs to the Marine Barracks. This work, completed during the Civil War, actually involved reconstruction of the structure to create a three-story central building with four-story wings, as well as a covered courtyard wing opening onto Chelsea Street. Congress appropriated funds for further



The Marine Corps occupied an area on the northern boundary of the Navy Yard between the Commandant's House and the Ropewalk. This Sept. 20, 1902, view depicts the Marine Barracks (Quarters H-I-K) and the Marine Corps Officer of the Day Office (Building 30), with the Parade Ground in the foreground. Note the cannon display, a feature of the area until the closure of the yard in 1974. *BOSTS-9220*

alterations in Fiscal Year 1890, and in Fiscal Year 1898 authorized the construction of an additional story to the structure, giving the building its present four-story configuration. The final major modification came in 1941, when fireproof stair towers and the present porches were added by the Work Projects Administration. Originally open, the porches were enclosed by storm windows in 1951.[35]

When the yard assigned alphabetical designations to quarters in the 1860s, the Barracks itself became Quarters I while the two wings were designated as Quarters H and Quarters K; these designations last appear on yard site plans in 1919. Thereafter, the two wings are shown as Quarters 1 (Commanding Officer) and 2 (Junior Officers), with each floor of the latter being assigned a lowercase letter suffix.[36]

Shortly after the Barracks was completed, the Marines laid out a Parade Ground in front of it. In 1867 a small one-story structure was built at the east side of the Parade Ground for the Marine Corps Officer of the Day (Building 30).[37] In 1909 this structure was razed and a new three-story Marine Corps Administration Building (Building 136) was erected in its place at the east side of the Parade Ground. This structure was enlarged at its south end in 1937 by the Works Progress Administration. It became the headquarters of Boston National Historical Park in 1976, but was vacated three years later to allow it to be demolished for the construction of 5th Street.[38]

[32] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:48-49, 352-53, 473-75. The Marine Hospital moved across the Mystic River to Chelsea where it remained until moved to Brighton, Mass., in 1940. See "U.S. Marine Hospital," *Chelsea Historical Society* [web site] [http://www.olgp.net/chs/d2/marine.htm], accessed Apr. 27, 2004. The Marine Hospital should not be confused with the Naval Hospital which was also located at Chelsea and which took over the Marine Hospital's second Chelsea building on that institution's move to Brighton.

[33] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:62-68, 109-11, 347-51, 489-91. The Watertown Arsenal developed into a military-industrial complex which served the needs of the Army for heavy manufacture of equipment in a similar manner as the Charlestown Navy Yard served the Navy. For a brief history and photographic survey of the Watertown Arsenal, see Alan R. Earls, *Watertown Arsenal*, Images of America (Charleston, S.C.: Arcadia, 2007). See also Libby Baylies Burns and Betsy Behr, "Written Historical and Descriptive Data," HAER MA-20, Watertown Arsenal, 1985, HABS/HAER Collection, Library of Congress.

[34] Robert Smith to William W. Burrows, May 21, 1802, quoted in Bearss, *Charlestown Navy Yard, 1800-1842*, 1:75-76; Boston Naval Shipyard, "Chronological List of Events, 1 January 1974-1 July 1974," Command Histories, 1961-1974, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Catalog No. BOSTS-13344, Box 12.

[35] G. Rodger Evans, *Historic Structure Report, Marine Barracks (Bldg. I), Charlestown Navy Yard: Architectural Data, Boston National Historical Park, Charlestown, Massachusetts* (draft; Denver: Denver Service Center, 1978), TIC 457/D36; Pub. Law 49, Feb. 21, 1861, 12 Stat. 148; Pub. Law 114, 50th Cong., 2nd sess., Mar. 2, 1889, Pub. Law 128, 54th Cong., 2nd sess., Mar. 3, 1897, in Woodbury Pulsifer, comp., *Navy Yearbook: Compilation of Annual Naval Appropriation Laws From 1883 to 1912*, Senate Doc. No. 955, 62nd Cong., 3rd sess. (Washington: Govt. Printing Office, 1912), p. 102, 273; Post Supply Officer, Marine Barracks, Boston, to Commandant of the Marine Corps, "Enclosing of Arcades, request for funds," Feb. 21, 1951, Public Works Dept., Design Division (Code 440), Completed Design Projects, Marine Barracks, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 41.

[36] Annual Site Plans, 1919, 1920, File 399-96, 399-97, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13502.

[37] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 235.

[38] Shelley K. Roberts and Audrey Marie, *Historic Structure Report: Architectural Data and Archeological Data Sections, Building 136, Charlestown Navy Yard, Boston National Historical Park, Massachusetts* (Denver: Denver Service Center, 1982), TIC 457/D1933. The construction



Figure 2-4 – Reconstructed Plan of Navy Yard, ca. 1812

This plan is part of a series of historic base maps prepared by Edwin C. Bearss to show the evolution of the yard. In most cases, these plans are tracings of historic plans, which have been used in this report in preference to the Bearss plans. However, there is no available 1812 yard plan, so this represents Bearss's reconstruction of such a plan based on earlier and later plans and documentary evidence. *NPS TIC 457/25020*

Through the years, there were several proposals to move the Marine Barracks outside of the Navy Yard in order to free up space for naval uses. The most serious of these proposals came in the mid-1830s. Congress in May 1836 authorized the purchase of a site on the opposite side of the Salem Turnpike (Chelsea St.) for the construction of a new Marine Barracks. Despite negotiations with the property owners, agreement could not be reached and nothing came of this plan.[39]

Unlike the Army or the Treasury Department parcels, which were considered to be outside of the yard's jurisdiction, the land occupied by the Marines remained a part of the yard until August 1964, when a 1.35-acre parcel encompassing the Marine Barracks, the Parade Ground, and the Marine Corps Administration Building (Building 136) was transferred to the Corps. This land was returned to Navy custody just before the closure of the Navy Yard in 1974.[40]

The Yard During The War Of 1812

By early 1812, when Captain William Bainbridge arrived to take command of the yard, parts of the site had been transferred to the Treasury Department (Marine Hospital) and to the War Department (Laboratory). There was a brick Powder Magazine intended for the joint use of both the Army and the Navy. The major structures in the yard included the Commandant's House (Quarters G), a Marine Barracks (Quarters I), a three-story wooden Storehouse, a one-story wooden structure occupied as offices, a building housing the boatswain and purser, a frame blacksmith shop containing three forges, and two frame sheds to protect timber stocks. There was a small stone landing for small boats, and a 300-foot dam or cobb wharf across the wet storage basin.[41]

Even before the start of the conflict with Britain, Bainbridge had pressed Secretary of the Navy Paul Hamilton for funds to begin improvements.[42] Among the improvements recommended was the construction of a wharf and shipbuilding slip in the area now occu-

of this building was apparently funded under the $20,000 appropriated in Fiscal Year 1909 for "the completion of marine barracks, navy-yard, Boston." See Pub. Law 115, 60th Cong., 1st sess., May 13, 1908, in Pulsifer, *Navy Yearbook, 1912*, p. 603.

[39] Pub. Law 62, 24th Cong., 1st sess., May 16, 1836, 5 Stat. 28-29; Bearss, *Charlestown Navy Yard, 1800-1842*, 2:1036-1037.

[40] "Marine Barracks – From Transfer of Land to Inactivation," Apr. 22, 1974; Director, Boston Caretaker Group, to Commandant of the Marine Corps, "Closure and Caretaker of the Marine Barracks, Boston," Aug. 2, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 19.

[41] Bainbridge to Hamilton, Apr. 21, 1812, cited in Bearss, *Charlestown Navy Yard, 1800-1842*, 1:101-3. See also Bainbridge, "Report on the Navy Yard, Charlestown," Apr. 14, 1813, *American State Papers: Naval Affairs*, 1:328-330.

[42] See, e.g., Bainbridge to Hamilton, June 10, 1812, in William S. Dudley, ed., *The Naval War of 1812: A Documentary History: Volume I, 1812* (Washington: Naval Historical Center, 1985), p. 131.

Marines In The Navy Yard: A Gallery

FROM MAY 1802 until May 1974 a detachment of United States Marines was stationed at the Navy Yard. The Marines provided security, including manning the yard's gates, as well as color guards and firing parties for ceremonial occasions. The Marines occupied an area along the north boundary of the yard. Although considerably modified through the years, the Marine Barracks (Building I) is recognized as the oldest surviving Marine Barracks structure.



This drawing of the Marine Barracks appeared in *Ballou's Pictorial Drawing-Room Companion* on Aug. 16, 1856, and shows the Marine detachment on parade. *BOSTS-9218*



The principal duty of the Marines was providing guard details for the yard's gates. This view of the Main Gate (Gate 1) dates to the 1870s. *BOSTS-8647*



The Marine Barracks provided a source of Marines for assignment to ships or other duties. This drawing, from a contemporary newspaper, shows a detachment leaving the Navy Yard for Cavite in the Philippines, probably on Apr. 5, 1899, since the caption mentions that they were commanded by Col. Percival C. Pope, who turned over command of the Barracks that day. Pope, who first joined the Corps in the Civil War, had commanded the Barracks as a major from July 1892 to Dec. 1893 and again in Mar. and Apr. 1898. He resumed his command at Boston as a lieutenant colonel in Sept. 1898, receiving his promotion to colonel in Mar. 1899. His final tour as commanding officer at Boston was from Aug. 1900 until Nov. 1903. *BOSTS-7773*



Inspections were a regular feature of Marine life at the Navy Yard. This image of the Marine detachment assembled for inspection dates from the period between 1910 and 1913. *USMC History Division*



In the latter stages of World War II the Marine detachment included many Marines who had returned to duty following recovery from battle injuries at the nearby Chelsea Naval Hospital. This Aug. 30, 1945, image shows a group of 16 Marines receiving their Purple Hearts. *BOSTS-13352*

Marines In The Navy Yard: A Gallery



This panoramic photograph shows the Marine Barracks detachment assembled in front of the Barracks on Apr. 27, 1969. *acc. BOSTS-781*





Two of the major functions of the Marines were furnishing color guards for ceremonial occasions and providing security at the yard's gates. At left, the color guard participates in the Feb. 17, 1973, commissioning of USS *Jesse L. Brown* (DE-1089). Above, two Marines man the guard post in the middle of First Ave. at Gate 1 on Feb. 15, 1974.
BOSTS-11515 (left); BOSTS-8956 (above)



The Marine detachment is seen on the Parade Ground on June 30, 1972. Neither the notes on the negative envelopes nor the *Shipyard News* provides any information on why the ceremony took place. *BOSTS-7637*



The last formal activity of the Marine detachment was Evening Colors on Apr. 30, 1974. Thus, the Marines were in dress uniform for the occasion.
BOSTS-7623

pied by Pier 1. No funds were immediately forthcoming for these projects.

During 1812, the yard performed repairs on six frigates (*John Adams, Chesapeake, Constitution, President, United States, Congress*), one sloop (*Hornet*), two brigs (*Nautilus, Argus*), and four gunboats. Much of this work had to be performed at rented wharves in Boston because the yard lacked suitable facilities for berthing larger vessels. In early 1813, the Navy Department finally authorized the construction of a wharf and a building slip at the west end of the property. The keel of the ship-of-the-line *Independence* was laid down on the slip in the late spring of the year. A few months later, a shiphouse was erected over the building slip so that construction could continue in all weather.[43] That summer and autumn saw the old Navy Store replaced by a new brick structure (Building 5) and a new blacksmith shop erected.[44]

During 1813, the yard performed repairs on USS *Constitution*, which had returned to Boston in February after a cruise during which she had defeated HMS *Java*. It also outfitted USS *Frolic*, which had been built at a private shipyard in Charlestown and launched in September.[45]

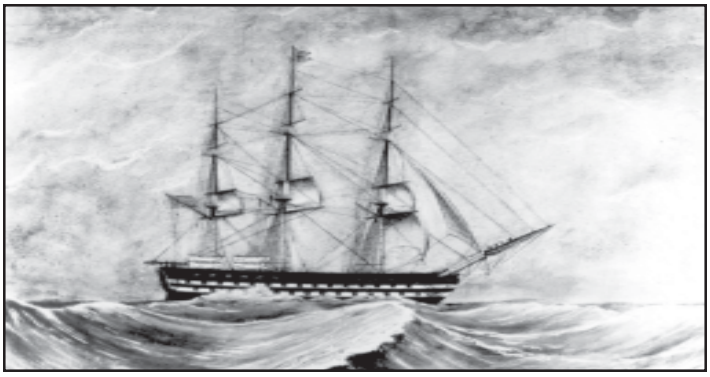
By early 1814, the British had extended the naval blockade of the American coast to New England. This blockade effectively prevented United States naval vessels from reaching Boston, except for USS *Constitution*, which had escaped from a British force off Marblehead in April.

On June 20, 1814, a boat party from HMS *Nymphe* entered Boston Harbor and destroyed a sloop within a mile of the Navy Yard. *Independence* was launched two days later. Fears of a British attempt to destroy the Navy Yard and the newly-launched *Independence* led Bainbridge to hastily arm the vessel. No British attempt on the yard occurred, and instead of putting to sea in 1815 to hunt the British, *Independence* would sail for North Africa and service in the newly-declared war on Algiers.[46]

Ship Construction Begins

The War of 1812 saw the Navy Yard finally begin ship construction, the task for which it had initially been established. The Navy in April 1813 assigned the yard the construction of one of four 74-gun ships-of-the-line authorized by Congress in January of that year. Commandant Bainbridge hired Boston shipbuilder Edmund Hartt and his son Edward to superintendent the construction work. Shortly after the keel of what would become USS *Independence* had been laid down at the yard in May, the Hartts became embroiled in a conflict with Bainbridge and walked off the job. Bainbridge then hired another Boston shipbuilder, Josiah Barker, to take their place.

Independence was launched, on the third try, on June 22, 1814, and put in commission, with Bainbridge in command, in July 1815. As originally built, probably due to modifications that Bainbridge had insisted on during construction, she was not a particularly successful ship due to, among other things, her lower gun ports riding too close to the water. In the mid-1830s, however, she was cut down one deck ("razeed" in naval terminology) and converted into a 56-gun frigate, which was regarded as a good vessel. As such, she served into the 20th century, spending most of her later years as the barracks, or receiving ship, at the Mare Island Navy Yard in California.[47]



This painting by an unknown artist depicts the 74-gun ship-of-the-line USS *Independence*, the first vessel built at the Charlestown Navy Yard. Launched on June 22, 1814, she put to sea in July 1815.

NARA 19-N-3164

The start of ship construction also brought the introduction of the shiphouse to the yard. A shiphouse is a large, barn-like structure erected over a shipbuilding way to protect workmen from bad weather. For years, internal histories of the Navy Yard claimed that Boston had pioneered the shiphouse concept in America. As Edwin Bearss has pointed out, this is but one of "the myths associated with the Boston Naval Shipyard," for in July 1813 Commandant Isaac Hull of the Portsmouth Navy Yard first proposed the construction of a shiphouse to shelter workers who were constructing the 74-gun ship-of-the-line USS *Washington* at that yard. A month later, when Commandant Bainbridge heard of this, he sought and obtained permission from the Navy Department to erect a similar structure at Boston.[48]

While the original shiphouse was destroyed in a windstorm shortly after USS *Independence* was launched in 1814, ultimately, the yard would possess four shiphouses (Buildings 68, 71, 73, 92). The newest of these (Building 92) was built in 1872 on the site of Shiphouse G, which replaced the original one in 1819 and which had been torn down shortly before the launch of USS *Vermont* in 1848. The last shiphouse would be demolished in 1906 as part of the yard's early 20th century modernization efforts.[49]

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[43] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:120, 123-26, 129, 131-33.

[44] McGrath and Booth with Wong, *Historic Structure Report, Buildings 4 and 5*, p. 3-4.

[45] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:143-146. The Navy Yard erroneously listed *Frolic*, a sloop built by Josiah Barker on contract in Charlestown (but not within the yard limits), as the first vessel built by the yard.

[46] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:149-50, 159-61.

[47] Ibid., 1:127-31, 133-39, 155-61; U.S. Naval Historical Center, *Dictionary of American Naval Fighting Ships* [hereafter *DANFS*] (8 vols.) (Washington, 1959-1981), 4:568-77. A number of sources have listed Hartt and Barker as the joint builders of the ship, but it is clear that their successive roles were as employees of the yard and not as private contractors building the ship for the Navy.

[48] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:131-33. Hull's proposal was made on July 24, 1813, while Bainbridge submitted his on August 21. See Linda M. Maloney, *The Captain From Connecticut: The Life and Naval Times of Isaac Hull* (Boston: Northeastern University Press, 1986), p. 216, 503-504 n. 22.

[49] Black, *Charlestown Navy Yard, 1890-1973*, 2:823, 824; Preble, "Charlestown Navy Yard," *Memorial History of Boston*, 3:344 n. 1; Bearss, *Charlestown Navy Yard, 1800-1842*, 1:146; Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 26-27, 236..

Shiphouses

SHIPHOUSES allowed construction of ships to occur without regard to the weather. They also provided protection for incomplete vessels, work on which had been suspended for various reasons. Their massive size dominated the waterfronts of 19th century navy yards. This gallery provides images of the Charlestown Navy Yard's shiphouses, the last of which was demolished in 1906.



This 1840 painting by George Curtis shows Shiphouse H (Building 68) and Shiphouse I (Building 71). The Bunker Hill Monument is nearing completion in the background.
Mariner's Museum



Shiphouse No. 39 (Building 73) (left) was constructed between 1838 and 1842 and first used for the brig USS *Bainbridge.* It was torn down in the 1890s. Shiphouse I (Building 71), built in 1822, housed only one ship throughout its existence, the ship-of-the-line *Virginia*, construction of which was suspended in 1825; some 49 years later, she was finally dismantled. The structure was demolished in 1906.
Hawes Collection 285, Kennedy Library



The massive size of the shiphouses can be seen in this Sept. 23, 1902, view of the West Shiphouse (Building 68). Building 68 would give way to what would become Shipways 1. Note Building 103 under construction to the left.
BOSTS-8978

Shiphouses were often described as having a structure similar to an upside down ship's hull. This interior view of the West Shiphouse (Building 68) taken from a stereographic card clearly shows its framing.
Historic New England





The newest Shiphouse (Building 92) was constructed in 1872 and demolished in 1894. This was the third shiphouse on the site of the yard's first building ways. The original shiphouse built for USS *Independence* in 1813 was destroyed in a storm in July 1814. Shiphouse G was erected on the site in 1818 and torn down in 1848.
Burroughs Collection, Bostonian Society

The Yard Defined

Although the acreage of the Charlestown Navy Yard grew from 35.5 acres in 1800 to 129.88 acres (of which 88 acres was hard land) in 1973,[50] the yard had little physical expansion into the surrounding Charlestown community (see Figure 2-5). The two major acquisitions on the west side of the yard came in 1862, when Buildings 3 and 4 were purchased,[51] and in 1942, when Building 204 was acquired.[52] In the summer of 1939, the yard looked at an expansion through the purchase of property along Chelsea Street from the yard to City Square, as well as the Hoosac Docks and associated Grain Elevator and storage warehouses of the Boston & Maine Railroad along Water Street. Although Congressman Thomas A. Flaherty introduced legislation to authorize this expansion in early 1940, it never passed because of the high costs associated with the land purchases, let alone site clearance, and the decision to develop the South Boston Annex property instead.[53] One additional parcel outside the yard, between Gates 1 and 2, was acquired in 1943, primarily to allow removal of buildings that had been constructed against the yard wall.[54]

Most of the accretion of land area came from the gradual filling in of land along the waterfront and the construction and reconstruction of piers out to the harbor line which formed the yard's waterside limits.[55] At first, not all construction on the waterfront was intended to reclaim hard land. A common method of preserving timber for shipbuilding was to submerse it in wet basins. The first site improvement at the yard was a 1,000-foot cobb (wood crib construction) wharf, built in 1801 and 1802. The first stone quay walls appeared in 1813 in connection with the construction of the yard's first shipbuilding ways. These were improved, and Shiphouse G erected, when the yard laid down what would become USS *Vermont* in 1818. A second building ways, along with Shiphouse I (Building 71), was built in the eastern section of the yard in 1822, to accommodate a second ship-of-the-line. Since both ways were occupied by incomplete vessels when the yard was given an order for a 44-gun frigate in 1825, a third ways, west of the second, was constructed, along with a third Shiphouse (Building 68).

Further quay wall construction in 1830 defined an additional timber basin, for mast and spar timbers, at the eastern end of the yard (Timber Dock No. 51/Structure 87). Improvements were also made in the original Timber Dock (Structure 90, 91) in the area between the Dry Dock and Shiphouse H (Building 68). Another building ways and Shiphouse No. 39 (Building 73) appeared to the east of Shiphouse I in 1841 and 1842. Further landfill occurred in the late 1840s and 1850s to provide the site for the Machine Shop (Building 42). By 1869, filling and wall building raised the total dry land area of the yard to 83.5 acres.

The waterfront remained relatively unchanged from then until the turn of the century, when the timber dock gave way to Dry Dock 2. The last section of timber dock, that at the east end of the yard, was filled in by 1918. In the early 20th century, the area at the west end of the yard was rebuilt as a solid wharf (Pier 1) to accommodate a large coaling plant.[56] During World War II, the eastern end of the yard was rebuilt with a new quay wall and fill to accommodate Dry Dock 5. Between 1955 and 1957, this wall was faced to form a wharf (Pier 11) capable of accommodating aircraft carriers.[57]

The Navy Yard Wall

The land side of the yard became clearly defined in the 1820s when a granite wall was constructed from Water Street to Chelsea Street and then along Chelsea (then the Salem Turnpike) to the Mystic River. Construction of the wall, intended to both deter trespassers (and naval deserters) and to protect the yard from fire spreading into it from adjoining areas, began in the summer of 1824, on the west side between the Navy Store (Building 5) and the Salem Turnpike (Chelsea Street). In the following year, after the conclusion of an agreement with the owners of the Salem Turnpike to straighten the northern boundary of the Navy Yard, construction of the northern wall began. It was completed in October 1826. As built, the wall curved into the corners of the Commandant's House, allowing the Commandant access to the outside without having to pass through the yard, and incorporated portions of the brick wall of the Marine Barracks' stable. The wall's design represented the first yard project for architect Alexander Parris.[58]

[50] For a summary of the acquisition of the yard's property, see *Federal Owned Real Estate*, p. 197-204; *Land Now Occupied as a Navy-Yard at Boston*; Frank H. Lewis, Attorney's Report on Title, Report No. 8-74, Boston Naval Shipyard, Charlestown, Boston, MA, July 17, 1974, Boston NHP Deed No. 2, Deed Files, Division of Cultural Resources, BNHP. The development of the yard is documented in the annual plans of the yard. For the 19th century, they accompanied the annual reports and often showed proposed new facilities; for the 20th century, they were largely existing conditions documentation. See Annual Site Plans, File 399, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13502. These plans are available on microfiche as TIC 457/62912.

[51] Deed, Samuel Oakman and Benjamin W. Eldridge to United States of America, July 1, 1862, Middlesex Deeds, bk. 871, p. 469.

[52] Edwin C. Bearss, Audrey R. Marie, and Clyde L. Schroeder, *Historic Structure Report, Historical, Archeological, and Architectural Data Sections: Building 204, Garage and Transportation Office, Charlestown Naval Shipyard, Charlestown, Massachusetts, Boston National Historical Park* (draft; Denver: Denver Service Center, 1979), TIC 457/D13, p. 6-7.

[53] "Encouraging News From Washington," *Boston Navy Yard News*, vol. 4, no. 7 (July 13, 1939), p. 1; "Congressman Flaherty Introduces Bill to Expand Yard," *Boston Navy Yard News*, vol. 5, no. 3 (Mar. 14, 1940), p. 1. The boundary for the Charlestown Navy Yard unit of Boston National Historical Park includes a portion of the lands proposed for acquisition in 1939, most notably the former Boston & Maine Railroad's Hoosac Stores No. 1 & 2, which was acquired in 1981. On the Hoosac Docks, see Paul O. Weinbaum, *Hoosac Docks: Foreign Trade Terminal*, Cultural Resources Management Study No. 11 (Boston: Division of Cultural Resources, North Atlantic Region, National Park Service, 1985), TIC 457/D6117A.

[54] Lewis, Attorney's Report on Title, Report No. 8-74, July 17, 1974, Boston NHP Deed No. 2, Deed Files, Division of Cultural Resources, BNHP, p. 6.

[55] On the filling of the land at the Navy Yard, see Nancy S. Seasholes, *Gaining Ground: A History of Landmaking in Boston* (Cambridge, Mass: MIT Press, 2003), p. 406-17. For a summary of the changes to the harbor line over time, see Stephen P. Carlson, *Evolution of Harbor Line, Charlestown Navy Yard*, Oct. 4, 2007.

[56] Mary Jane Brady, *Historic Structure Report, Architectural Data Section, Pier 1 and 2, Charlestown Navy Yard, Boston National Historic Park, Massachusetts: Volume I, Historical Background* (Denver: Denver Service Center, 1982), TIC 457/D1842.

[57] Seasholes, *Gaining Ground*, p. 414; Mansfield, *Boston Naval Shipyard, 1938-1957*, p. 36; "Pier 11 Job Underway," *Boston Naval Shipyard News*, vol. 20, no. 1 (July 15, 1955), p. 1, 3; "Public Works Announces New Projects," *Boston Naval Shipyard News*, vol. 22, no. 1 (July 12, 1957), p. 1, 4.

[58] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:450-69; Lalande L. Keeshan, *Historic Structure Report, Navy Yard Granite Wall, Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts* (draft; Boston: Boston National Historical Park, 1981), TIC 457/D6081.

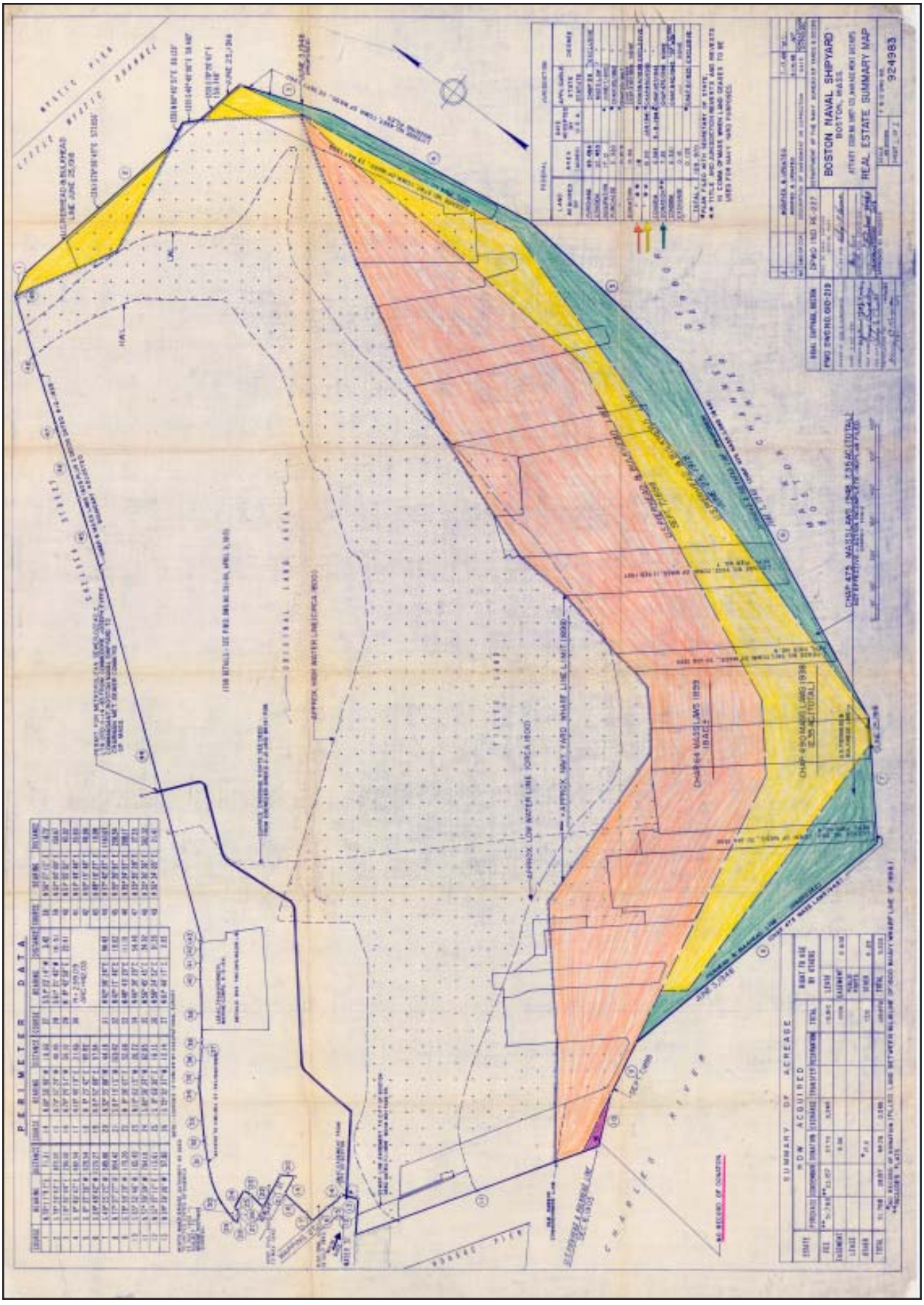


Figure 2-5 – Real Estate Summary Map, 1969

This real estate summary map, updated to July 17, 1969, is one of several prepared by the Navy Yard over the years showing the lots and methods by which the yard was acquired. This plan has been annotated to show how the waterside boundary evolved through the years. *BOSTS-13347*

The Navy Yard Wall & Gates: A Gallery





This look at the Navy Yard's Boundary Wall and gates starts at the Main Gate (Gate 1) and proceeds clockwise around the yard. The view above shows the Main Gate in the 1850s. Note the Marine sentries. At right is the Old Navy Store (Building 5), built in 1813. Between 1901 and 1903 a new Main Gate (Building 97) was constructed by Boston contractor George W. Harvey. This structure, which became a symbol of the yard, is seen above right on Apr. 14, 1958. By that time, the gate could no longer accommodate truck traffic, and it was demolished in 1958 and 1959 and a new modern Gate House (Building 267) erected. It is seen at right in Nov. 1971. Note the guard booths in the center of First Ave. at both the gate and the intersection of 3rd Street.

BOSTS-8939 (above); BOSTS-8945 (above right); BOSTS-8949 (right)

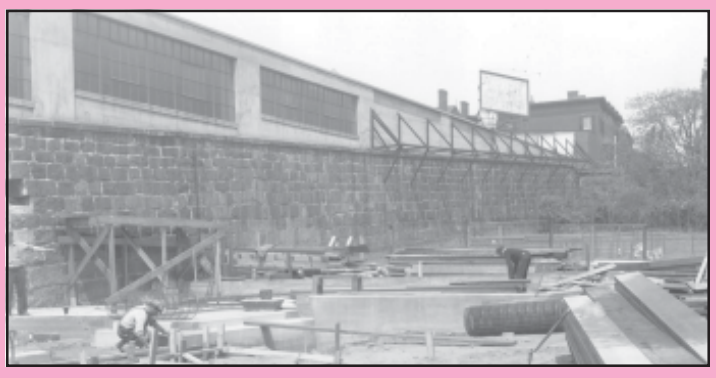






The fact that the yard was located in a dense urban neighborhood can be seen in these views of the western wall. Above left, this section of wall across Henley Street, seen in 1936, would be removed in 1941 to create Gate 2. Note the concrete garage built against the wall in 1927. Acquired by the Navy as Building 204 in 1942, it is seen at left in the Jan. 8, 1959, view of Gate 2 above. The rear of Captains Row (Quarters B-F), showing the various porch additions, can be seen just inside the gate.

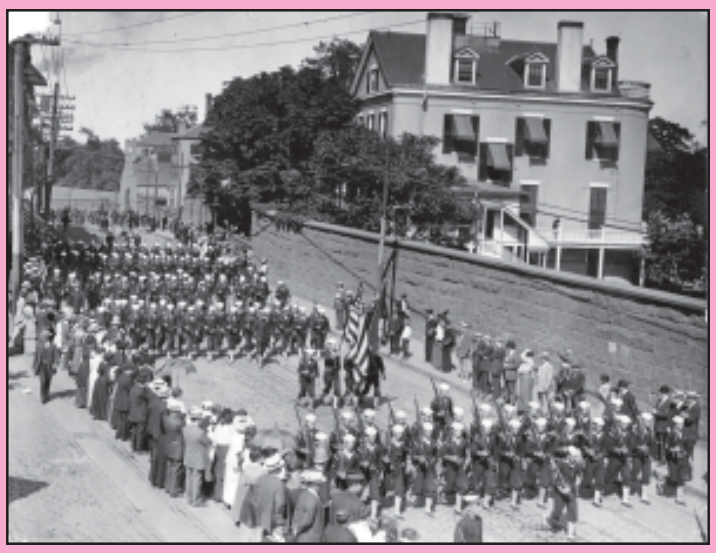
BOSTS-9155 (above left); BOSTS-15654 (above)



The interior of the west wall is seen on May 19, 1936. Construction has started on the new Garage & Chauffeur's Quarters (Building 1).

BOSTS-9250

The Navy Yard Wall & Gates: A Gallery





At left, the 1914 Bunker Hill Day Parade passes the Commandant's House (Quarters G) and the Navy Yard wall on Chelsea St. Note the wrought iron fence in front of the house which allowed the Commandant direct access to Chelsea St. As part of security changes just before World War II, the wall was extended across the front of the house and the curved wing walls cut down to half height, as seen in this 1946 view of the wall's interior. Within a few years, the structures on the other side of Chelsea St. would be swept away for the construction of the Mystic River Bridge.

Leslie Jones photo, BOSTS-10085 (left); BOSTS-9187 (above)

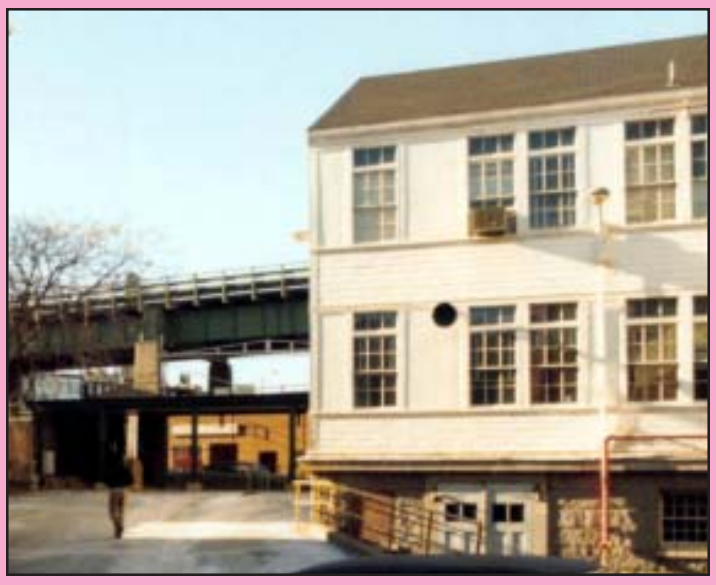




The wall incorporated the brick wall of the Marine Barracks stable. There were also gates into the east and west yards of the Barracks. These photographs were both taken on July 7, 1949, and clearly show the chain link fencing, with barbed wire, which was added on top of the wall as part of World War II yard security improvements. *BOSTS-9224*



Gate 4 was reconstructed in 1929 as part of the removal of the wall along the length of the Ropewalk. In an era before car ownership became universal, many yard workers either walked or took streetcars to work. The colored band on the pole denoted the location of a stop for streetcars serving Chelsea Street and headed to both Charlestown and Chelsea as well as into the Boston subway at North Station. *BOSTS-8951*



This 1974 view shows Gate 4 as enlarged in 1942 to accommodate greater pedestrian traffic, as well as the two-story wood addition on the west end of the Ropewalk to accommodate the Labor Board (Industrial Relations Office), the yard's personnel department. Following closure of the yard, the addition was removed and Gate 4 was converted into the main vehicular entrance to the Navy Yard, replacing Gate 1. *BOSTS-8670*

The Navy Yard Wall & Gates: A Gallery





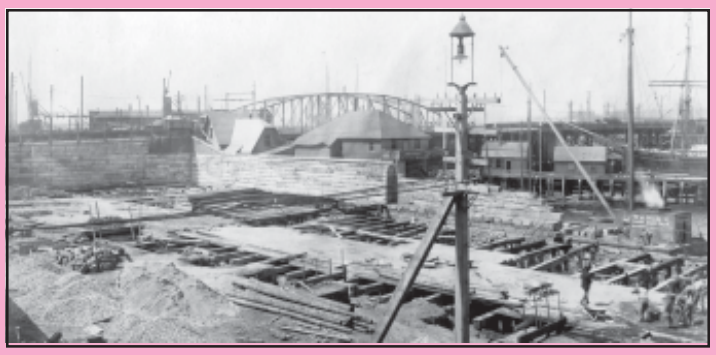
Between July and December 1929, a quarter-mile section of the granite wall paralleling the Ropewalk (Building 58) was demolished and replaced by a wrought iron fence with concrete posts. At left, demolition of the wall has begun in July. Note the streetcar headed from Chelsea into downtown Boston. Above, by Oct. 1, construction of the new posts is well underway. *BOSTS-8951*

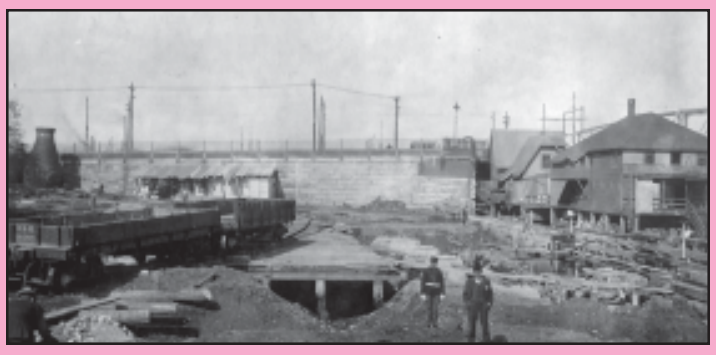


Gate 5 is seen on July 2, 1936, following the widening of 13th Street by moving the sidewalk to pass under the canopy of the Guardhouse (formerly Building 116; later Building 243). The wall extending from Building 79 at left would later be removed and a pedestrian passageway cut through the building. *BOSTS-8953*

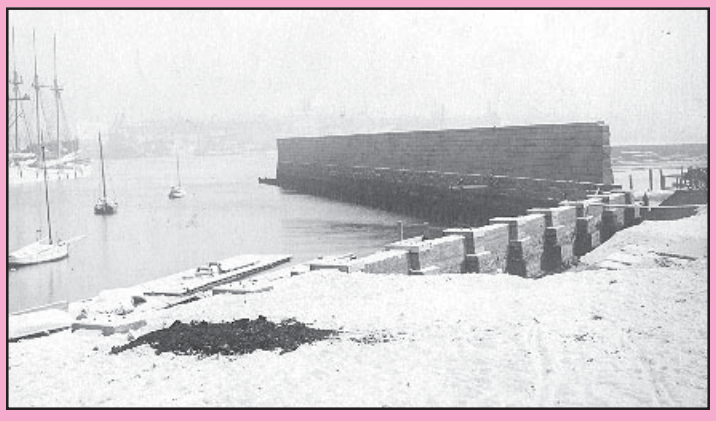


In 1894 this iron fence on a brick base replaced an earlier fence installed when the wall was removed in front of the Lower Quarters (Building 266/ Quarters L-M-N-O) in 1835 and 1836. Note in this Feb. 15, 1974, view the chainlink fence topped by barbed wire which had been added as part of World War II security enhancements. *BOSTS-8956*





When it reached the Mystic River, the wall turned and followed the shore line and enclosed the Timber Dock (Structure 87). Above, on May 17, 1902, work has commenced on the removal of a portion of the wall to allow construction of a new Saw Mill (Building 114). The arch of the Chelsea Street bridge over the Little Mystic Channel can be seen in the background. By Oct. 2, 1902, above right, the removal is complete. The structures on pilings belong to a private yacht club. The 18-foot diameter Hoop Furnace (Building 80) can be seen at the upper left. *BOSTS-9814*



The portion of the wall continuing from the site of Building 114 to surround the Timber Dock can be seen in this Jan. 1, 1903, view. While the Timber Dock was removed and the land filled in the 1910s, the wall survived until the early 1940s. *BOSTS-9814*



In 1904 Navy Yard employee V.K. Spicer produced this perspective views of the Navy Yard as it was in 1823. Waterfront features, from left to right, included Shiphouse G, Pile Wharf, New Timber Dock, Old Timber Dock and Cobb Wharf, Blacksmith Shop, New Timber Dock, Shiphouse I (Building 71), and New Wharf. The Marine Hospital Reservation occupies the northeast corner of the yard, near the Chelsea Bridge. *BOSTS-8871*

Through the years, gates were cut into the wall or filled in as access points changed due to operational needs. In 1835 and 1836 the Lower Quarters (Quarters L-M-N-O, Building 266) were reversed in orientation to front on the Salem Turnpike and that portion of the wall was removed and replaced by an iron fence. In the 1850s, a portion of the wall was incorporated into Building 79, the Coal & Boiler House for the Ropewalk. In 1902, a part of the wall along the Mystic River, added in 1843, was removed for the construction of the new Saw Mill (Building 114), with the remainder disappearing when the east end of the yard was reconfigured in the early 1940s.[59]

The greatest change came in the 1929, when the quarter-mile section along the Ropewalk was demolished and replaced with a wrought-iron fence in order to allow more light into that facility. Just before World War II, Gate 2 was cut into the western wall and the northern wall was filled in on the Chelsea Street side of the Commandant's House. At that time, the wing walls were cut down to their present low height. Pedestrian Gate 4 was enlarged in 1942 to accommodate the influx of war workers, an act which required removal of the westernmost portion of the Ropewalk (Building 58). A separate entrance was provided from Chelsea Street into the Industrial Relations Office, the yard's personnel office, which occupied a two-story wooden structure built atop the Ropewalk.[60]

The Yard Following The War Of 1812

The end of the War of 1812 brought about the traditional retrenchment of American military forces. Although the United States almost immediately entered into a new war, with Algiers, questions arose as to the nature and extent of the Navy and its shore establishment. One of the first tasks undertaken by the newly created Board of Navy Commissioners was a review of navy yards. On May 2, 1815, the board submitted a report which recommended that in peacetime only three yards were necessary. Each of those yards, it stated, "should have attached to them a dry dock suitable for docking the largest class of ships." The board went on to list the deficiencies of all six existing yards. They concluded that "with the exception of the Navy yard at Charlestown, no further expense should be incurred on those in use." The board recommended that "a capacious dry dock be immediately commenced at that yard" and that all naval stores be concentrated at Charlestown.[61] These recommendations, however, were not implemented.

In the spring of 1817, in response to a request from the U.S. Senate, Secretary of the Navy Benjamin Crowninshield appointed boards to determine what would be "a proper site for a naval depot, rendezvous, and dock-yard." The board dealing with sites north of the Chesapeake consisted of Capts. William Bainbridge, Samuel Evans, and Oliver Hazard Perry, along with Army Chief of Engineers Brig. Gen. Joseph G. Swift. After examining numerous sites along the coast from Penobscot Bay to New York, the majority of the board submitted its recommendation on October 30, 1817, that "it is advisable to retain the present establishment [at Charlestown], connecting it with a dry dock, for occasional building and repair, but that it is not advisable to establish a great national depot and rendezvous" there. It recommended Narragansett Bay for those purposes.[62] Bainbridge dissented, expressing "my perfect conviction that Boston is the most eligible situation, in every respect, for the establishment of a naval depot, rendezvous, and dock-yard."[63]

The report had little impact. By January 1824, when President James Monroe sent the House of Representatives a report on a plan for the "Naval Peace Establishment," the Navy was no longer proposing reductions. Secretary of the Navy Samuel L. Southard stated that all six yards, plus a new yard south of Chesapeake Bay, should be kept, although stating that "the expense of them" could be "greatly curtailed."[64]

[59] Keeshan, *Historic Structure Report, Navy Yard Granite Wall*; Bearss, *Charlestown Navy Yard, 1800-1842*, 2:930-932; Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 21-22; Bither and Boston National Historical Park, *Charlestown Navy Yard*, p. 66.

[60] Keeshan, *Historic Structure Report, Navy Yard Granite Wall*; Specification No. 5895, "Fence at the Navy Yard, Boston, Mass.," May 18, 1929, Public Works Dept., Design Division (Code 440), Completed Design Projects, File 462, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 92; Progress Photos, July-Dec. 1929, Contract NOy-576, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8951, Box 1-35.

[61] John Rodgers to B.W. Crowninshield, May 2, 1815, *American State Papers: Naval Affairs*, 3:493-94.

[62] J.G. Swift, Samuel Evans, and O.H. Perry to Crowninshield, Oct. 30, 1817, *American State Papers: Naval Affairs*, 1:490-92.

[63] Bainbridge to Crowninshield, Oct. 18, 1817, *American State Papers: Naval Affairs*, 1:487-89.

[64] Samuel L. Southard to President, Jan. 24, 1824, *Plan for a Naval Peace Establishment*, Jan. 30, 1824, *American State Papers: Naval Affairs*, 1: 907-10, 912.

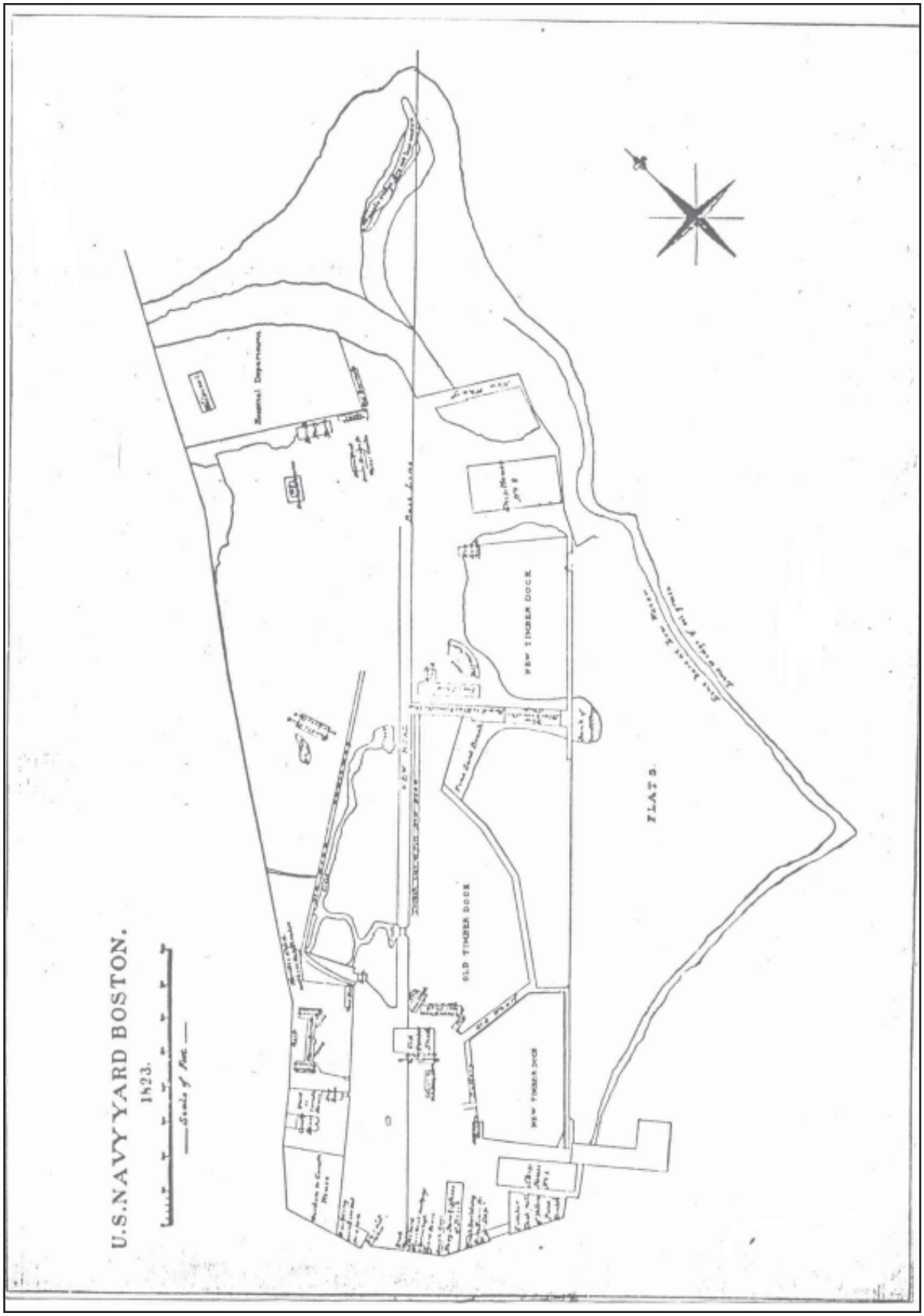


Figure 2-6 – Plan of Navy Yard, 1823

"U.S. Navy Yard, Boston," 1823. This plan was prepared for George Henry Preble's 1874 history of the Navy Yard and later copied for inclusion in the yard's site plan files. It was possibly based on a contemporary plan prepared to accompany a Dec. 1823 report to Congress on conditions at the various navy yards. Note that the plan also shows the Marine Hospital property at the northeast corner of the yard. Most of the buildings shown on this plan would be recommended for removal in the 1828 master plan for the yard. *BOSTS-13430*

The physical development of the Navy Yard in this era was modest. Most of the improvements came as a result of the assignment to the yard of the construction of two ships of the line and other vessels. In December 1823 the Navy Department provided Congress with a report on the conditions in nation's navy yards. That document reported that the Charlestown yard was "enclosed with a wooden fence, in great decay," and listed its improvements as "a comfortable dwelling-house for commandant," "a brick smith's shop," "good warehouses, sufficient for the present," "wooden workshops and sheds," "good brick marine barracks," "two building slips," "two ship-houses for seventy-fours," "timber docks," and "mast sheers."[65] (See Figure 2-6)

During this period, as discussed in detail elsewhere, yard commandants sought to reclaim the portions of the yard previously turned over to the War Department or Treasury Department (Marine Hospital). They also sought funds to better enclose the yard, the results of those efforts being the start of the granite Boundary Wall.

Yard improvements, however, were not undertaken in accordance with any consistent plan. This lack of a coherent development concept for Charlestown, a defect also found at other yards, was addressed by Secretary Southard in his December 1825 annual report:

> Other difficulties have arisen, from the present disposition of the building arrangements at our yards. They have, heretofore, been improved by temporary expedients, and the buildings erected and arranged with reference only to existing necessities, and without regard to the future and growing wants of our navy. Many and serious evils have resulted; much public money has been unnecessarily expended; many losses sustained by the change, removal, and alteration of the several erections.… It is a mortifying fact, yet there is no doubt of its truth, that one-third of the money spent at our yards, has been lost from this cause.[66]

He recommended establishment of a board of naval officers to prepare master plans for the development of each navy yard. "The future saving to the nation, by adopting and pursuing it [the plans] rigidly," he wrote, "may be counted by hundreds of thousands, perhaps millions of dollars."[67]

The 1828 Master Plan

Responding to Secretary Southard's recommendations, Congress in March 1827 directed the President to "cause the navy yards of the United States to be thoroughly examined, and plans to be prepared … for the improvement of the same" which, once established, were not to be deviated from without presidential authorization.[68] A board of three senior naval officers, including former Charlestown Navy Yard Commandant William Bainbridge and soon-to-be Commandant Charles Morris, was set up to carry out the project, and Massachusetts native Colonel Loammi Baldwin, one of the country's most prominent civil engineers, was named the board's chief engineer.[69] With the exception of the plan for Pensacola, all of the master plans had been prepared and approved by the end of 1828. Southard praised the work, stating that "if these plans be well filled up, all of them will promote convenience and economy" and "exhibit establishments inferior to none in the world."[70]



Loammi Baldwin (1780-1838), considered to be the "Father of Civil Engineering in America," served as chief engineer for the board which produced master plans for the nation's navy yards and designed the first two naval dry docks. This portrait of Baldwin was painted in 1823 by Chester Harding. *National Portrait Gallery NPG85.6*

The Board of Navy Commissioners transmitted the plan for the Boston yard to Commandant Morris in August 1828 (see Figure 2-7).[71] Baldwin's notes describe how the yard was divided into a grid based on a new Main (now Second) Avenue "to aid in the laying off in symmetrical order all the plans of buildings, etc., which the irregular boundary of the yard would allow."[72] With few exceptions, the

[65] *Condition and Disposition of the Navy*, Dec. 1, 1823, *American State Papers: Naval Affairs,* 1:1097.

[66] *Annual Report of the Secretary of the Navy … Showing the Operations of That Department in 1825,* Dec. 2, 1825, *American State Papers: Naval Affairs,* 2:101-102.

[67] Ibid.

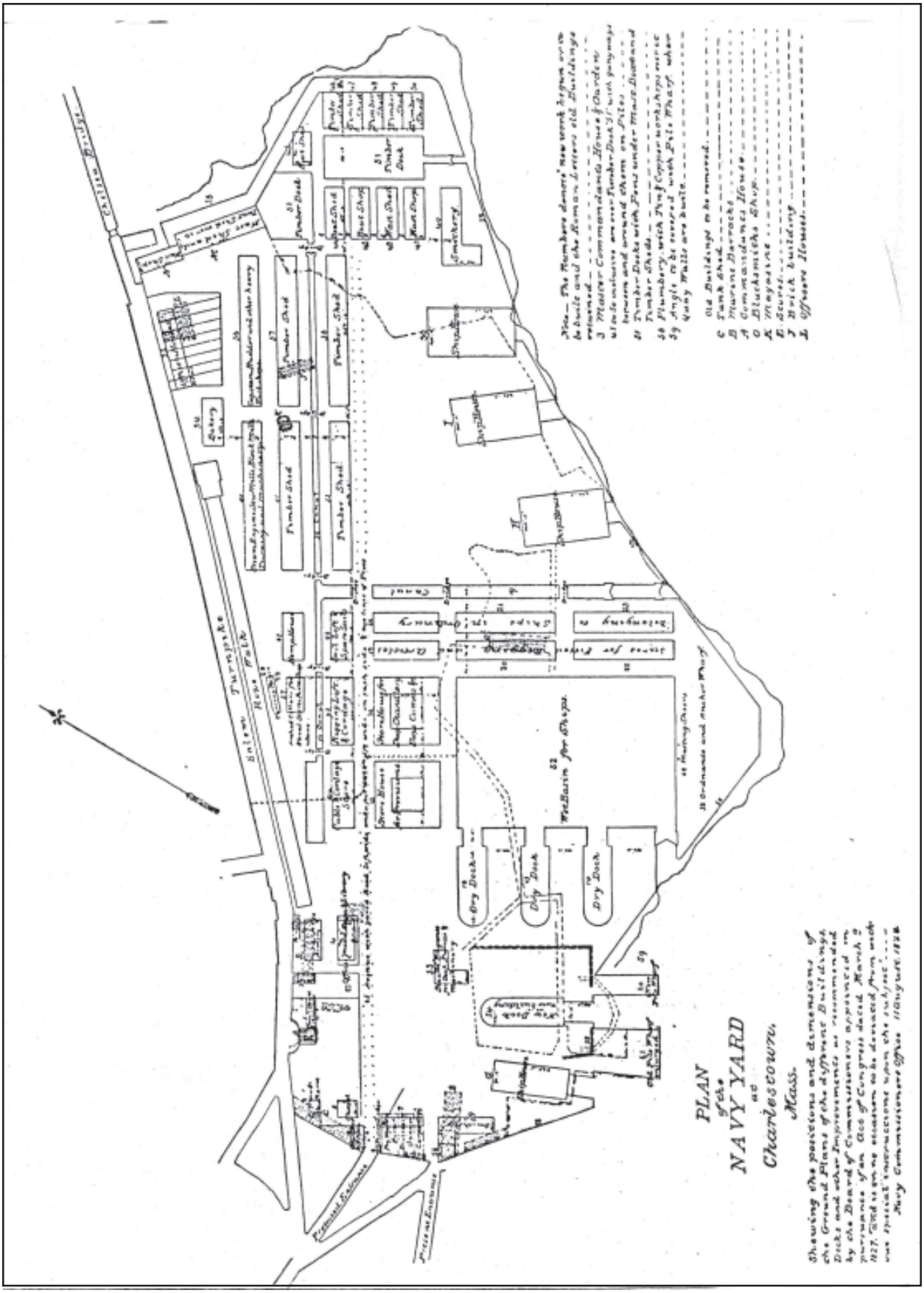
[68] "An act for the gradual improvement of the navy of the United States," Pub. Law 94, 19th Cong., 2nd Sess., Mar. 3, 1827, 4 Stat. 243.

[69] *Annual Report of the Secretary of the Navy, Showing the Condition of the Navy in the Year 1827*, Dec. 1, 1827, *American State Papers: Naval Affairs*, 3:53-54. The third member of the board was Capt. Isaac Chauncey, commandant of the New York Navy Yard. During the course of its work, the board, among other activities, reviewed plans for British royal dockyards, which Bainbridge had requested from a contact in London in May 1827. See Bainbridge to Wm. Aspinwale, May 26, 1827, Navy Dept. Library Manuscript B162-64-139-I [http://www.history.navy.mil/biblio/biblio3/bainbridge1827.html], accessed Sept. 22, 2002. On British royal dockyards, see Winklareth, *Naval Shipbuilders of the World*, p. 34-59; Philip MacDougall, *Royal Dockyards* (Newton Abbot, England; North Pomfret, Vt.: David & Charles, 1982).

[70] *Annual Report of the Secretary of the Navy, Showing the Condition of the Navy in the Year 1828*, Nov. 27, 1828, *American State Papers: Naval Affairs*, 3:212. President John Quincy Adams, in his fourth annual message to Congress on Dec. 2, 1828, reported that the plans for Portsmouth, Charlestown, Philadelphia, Washington, and Gosport had been approved and "received my sanction." See James D. Richardson, comp., *A Compilation of the Messages and Papers of the Presidents, 1787-1897*, 10 vols. (Washington: Govt. Print. Off., 1896-1899), 2:419.

[71] Rodgers to Charles Morris, Aug. 11, 1828, cited in Bearss, *Charlestown Navy Yard, 1800-1842*, 1:507.

[72] Loammi Baldwin, "Surveys and Plans of Navy Yards," Loammi Baldwin Papers, Massachusetts Institute of Technology Archives, Cambridge, Mass. [hereafter MIT Archives]. While Baldwin mentions surveys done by "me and my assistants," he does not identify them and there is no evidence to support claims that Alexander Parris was responsible for the 1828 plan. Baldwin used his brothers as his assistants on many occasions throughout his career, and records of his brother George R. Baldwin mention conducting a


PLAN
of the
NAVY YARD
at
Charlestown
Mass.
Dry Dock
Dry Dock
Dry Dock
Timber Shed
Timber Dock
Timber Basin
Timber Shed
Timber Shed
Timber Shed

two major building campaigns in the yard, those of the 1830s to 1860s and the late 1890s/early 1900s, sited structures in accordance with this grid. Like many other developments associated with the Navy Yard, it was neither unique nor specific to naval facilities. Rather, it reflected the prevailing thinking in urban and industrial design of the period.

The "Explanation" accompanying the plan listed sixteen existing structures in the yard, which it designated by letters (post-1868 numbers in parentheses):

A Commandant's House & Outbuildings (Quarters G)
B Marine Barracks (Quarters I)
C Timber Shed (Building 1)
D Boatswain's House
E Warehouse, Office, etc. (Building 5)
F Old Warehouse (Building 6)
G Shiphouse
H Shiphouse (Building 68)
I Shiphouse (Building 71)
J Boat Shop
K Old Magazine
L Four Houses for Officers of the Yard (Quarters L-O)
M Mast House & Boat Shed (Building 85)
N Mast Shop (Building 85)
O Blacksmith's Shop
P Masting Shears[73]

Of these structures, the plan identified several "to be removed when thought expedient." These included structures A, B, C, E, J, K, and L. This recommendation was never fully carried out, and A, B, E, and L, although altered to a greater or lesser degree, survive to the present day.

The plan identified sites for 63 "New Works begun or to be built." One of these was the Dry Dock (54) then under construction. Three additional dry docks (12, 13, 14) would be accessed from a "Wet Basin" (52) on the site of the existing Timber Dock at the center of the yard. A new Timber Dock (51) would be located at the yard's eastern end. A series of mast and spar shops and storage sheds (41-50) would be built on piles over and around this dock.

The three shipbuilding ways along the waterfront would be augmented by a new facility (39) to the east of the existing ones. The water edge of the yard, then still largely tidal flats, would be defined by a series of quay walls (58) running from the northeast corner of the yard to the vicinity of the Dry Dock. The existing Pile Wharf (61) would be enlarged, and a second Pile Wharf (60) added to the east of the entrance to the Dry Dock. The wharf formed between the quay walls at the center of the yard and the Wet Basin would become the "Ordnance and Anchor Wharf" (53). The Masting Shears (62) would be relocated to the Wet Basin side of this wharf.

One feature of the master plan, reflecting the times in which it was drawn and perhaps Baldwin's own involvement in such projects, was a series of canals (19, 32) for use in moving materials within the yard. None of these canals would ever be built. Indeed, it does not appear that their construction was ever proposed to Washington by yard officers.

The only road specifically shown on the master plan was the new "Main Avenue" (63). It was described as being a paved road 30 feet wide, with a 15-foot "foot walk" on each side. The road would be set within an allée of trees, the only vegetation mentioned in the plan. In conjunction with this road, a new main gate would be cut into the western boundary wall, with a new section of street being constructed on the outside of the yard to connect it to existing Charlestown streets.

Two square Storehouses (15, 16) with central courtyards would dominate the center of the yard. Most importantly, a Ropewalk (28) would be located along the line of the yard's northern boundary. It and its associated Tarring House (29) were the only structures not oriented to the master grid, taking advantage of the angle of the yard to minimize its impact on space within the yard.

The fairly recent four-unit row house at the northeast corner of the yard (L [Building 266]) would be replaced by an eight-unit complex (35) for yard officers. A five-unit row house (7) would be located along the western wall to house the pay officer, porter, boatswain, gunner, and carpenter. The current Commandant's House (A [Quarters G]), the deficiencies of which commandants were repeatedly reporting to Washington, would be replaced by a new structure (1) on the same site. Interestingly, no replacement was proposed for the Marine Barracks (B [Quarters I]), the site of which would be occupied by an Armory (10).

There is no indication that Baldwin's master plan for Charlestown, or those he prepared for the nation's other navy yards, were accompanied by any cost estimates for carrying out all of the work proposed. Indeed, beyond footprints, the plans did not provide any details about the individual facilities. Carrying out the master plan would become the responsibility of successive yard administrations, subject to the exigencies of the day and the fiscal constraints placed on civil works by the budget process both within the Navy Department and by Congressional action on Navy requests.

Dry Dock 1 Constructed

One of the most dangerous aspects of work on ships involved repairs to the underwater portions of their hulls. From the earliest days of the Navy, senior officers repeatedly pointed out the disadvantages of the process then in use for this work, known as heaving down (also called careening), advocating the construction of dry docks for that purpose. As discussed above, the earliest plans for the Charlestown Navy Yard, prepared in 1801 and 1802, showed several dry docks, and in 1815 the Board of Navy Commissioners had recommended the construction of a dock at Charlestown. While the board's recommendation had been endorsed by Secretary of the Navy Benjamin Crowninshield, Congress took no action on the subject for a decade.

In May 1824 the U.S. Senate requested that the Secretary of the Navy submit a report on both "the expediency of constructing" and "the best location" for a naval dry dock. In submitting his report to the Senate, Secretary Southard agreed with the Board of Navy Commissioners that there should be two docks to accommodate the geographic spread of the Navy. Admitting that "the difficulty has not been to find a suitable place … but to select the best among several, all of which are good," he recommended that these docks be located at the Boston (Charlestown) and Norfolk (Gosport) Navy Yards.[74]

survey of the yard in 1826. See *Woburnites: The Family of Baldwin* [http://www.yeoldewoburn.net/Baldwin.htm], accessed May 16, 2005.

[73] "Notes & Explanations upon the Plan A of the Navy Yard at Charlestown, Mass.," Baldwin Papers, MIT Archives.

[74] Samuel L. Southard to Senate, *Dry Docks*, Jan. 3, 1825, with encl., *American State Papers: Naval Affairs*, 1:1032-34.

In conjunction with his report, Southard in September 1824 hired Loammi Baldwin to prepare a report on the feasibility and probable cost of building a dry dock at Charlestown. Baldwin's design, completed in November 1824, would, with minor changes, serve as the basis for Dry Dock 1.[75]

In May 1826, Congress directed the President to have "a skilful engineer" conduct a detailed survey of the possibility of constructing a dry dock at either the Portsmouth, Charlestown, Brooklyn, or Gosport Navy Yards.[76] Southard again retained Baldwin for this task, which was completed in late December.[77] On January 10, 1827, President John Quincy Adams submitted Southard's report, which stated that "the best position" for a dry dock was at Charlestown. The Secretary went on to recommend building three docks, the order of preference being Charlestown, Gosport, Brooklyn, and Portsmouth.[78]

In the same act directing the preparation of master plans for the various navy yards, the Navy received appropriations for the construction of two dry docks, one "at some point to the south, and the other to the north of the Potomac river."[79] In keeping with his earlier recommendations, Southard selected Charlestown and Norfolk as the locations.

President Adams selected Baldwin as chief engineer to carry out the project. When his brothers, whom he had initially selected as his assistants, moved on to other endeavors, Baldwin hired Alexander Parris as assistant engineer for Boston and William P.S. Sanger as assistant engineer for Norfolk. Construction of the Boston dock began in June 1827, while work commenced at Norfolk the following November. The two docks progressed at approximately the same pace. On Bunker Hill Day, June 17, 1833, the ship-of-the-line USS *Delaware* entered the Norfolk dock; a week later, USS *Constitution* inaugurated the Boston facility.[80]

The docking of the frigate, which had been at Charlestown awaiting the completion of the dock for several years, was a ceremonial occasion. President Andrew Jackson, Vice President Martin Van Buren, and state and local dignitaries were invited, although Jackson did not attend because of illness. The following account of the opening of the dock appeared in the *Boston Daily Advertiser and Patriot* for June 25, 1833:

> The hull of "Old Ironsides," the frigate Constitution, was taken into the Dry Dock at the Charlestown Navy Yard yesterday morning, under the superintendence of Commodores [Isaac] Hull and [Jesse] Elliot, and the whole operation was conducted in fine style. The Yard was handsomely decorated with flags and pendants. The morning was exceedingly unpleasant, the wind being North-East, attended by rain; yet upwards of fifteen hundred persons, including some ladies, were present at 5 o'clock, and great numbers visited the Yard through the day…
>
> The turning gates were opened to admit the ship about half past 5 o'clock, when the tide had fallen about one foot. As the ship was warped into the dock, a salute of 19 guns was fired from the battery of 9 pounders. Salutes were afterwards fired from Columbus, ship of the line, and from the battery, in honor of the President and suite, and of the Governor of the State. The President, from illness, was not present.
>
> When the ship was admitted and placed in the proper position by means of warps and horizontal shores, the turning gates were closed; and the floating gate, which forms a barrier against the sea, having been floated into the grooves made to receive it, was filled with water and sunk. The reservoirs and culverts were then filled from the dock, the powerful steam engine for pumping out the water was put in operation, and upright shores placed to support her in her position as fast as she settled.
>
> Before two o'clock, P.M., the dock was emptied of water and the ship was ready to undergo repairs. This old favorite of the people, with the appearance of a hardy veteran, still retains the beauty of her model.[81]

Although the dock, designated Dry Dock No. 1 (Dry Dock 1) following the start of work on a second dock in the late 1890s, has been extended and improved since its completion, it retains considerable integrity to the original design and is the only one of the three dry docks at the Charlestown Navy Yard that remains functional in 2008. In 1977, both the Norfolk and Boston docks were designated as National Historic Civil Engineering Landmarks by the American Society of Civil Engineers. The ASCE described them as follows:

> **Charlestown Naval Dry Dock, Boston, MA and Gosport Naval Dry Dock, Norfolk, VA**. Built 1827-34, these are two of the earliest major structures of their type in the United States, and probably in the Western Hemisphere. Despite the dearth of scientific knowledge of hydraulics and geotechnology at the time, Loammi Baldwin II and his associated engineers successfully completed these projects which served the US Navy for well over a century.[82]

[75] Baldwin to Southard, Nov. 6, 1824, *American State Papers: Naval Affairs*, 1:1035-38.

[76] "Resolution directing surveys and estimates for dry docks," Public Resolution 5, 19th Cong., 1st Sess., May 22, 1826, 4 Stat. 195-96.

[77] Baldwin to Southard, Dec. 28, 1826, *American State Papers: Naval Affairs*, 2:811-29. Baldwin, who expressed no preferences as to site in his report, did not perform a new survey at Charlestown, stating that, with minor changes reflecting comments by the Board of Navy Commissioners, his earlier report on Charlestown remained valid.

[78] Southard to President, Jan. 10, 1827, encl. in John Quincy Adams to Congress, *Examination of Sites for the Establishment of a Dry Dock for the Navy*, Jan. 10, 1827, *American State Papers: Naval Affairs*, 2:810-11.

[79] 4 Stat. 243.

[80] Stephen P. Carlson, *Dry Dock No. 1, Charlestown Navy Yard* (Paper presented to Seventh Maritime Heritage Conference, Oct. 2004) [http://www.hnsa.org/conf2004/papers/carlson.htm], accessed Mar. 21, 2008; Mary Jane Brady and Christopher J. Foster, Inc., *Historic Structure Report, Dry Dock 1, Charlestown Navy Yard: Architectural Data, Boston National Historical Park, Massachusetts* (draft; Denver: Denver Service Center, 1980), TIC 457/D6059, p. 4-21; Frederick K. Abbott, *The Role of the Civil Engineer in Internal Improvements: The Contributions of the Two Loammi Baldwins, Father and Son, 1776-1838* (Ph.D. diss., Columbia University, 1952), p. 137-39, 152-86; Charles B. Stuart, *The Naval Dry Docks of the United States* (New York: Charles B. Norton, Irving House, 1852), p. 59-66, 123. Parris was hired in Oct. 1827 to replace Baldwin's brother James, who left the project to work on a railroad survey. See Abbott, *Role of the Civil Engineer*, p. 155. Abbott lists Henry Singleton rather than Sanger as the Norfolk assistant. One source states that Baldwin and Parris alternated between the two sites, but available correspondence refutes that claim. For the claim, see Helen W. Davis, Edward M. Hatch, and David G. Wright, "Alexander Parris: Innovator in Naval Facility Architecture," *IA: The Journal of the Society for Industrial Archeology*, vol. 2, no. 1 (1976), p. 5-6 n. 8.

[81] *Boston Daily Advertiser and Patriot*, June 25, 1833, quoted in "All Is In Readiness: 'Old Ironsides' Goes Into Drydock Tuesday, After Brief Turn-Around Cruise," *Boston Naval Shipyard News*, vol. 37, no. 21 (Apr. 13, 1973), p. 1, 7.

[82] 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.

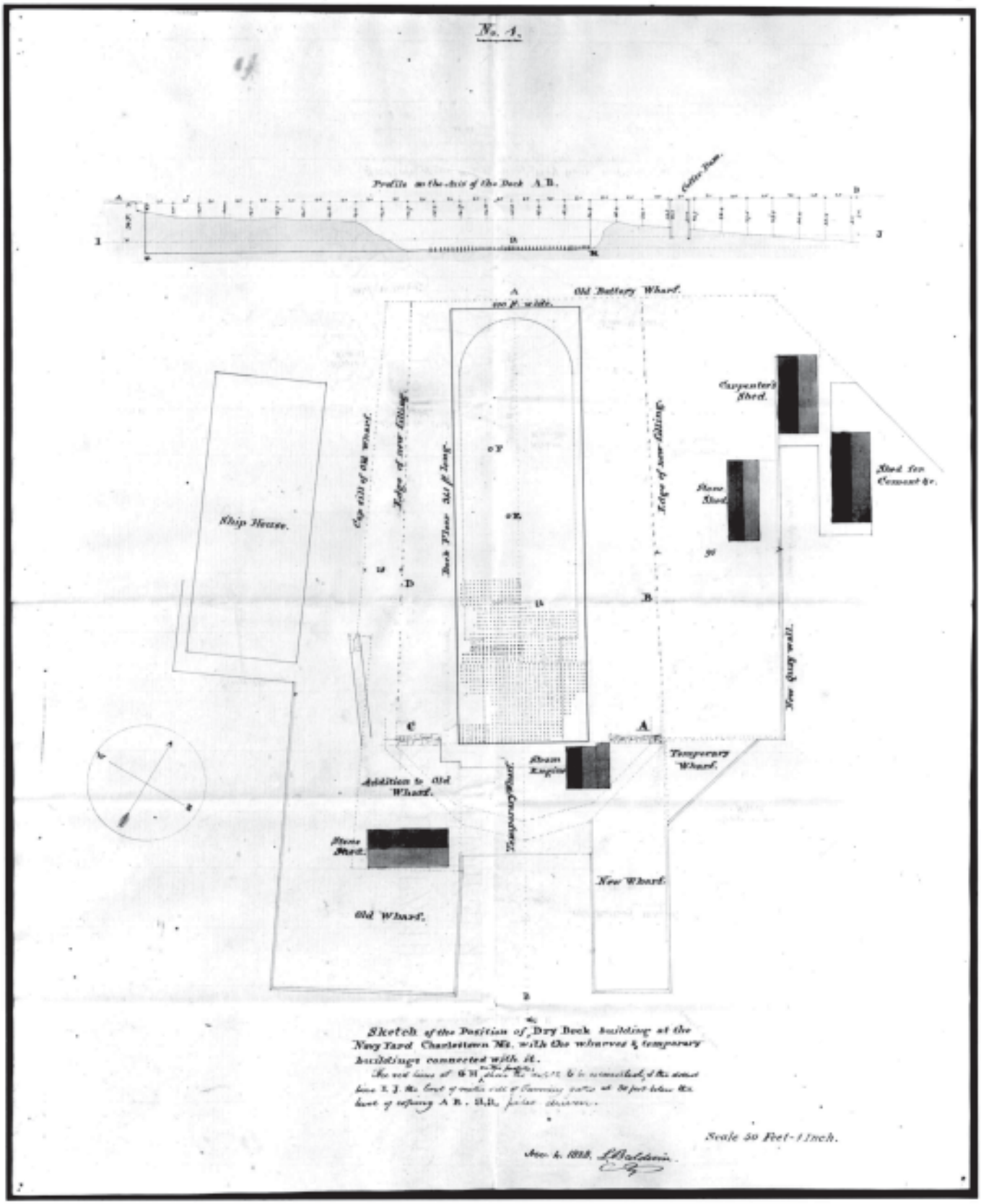


Figure 2-8 – Plan of Dry Dock, 1828

"Sketch of the Position of Dry Dock building at the Navy Yard, Charlestown, Ms. with the wharves & temporary buildings connected with it," November 4, 1828. This plan was prepared by Loammi Baldwin, the chief engineer for the Board of Navy Commissioners.

Baldwin Collection, Baker Library, Harvard Business School

The Charlestown And Gosport Dry Docks

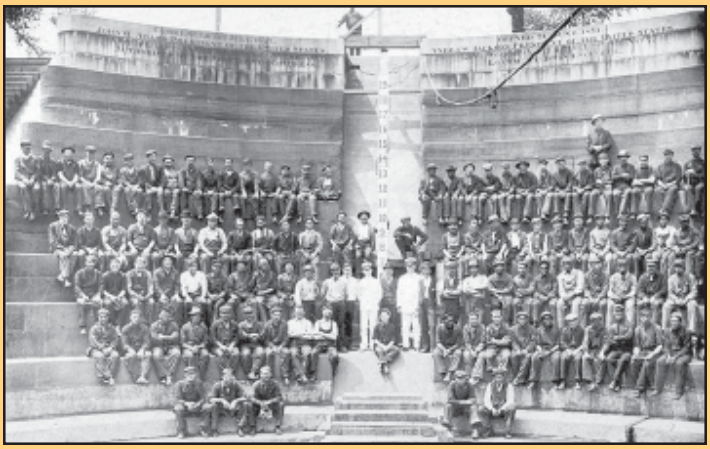
THE NAVY'S FIRST TWO DRY DOCKS were identical in design. The Charlestown Dry Dock 1, however, has been twice extended and is thus longer than Norfolk Dry Dock 1. Both docks remain active in 2008.

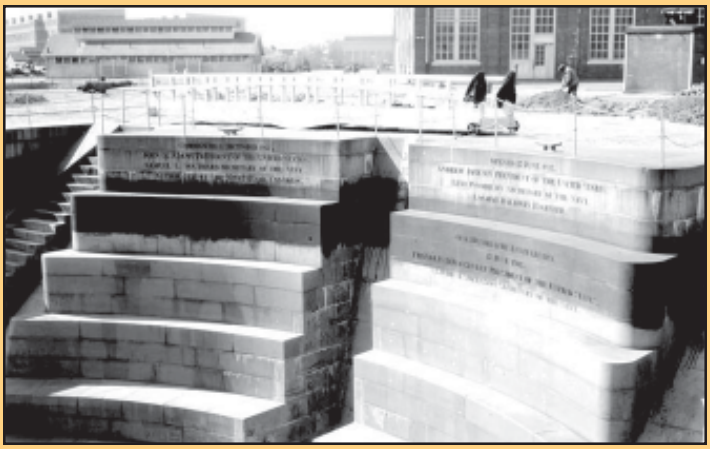


Based on a contemporary lithograph from a sketch by J.G. Bruff, this view of USS *Delaware* entering the Norfolk dry dock on June 17, 1833, shows what the Charlestown dock probably looked like upon completion.
Norfolk Naval Shipyard

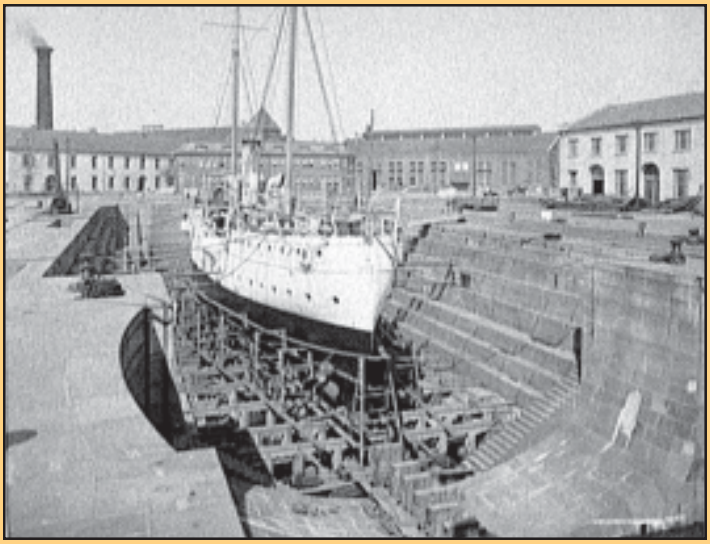


One of the earliest photographs of the Navy Yard is this one by Southworth & Hawes believed to have been taken in 1852 depicting a sloop-of-war in Dry Dock 1. The Dry Dock Engine House (Building 22) is in the background. The vessel is USS *Decatur*, which was in the dock from August to November. (This photograph has been reversed to show the correct perspective rather than the mirror image provided by the original daguerrotype.)
George Eastman House 5660





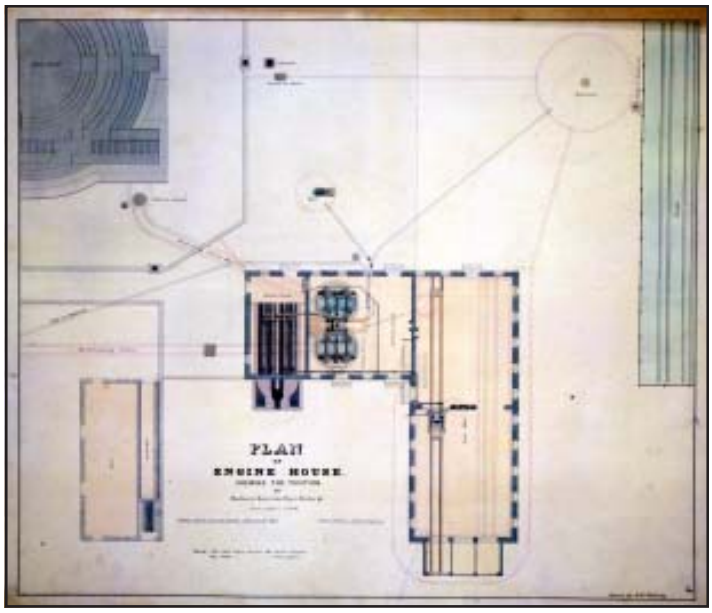
As these views of the Charlestown (top) and Norfolk (above) dry docks show, the heads were inscribed with the dates of construction start and completion. Note that an inscription commemorating President Franklin D. Roosevelt's visit on the occasion of its centennial has been added to the Norfolk dock. The identity of the group of shipyard workers in the top photo is unknown. *BOSTS-7463 (top); Norfolk Public Library (above)*



Except for the background buildings, this view of Norfolk Dry Dock 1 in the early 20th century could be mistaken as being of the Charlestown dock. The vessel is unidentified. *Detroit Publishing Co., LC*



This unsigned drawing depicting the Navy Yard is dated Sept. 14, 1837, and appears to have been done from the top of the still incomplete Bunker Hill Monument with a perspective similar to a modern fish-eye lens. From left to right are Shiphouse H (Building 68), Timber Dock No. 52 (Structure 90/91), Storehouse No. 15 (Building 34), Dry Dock 1, and Shiphouse G. The buildings barely visible behind the trees opposite Building 34 are the Marine Barracks and Commandant's House. Notably missing is the Dry Dock Engine House (Building 22). East Boston can be seen across the harbor at the top of the image, while Boston proper is at right. *Childs Gallery*



"Plan of Engine House Shewing the Position of Machinery, Reservoirs, Pipes, Drains &c.," Mar. 11, 1840. This plan by Alexander Parris shows the steam pumping engines for the Dry Dock and the associated building (Building 22), which also contained the yard's Saw Mill. The pumps remained in use until Building 123, serving both Dry Dock 1 and Dry Dock 2, was completed in 1905. *NARA RG 71*

The yard received the first of its granite buildings in association with the Dry Dock. The Engine or Pump House for the dock (Building 22) was designed by Parris. It served the dry dock until the completion in 1905 of a new Pump House (Building 123) that served both Dry Dock 1 and Dry Dock 2. In addition to the pumping function, the structure housed the yard's Saw Mill. Like most yard buildings, it would accommodate a variety of activities through the years.[83]

[83] "Appendix: A Guide to Building Usage at Boston Navy Yard, 1890-1973," in Black, *Charlestown Navy Yard, 1890-1973*, 2:817-34, provides a summary of building usage through the years taken largely from the annual yard plans. As the author admits, it is far from complete and only as accurate as the sources it was compiled from. See also Table 5-1, Master List of Navy Yard Structures.



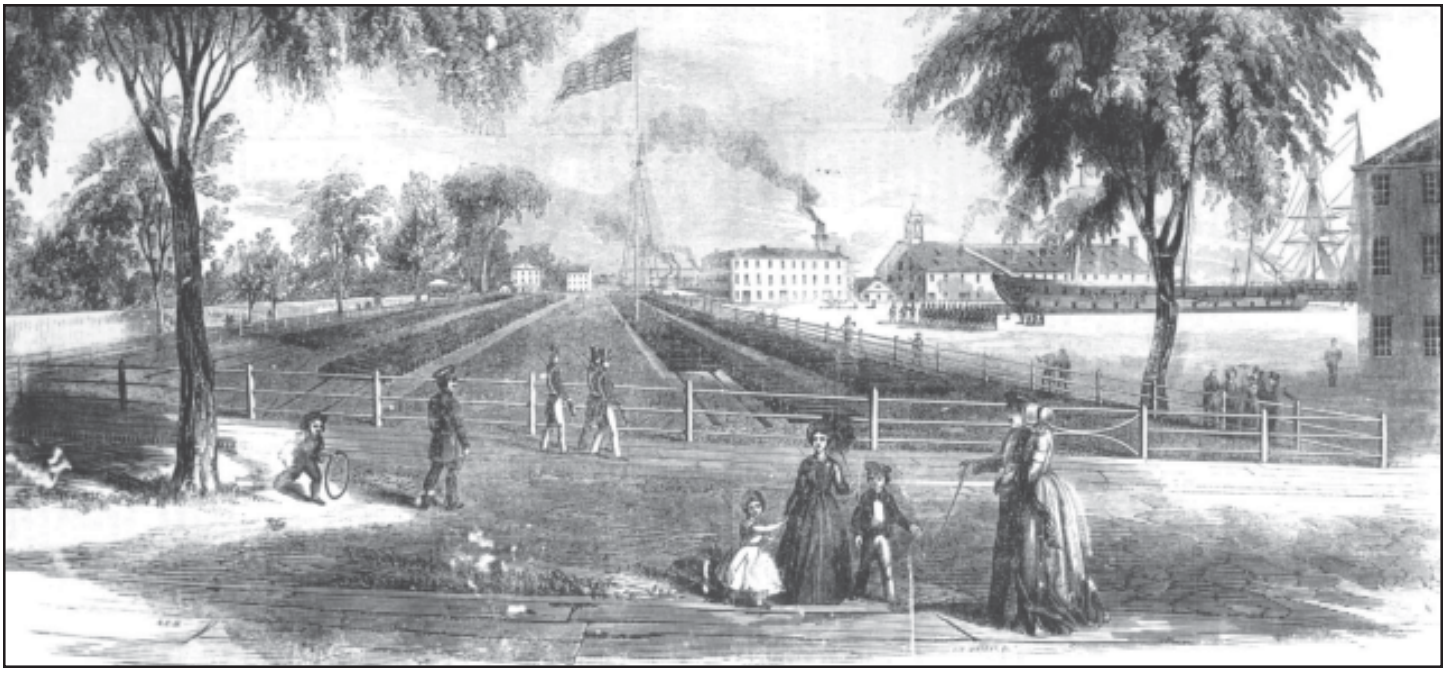
This view of the Navy Yard looks from Chelsea and probably dates to ca. 1842. The lower yard's Timber Dock (Structure 87) can be seen just above the Salem Turnpike bridge. Prominent in the image are Shiphouse I (Building 71), Shiphouse H (Building 68), and, at the center, Shiphouse G. The Mast House (Building 85) is seen to the right of Shiphouse I against the roadway. The Massachusetts State House is visible on the hill in the center background. *Vose Gallery*

Yard Improvements Through The Civil War

Following the promulgation of the master plan for the yard, commandants continually sought funding to carry out improvements to the physical plant. Alexander Parris served as civil engineer for the yard until the middle of 1843.[84] His successor, Joseph E. Billings, took office in 1853, the first person to hold the formal position of Civil Engineer within the yard hierarchy.[85] He held the post

[84] Davis, Hatch, and Wright, "Alexander Parris," p. 3, 19; Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 10. In addition to work at the Charlestown Navy Yard, Parris had been involved with the Chelsea Naval Hospital and the Army's Watertown Arsenal. One of the last projects Parris completed was a portfolio of plans showing yard improvements in the 1830s. See Alexander Parris, *Plans of Buildings and Machinery Erected in the Navy Yard, Boston, 1830 to 1840*, Microcopy T1023 (Washington: National Archives, 1967). He later did work at the Portsmouth Navy Yard.

[85] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 89. Between Parris' dismissal and Billings' appointment, building design came under the purview of Naval Constructor Samuel M. Pook. See ibid., p. 49-51. For a brief account of Billings' career, see James F. O'Gorman, "H. and J.E. Billings of Boston: From Classicism to the Picturesque," *Journal of the Society of Architectural Historians*, vol. 42, no. 1 (Mar. 1983), p. 54-73. On Pook, see "Samuel M. Pook" [obituary], *New York Times*, Dec. 4, 1878.



This lithograph shows "the interior of the United States Navy Yard, Charlestown," around 1851. The view looks east from in front of Captain's Row. In the foreground is the yard's Gun Park, where ordnance was stored, and Flag Pole. Beyond the open area are the Sail Loft (Building 33) and Store House (Building 34). To the right of center are the Engine House & Saw Mill (Building 22), the Carpenters & Joiners Shop (Building 24), and the Dry Dock with what appears to be a frigate in it. The edge of the Navy Store (Building 5) can be seen at the far right. *BOSTS-8635*

until 1866. Between them, they were responsible for the design and construction of most of the 19th-century granite and brick buildings that remain in the yard as of 2008. The following is a listing of the buildings that were completed in this time period, showing their original purpose. Buildings in **blue** can be attributed to Parris, while those in **green** were designed by Billings. Additional information regarding extant structures can be found in the individual resource profiles found in Chapter 5 of this report.



Alexander Parris (1780-1852) worked as an assistant to Loammi Baldwin on the Dry Dock and served as architect and engineer for several Navy Yard projects, including the Boundary Wall, the Dry Dock Engine House (Building 22), the Ropewalk Complex (Buildings 58, 60, 62), and the Store House (Building 34). His most important work, however, was the Faneuil Hall (Quincy) Market complex in downtown Boston. This portrait was done by W.E. Chickering of Boston. *Bostonian Society 1525*

Building 10 (Pitch House & Oakum Loft) – Built 1853[86]

Building 16 (Iron Platers Shop) – Built 1868[87]

Building 22 (Dry Dock Engine House & Saw Mill) – Built 1832; enlarged 1837, 1856[88]

Building 23 (Oil Boiling House) – Built 1841[89]

Building 24 (Carpenters & Joiners Shop) – Built 1849[90]

Building 25 (Smiths Shop) – Built 1848; moved 1875[91]

Building 28 (Coal House) – Built 1849; enlarged 1866[92]

[86] Paul O. Weinbaum, *Building 10 Historic Structure Report: Historical Data Section* (draft; July 1988), TIC 457/D6309; Orville W. Carroll, *Historic Structure Report, Architectural Data Section, Building 10, Charlestown Navy Yard, Mass.* (draft; Jan. 30, 1989), TIC 457/D6310. This structure was moved from its original location to its present site during the reconstruction of Pier 1 in 1900-1901.

[87] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 235.

[88] The building is also referred to as No. 55 based on the 1828 master plan. Designed as a single structure, the Dry Dock Engine House and Saw Mill wings were constructed separately. The Saw Mill wing was finally built in 1837, with the machinery not being completed and placed in operation until 1840. See Bearss, *Charlestown Navy Yard, 1800-1842*, 1:579, 2:932-39.

[89] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:941-42. The building was later used as a Chapel and, after being moved in the early 20th century, a Latrine.

[90] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 50; Goody, Clancy & Associates, *Building 24 Historic Structures Report* (Oct. 2003), TIC 457/D139.

[91] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 50; Annual Site Plans, 1875, 1877, File 399-20, 399-22, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13502.

[92] Andrew Barton, et al., *Historic Structure Report: Building 28 and Electrical Substation, Building 22, Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts*, 2 vols. (Denver: Denver Service Center, 1989), TIC 457/D70, 1:26.

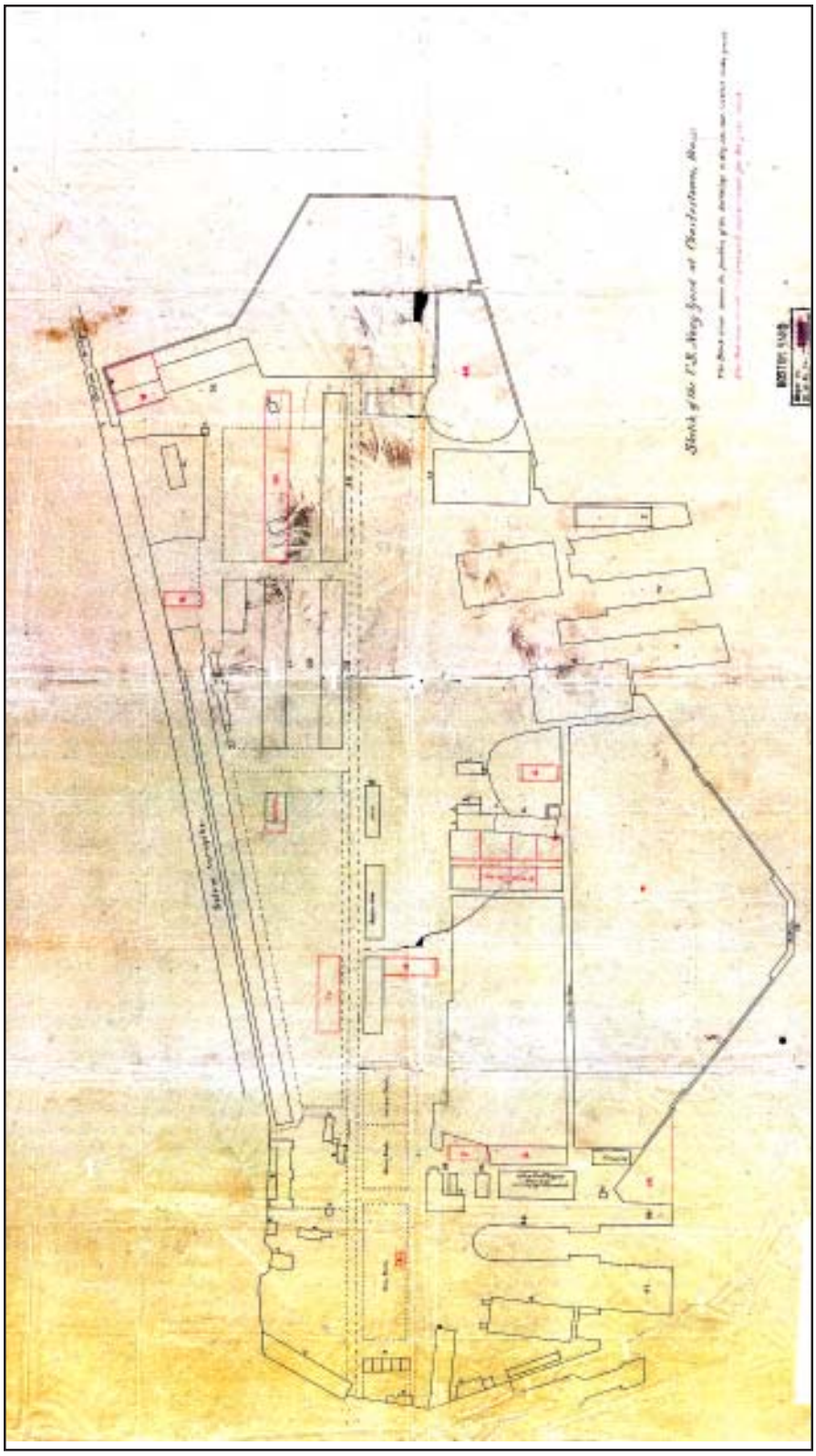
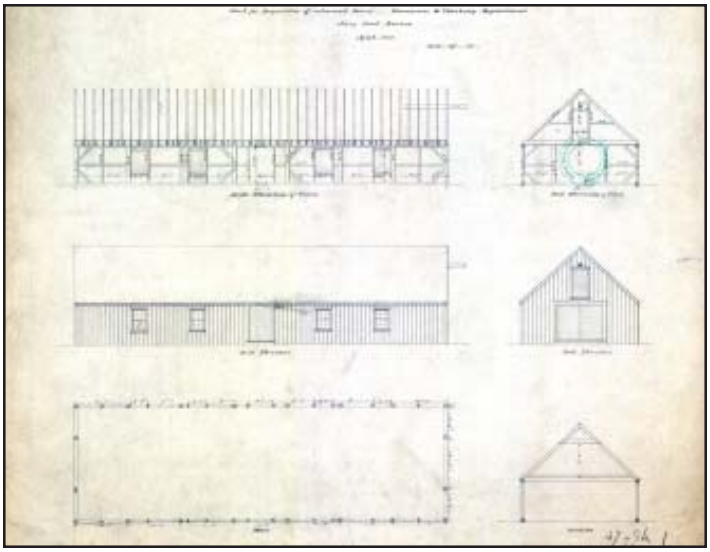


Figure 2-9 – Plan of Navy Yard, 1848

"Sketch of the U.S. Navy Yard at Charlestown, Mass." This plan shows "the position of the Buildings as they are now erected on the yard" in black and "proposed improvements for the year 1848" in red. This plan is typical of those submitted annually by the Navy Yard throughout the 19th and early 20th centuries. The building numbering/lettering shown for existing structures, as well as some of the proposed improvements, reflects the numbering found in the 1828 master plan. *NARA RG 71*

This Apr. 1864 plan shows the Shed for Inspection of Returned Stores (Building 37), built to the north of Building 38. It would be demolished in 1890. *BOSTS-13388*



Building 31 (Muster House) – Built 1853; enlarged 1871[93]

Building 32 (Shell House) – Built 1856[94]

Building 33 (Sail Loft) – Built 1852[95]

Building 34 (Store House) – Built 1837[96]

Building 36 (Joiners Shop & Paint Loft) – Built 1866[97]

Building 37 (Returned Stores Inspection Shed) – Built 1864[98]

Building 38 (Packing House & Cooperage) – Built 1857[99]

Building 39 (Ordnance Store) – Built 1866[100]

Building 40 (Heavy Hammer House) – Built 1864[101]

Building 42 (Machine Shop, Foundry, Smithery) – Built 1858; enlarged 1863[102]

Building 43 (Machine Shop Boiler House) — Built 1858; enlarged 1867[103]

Building 47 (Shell House) – Built 1863[104]

Building 48 (Magazine) – Built 1863[105]

Building 49 (Shed for Battery Guns) – Built 1866[106]

Building 52 (Ropewalk Boiler House) – Built 1873[107]

Building 56 (Brick Barn) – Built 1849; enlarged 1866[108]

Building 58 (Ropewalk) – Built 1836[109]

Building 60 (Tarring House) – Built 1838[110]

Building 62 (Hemp House) – Built 1837[111]

Building 63 (Timber Shed) – Built 1832[112]

Building 64 (Timber Shed) – Built 1828[113]

Building 66 (Timber-Bending Mill) – Built 1872[114]

Building 67 (Saw Mill) – Built 1868[115]

Building 75 (Timber Shed) – Built 1831[116]

Building 76 (Timber Shed) – Built 1849[117]

Building 77 (Mould Loft & Boat Shop) – Built 1852[118]

[93] Kenneth Guditz, et al., *Historic Structure Report: Muster House/ Building 31, Boston Naval Shipyard, Charlestown, MA* (1991), TIC 457/ D6113. This octagonal structure was an adaptation of a similar building at the New York Navy Yard, one of the earliest instances where the Navy Department played a significant role in the design of the yard's structures. See Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 94. The 1871 enlargement consisted of the addition of a third story.

[94] "Building Number 32," in Helen W. Davis, Edward M. Hatch, and David G. Wright, *An Initial Investigation Into the Architectural History of the Boston Naval Shipyard*, Dec. 20, 1972 (thesis, Architectural History 1-2b, Graduate School of Design, Harvard University), TIC 457/D6170.

[95] Anne Booth, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 33, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6015. Shown as No. 24 on the 1828 master plan.

[96] E. [Edward] Zimmer, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 34, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6016. Shown as No. 15 on the 1828 master plan.

[97] Anne Booth, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 36, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6017.

[98] "Shed for Inspection of returned Stores" [drawing], Apr. 1864, File 37-1, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13388.

[99] Anne Booth, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 38, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6018; Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 93-94, 119. Shown as No. 25 on the 1828 master plan.

[100] E. [Edward] Zimmer, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 39, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6019.

[101] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 172, 173. The hammer itself was not installed until 1867. See ibid., p. 173.

[102] Ibid., p. 91, 92-93, 119-124, 172-173.

[103] Ibid., p. 121; Civil Engineer, Annual Report, FY 1867, Records of the Boston Naval Shipyard, RG 181.3.1, Entry 154, NARA.

[104] Black, *Charlestown Navy Yard, 1890-1973*, 2:821.

[105] Ibid., 2:822.

[106] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 235.

[107] Ibid.

[108] Ibid., p. 49-50; Civil Engineer, Annual Report, FY 1867, Records of the Boston Naval Shipyard, RG 181.3.1, Entry 154, NARA.

[109] Marie L. Carden and Lawrence A. Sorli, *Ropewalk and Tar House (Buildings 58 and 60): Historic Structure Report, Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts*, rev. by Louis P. Hutchins, 2 vols. (1999), TIC 457/D6301A. Shown as No. 28 on the 1828 master plan.

[110] Ibid. Shown as No. 29 on the 1828 master plan.

[111] Bearss, *Charlestown Navy Yard, 1800-1842*, 2:963. Shown as No. 27 on the 1828 master plan.

[112] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:588-590. Shown as No. 31 on the 1828 master plan.

[113] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:584-587. Shown as No. 33 on the 1828 master plan.

[114] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 235, 236.

[115] Ibid., p. 235.

[116] E. [Edward] Zimmer, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 75, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6021. Shown as No. 38 on the 1828 master plan.

[117] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 51-52. Shown as No. 37 on the 1828 master plan.

[118] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 79. Shown as No. 36 on the 1828 master plan.



There has been considerable mis-attribution of responsibility for the design of several of the Navy Yard's 19th century granite structures. For example, the Sail Loft (Building 33) has been credited to both Alexander Parris and Joseph Billings, but it was built in 1852 on Site 24 of the 1828 master plan under the aegis of Naval Constructor Samuel M. Pook. This view probably dates to the 1870s *BOSTS-14942*

Building 79 (Ropewalk Coal & Boiler House) – Built 1853; enlarged 1858[119]

Building 85 (Mast House & Spar Shed) – Built 1826; enlarged 1852[120]

Other significant changes also occurred in this period. In the mid-1850s the yard undertook to both replace the pumping machinery for the Dry Dock and to lengthen the dock itself.[121] There were also improvements to the yard's waterfront; extensions of the Boundary Wall on both the east and west sides of the yard and the opening of Gate 4 on Chelsea Street; upgrading of the Gun and Shot Parks; and paving of yard streets, improvements to drainage, and other landscaping work.[122] A key infrastructure improvement came in 1856, when gas lighting was introduced into the yard.[123] An even more significant development came in 1862 with the laying of pipes throughout the yard for water purchased from the Cochituate Waterworks. An important result of this project was the improvement of firefighting capabilities through the introduction of fire hydrants in the yard.[124]

[119] Anne Booth, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 79, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6022.

[120] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:484-486; Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 78-79.

[121] McGinley Kalsow & Associates, *Dry Dock 1 Historic Structure Report, Charlestown Navy Yard, Boston National Historical Park*, June 21, 2007, TIC 457/D6348, p. 20-21, 36-37.

[122] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 21-23, 50-51, 52, 53, 79-80, 82, 96, 126-28. See also Civil Engineer, Annual Reports, FY 1856-1865, Records of the Boston Naval Shipyard, RG 181.3.1, Entry 154, NARA. Paving work even extended to sidewalks along the outside of the Navy Yard Boundary Wall. See Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 57-58. For more detail on landscaping, see Christopher Stevens, et al., *Cultural Landscape Report for Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts* (Boston: National Park Service, 2005), TIC 457/D154.

[123] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 118.

[124] Ibid., p. 175-77.

The Navy Yard attracted considerable public interest in this period. In September 1854 one of the leading pictorial magazines of the day provided the following description of the yard:

> The yard within the walls covers an area of about seventy acres. The general form of the yard is a parallelogram … and is surrounded on three sides by a granite wall fourteen feet in height.… There are three ship-houses and slips for building vessels under cover. [*There are*] Two large store-houses…built of Quincy granite, and other buildings exclusively for stores and munitions of war. There are four timber sheds.… The most remarkable building, and one which attracts the attention of all visitors is the rope-walk, one thousand three hundred and fifty feet in length, and having double laying grounds.… The blockmakers shop … is pronounced by the officers of several foreign nations … to be the most complete establishment of the kind to be found anywhere.… The gun carriage shop, saw-mill, and planing-machines; the smithery, foundry, etc., are also well adopted to this great naval depot and workship; and ships can be built, and everything necessary for their equipment made, in as little time, and to as great an advantage, as at any dock yard in the world.
>
> The whole yard is laid out into streets and avenues, which are either paved or gravelled, and boarded with elms, maples or other ornamental trees, affording one of the most beautiful promenades in this part of the country. There is a magnificent park for heavy cannon; … a shot park, with many thousand balls piled in the neatest manner, and an anchor park.[125]

The Machine Shop Complex

By the late 1840s the Navy had begun to adopt steam propulsion for naval vessels. Like most navy yards, the Charlestown Navy Yard was not equipped to deal with the complexities of steamships. In 1851, for example, the yard constructed a new hull for the screw steamer USS *Princeton*. The vessel, however, had to be towed to Baltimore to have the engines from the previous USS *Princeton* installed.[126] Thus, the yard's Commandant sought funds to develop a plant capable of dealing with the new technology.

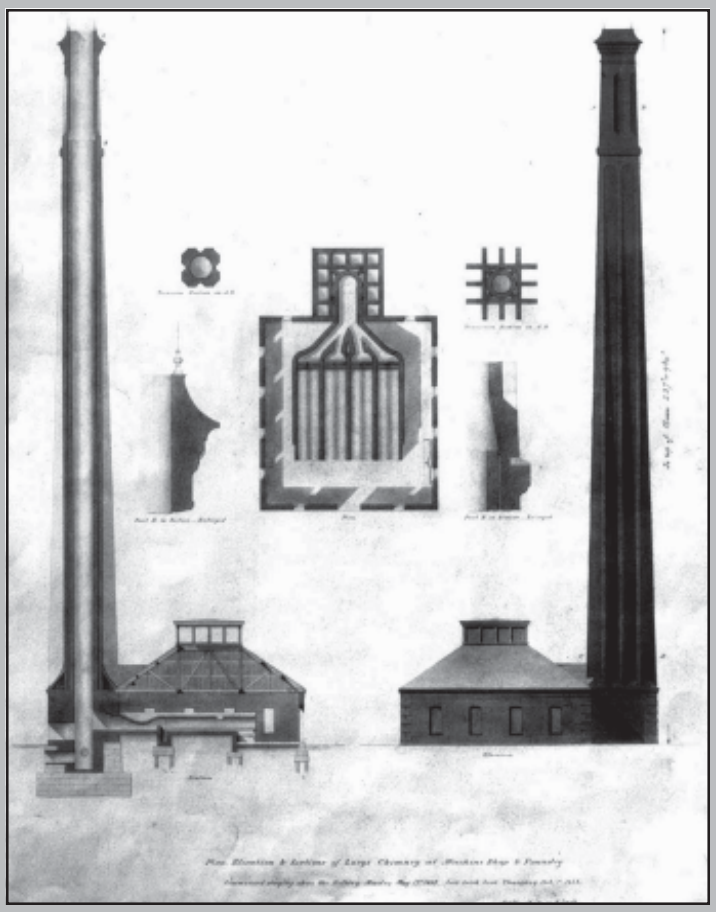
The result of these efforts was the Machine Shop (Building 42), which was, with the possible exception of the Ropewalk Complex, discussed below, the most significant improvement to the yard since the completion of Dry Dock 1. The building was actually a complex which housed a Machine Shop, a Foundry, and a Smithery (forge). According to Commandant Francis Gregory, it was intended to both consolidate operations performed in other yard buildings and to "furnish all the necessary … facilities for the manufacture or repair of steam engines, and other machinery used in the service."[127] The complex also included a Boiler House (Building 43), with its massive chimney that was a prominent feature of the yard's skyline well into the 20th century, as well as a Heavy Hammer House (Building 40), added in 1864.

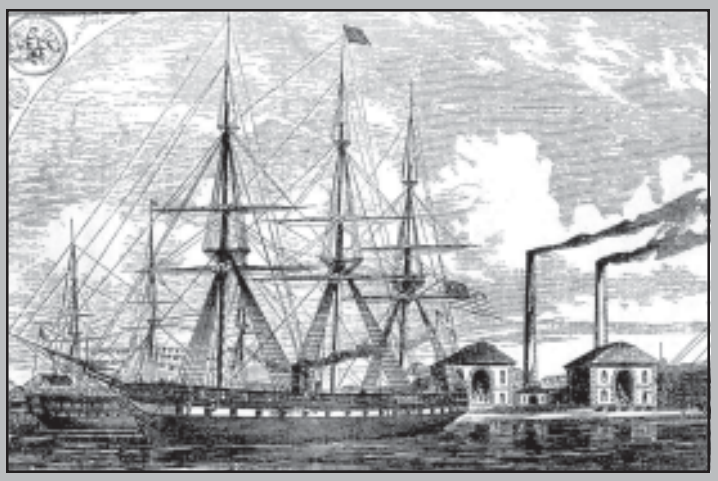
[125] "Comprehensive View of the United States Navy Yard at Charlestown, Massachusetts," *Gleason's Pictorial*, vol. 7, no. 9 (Sept. 2, 1854). During this period, the yard was generally open to the public, and in 1852 a visitor's guide to the yard was published. See *The Stranger's Guide and Conductor to the U.S. Navy Yard at Charlestown, Mass.* (Charlestown, Mass.: A.B. Needham, 1852).

[126] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 70-71.

[127] Francis H. Gregory to Joseph Smith, Sept. 2, 1853, quoted in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 92.

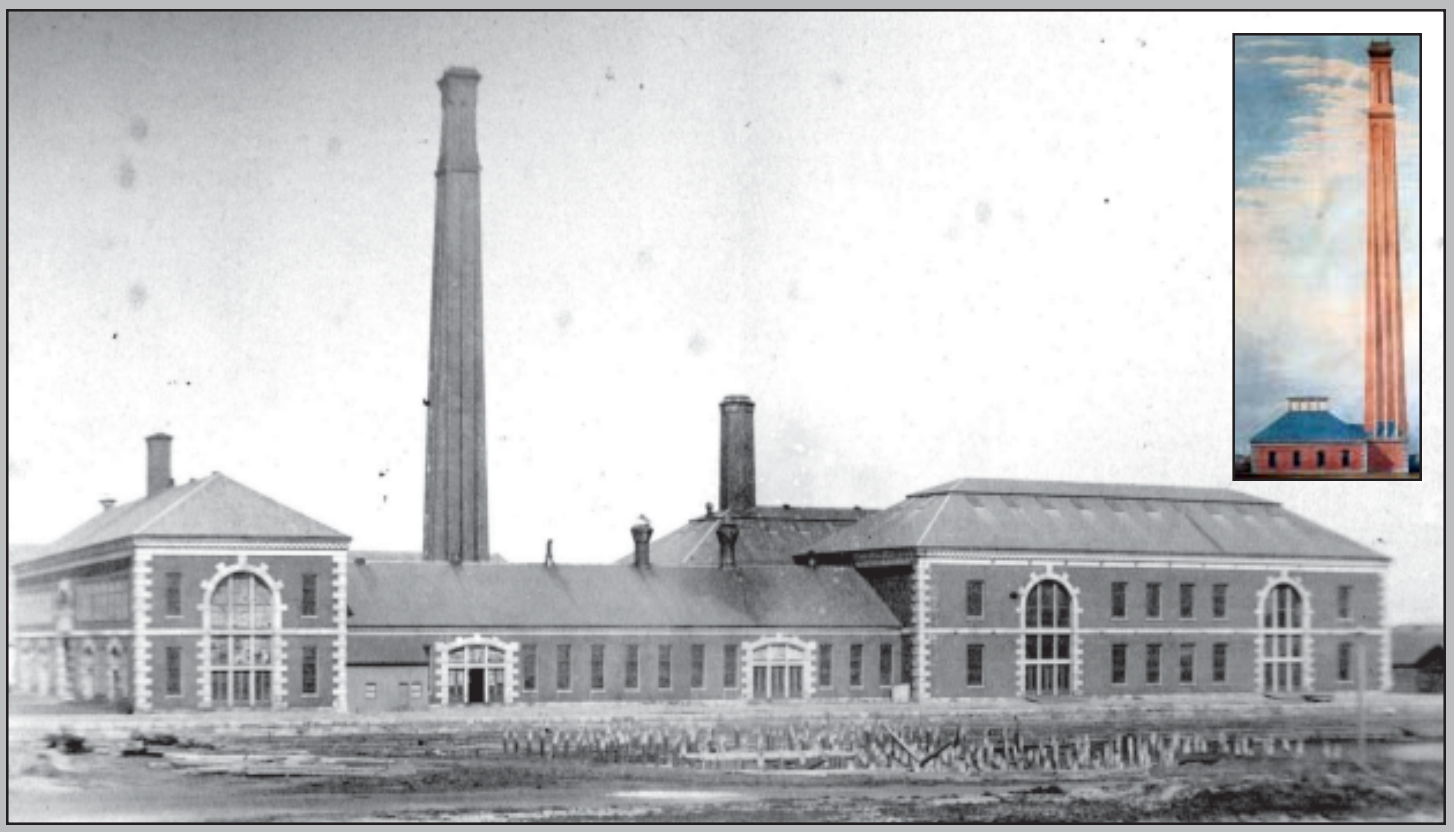
The Machine Shop Complex





This sketch of the Navy Yard was probably made in the late spring or early summer of 1858, when the steam frigate USS *Roanoke*, foreground, was at the yard for repairs. It shows the Machine Shop complex as originally completed. The U-shaped main structure (Building 42) housed the Foundry in the east (right) wing and the Machine Shop in the west (left) wing, with the Coal House and Smithery in the north wing. The Boiler House (Building 43) was located in the center of the quadrangle, which was open at the south end. *BOSTS-14097*

"Plan, Elevation & Sections of Large Chimney at Machine Shop & Foundry," Oct. 1858. The brick chimney, which was taller than the Bunker Hill Monument, was a prominent visual element of the Navy Yard viewscape into the 20th century. *BOSTS-9505*



This ca. 1874 view of the Machine Shop, Foundry, Smithery & Boiler Shop (Building 42) was taken looking east across the Timber Dock. While the structure has undergone considerable alterations over the years, the two-story Machine Shop section (right) remains relatively unchanged in 2002. The inset shows an architect's rendering of Building 43 and the chimney. *BOSTS-14942; (inset) Boston Athenaeum*

The Yard As A Home: Construction Of Quarters

Throughout its existence, the Navy Yard was more than an industrial site. It provided homes for naval officers (and, in the early 19th century, some senior civilian employees) assigned to the yard. The first residential structure was the yard's grandest, the Commandant's House. Begun by Samuel Nicholson in 1805, it underwent a major reconstruction in 1849, and continued to evolve over the next century. It served as the home of the Commandants of the yard and their families until 1945, when the functions of yard Commandant and Commandant of the First Naval District were separated. From that time until the summer of 1976, it housed the district commandant, while the Shipyard Commander lived in one of the units in Quarters L-O (Building 266).[128]

In the two decades following the end of the War of 1812, three structures intended as quarters for yard personnel were erected. The first of these came in 1817, when a combination Guard House and two-story brick Porter's Quarters (Quarters A) was erected at the Main Gate to the yard. Quarters A was demolished in 1955.[129]

Following the transfer of the Marine Hospital property back to the Navy, the existing structures on the site were demolished and a new four-unit rowhouse was built for yard officers. The Lower Officers' Quarters (Quarters L-M-N-O/Building 266) were completed in August 1826. Nine years later, this structure was rebuilt so as to front on the Salem Turnpike (Chelsea Street) rather than into the Navy Yard.[130]

In 1832 construction began on a second set of rowhouses at the western end of the yard. Originally envisioned as three units, it was expanded to five during construction. The Upper Quarters (Quarters B-C-D-E-F/Building 265), originally intended for non-commissioned officers but later occupied by officers and now known as Captains Row, were completed in September 1833.[131]

Despite pleas of the yard for the construction of additional quarters,[132] the two sets of quarters, along with the Commandant's House (Quarters G) remained the only quarters within the Navy Yard for senior yard officers until the early 20th century. The Fiscal Year 1912 Naval Appropriations Act provided $12,000 for the construction of "one officer's quarters" in the yard.[133] This structure (Quarters P) was located adjacent to the Lower Officers' Quarters and was completed in 1913.[134] It originally housed the Captain of the Yard; after 1945, when that position disappeared from the yard, it became home to the Chief of Staff for the district.

The Yard As A Manufacturing Establishment: The Ropewalk

One of the most essential manufactured items required by a sailing vessel is rope. As early as October 1813, Commandant Bainbridge had recommended establishment of a ropewalk at the Navy Yard, but the department took no action on his proposal.[135] The idea resurfaced in the 1828 master plan, which included a ropewalk running parallel to the Salem Turnpike, and in 1831 the Navy Department directed Commandant Charles Morris to secure information on local ropewalks so that a proposal could be made to Congress to fund such a facility at the Navy Yard. One of the outcomes of this research was the decision to employ steam-powered machinery to handle most of the fiber preparation activities. Alexander Parris was retained to prepare the design of the facility, which began operation on December 16, 1837.

The Charlestown Navy Yard had been chosen as the site of a ropewalk intended to supply the needs of the entire Navy for a number of reasons: Boston was one of the leading ports trading in hemp, the raw material for rope; the area had a number of commercial ropewalks from which the necessary skilled workers could be drawn; and the area was a major center of innovation in the textile industry.[136] With the exception of a short period when the Navy developed a facility at Memphis, Tennessee, in the late 1840s and early 1850s,[137] the Charlestown Ropewalk would be the sole rope manufacturing plant for the Navy and would supply most if not all of the rope it required well into the 20th century.

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[128] Margaret A. Micholet, *Public Place, Private Home: A Social History of the Commandant's House at the Charlestown Navy Yard, 1805-1974* (Boston: Boston National Historical Park, 1986), TIC 457/D6156A; Peggy A. Albee, *The Commandant's House: Historic Structure Report, Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts* (draft; Boston: Cultural Resources Center, North Atlantic Region, 1990), TIC 457/D6314. Although some sources have claimed that the house had been designed by Charles Bulfinch, this was not the case. The plans for the house originated in Washington, and most likely were by the same architect who prepared the plans for the Marine Commandant's House in the Washington Navy Yard, possibly George Hadfield. See Micholet, *Public Place, Private Home*, 34-36.

[129] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:337; "Second Oldest Building In Yard Closes Long Service To The Navy," *Boston Naval Shipyard News*, vol. 19, no. 43 (May 6, 1955), p. 1, 3.

[130] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:473-478, 2:930-933; A. [Anne] Booth, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 266, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6033.

[131] Bearss, *Charlestown Navy Yard, 1800-1842*, 2:710-712; Clyde L. Schroeder, *Historic Structure Report, Captain's Row (Bldg. 265), Charlestown Navy Yard: Architectural Data, Boston National Historical Park, Charlestown, Massachusetts* (draft; Denver: Denver Service Center, 1979), TIC 457/D37; Stephen P. Carlson, *Captains' Row, Charlestown Navy Yard, Historical Summary* (rev. May 1992), TIC 457/D6325A.

[132] See, e.g., Civil Engineer, Annual Reports, FY 1867-1871, Records of the Boston Naval Shipyard, RG 181.3.2, Entry 154, NARA.

[133] Pub. Law 479, 61st Cong., 3rd sess., Mar. 4, 1911, in Pulsifer, *Navy Yearbook, 1912*, p. 689.

[134] See Progress Photos, Quarters P, May-July 1913, Boston Naval Shipyard Photograph Collection, NPS Cat. No. BOSTS-9245, Box 1-40.

[135] Bainbridge to Jones, Oct. 24, 1813, cited in Bearss, *Charlestown Navy Yard, 1800-1842*, 1:134.

[136] Louis P. Hutchins, *Work, Culture, and Resistance to Mechanization in the American Rope Making Industry, 1830-1850* (typescript; 1999), TIC 457/D6300, p. 34-36; Diana S. Waite, *Historical Study of the Charlestown Navy Yard Ropewalk and Tar House* (draft, May 1991), TIC 457/D6306, chap. 3, p. 3-5.

[137] The Memphis Navy Yard was authorized by Congress in 1844 and transferred to the City of Memphis in 1854. See Coletta, *United States Navy and Marine Corps Bases*, p. 308; Stanley J. Adamiak, "A Naval Depot on the Western Waters: The Rise and Fall of the Memphis Naval Yard, 1844-1854," *International Journal of Naval History*, 1 (Apr. 2002). Shortly after Congress authorized the Memphis yard, President John Tyler, in his Dec. 3, 1844, annual message to Congress, recommended establishment of a ropewalk there. "The only establishment of the sort now connected with the service [Navy] is located at Boston, and the advantages of a similar establishment convenient to the hemp-growing region must be apparent to all," he wrote. See Richardson, *Messages and Papers of the Presidents*, 4:349. The Memphis ropewalk was developed starting around 1848 using personnel from the Charlestown facility. See Waite, *Historical Study of the Charlestown Navy Yard Ropewalk and Tar House*, chap. 4, p. 41-44.

The Commandant's House (Quarters G)



This painting attributed to Mrs. James Armstrong, wife of a Navy officer assigned to the yard, is sometimes dated as late as 1835, but it more likely dates to the period 1818-1823, since it shows the Commandant's House (Quarters G) before the 1825 modifications, which saw several windows removed and bricked in and a balcony added. The Marine Barracks (Quarters H-I-K) can be seen to the right. *Naval Academy Museum*



"Commandants House," 1849. This plan shows the Commandant's House as reconstructed in that year, a project which saw the roof either raised or completely rebuilt in order to provide a full third story with an attic space above. *BOSTS-13451*



Until 1941, the main entrance to the house was from Chelsea Street, the yard wall curving inward from the sidewalk to the edge of the house and the yard enclosed with a wrought-iron fence. At that time, as a security measure, the fence was removed and a section of wall built across the front of the house. The oriel windows were added to the house in 1856. This view was taken by Arthur C. Haskell for the Historic American Buildings Survey in Oct. 1934.
LC HABS MA-2-10



In 1936 the WPA built the present enclosed sun porch and side porches. Two years later, its workers added a two-story kitchen wing to the east side of the house. This view shows the house in June 1966. The Carriage House (Building 21) can be seen at right. *BOSTS-9192*

Navy Yard Quarters: A Gallery



Quarters A was located just inside the yard's Main Gate (Building 97). During most of the 19th century, it housed the porter. In the first decades of the 20th century, yard plans showed it as home of the mail messenger. This view dates to June 26, 1913. Vacant in the mid-1930s, in 1946 Quarters A housed the emergency plumber. Following the removal of the building in 1955, 2nd Street was abandoned and replaced with grass. *BOSTS-9158*



Officers' families pose for photographer A.E. Alden outside Quarters B-F in 1882. The five-unit rowhouse had been completed in 1833. Windows were later added into the end wall of Quarters B. *BOSTS-15782*



The wrap-around porch on Quarters L-O in this Mar. 25, 1921, view was removed in 1924. The Lower Officers' Quarters originally faced into the yard rather than out to Chelsea St. *BOSTS-9232*



Constructed by Connors Bros. in 1913,Quarters P was the only quarters built during the 20th century. It is seen here on Apr. 9, 1936. *BOSTS-9246*

The Ropewalk Complex included three structures. The main building was the 1,300-foot-long Ropewalk (Building 58) itself. It included a partial second-story where spinning and other fiber preparation machinery was placed, as well as a three-story headhouse for the steam engine that powered the facility. The second floor of the Ropewalk was extended in 1865 and then again in 1910.[138] Adjoining the Ropewalk was the Tarring House (Building 60), where the rope was coated with preservative tar,[139] and the Hemp House (Building 62), used to store the raw material for the process.[140]

A new Coal House for the Ropewalk (Building 79) was added in 1853 and enlarged five years later as a Boiler House.[141] In 1869 a Naval Board on Yards & Docks submitted a report recommending extensive modernization of the Navy Yard. While its recommendation that the entire Ropewalk operation be moved to the grounds of the Chelsea Naval Hospital never went anywhere, it also recommended installation of machinery for making wire rope.[142] In response to this report, Building 79 was converted to a Wire Rope Mill in 1871, with a new Boiler House (Building 52) being completed two years later.[143] This facility was replaced by a new Power House for the Ropewalk (Building 96) in 1899; after all yard power plants were consolidated in 1908, it was used primarily for storage.[144] The Hemp

[138] Carden and Sorli, *Ropewalk and Tar House (Buildings 58 and 60): Historic Structure Report*.

[139] Ibid.

[140] Bearss, *Charlestown Navy Yard, 1800-1842*, 2:963.

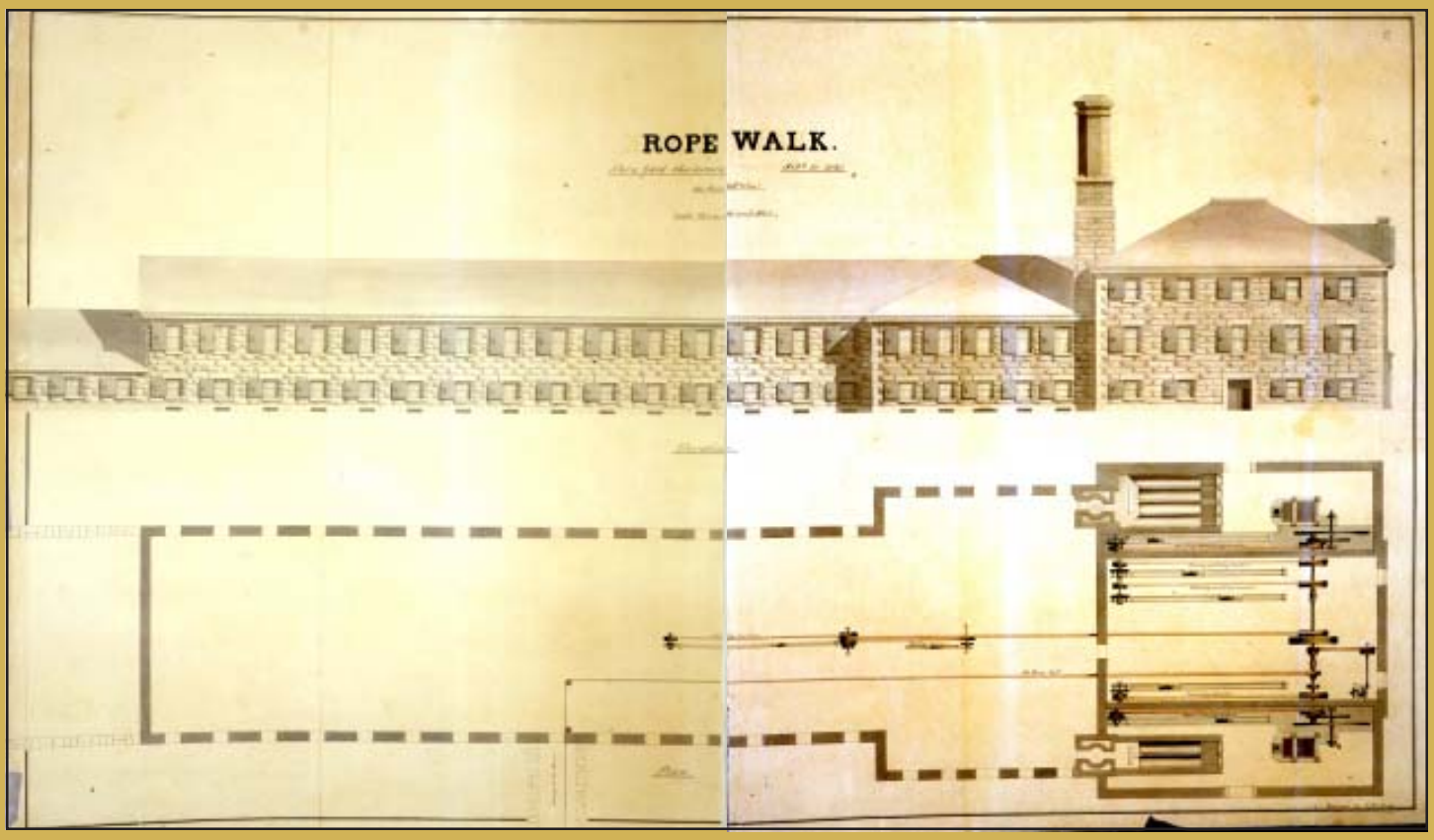
[141] Booth, "Chronological Profile," in Boston Redevelopment Authority, *Building 79*.

[142] "Report, Naval Board on Yards and Docks–Navy Yard, Boston, Massachusetts," Oct. 6, 1869, in Preble, *History of the Boston Navy Yard*, p. 541-42.

[143] Booth, "Chronological Profile," in Boston Redevelopment Authority, *Building 79*; Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 235.

[144] Anne Booth, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 96, Boston Naval Shipyard* (May 20, 1977), TIC 457/D6023.

The Ropewalk Complex



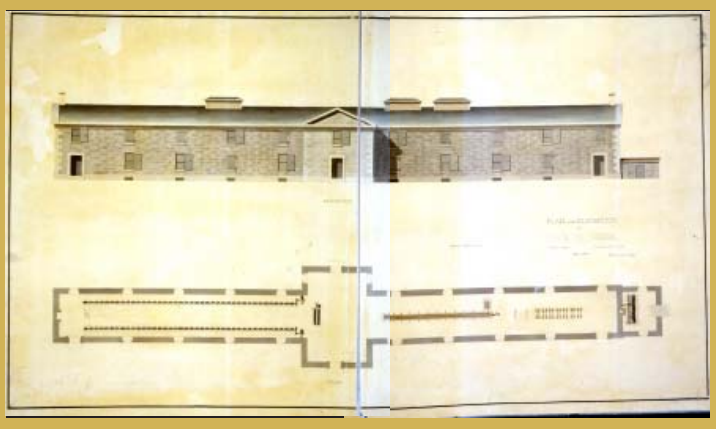
"Rope Walk, Navy Yard, Charlestown," Feb. 21, 1841. This plan by Alexander Parris shows the headhouse with its machinery and the two-story section of the building. *NARA RG 71*



Ropemaking required long facilities to allow manufacture of ropes measuring several hundred fathoms in length. This ca. 1936 view of ropemaker James Lee on one of the traveling carts gives an indication of the length of the Ropewalk. *BOSTS-9541*



The second floor of the Ropewalk was devoted to the processing of raw materials into yarn from which rope would be spun. In this 1938 view, workers are feeding hemp into a breaking machine to prepare it for the spinning process. *BOSTS-9544*



"Plan and Elevation of Tar House, Navy Yard, Charlestown," Aug. 2, 1839. This plan by Alexander Parris shows the Tarring House as completed. *NARA RG 71*

The Ropewalk Complex



The second floor of the Ropewalk held the fiber preparation machinery. It was extended twice, first in 1865 and then again in 1910. The second extension is nearing completion in this Apr. 1, 1910, view. Note that the tree-lined boardwalk known as "Flirtation Walk" is still in place, and that the end wall is of sheet steel to facilitate a further addition in the future.
BOSTS-9513



A more temporary two-story addition to the west end of the Ropewalk appeared in 1943 to provide space for the Labor Board (Industrial Relations Office). The addition had its own direct entrance onto Chelsea Street so that job applicants did not need to enter secure areas of the yard. This view was taken from Bunker Hill St. by Charles A. Duncan in April 1948.
CD 8943-I, Bradley H. Clarke Collection



The Tarring House (Building 60) and the Wire Rope Mill extension of the Hemp House (Building 62) are seen during the installation of railroad tracks on both Fifth and Fourth Aves. on Sept. 6, 1911. At the start of World War II the projecting south wing of Building 60 would be removed to facilitate traffic on Fifth Ave.
BOSTS-9571



This Feb. 18, 1915, view of the south side of the original granite Hemp House (right) clearly shows that the 1911 brick addition had been set at a slight angle so as not to close off the area between it and the Tarring House (Building 60) on the north side of the structure.
BOSTS-9570



The original Coal House & Boiler House for the Ropewalk (Building 79) is seen on Apr. 15, 1921. Converted to a Wire Rope Mill in 1871, the structure was used primarily for storage after wire rope manufacture ended in 1918. Note the bridge connecting it to the Ropewalk.
BOSTS-9598



In 1899 the Ropewalk Boiler House (Building 52) was replaced by a new Power House (Building 96), which, while following the general style of Building 52, was almost double in size. Building 96 is seen here on Apr. 15, 1921.
BOSTS-9601

House was doubled in size in 1910 and 1911, the addition intended as a new Wire Rope Mill.[144] The yard ceased manufacture of wire rope in 1918.[145]

The importance of the Ropewalk to the Navy Yard, especially in the latter half of the 19th century, cannot be understated. As will be discussed below, during the 1880s the Navy embarked on a policy of reducing its shore establishment, a policy that led to the virtual closing of the Charlestown Navy Yard as a ship repair facility. While there were other factors involved, the primary reason that the yard was not closed completely at that time was the value of the Ropewalk.

In the 19th century, the military followed a policy of operating its own industrial facilities for the production of weapons and other essential militarily-useful products. By the end of World War II, this policy was coming under increased pressure as American industry felt that government should not compete with private enterprise in these areas. At Charlestown, both the Ropewalk and Forge Shop came under increasing scrutiny, and in February 1955 the Bureau of Ships ordered the Ropewalk closed.[146] Congressional objections to this order led to its being modified to allow limited production to continue to permit it to recover operating costs while its major mission was to be cordage research, development, and testing.[147] As such, the Ropewalk made significant contributions to the development of nylon rope.[148] The facility was finally closed on December 31, 1971, with only a portion of the laying ground and its equipment retained as an historical exhibit.[149]

Shipbuilding Prior To The Civil War

Following the end of the War of 1812, Congress in 1816 passed an act for the gradual increase of the Navy. This legislation, along with other subsequent acts, authorized the service to build a number of warships, including ships-of-the-line, frigates, and sloops-of-war. The construction of these vessels was assigned to the navy yards on a fairly even basis. Starting with USS *Vermont* (originally laid down as *Virginia* but which swapped names with her sister in 1827) in 1818, the stocks (shipways) at the Charlestown Navy Yard were not devoid of ships under construction until the early 1880s.



Ropewalk Master Edmund Skelly, right, presents the last piece of nylon rope manufactured at the Ropewalk to Shipyard Commander Capt. Raymond W. Burk on Dec. 17, 1971, marking the end of 134 years of ropemaking at the Charlestown Navy Yard. *BOSTS-9546*

Between 1814 and 1859 the yard launched two ships-of-the-line, two frigates, eight sloops-of-war, and eleven brigs and other smaller vessels; six ships (one frigate, two sloops, and three others) were powered by steam engines. However, reduced funding, changing operational needs, and, later, changing naval technology, meant that some of the ships assigned to the yard lay incomplete for years (for example, *Vermont* was laid down in 1818, launched in 1848, and not commissioned until 1862), and several were finally broken up for scrap rather than being completed.[150]

Several of the ships constructed by the yard had careers that put them in every Navy history. Foremost of these were the steam frigate USS *Merrimack* and the steam sloop USS *Hartford*. Ironically, *Merrimack* achieved her fame under another flag as CSS *Virginia*, having been salvaged by the Confederate Navy from the ruins of the Norfolk Navy Yard and converted into an ironclad. On March 8, 1862, she sank an earlier Charlestown-built frigate, USS *Cumberland*, and her battle with USS *Monitor* off Hampton Roads, Virginia, the following day is rightly regarded as one of the seminal events in world naval history, heralding the end of the era of wooden warships.[151] USS *Hartford* (IX-13) achieved lasting fame as the flagship of Admiral David G. Farragut at the Battle of Mobile Bay in 1864. For years afterwards, Congress routinely exempted her from the limitations it put on the use of naval ship repair appropriations for work on wooden vessels. However, by the early 1950s she was somewhat neglected, finally sinking at her berth at Norfolk in November 1956.[152]

[144] Progress Photos, Aug. 1910-Feb. 1911, Contract No. 1429, E. Locatelli Co., Boston Naval Shipyard Photograph Collection, NPS Cat. No. BOSTS-9570, 9571, 9573, Box 1-47. This facility had been authorized as Building 132 in 1904, but questions as to its location delayed its construction for six years.

[145] Black, *Charlestown Navy Yard, 1890-1973*, 1:328.

[146] Memorandum, Chief, Bureau of Ships, to Commander, Boston Naval Shipyard, "Ropewalk; closing of," Feb. 9, 1955, in David Himmelfarb, *Ropewalk Study Final Report: Vol. II, History Section* [1988], TIC 457/D6308, p. 184.

[147] Memorandum, Deputy Assistant Secretary of Defense (Supply and Logistics) to Assistant Secretary of the Navy (Material), "Commercial and Industrial Type Facilities Review Program (Ropewalk, Boston Naval Shipyard, Boston, Massachusetts)," Feb. 23, 1956, in Himmelfarb, *Ropewalk Study Final Report: Vol. II, History Section*, p. 191-93.

[148] For information on this subject, see David Himmelfarb, *Ropewalk Study Final Report: Vol. VI, Research and Development Functions*. Himmelfarb was the master of the Ropewalk and directly involved with this research and development, receiving several patents for his work.

[149] Boston Naval Shipyard, Command History, 1 January 1971-31 December 1971, OPNAV Report 5750-1, Command Histories, 1961-1974, Records of the Boston Naval Shipyard, RG 1.1, NPS Cat. No. BOSTS-13344, Box 12.

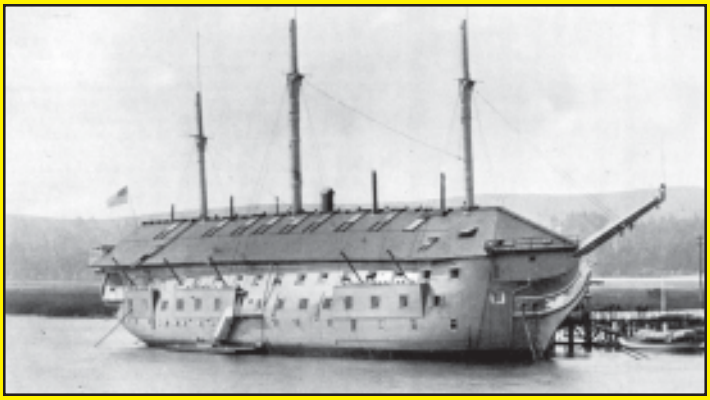
[150] Stephen P. Carlson, *Ships Built at the Charlestown Navy Yard* [draft] (Boston: Boston National Historical Park, 1992), TIC 457/D6304. Unless otherwise noted, information on ship construction has been taken from this source. A simplified listing was published as "Ships Built by the Charlestown Navy Yard, 1814-1957," *The Broadside/Boston National Historical Park* (Spring 1995 Supplement); a revised and updated version of this listing appears as Appendix B to this report. For operational histories of these ships, see *DANFS*, vol. 1-8.

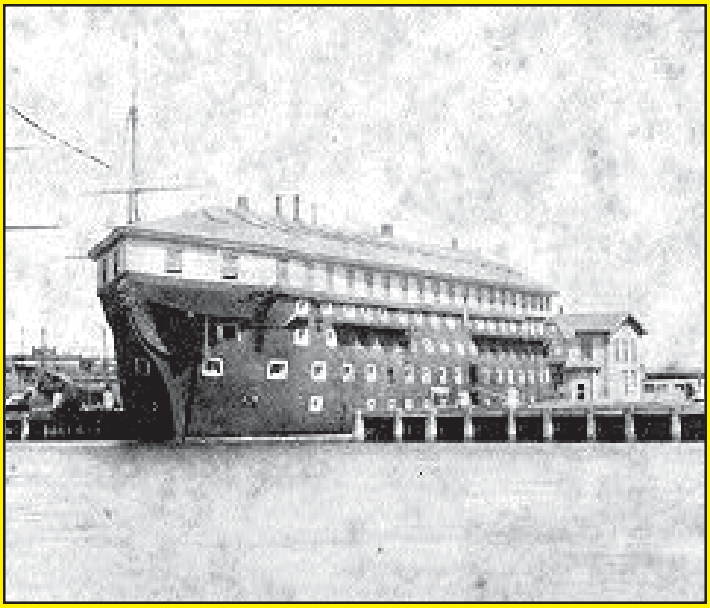
[151] *DANFS*, 2:579, 4:337-38.

[152] Ibid., 3:261-63.

Pre-Civil War Shipbuilding: A Gallery

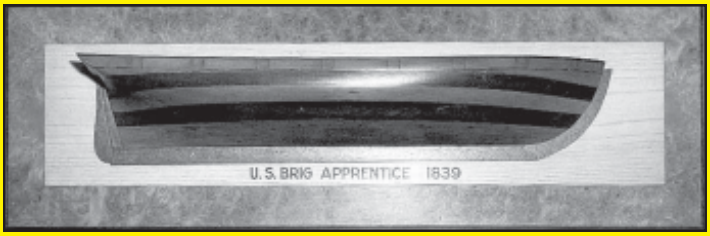
STARTING IN 1813, the Charlestown Navy Yard built a number of ships, ranging in size from ships-of-the-line to brigs. By the time of the Civil War, the yard had begun to construct vessels with steam propulsion, including two which would earn places in every American history textbook, USS *Merrimack* (later CSS *Virginia*) and USS *Hartford* (IX-13).





Among the yard's longest-surviving ships were the first two laid down, both 74-gun ships-of-the-line. Above, USS *Independence*, which was cut down by one deck in the mid-1830s, is seen at Mare Island Navy Yard during her long service (1857-1912) as the yard's Receiving Ship. At right, USS *Vermont*, laid down in 1818, launched in 1848, and commissioned in 1862, is seen in a similar role at the New York Navy Yard.

Mare Island Naval Shipyard (above); New York Public Library (right)



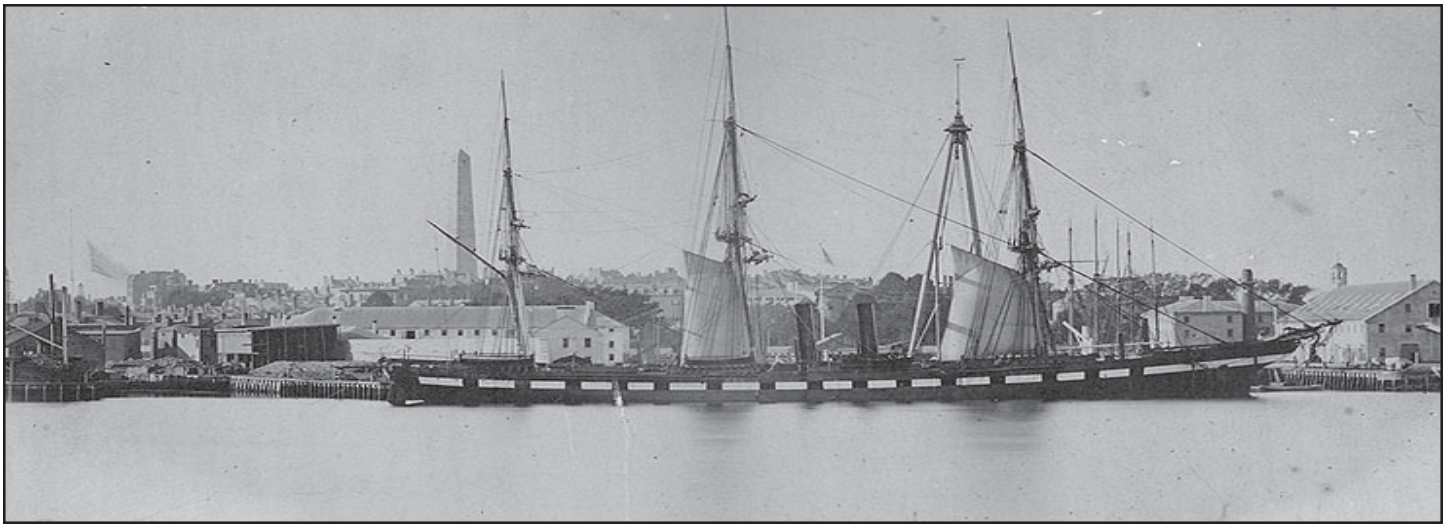
A traditional part of the ship design and construction process in the age of wooden ships was the construction of a half-hull model which was then used by craftsmen, many of whom could not read plans, to scale off and lay out the lines of a vessel. Such models were often then saved and used as wall decorations for Navy Yard offices. This half-hull model is of the training brig *Apprentice*, built in 1841 and transferred to the U.S. Coast Survey in 1846. *BOSTS-9107*



This colored engraving by Warren, based on a drawing by John Andrew, shows the steam frigate USS *Merrimack* being launched from Shiphouse H (Building 68) on June 15, 1855. Abandoned by the Navy at Norfolk in April 1861, *Merrimack* was salvaged by the Confederate Navy and rebuilt as the ironclad CSS *Virginia*. *NHC NH-86347-KN*



Because of her role in the Civil War, USS *Hartford* (IX-13) survived for almost a century. Here she is seen under full sail in Long Island Sound on Aug. 10, 1905. *BOSTS-11370*



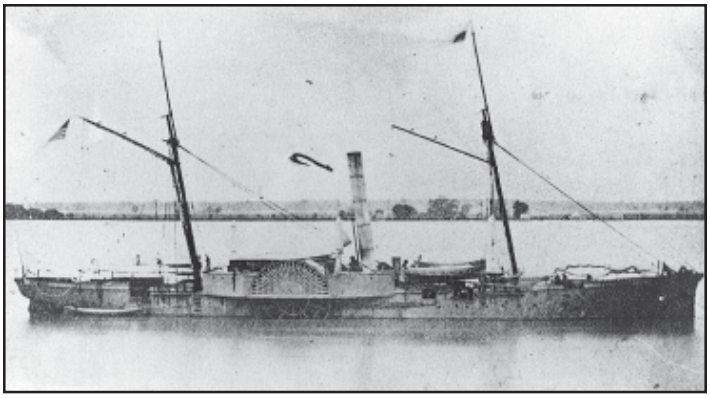
USS *Niagara* is seen at the Navy Yard in 1863. The steam frigate was at the yard for repairs between June 1862 and October 1863. The long structure beneath the Bunker Hill Monument is the Navy Store (Building 5), while the Pitch House (Building 10) can be seen to the right of *Niagara*'s mizzenmast. The top of the Commandant's House (Quarters G) is barely visible through the trees to the right of the yard's flag pole (center), while at right over the bow are the Dry Dock Engine House (Building 22) and the Carpenters & Joiners Shop (Building 24). *NHC NH-57980*

The Yard During The Civil War

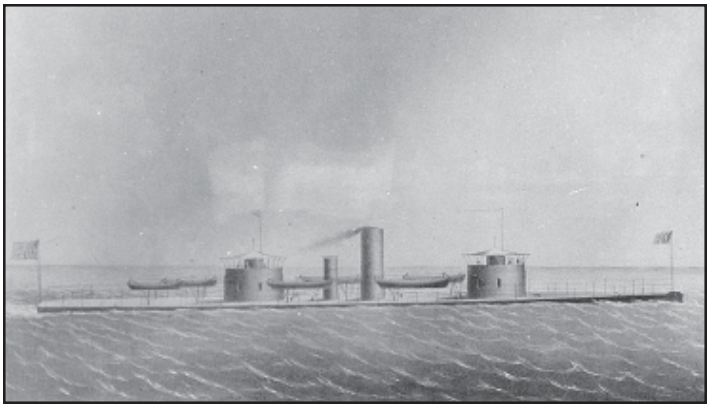
On April 15, 1861, President Abraham Lincoln proclaimed the existence of a rebellion against the United States. A key element of Union strategy to defeat the Confederacy was the imposition of a naval blockade along the coast from Virginia to the Rio Grande. This required a many-fold increase in the size of the Navy, which in 1860 numbered under 100 vessels. Almost immediately, the Navy ordered new ships constructed in its own shipyards, and, for the first time since the early years of the century, placed orders with private shipbuilders for major warships. It also purchased commercial steam vessels for conversion into warships for blockade duty.[153]

The Civil War brought considerable growth to the Charlestown Navy Yard. Civilian employment, a prime source for determining the scope of activities in the yard, grew from 374 in mid-1860 to 1,558 a year later. That number doubled again by 1863, and reached its 19th century peak of 3,217 just as hostilities came to an end.[154] Production in the Ropewalk increased, but the largest number of employees were involved in ship construction, outfitting, and repair work.

New construction orders came quickly after the outbreak of war. Between October 1861 and August 1867, the yard launched 15 vessels, and laid down the keels of three others. It also completed construction of a vessel whose keel had been laid down in 1818. The ship-of-the-line USS *Vermont*, which had been languishing at the yard since her 1848 launching, was completed in January 1862 as a store ship. On May 10, 1861, the yard was assigned the construction of a screw sloop-of-war, USS *Wachusett*; two sister ships were soon added to the order. One of these sisters, USS *Housatonic*, would earn the distinction of being the first naval vessel sunk by a submarine when she was torpedoed by the Confederate vessel *H.L. Hunley* off Charleston, S.C., on February 17, 1864.[155]



Naval strategy during the Civil War led to the construction of a large class of shallow-draft sidewheel steam gunboats. USS *Genesee*, shown on the Mississippi at Baton Rouge in March 1863, was completed by the Navy Yard in about eight months in 1861-62. Sold after the war, the ship operated commercially as *Hattie C. Besse*. *NHC NH-53871*



Most of the Navy's monitors were constructed by private shipbuilders, but the Navy did order a class of double-turret monitors from its own facilities. Boston was assigned USS *Monadnock*. Launched on Mar. 23, 1864, she commissioned in Oct. 1864 and saw service in the campaign against Fort Fisher, N.C. Following the war, she circumnavigated South America to arrive at the Mare Island Navy Yard in June 1866. Eight years later, she was broken up and a new ship of the same name begun. This lithograph was published by Endicott & Co. in 1864. *NHC NH-60657*

[153] Paul H. Silverstone, *Civil War Navies, 1855-1883*, The U.S. Navy Warship Series (Annapolis: Naval Institute Press, 2001).

[154] Table 8, "Numbers of Civilian Employees, Boston Navy Yard, 1842-1889," in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 199.

[155] David L. Conlin, ed., *USS* Housatonic *Site Assessment*, Submerged Resources Center Professional Papers No. 19 (2005), TIC 999/D1753, p. 1, 34-37.

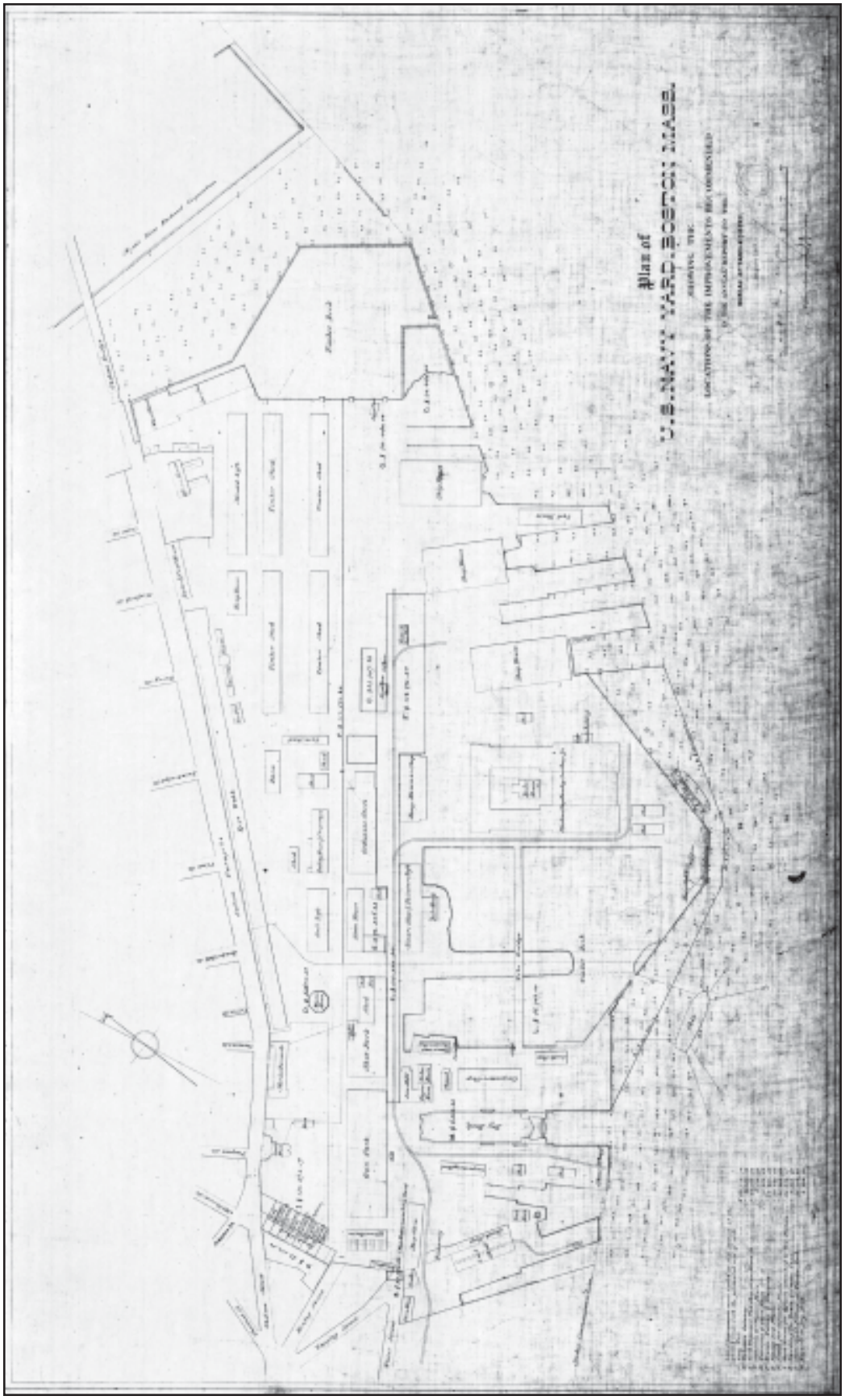
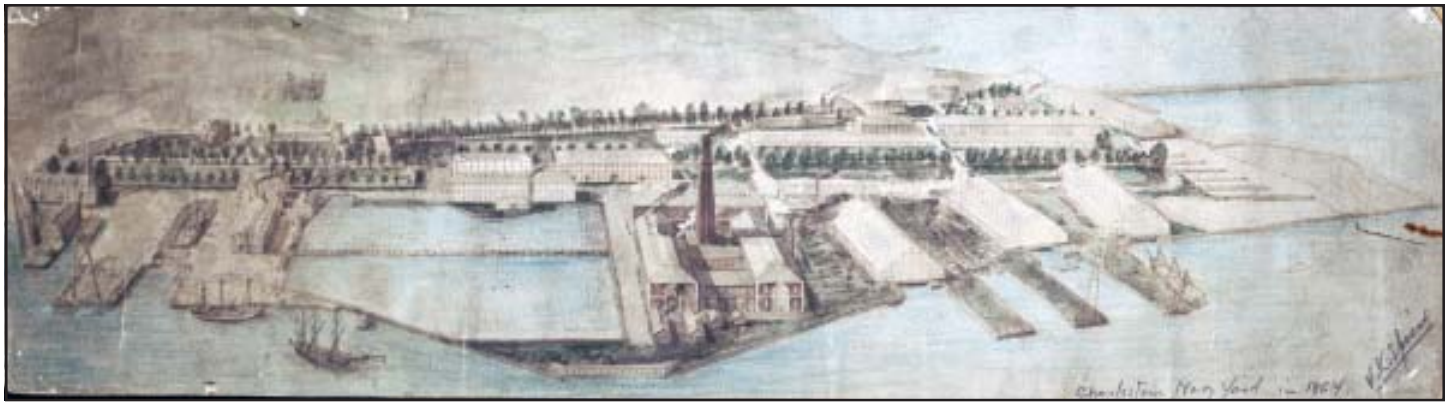


Figure 2-10 – Plan of Navy Yard, 1867

"Plan of U.S. Navy Yard, Boston, Mass., Showing the Locations of the Improvements Recommended in the Annual Report to the Bureau of Yards & Docks," Aug. 1867. This plan shows the yard as it existed at the end of the Civil War. Of the buildings recommended, only the addition of the third floor to the Muster House (Building 31) would ever be funded. The land recommended for purchase for new Officer's Houses (Item H) would eventually be acquired by the Navy during World War II. *BOSTS-13502*



In 1904 Navy Yard employee V.K. Spicer produced this perspective view of the Navy Yard as it was in 1864. From left to right are Pier 1, Shear Wharf (Pier 2), Dry Dock 1, Pier 3, Timber Dock (Structure 90, 91), Ordnance Wharf and Battery (Building 49), Machine Shop (Building 42), Shiphouse H (Building 68), Pier 4, Pier 5, Shiphouse I (Building 71), Pier 6, Shiphouse No. 39 (Building 73), and Timber Dock No. 51 (Structure 87). The presence of both Buildings 36 and 39 in the view indicates that in fact it reflects conditions from around 1866 rather than 1864. *BOSTS-8871*

In August 1861, the first of what would ultimately number five sidewheel double-end gunboats, intended for operation in coastal waters, was ordered. A year later, the Navy Department assigned construction of two screw gunboats to Charlestown. At the same time, the yard began work on a double-turret ironclad monitor; a second monitor would be laid down shortly after the launch of USS *Monadnock* in the spring of 1864, but with the end of the war a year later, work was suspended. The final wartime shipbuilding program that the yard participated in was the large cruiser program initiated in 1863. These were intended as fast sea-going ships to hunt down Confederate commerce raiders. This program moved slowly, and in 1866 three vessels that had not yet been started were cancelled. Ultimately, one monitor and one cruiser would be scrapped on their building ways in the early 1880s as the Navy cleaned house of all incomplete ships.

Between the fall of 1861 and the spring of 1865, the yard took delivery of 23 vessels built by private shipyards, completing their outfitting, and placing them in commission.[156] Finally, it converted over 40 commercial vessels acquired in the Boston area for naval duty.[157] The Dry Dock, which had been used for work on only two vessels in 1860, was in constant use, and yard workers undertook major and minor repairs to numerous other vessels.

The Civil War also saw the funding of improvements to the yard's physical plant, although many of the new facilities would not be completed until after the war. In addition to improvements to the Machine Shop (Building 42), new buildings erected included the Heavy Hammer House (Building 40), completed in 1864 (although not operational until 1867), and the Joiners Shop & Paint Loft (Building 36) and Ordnance Store (Building 39), both finished in 1866.[158]

An even more important addition to the yard was a railroad system, first used in November 1865. This allowed the yard not only to move materials more easily within the yard but also to receive shipments from suppliers by rail.[159] Waterfront changes included the purchase of White's Wharf at the western side of the yard; included in that purchase were two buildings, including one (Building 4) that had been built in 1827 directly against the wall of the Navy Store (Building 5).[160]

The Post Civil War Period, 1865-1890

The end of the Civil War did not immediately result in stoppage of work at the Navy Yard. While employment dropped to 1,170 by mid-1866, it fluctuated between approximately 900 and 1,500 through the early 1870s.[161] With the end of the war, the Navy discarded most of the ships it had purchased during the conflict. The yard was involved with the removal of armament and other naval equipment from vessels being sold. It also deactivated naval vessels that were being placed "in ordinary" or storage at the Navy Yard for future service. In this period, several of the ships begun during the war were completed, and the yard built three new vessels.

At first, the postwar years were optimistic. In October 1869 a Naval Board on Yards & Docks produced the yard's second master plan, intended to supersede that of 1828 (see Figure 2-11). It proposed a massive modernization of facilities, including the construction of three new dry docks, a dozen new quarters, several new shop buildings, and the transfer of the Ropewalk to the grounds of the Chelsea Naval Hospital. It also sought the acquisition of the Mystic Flats property between the Little Mystic Channel at the yard's east end and the Mystic River itself.[162]

In reality, the yard was about to enter a period of relative stagnation. Following the completion of the building construction programs funded during the war, the yard struggled to keep up with ongoing maintenance. No substantial new facilities were constructed following the completion of a new Shiphouse (Building 92) over the building ways west of the Dry Dock in 1872. The yard continued to provide service for naval vessels and to manufacture rope, but em-

[156] Table 4, "Vessels Built Under Contract and Outfitted and Commissioned at Charlestown Navy Yard, 1861-1865," in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 157. The outfitting and commissioning of contractor-built naval vessels by the Navy Yard would continue until the yard closed.

[157] Table 5, "Vessels Purchased, Outfitted, Manned, and Commissioned at Charlestown Navy Yard, 1861-1865," in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 159.

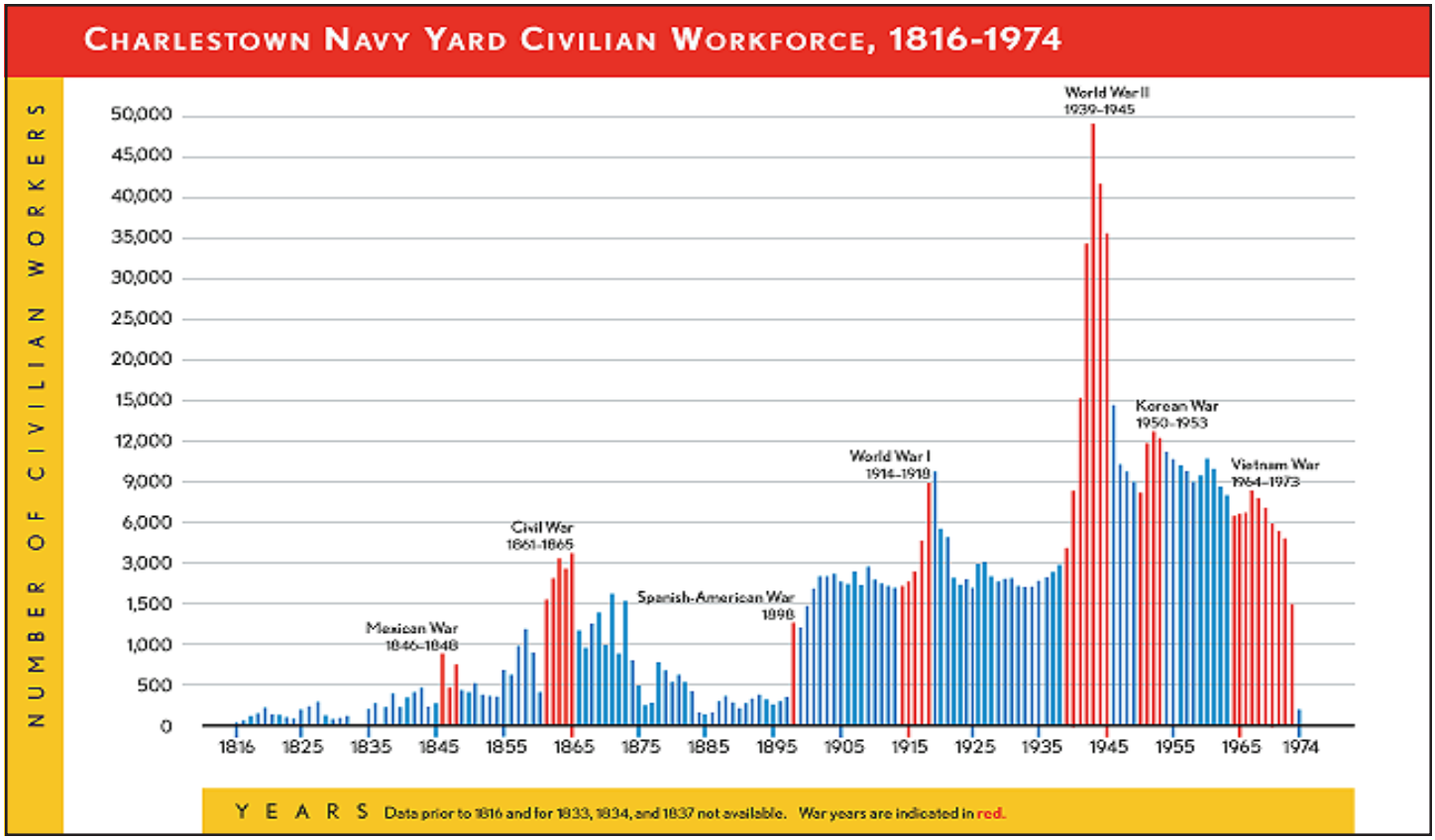
[158] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 171-74, 194.

[159] Ibid., p. 172, 197.

[160] Ibid., p. 174-75; McGrath and Booth with Wong, *Historic Structure Report, Buildings 4 and 5*, p. 162.

[161] Table 8, "Numbers of Civilian Employees, Boston Navy Yard, 1842-1889," in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 199.

[162] "Report, Naval Board on Yards and Docks," in Preble, *History of the Boston Navy Yard*, p. 541-50.



This chart shows the levels of civilian employment at the Charlestown Navy Yard between 1816 and 1974. Note the large increases during war years (red), followed by sharp decreases as the Navy retrenched in peacetime. The sole exception to this trend was during the Vietnam era, when the yard's East Coast location and growing obsolescence were becoming key factors in the ultimate decision to close the yard.

Wondercabinet Interpretive Design

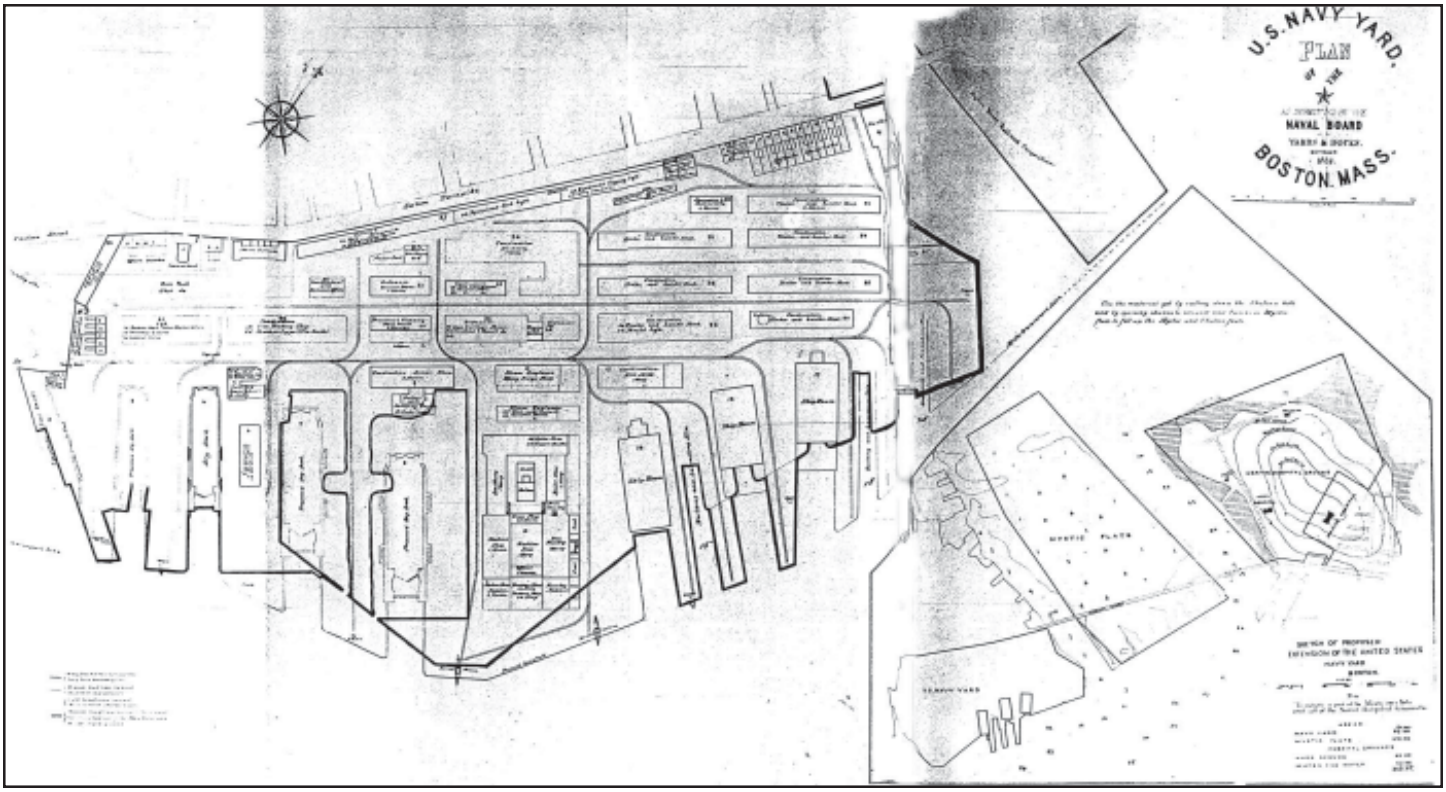


Figure 2-11 – Navy Yard Master Plan, 1869

"Plan of the U.S. Navy Yard, Boston, Mass., as Submitted by the Naval Board on Yards & Docks," Oct. 1869. Virtually none of the proposals in this master plan were ever implemented.

NARA RG 45

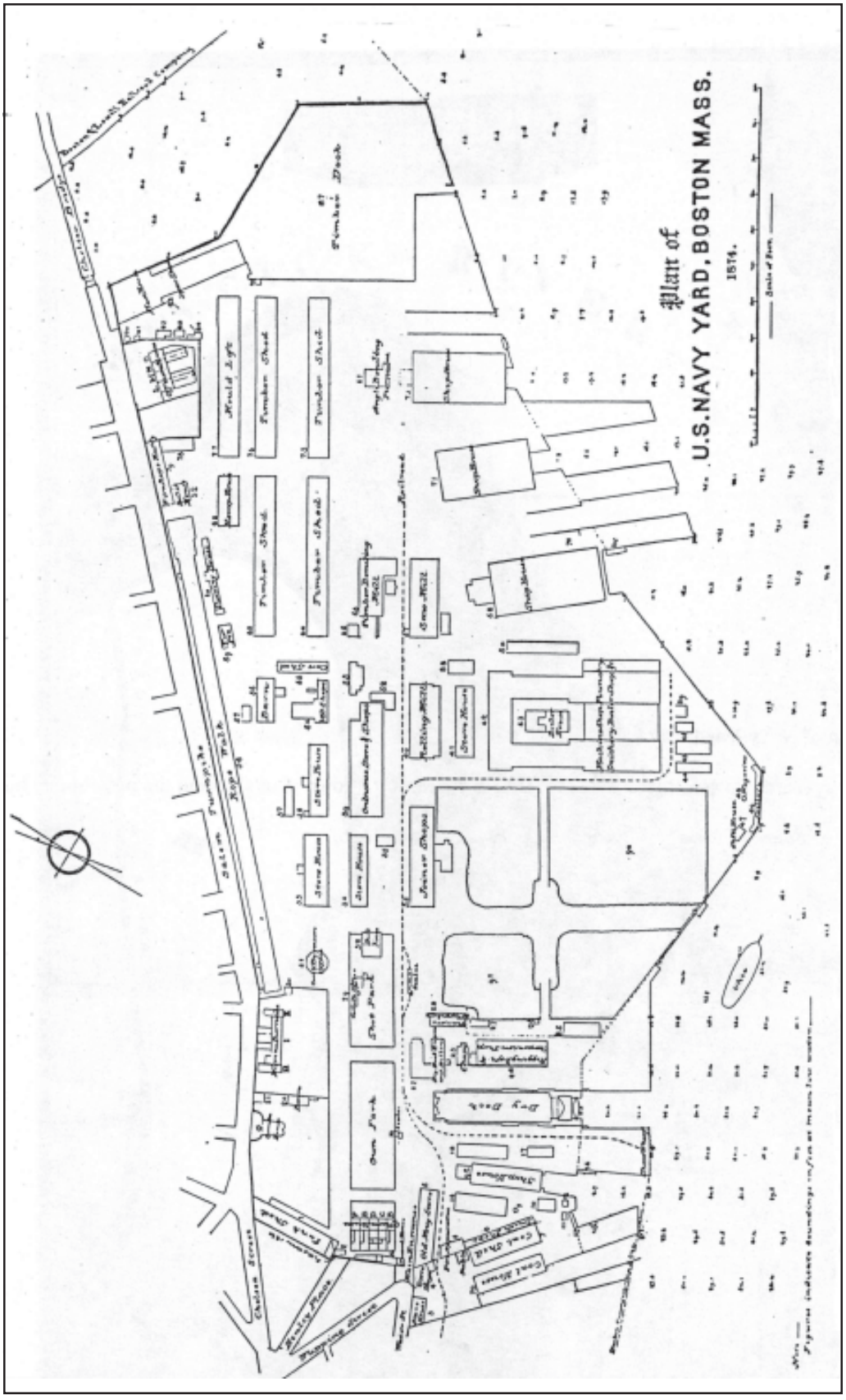


Figure 2-12 – Plan of Navy Yard, 1874

"Plan of U.S. Navy Yard, Boston, Mass.," 1874. This is the earliest known plan showing the complete present-day building numbering scheme adopted during Fiscal Year 1868. *NARA RG 45*



This drawing of the Navy Yard was done by Edwin Whitefield in 1866 for a proposed book on Charlestown. It is one of the few 19th century views of the east end of the Navy Yard. Among the features seen in this view, from left to right, are the Machine Shop Complex (Building 42) and Boiler House Chimney (Building 43), the three Shiphouses (Buildings 68, 71, 73), the incomplete USS *Keywadin*, the Timber Dock (Structure 87), and the Mast House & Spar Shed (Building 85). Behind the Timber Dock are two Timber Sheds (Buildings 75, 76) and the Mould Loft (Building 77), with the Bunker Hill Monument in the distance. *Norton*, Boston Naval Shipyard

ployment levels would drop from 1,542 in 1873 to just 226 three years later.[163] This would rise over the next five years before declining dramatically in the 1880s as the Navy Department, as discussed below, instituted plans to close the yard as a shipyard.

Shipbuilding continued at a slower pace following the Civil War. Although steam-powered, with one exception the ships were of traditional design with wood hulls. The exception was the experimental torpedo ram USS *Intrepid*. This iron-hulled vessel, launched in March 1874, was the final ship built on the yard's original building ways at the west end of the yard. The final wooden warship was the sloop-of-war USS *Vandalia*, completed in 1876. Even as it was completing these vessels, it was also scrapping the four vessels that had been occupying its building ways for many years. One of those ships, *Virginia*, had spent over fifty years in Shiphouse I (Building 71) before being reduced to scrap wood in 1873.

The yard became involved in two experimental processes in this period, both of which could be seen as backward looking in that they dealt with wood rather than iron or steel. In 1871 the Navy purchased a timber-bending machine from inventor John Willis Griffiths and contracted with him to erect a building to house it. The Timber-Bending Mill (Building 66) was completed in 1872.[164] Five years later, in 1877, the Navy entered into a contract with the American Wood Preservation Co. which allowed it to set up its Thilmany-process wood treatment plant in the yard. This was located in Building 41, a Boiler Storage Shed which stood between the Machine Shop (Building 42) and the Rolling Mill (Building 40). The process met with mixed success, and the Navy ultimately purchased the equipment in 1885 after the company's assets had been seized by the federal marshal. This purchase led the *New York Times* to complain that "the Government has been induced to spend a good many dollars for an 'invention' of little or no practical utility."[165]



In 1877 the Navy awarded a contract to the American Wood Preservation Co. which allowed it to establish a Thilmany-process wood preservation plant at the Navy Yard. The site selected was Building 41, which had been a Boiler Storehouse and was unusual among yard buildings in that it was built of iron. While the process worked, the contract was seen as an example of the corruption of the Grant administration. *BOSTS-14942*

The Receiving Ship *Wabash*

One waterfront fixture in the yard changed in this period. In 1851, the ship-of-the-line USS *Ohio* had been assigned to the yard as a Receiving Ship. A Receiving Ship served as a temporary barracks for sailors who were either between assignments or whose ships were in the yard for repair work. Largely demasted, their upper deck was housed over to create additional space. *Ohio* was the latest in a long line of vessels which had served as the Receiving Ship during the early 19th century, including the ships-of-the-line USS *Independence* (1816-1822, 1825-1832), *Columbus* (1833-1841), *Ohio* (1842-1846), and *Franklin* (1846-1851), and the frigate USS *Java* (1823-1824).

In April 1874, the steam frigate USS *Wabash* arrived at the yard. In October 1875, she replaced *Ohio* as the yard's Receiving Ship, although the older vessel would remain at the yard for another eight years before being sold for scrap. *Wabash* would serve as the yard's Receiving Ship until 1912, being shown as a permanent fixture on Navy Yard site plans; in later years, she was supplied with steam for heating from a shoreside power plant (Building 134).

Following *Wabash*'s retirement, a number of other vessels fulfilled the function, most notably USS *Southery* (IX-26), which served as the yard's Receiving Ship from April 1922 until the function was replaced by a land-based Receiving Station in July 1933.[166]

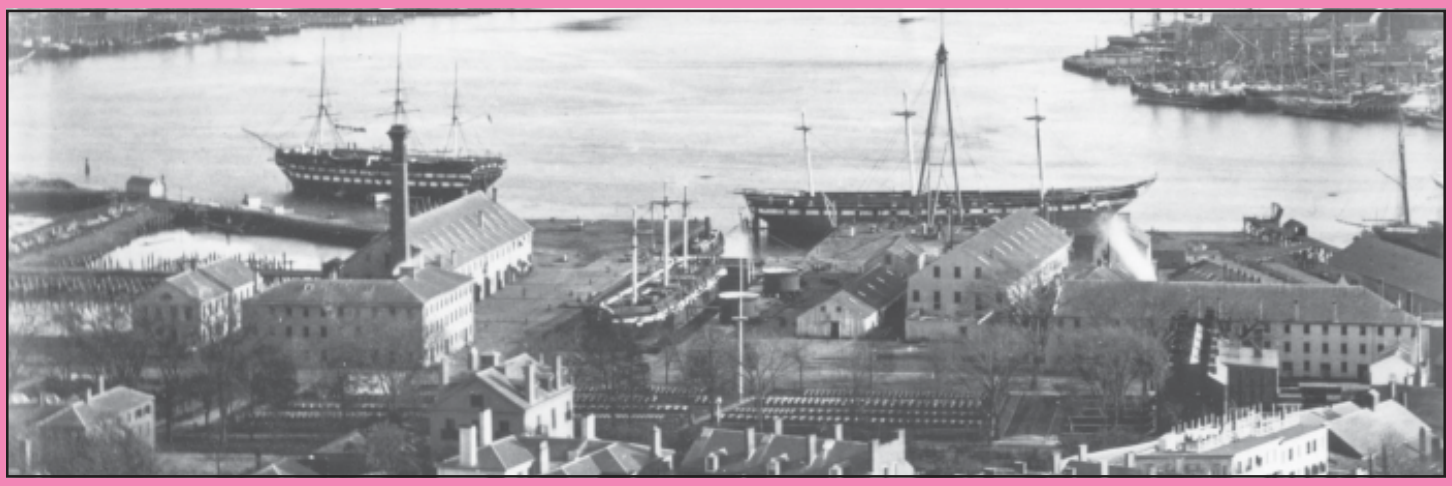
[163] Table 8, "Numbers of Civilian Employees, Boston Navy Yard, 1842-1889," in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 199.

[164] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 272-73.

[165] Ibid., p. 368-71; "Another Fraud Exposed," *New York Times*, June 9, 1885. The Thilmany process involved the pressure treating of wood with a copper-based compound. See Howard F. Weiss, *The Preservation of Structural Timber*, 2nd ed. (New York: McGraw-Hill, 1916), p. 249.

[166] Officer-in-Charge, Office of Naval Records and Library to Commanding Officer, Receiving Station, Navy Yard, Boston, Mass., "List of vessels used as Receiving Ships at Boston," Aug. 23, 1937, in Hamlin, *History of the Boston Naval Shipyard, 1800-1937*, Appendix K; *DANFS*, 6:569; "New Receiving Barracks," *Boston Navy Yard News*, vol. 3, no. 1 (Jan. 13, 1938), p. 3..

The Yard In The 1870s: A Gallery



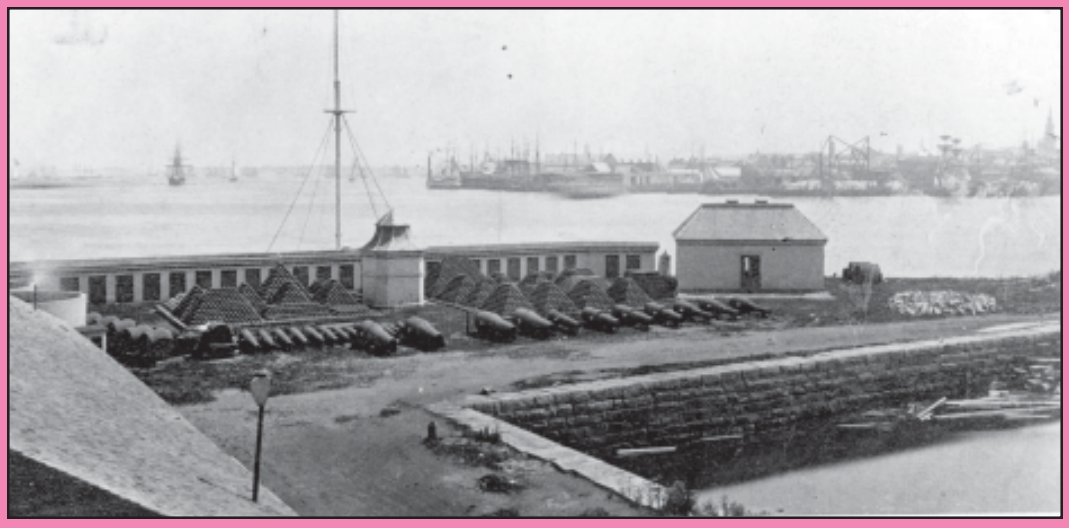
This view of the western end of the Navy Yard s in the mid-1870s looks south from the top of the Bunker Hill Monument. At far left is the Timber Dock and Battery, beyond which is the Receiving Ship USS *Ohio.* Seen in front of *Ohio* is the Plumbers & Tinners Shop (Building 28), the Dry Dock Engine House (Building 22), and the Carpenters & Joiners Shop (Building 24). A ship occupies the Dry Dock, while another, possibly USS *Wabash*, is at the Shear Wharf (Pier 2). The three-story structure to the right of the A-frame shears is Building 92, the third shiphouse built over the yard's original building ways, with the Carpenters Shop (Building 18) to its left. The Old Navy Store (Building 5) extends from the Shiphouse to the right edge of the image, while Captains Row (Quarters B-C-D-E-F) is seen at a right angle at approximately the middle of the building. Note the Gun Park extending from the Quarters past the flag pole. The Commandant's House (Quarters G) and the Marine Barracks (Quarters H-I-K) can be seen along the yard's northern boundary.

Historic New England 12426B



Two pictures provide a panorama looking west from the top of the Shiphouse (Building 73). Among the major structures are, from left to right, the Saw Mill (Building 67), Timber Bending Shop (Building 66), and two Timber Sheds (Buildings 64, 63). In line with the Saw Mill, moving westward along Avenue E (First Ave.), are the Rolling Mill & Forge Shop (Building 40) and Joiners Shop & Paint Loft (Building 36), while the Storehouse for "Fire Brick, Ladders, etc." (Building 51) and the Ordnance Store (Building 39) are seen to the west of the Timber-Bending Mill. The Brick Barn (Building 56) is west of the Timber Sheds, while the Cooperage & Packing House (Building 38) is on the north side of Avenue D (Second Ave.) across from Building 39. The Carpenters Shop & Rigging Loft (Building 24) can be seen at the far side of the Timber Dock (Structures 90, 91). Note the timber stored in the foreground and the trees which lined Avenue D.

BOSTS-8649



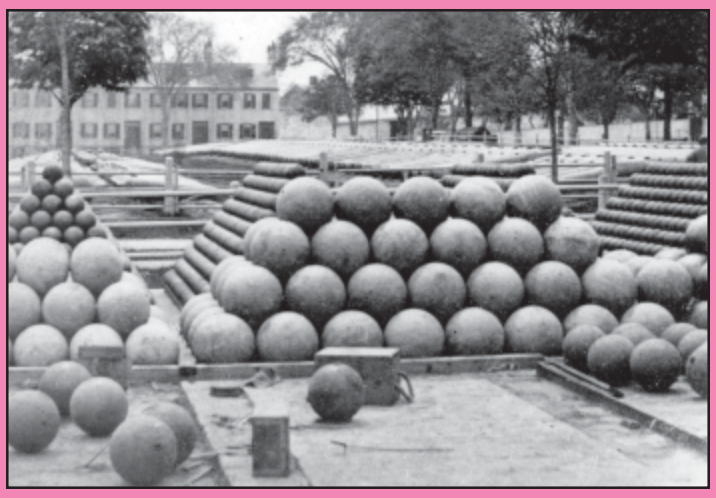
The furthest reach of the quay wall forming the Timber Dock was occupied by the yard's Saluting Battery and served as an ordnance storage space. This ca. 1870 view looks out towards Boston Harbor. The Shed for Battery Guns (Building 49) can be seen along the edge of the quay. The octagonal Magazine (Building 48) and Heavy Shell House (Building 47), both built in 1863, can also be seen, along with a number of large cannons.

BOSTS-8974

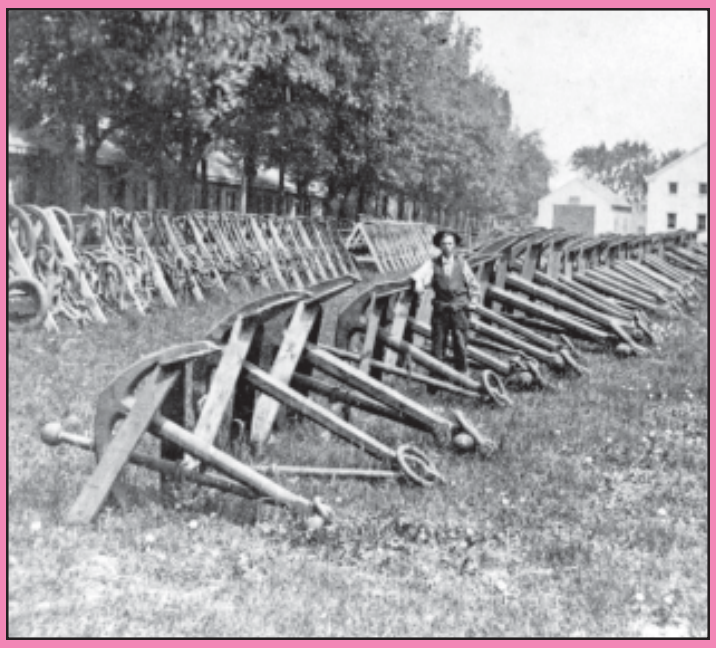
The Yard In The 1870s: A Gallery



The Navy Yard's open spaces provided storage areas for large pieces of equipment. This view looks over the Dry Dock towards the Commandant's House, with the Gun Park in the foreground between what was then called Avenue D (Second Ave.) and Avenue E (First Ave.). The small structure at left is the Scale House (Building 19), while the edge of Building 22 can be seen at right. *BOSTS-8880*



To the east of the Gun Park was the Shot Park, which occupied the area between what was then 5th (now 4th) Street and the Shell House (Building 32). This view looks west towards Captains Row (Quarters B-F). *Portsmouth Naval Shipyard Museum*





Anchors were stored in the area bounded by the Ropewalk (Building 58), the Brick Barn (Building 56), and the Inspection Shed (Building 37). In the view at left, the Shed for "Transporting Wheels for Guns" (Building 57) and the Brick Barn (Building 56) are at the upper right. Above, a nanny (seated center, holding a baby) and her charges sit at a bench along the tree-lined boardwalk known as "Flirtation Walk" which paralleled the Ropewalk. The Anchor Park is at the right. *BOSTS-8872 (left); BOSTS-9512 (above)*



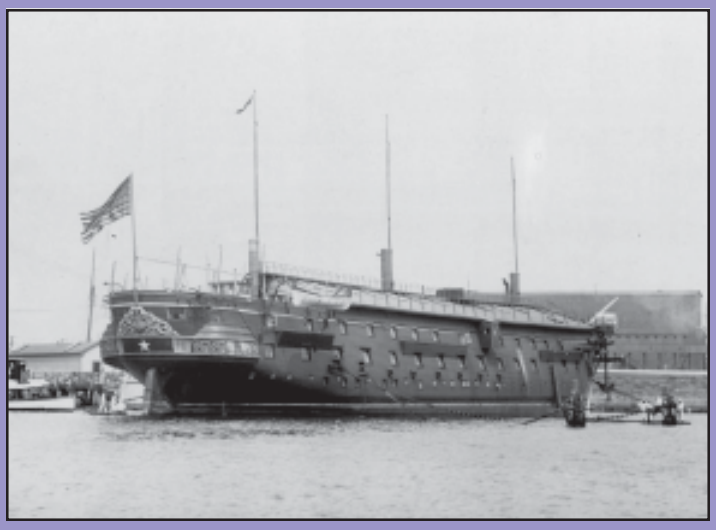
Also stored at the yard were inactive warships. Above, the steam frigates *Iowa* (ex-*Ammonoosuc*) and *Niagara* are moored off the quay wall by the Machine Shop (Building 42) in 1874, with Shiphouses G and H (Buildings 68, 71) in the distance. At right, the monitors *Shawnee* and *Wassuc* are tied up at the yard's east end around 1871. The monitors would be sold for scrap in 1875; the two frigates were disposed of in the mid-1880s. *NHC NH-57982 (above); NHC NH-100992 (right)*



Receiving Ships *Ohio* And *Wabash*



The Receiving Ship *Ohio* is seen in 1874 off Pier 3 shortly before her replacement by *Wabash*. The former ship-of-the-line, launched in 1820 at the New York Navy Yard, served as Charlestown's Receiving Ship from 1842 to 1846 and again from 1851 to 1875. At left are the Pitch House (Building 10) and the Shiphouse (Building 92), while the Blacksmith Shop (Building 25) is at right. *BOSTS-14941*



The longest-serving of the yard's Receiving Ships, *Wabash* is seen at the eastern end of the yard on Apr. 24, 1903. Serving the Charlestown Navy Yard for 37 years (1875-1912), she had been built at the Philadelphia Navy Yard in 1856. Note the granite wall at right which enclosed the Timber Dock (Structure 87). *BOSTS-14957*

The Yard's Last Wooden Warships: *Vandalia* And *Adams*





The last wooden warship built at the Charlestown Navy Yard was the sloop-of-war USS *Vandalia*, completed in 1876. Seen at left in the Dry Dock in November or December 1875, awaiting final painting of her hull, *Vandalia* was ordered in 1872 in the guise of the rebuilding of the sailing sloop-of-war of the same name, dating to 1828. Commissioned in January 1876, she was one of the ships lost to a hurricane at Apia, Samoa, in 1889. Visible through the rigging of *Vandalia* and shown in the view above, USS *Adams* awaits her turn in the Dry Dock. One of four wooden gunboats authorized in February 1873, she was constructed by East Boston shipbuilder Donald McKay under a November 1873 contract that allowed McKay to build the ship using materials and equipment supplied by the Navy Yard and to have access to its facilities. This contract became the focus of an inquiry by the House Naval Affairs Committee in 1876, which, while finding no criminal wrongdoing, raised serious questions about how the Navy conducted its relationships with private contractors. *Adams* would survive until the 1920s. *NHC NH-42469 (left); NHC NH-57285 (above)*

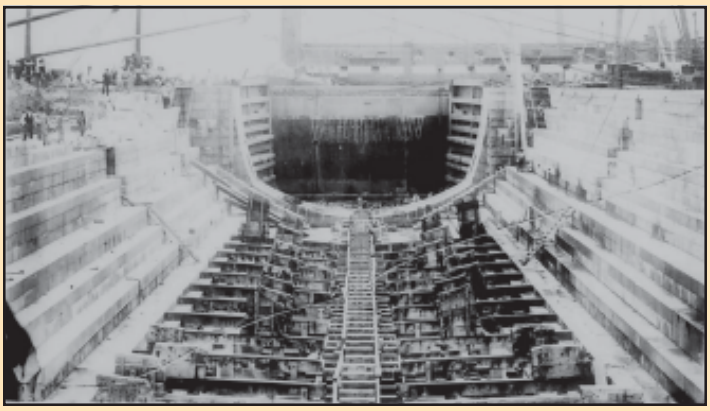
The Yard In 1874: The Preble History Gallery

IN THE 1870s the Bureau of Yards & Docks commissioned histories of various navy yards. Commodore George Henry Preble (1816-1885) was assigned to write those for Boston and Portsmouth. The Boston manuscript was completed in June 1875, but was never published, although a condensed version did appear as a chapter in the four-volume *Memorial History of Boston* compiled by Justin Winsor and published in 1881.

As a part of the history, Preble included photographs of the yard, both overall views and images of specific buildings. This represented the first systematic effort to photographically document the yard. This gallery presents the views of the yard's buildings and waterfront found in the Preble manuscript. The 1874 yard plan (Figure 2-12), also taken from the Preble volume, shows the location in the yard of each structure shown.

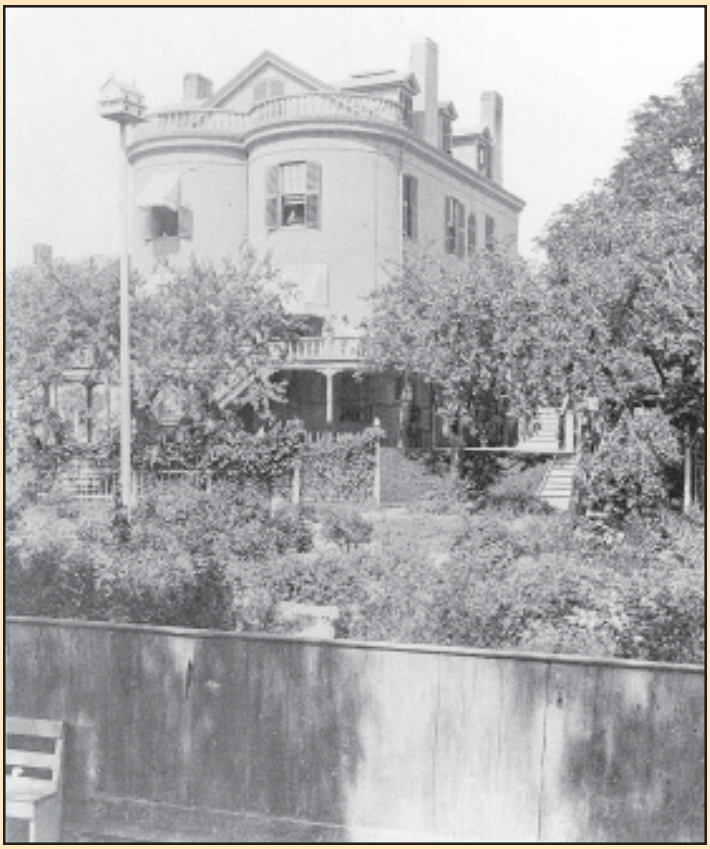


George Henry Preble was born in Portland, Me. Entering the Navy as a midshipman in 1835, he saw active service in both the Mexican War and the Civil War, rising to the rank of commodore in 1871 and rear admiral in 1876. During his long career, he served several tours of duty at the Boston Navy Yard. In Nov. 1873 he was assigned to write histories of the Portsmouth and Boston yards. In May 1874, before he completed those manuscripts, he became Commandant of the Philadelphia Navy Yard, a post he held until Mar. 1876. Following service as commander of the South Pacific Squadron, he retired in Apr. 1878, making his home in Boston. *NHC*



Dry Dock 1

In this June 1874 view of the dock undergoing repair, the turning gates are fully open, providing a good view of the original wooden caisson. *NARA RG 45*



Quarters G

This view of the Commandant's House shows an elaborate landscape scheme. Note the birdhouse on the pole in the foreground and the bench against the wooden fence separating the Commandant's yard from Second Ave. *NARA RG 45*



Quarters B-C-D-E-F (Building 265)



Quarters O-N-M-L (Building 266)

Other than the Porter's Quarters (Quarters A) and the Commandant's House (Quarters G), Navy Yard quarters were multi-unit rowhouses. The Upper Quarters (top) were located at the western end of the yard and faced the Gun Park. The Lower Quarters (above) were at the northeast corner and faced Chelsea St. Note the horsecar headed for Lynn via Chelsea in the foreground. *BOSTS-9162 (top); NHC NH-1197 (above)*

The Yard In 1874: The Preble History Gallery



Main Gate & Building 5
Preble indicates that Building 5 (right), built in 1813, was used in 1874 as the Paint Shop, Dispensary, Naval Library, and Storerooms. Note both the civilian watchmen and Marine guards at the Main Gate as well as the gas lamps on the top of the gateposts. The Guard House (left) was attached to Quarters A. Building 22 can be seen in the distance. *BOSTS-8940*



Building 22
Designed by Alexander Parris, Building 22 housed the pumping machinery for the Dry Dock, a Machine Shop, and the Blockmakers Shop.
BOSTS-9287



Buildings 23 & 24
Building 23 (left), built in 1841 as an Oil Boiling House for the yard's painters, was being used as a Chapel and Steam Box in 1874; it would be moved to the east side of Building 24 in 1905. Building 24, the Carpenters & Joiners Shop,had been built between 1847 and 1849. The lean-to on the north end held a Galvanizing Shop *BOSTS-9297*



Building 29
Originally located on the opposite side of Second Ave., Building 29 housed the Commandant's Office. It had been built as the site office for the construction of Dry Dock 1. Building 28, the Tinners, Plumbers & Coppersmiths Shops, can be seen in the left background, while the chimney of the Dry Dock Engine House (Building 22) can be seen to the left of Building 29's own chimney. *NARA RG 45*



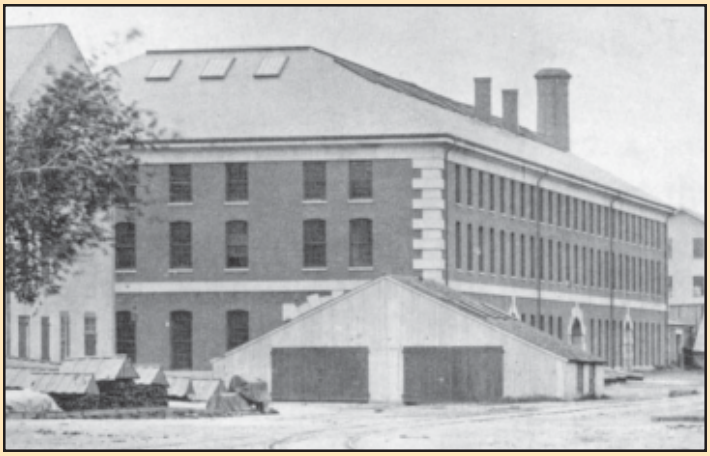
Building 31
The Muster House had been raised from two to three stories in 1871. The upper floors housed the Civil Engineer's offices. *BOSTS-9316*

The Yard In 1874: The Preble History Gallery



Buildings 32 & 34

Building 32 (left) was constructed in the 1850s as a Shell House. As such, it had no windows other than those contained in the doors which were centered on each side of the structure. Building 34 (right), completed in 1837, was designed as Store House No. 15 by Alexander Parris and was intended to be a square facility with a central courtyard. In the event, funding for only the north wing was available. Note how the ends were left as brick to facilitate construction of the remainder of the structure, which was never funded. *BOSTS-9339*



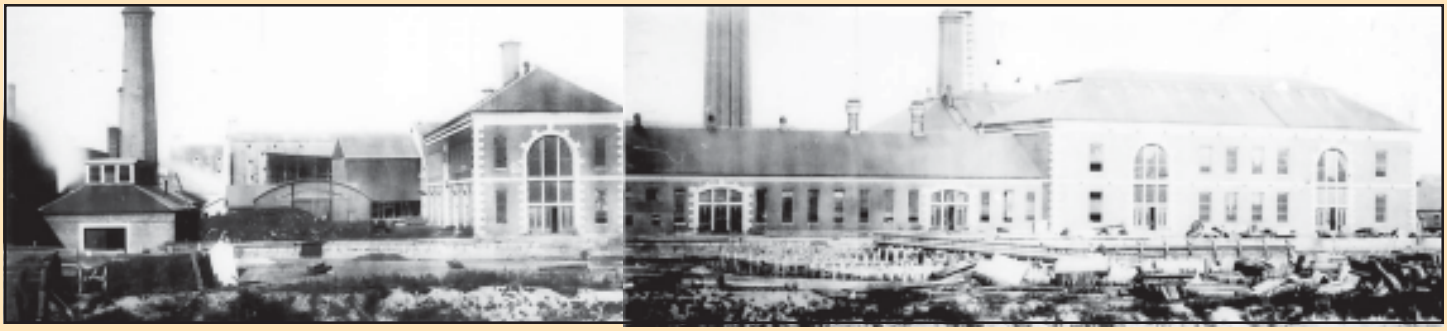
Buildings 35 & 39

Built of brick with granite trimmings, Building 39 was described in 1874 as containing the shops, stores, offices, and armory for the Ordnance Department. In the foreground is Building 35, the wooden "Shed for Sighting Guns," built in 1865 and gone by 1878. *BOSTS-9339*



Building 36

The Joiners Shop & Paint Loft, completed in 1866, was the last major granite structure built in the Navy Yard. To the immediate right is the boiler house extension which supplied the steam needed to operate the shop's machinery, while Building 42 looms in the background. The small structure in the foreground is the Scale for weighing railroad cars installed in 1871. *BOSTS-9351*



Buildings 40, 41, & 42

Completed in 1864 but not operational until 1867, the Heavy Hammer House (Building 40, left) also contained the yard's Rolling Mill. Building 41 (center), used for "Storage of Unfinished Machinery," was unique among yard buildings in that it was built of iron rather than wood or masonry. The largest structure in the yard, Building 42 housed the Machine, Boiler, and Pattern Shops as well as the Brass and Iron Foundry and a Smithery. *NARA RG 45*



Buildings 57 & 56

Not all yard structures were for industrial purposes. Building 57 (left) was used for storing "Transporting Wheels for Guns." The Brick Barn (Building 56), used for the yard's draft animals, was originally completed in 1850 and obviously reconstructed in 1866. Like many of the brick structures in the yard, it was painted rather than left as raw brick. *NARA RG 45*

The Yard In 1874: The Preble History Gallery



Buildings 58 & 52
Note the iron shutters on the doors and windows of he headhouse of the Ropewalk (Building 58). At left is the bridge connecting the structure to the Hemp House (Building 62). At right is the new Boiler House (Building 52) replacing that in the original Boiler House (Building 79) which had been converted into a Wire Rope Mill in 1871. *NARA RG 45*


HISTORY
OF THE
BOSTON NAVY YARD
IN
Charlestown, Mass.
FROM
1797 to 1875,
WITH AN
HISTORICAL INTRODUCTION AND APPENDIX,
PREPARED BY
Commodore George Henry Preble, U.S.N.,
UNDER THE DIRECTION OF THE
BUREAU OF YARDS AND DOCKS,
Navy Department;
Commodore John C. Howell, U.S.Navy,
CHIEF OF THE BUREAU.
1875.



Building 67
The Saw Mill was completed in 1868 and replaced the one located in Building 22. The structure, moved to the east end of the yard in 1901, was largely demolished in 1906, with the remnant being renumbered Building 130. *NARA RG 45*

Building 66
The Timber-Bending Mill was constructed in 1872 to house a machine purchased from inventor John Willis Griffiths. The last structure from the Civil War era yard improvement program, it became the Iron Platers Shop in the early 1890s. *NARA RG 45*

Waterfront Panorama



This two-part panorama shows the Navy Yard waterfront from Wharf 3 to Shiphouse 39 (Building 73). From left to right, visible structures include the Blacksmiths Shop (Building 25); Carpenters Shop & Rigging Loft (Building 24); Dry Dock Engine House (Building 22); Tinners, Plumbers & Coppersmiths Shop (Building 28); Heavy Shell House (Building 47); Battery (Building 49); Magazine (Building 48); Commandant's Office (Building 29); Shell House (Building 32); Joiners Shop (Building 36); Machine Shop Complex (Building 42); Coppersmiths Shop (Building 44); Engine Repair Shop (Building 45); Spare Machinery Shed (Building 46); Boiler Storage Shed (Building 89); USS *Wachusett*; USS *Niagara* (housed over behind *Wachusett*); Shiphouse H (Building 68); USS *Connecticut*; Shiphouse I (Building 71); and Shiphouse 39 (Building 73). Note the Bunker Hill Monument in the background to the right of the flagpole. *BOSTS-8639*

The Yard Resurrected, 1890-1912

The Charlestown Navy Yard in the early 1890s was a moribund and outdated facility. It had suffered from its virtual closure in the 1880s, and, while other yards had benefited from Congressional direction that a portion of the new ship construction being authorized be done in government yards, such was not the case at Boston. While some rehabilitation work on piers had occurred in the late 1880s, the focus of the yard was on manufacturing. In June 1883 Secretary of the Navy William E. Chandler had ordered all work at the Navy Yard suspended except for rope manufacture and at the Sail Loft.[167] In December 1886, Chandler's successor, William C. Whitney, ordered that as of February 1, 1887, the yard would be used "as a permanent, general manufacturing yard for articles of equipment."[168]

These manufacturing activities included the production of both fiber and wire rope and the making of sails, long activities associated with the yard. Under Whitney's orders, the yard now assumed responsibility for assembling all rigging for naval vessels except for the rigging produced at Mare Island. More importantly, as the Washington Navy Yard transitioned into its new role as the Naval Gun Factory, the production of anchors and anchor chain was shifted to Boston.[169] Anchor chain would become the yard's major industrial activity in the 20th century.

Unlike Washington, the Charlestown Navy Yard never lost ship repair activity entirely. Although the Dry Dock was too small for some of the new battleships and cruisers, it was still a valuable facility. If it was not in use for naval vessels, it was made available for civilian use. For example, in 1890 all but four of the twenty-one vessels docked were commercial.[170] While the yard worked on more and more naval vessels as the 1890s progressed, it was the Spanish-American War of 1898 that fully brought it back to life as a functioning shipyard. Civilian employment shot up from under 500 to nearly 1500.[171] During the spring and summer of 1898 the yard converted several merchant vessels into naval colliers and the Navy's first dedicated repair ship, USS *Vulcan*, as well as transformed yachts into gunboats for coastal defense.[172]

The start of yard modernization can be dated to the Fiscal Year 1891 Naval Appropriations Act. That measure, approved on June 30, 1890, provided $40,000 "for extra tools required to put the yard in condition for repairing modern marine machinery with economy and dispatch."[173] Throughout the 1890s, however, appropriations for public works at the Navy Yard were limited to such items as installation of water pipes, repairs to wharves and the Dry Dock, and the introduction of electric lighting.[174]

[167] Circular Letter, June 23, 1883, cited in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 372.

[168] General Order No. 356, Dec. 18, 1886, quoted in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 372.

[169] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 372.

[170] Table 1, "Dry-Dockings, Boston Navy Yard, 1890-1897," in Black, *Charlestown Navy Yard, 1890-1973*, 1:110.

[171] Table 3, "Number, Civilian Employees on June 30, Boston Navy Yard, 1890-1915," in Black, *Charlestown Navy Yard, 1890-1973*, 1:231.

[172] Black, *Charlestown Navy Yard, 1890-1973*, 1:121-62.

[173] Pub. Law —, June 30, 1890, in Pulsifer, *Navy Yearbook, 1912*, p. 117-18.

[174] Black, *Charlestown Navy Yard, 1890-1973*, 1:54-56, 66-72.

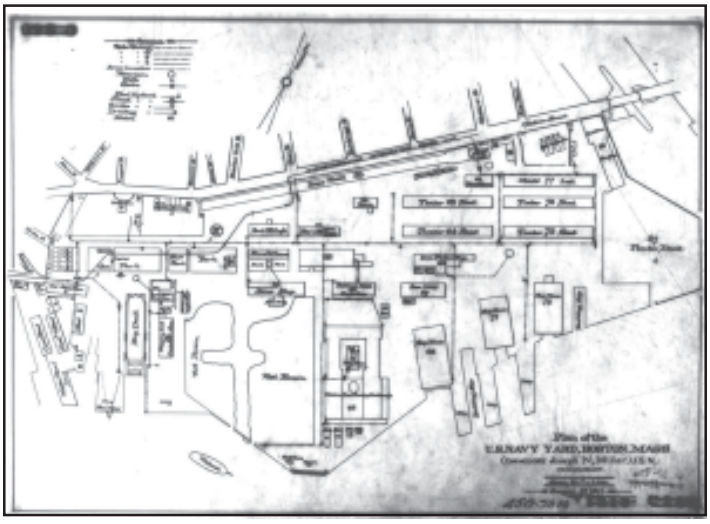
The Yard In The Spanish-American War



USS *Inca* is seen at Pier 2 in November 1898. The yacht had been converted by the yard for naval service in the Spanish-American War in June 1898. Directly behind *Inca* is USS *Vulcan*, the Navy's first repair ship, another yard conversion of a civilian vessel. At right behind the shear legs is the Receiving Ship *Wabash*. *NHC NH-53225*



Although modern warships, such as the monitor USS *Amphitrite* (BM-2) seen at Pier 3 in the winter of 1898-1899, called at the yard, its facilities were ill-equipped to deal with steel vessels. Shortly after this view was taken, the Timber Dock, seen to the right of the ship and Building 24, would see the start of construction for a new, larger dry dock. *NHC NH-58949*



Most yard improvements in the 1890s involved infrastructure such as water and sewer lines. This Jan. 1, 1897, plan details the yard's water system. It also shows the Metropolitan Interceptor Sewer line that crossed under the yard from Chelsea Street at the Ropewalk to Water Street at Gate 1. *BOSTS-9048*

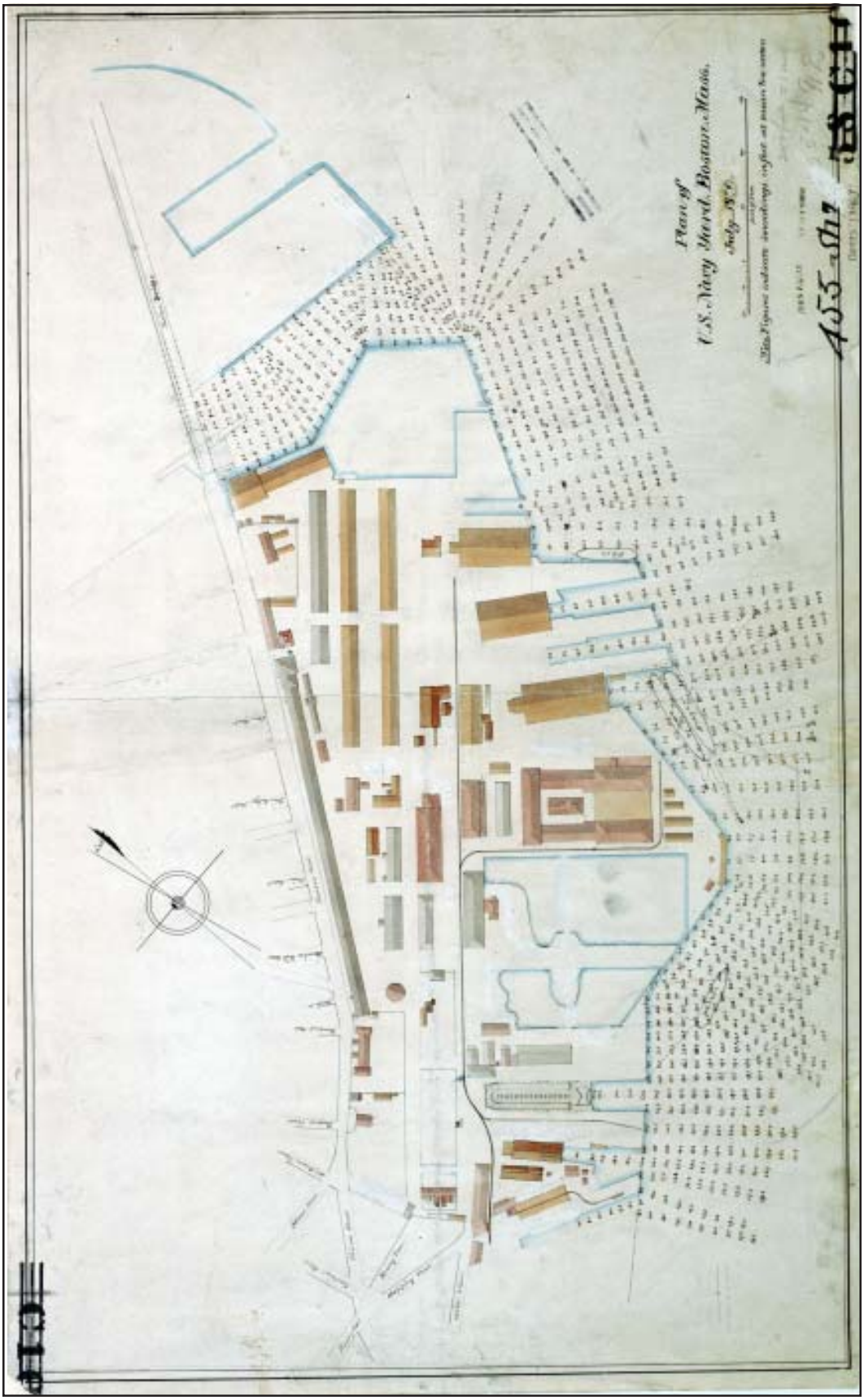


Figure 2-13 – Plan of Navy Yard, 1882

"Plan of U.S. Navy Yard, Boston, Mass.," Aug. 1882. This plan was originally drawn in July 1870 and updated to Aug. 1882. It depicts the yard as it was in the late 19th century, before the start of major modernization efforts in the late 1890s. Granite buildings are shown in gray, brick buildings in red, and wooden buildings in brown. Note that the Navy colored the Timber Sheds, which were a combination of granite and wood construction, as wood.

BOSTS-13467

The Yard At The Turn Of The Century: A Gallery

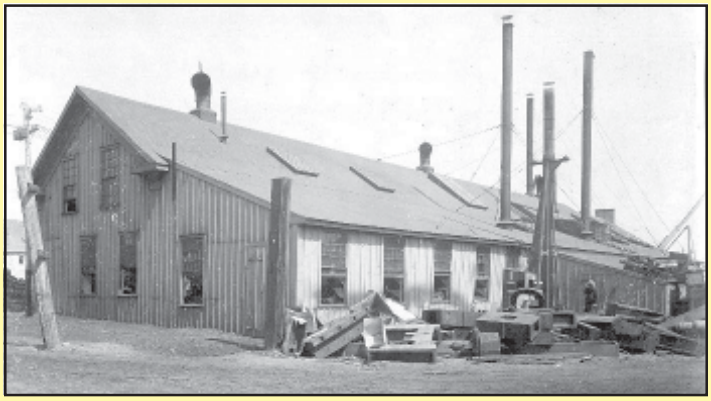
THE PHOTOGRAPHS in this gallery, taken between 1899 and 1902, depict the yard's older structures as it embarked on a major modernization effort. New structures being added to the yard are shown elsewhere in a separate gallery. The 1882 and 1901 yard plans (Figures 2-13, 2-14) show the location in the yard of each structure shown.



Building 4, Aug. 2, 1900
Used as a Storehouse, Building 4 contained a large sign directing people to the Main Gate. Note the large iron doors. The gate at right provides access to 1st St. *BOSTS-14957*



Building 6, Dec. 1899
The old Fire Engine House, dating back to 1805, is seen shortly before it was demolished to make way for the reconfiguration of the Fitchburg Slip and Pier 1. *BOSTS-8936*



Building 16, Aug. 2, 1900
Built in 1868 as an Iron Platers Shop (but frequently shown on yard plans as a Shed), it was employed in 1900 as a Foundry for the Construction & Repair Department. Tthe structure was demolished around 1910. *BOSTS-9278*



Building 5, Main Gate & Quarters A, Aug. 10, 1899
This view looks west along First Ave. towards the Main Gate. Building 5, which housed the Pay Office, Dispensary, Labor Board, and Museum, is at left, while Quarters A, with its attached Guard House, is at right fronting on 2nd St. Beyond the gate to the left is Building 3 and the Fitchburg Railroad's Hoosac Stores No. 1 & 2. *BOSTS-8941*



Building 10, Aug. 2, 1900
The building is supported on cribbing in preparation for its relocation as a part of the reconstruction of Pier 1. Built in 1853 as a Pitch House, it was being used as a Paint Shop in 1900. *BOSTS-9270*



Building 22, Sept. 20, 1902
The north and west walls of the Machine Shop & Pump House for Dry Dock look little different than they do in 2008, including the large gooseneck vent at the south end. *BOSTS-9288*

The Yard At The Turn Of The Century: A Gallery



Building 24, Aug. 2, 1900
This view of Building 24, used as an Office Building and the Rigging Loft, shows the south and east sides. Note the cupola containing a yard bell at the north end and the wooden sidewalk along the east side of 5th St.
BOSTS-9898



Building 28, Aug. 4, 1900
Building 28 was originally built in 1849 as a single-story Coal House for the Dry Dock Engine House. In 1866 the second floor was added and the building adapted as the Plumbers & Tinners Shop. In 1895 it was converted into the Electric Light Plant. *BOSTS-9308*



Building 36, Aug. 2, 1900
This view shows the west and south sides of the Joiners Shop. Note the lighter color of the stonework around the central doorway on the west end, constructed in 1898. The structure's brick boilerhouse is at right.
BOSTS-9352



Building 42, Aug. 8, 1900
The north wing of the Machine Shop Complex was occupied in 1900 by the Smithery. Note the granite pavers and railroad tracks along 8th St.
BOSTS-14957



Building 66, July 31, 1900
The Bending Mill is seen following its reconstruction after a Nov. 1899 fire. This view shows the north and west sides. Note the trees which lined Second Ave. This structure would survive only a short time before being demolished for the construction of Building 105. *BOSTS-9580*



Building 67, Aug. 2, 1900
The west and south sides of the Saw Mill are seen in this view. Shortly after this picture was taken the wooden structure would be moved to the east side of the yard's building ways on the site of Shiphouse No. 39 (Building 73). The recently-rebuilt Building 66 can be seen on the opposite side of First Ave. *BOSTS-9585*

The Yard At The Turn Of The Century: A Gallery



Building 68, Aug. 4, 1900
The land side of the West Shiphouse is seen here. Shiphouse H had been built in 1825 for the construction of the frigate USS *Cumberland* and last used for the monitor *Quinsigamond*, renamed *Oregon* in 1869 and broken up on the ways in 1883. *BOSTS-8978*



Building 75, Aug. 4, 1900
Built in 1831 as Timber Shed No. 38, the structure was being used as a temporary Spar Shop when this view was taken. *BOSTS-10049*



Building 85, July 20, 1900
Before the yard photographer could record it for posterity, the Mast House & Spar Shed was destroyed by fire. This view of the charred remains was taken on the day afterwards. *BOSTS-10048*



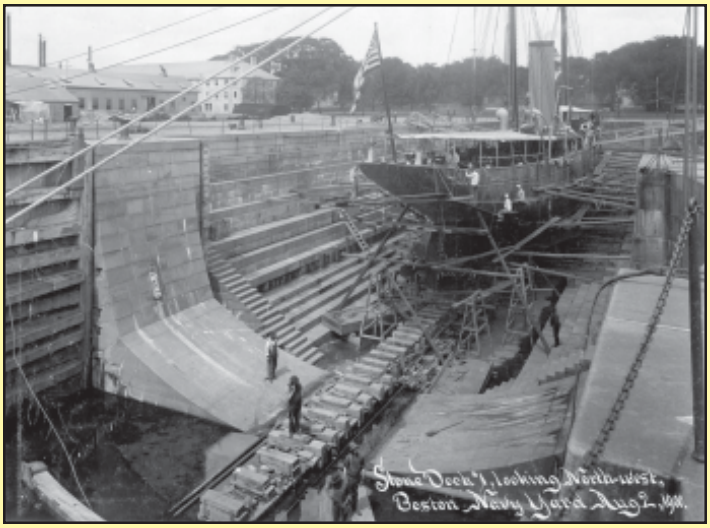
Buildings 94 & 10, Nov. 1, 1901
The Boat House (Building 94) replaced the Shiphouse (Building 92) over the yard's original building ways in 1894. This facility has erroneously been referred to as a marine railway. The relocated Building 10 can be seen at the right. *BOSTS-9807*



Building 71, Aug. 4, 1900
The water side of the East Shiphouse (Shiphouse I) shows the large doors which would be opened for launching and the bridge allowing passage across the end of the building ways. *BOSTS-8978*

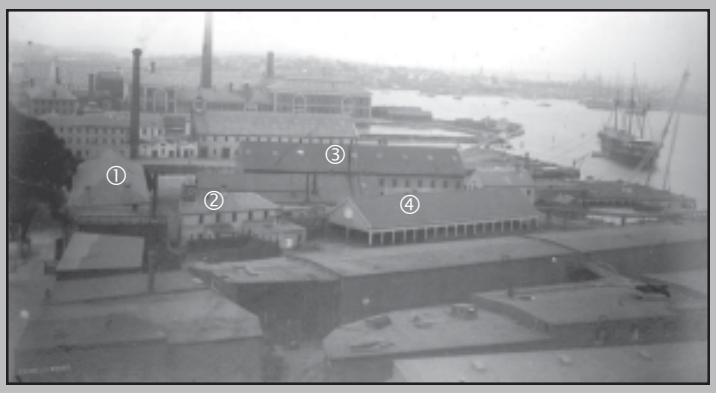


Building 77, Aug. 2, 1900
The Mould (or Mold) Loft, used for laying out the lines of vessels to guide fabrication of structural timbers, was built in 1852 and was also used as a Boat Shop. The only major granite structure in the yard not to survive in 2008, it was demolished in 1941 for the construction of a new Storehouse (Building 199). *BOSTS-9590*



Dry Dock 1, Aug. 2, 1900
USS *Scorpion* (PY-3) is seen in what is identified as the Stone Dock. Buildings 94, 16, and 5 can be seen at the left. A yacht acquired during the Spanish-American War, *Scorpion* would serve the Navy as a patrol vessel into the 1920s. *BOSTS-14208*

Reconstruction of Pier 1



Pier 1 is seen above in 1874. Major yard structures visible in this view are (1) the Old Navy Store (Building 5), (2) the Fire Apparatus House (Building 6), (3) the Shiphouse (Building 92), and (4) the Coal Shed (Building 7). The reconstruction of the pier was precipitated in the mid-1890s by the Fitchburg Railroad, which wanted to sweep away the warren of buildings in the foreground in favor of a new, modern freight pier. Under Congressional authorization, the Navy and the railroad instituted a modernization of the Fitchburg Slip between Pier 1 and the railroad's Hoosac Pier. At upper right, work has begun in December 1899, with the Coal House already demolished. Soon to follow would be the Fire Apparatus House (Building 6), part of which dated to 1805, and what is the least known section of the yard's granite wall, completed in 1845, which reflected the fact that the Navy did not acquire the portion of Pier 1 in the foreground until 1863.

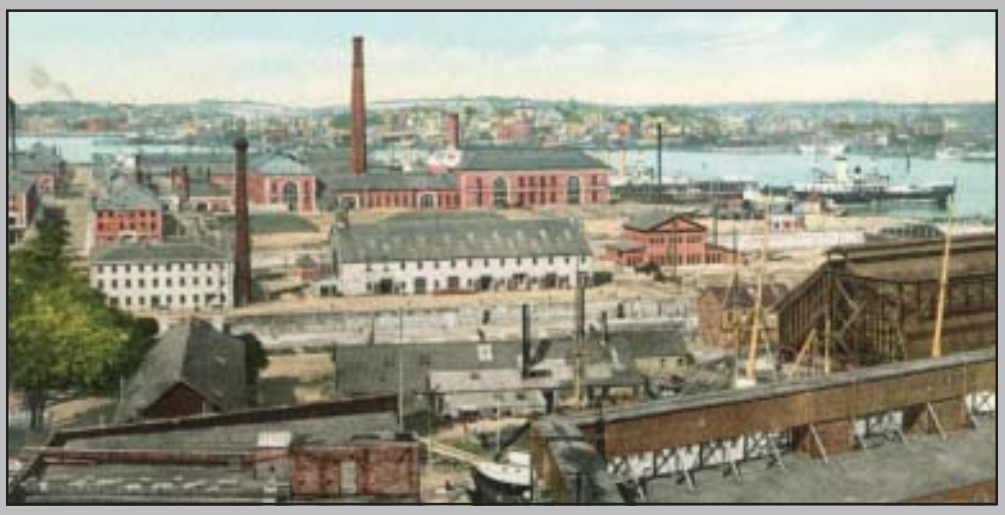
BOSTS-14942 (above); BOSTS-8936 (above right)





By December 6, 1901, the Fitchburg Slip work had been completed. The new west side of Pier 1 is seen here. Work is about to start on filling in the pier in the area of the yard's original shipbuilding ways for the construction of a massive Coal Storage & Handling Plant (Building 109). To the left of center behind the crane is the Foundry (Building 16), while the Paint Shop (Building 10) is to the right. The small structure to the left of Building 10 is the Boat House (Building 94), which had replaced the Shiphouse (Building 92) in 1894 and which would be shortened in 1902 and demolished completely two years later.

BOSTS-9807



Taken from a similar vantage point to the 1874 view above, this ca. 1904 hand-colored postcard view shows the Foundry (Building 16) at center, with the Boat House (Building 94), Paint Shop (Building 10), and the Coal Storage & Handling Plant (Building 109) to its right. On the other side of Dry Dock 1 are Buildings 22, 24, and 125, while the Machine Shop Complex (Building 42) is in the far background. *Detroit Publishing Co. 10659, BNHP*



By June 14, 1913, Pier 1 had been cleared of all structures except Buildings 10 and 109. Note the locomotive on the track, as well as the freight cars. While the section of rail where the locomotive sits was removed in the 1960s, the remaining two legs of the wye remain in place. In the foreground is *Floating Derrick No. 21* (YD-21), the 150-ton floating crane which was a prominent feature of the yard's waterfront throughout the 1910s.

BOSTS-8883

Dry Dock 2

THE MOST IMPORTANT PROJECT in the early 20th century modernization of the Navy Yard was the construction of its second dry dock. One of the largest public works projects ever undertaken at the Navy Yard, it took over six uears to complete and saw the elimination of the Timber Dock, a facility not needed for a Navy built of steel.



June 1, 1899

Construction of Dry Dock 2 began with the dredging the former Timber Dock. *BOSTS-8808*



January 22, 1901

Excavation of the area towards the head of the dock is underway. Building 28 is at left, while Buildings 31 and 32 are at right. *BOSTS-8808*



October 1, 1904

The circular Pump House (Building 123) can be seen in the background of this view of work on the approach to the dry dock. *BOSTS-8808*



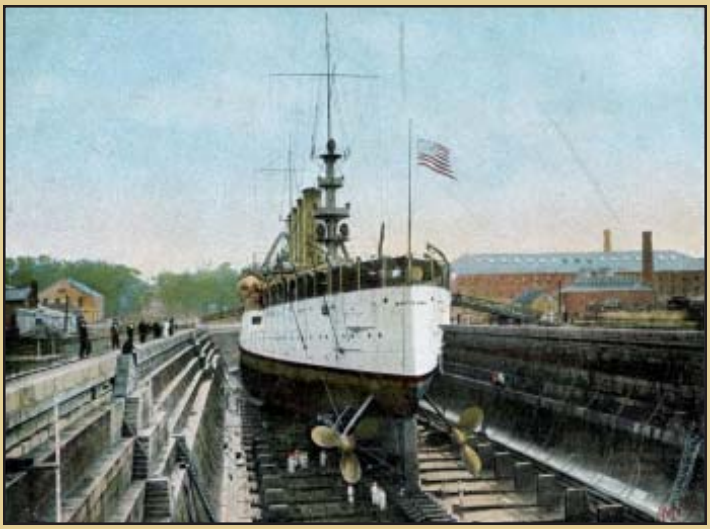
November 18, 1899

This view shows the coffer dam erected to keep water out of the site as work progressed. Removal of over 250,000 cubic yards of material from the site was slowed by three collapses of this dam during the course of the project. *BOSTS-8808*



March 2, 1903

The granite block floor is nearly complete and work is well underway on the dock walls. Over 11,200 granite blocks went into the structure. *BOSTS-8808*



This hand-colored postcard depicts the first vessel to use the new Dry Dock 2—USS *Maryland* (CA-8)—on the day of its inauguration, August 12, 1905. *Metropolitan News 7376, BNHP*

Commonality Of Design: Early 20th Century Industrial Shops

THE EARLY 1900s saw the construction of numerous new industrial buildings at the nation's navy yards. The basic design vocabulary came from the Bureau of Yards & Docks in Washington, although detailed plans were still drawn locally. Thus, while the basic form—high central blocks with lower wings—was similar, detailing varried from yard to yard, as these views show.



Shipfitters Shop (Building 104), Boston Navy Yard



Forge Shop (Building 6),Charleston Navy Yard



Boiler & Blacksmith Shop (Building 18), Philadelphia Navy Yard

The basic design of the shop buildings involved steel framing with brick curtain walls. Note how each of the unidentified architects have interpreted the Renaissance Revival style in their detailing of the structures. For example, the lower wings at Boston had hipped roofs, those at Charleston had gabled roofs, and those at Philadelphia had flat roofs. Boston featured rooftop ventilators, while Charleston and Philadelphia chose clerestories for ventilation purposes. The Philadelphia structure, completed in 1908, had far more elaborate window and cornice treatments than did those at the other yards. *BOSTS-9616 (above); McNeil,* Charleston's Navy Yard *(above right); Jet Lowe, HAER (right)*

This changed as a result of the Fiscal Year 1899 Naval Appropriations Act. That legislation provided funding for the construction of four timber dry docks, to be located at Portsmouth, Boston, Philadelphia, and Mare Island. It also gave the Secretary of the Navy the authority to build one of those docks of granite or of concrete faced with granite. Secretary John D. Long opted to build the Boston dock of the more permanent materials. The construction of Dry Dock 2 changed the waterfront of the yard dramatically, as the Timber Dock gave way to the new facility, first used to dock USS *Maryland* (later USS *Frederick*) (CA-8) in August 1905.[175]

Starting in 1899, the yard received considerable appropriations for public works, which continued until mid-decade. By the time the program winded down, the yard had been transformed into a modern shipyard (see Figures 2-11, 2-12).[176] Along with the changes wrought by the start of Dry Dock 2, Pier 1 was extensively reconstructed, first as part of a joint project with the Fitchburg Railroad to improve the slip between Pier 1 and the railroad's Hoosac Pier and then to accommodate a Coal Storage & Handling Plant (Building 109).[177] The entire face of the waterfront would also change as new wooden finger piers were built out to the Harbor Commissioners' line, the official waterside boundary of the yard, which had been extended in 1898.[178]

The following new buildings were authorized and constructed in this period. Additional information regarding extant structures can be found in the individual resource profiles found in Chapter 5 of this report.

Building 97 (Main Gate) — Built 1903[179]

Building 103 (Chain & Anchor Storage) — Built 1903[180]

Building 104 (Shipfitters Shop) — Built 1903[181]

[175] Ibid., 1:197-201; "Big Boston Dry Dock Soon Ready for Navy," *New York Times*, July 16, 1905; Progress Photos, Apr. 1899-Aug. 1905, Dry Dock No. 2, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8808, Box 1-29. Ultimately, all four docks were built of masonry. See Hepburn, *History of American Naval Dry Docks.*

[176] Black, *Charlestown Navy Yard, 1890-1973*, 1:196-229; Civil Engineer, Annual Reports, FY 1899-1911, Records of the Boston Naval Shipyard, RG 181.3.2, Entry 154, NARA. For detailed records of individual construction projects in this period, see Inspectors' Daily Reports, 1899-1916, Public Works Dept., Inspection & Contracts Branch (Code 421), Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, vols. 1-94.

[177] Brady, *Historic Structure Report, Pier 1 and 2*; Bruce Craig, *Building 109 Historical Survey Section* (Apr. 1978), TIC 457/D6038. All of the improvements to the Fitchburg Slip and Pier 1 were to be paid for by the railroad. The Navy, however, had the right to use the entire slip in times of war or national emergency. See Pub. Law 185, Mar. 3, 1899, in Pulsifer, *Navy Yearbook, 1912*, p. 312-13. The Fitchburg Railroad became part of the Boston & Maine Railroad in 1900. See Weinbaum, *Hoosac Docks*, p. 11.

[178] Brady, *Historic Structure Report, Pier 1 and 2*; Black, *Charlestown Navy Yard, 1890-1973*, 1:206-10; Carlson, *Evolution of Harbor Line*.

[179] U.S. Navy, Bureau of Yards & Docks, *Specification No. 1192 for New Gate House, Building No. 97* (Oct. 1901), Public Works Dept., Design Division (Code 440), Completed Design Projects, Building 97, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 58.

[180] Black, *Charlestown Navy Yard, 1890-1973*, 1:224; Progress Photos, Jan. 1902-Apr. 1903, Chain & Anchor Storage Building, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9606, Box 1-48.

[181] McGinley Hart & Associates, *Shipfitters' Shop, Building 104, Charlestown Navy Yard: Historic American Buildings Survey* (July 1992), TIC 457/D6313.



The early 1900s saw the complete renewal and expansion of the yard's internal railroad system. Here, work is underway on the tracks along the north face of Building 22 on Aug. 8, 1903. One of the yard's saddle tank steam locomotives is seen in the distance. The concrete sidewalk is the cover for a branch of the utility tunnel. *BOSTS-9288*

Building 105 (Power House & Shipsmiths Shop) — Built 1904[182]

Building 106 (Metalworkers Shop) — Built 1904[183]

Building 107 (Yard & Docks Shop) — Built 1904[184]

Building 108 (Yard & Docks Power Plant) — Built 1904[185]

Building 109 (Coal Storage & Handling Plant) — Built 1904[186]

Building 114 (Saw Mill & Spar Shop) — Built 1904[187]

Building 117 (Stable & Carriage House) — Built 1902[188]

Building 120 (Dispensary) — Built 1905[189]

Building 123 (Dry Dock Pump House) — Built 1905[190]

Building 125 (Paint Shop) — Built 1906[191]

[182] Jane Carolan, *Building 105/The Chain Forge, Charlestown Navy Yard* (rev. draft; Dec. 2003), TIC 457/D6312.

[183] Anne Booth, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 106, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6024.

[184] Anne Booth, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 107, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6025.

[185] U.S. Navy, Bureau of Yards & Docks, *Specification No. 1189 for Yards and Docks Shop Building, (Building No. 107), and Electric-Light Building, (Building No. 108)* (Sept. 1901), Public Works Dept., Design Division (Code 440), Completed Design Projects, Building 108, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 64; Progress Photos, June 1902-June 1904, Building 108, Y&D Power Station, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9760, Box 1-52.

[186] Craig, *Building 109 Historical Survey Section.*

[187] E. [Edward] Zimmer, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 114, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6027.

[188] Progress Photos, May-Aug. 1902, Building 117, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9845, Box 1-54.

[189] E. [Edward] Zimmer, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 120, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6028.

[190] Black, *Charlestown Navy Yard, 1890-1973*, 1:200-201.

[166] Einhorn Yaffee Prescott, *Historic Structure Report for Building 125 (Paint Shop), Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts* (Boston: Einhorn Yaffe Prescott, 2003), TIC 457/D6326.

Paving First Avenue







The paving of yard streets is typified by First Ave., depicted in this series. From top, brick paving between Gate 1 and 3rd Street and along 3rd Street is nearly complete on May 1, 1903. Next, excavation of the "conduit" or utility tunnel along First Ave. is nearing completion on Dec. 1, 1902. Note the fence enclosing the tennis courts by Building 32. At bottom, on May 1, 1903, installation of the conduit cover slabs (sidewalk) is complete and the widened First Ave. is ready for paving.
BOSTS-9163 (top); BOSTS-8654 (middle, bottom)

Building 131 (Oil Storage House) — Built 1910[192]

Building 136 (Marine Corps Administration) — Built 1909[193]

There were also a number of minor buildings, two of which—a Pitch House (Building 110) and a Latrine (Building 124)—are still extant in 2008.

The Central Power Plant (Building 108) came into existence when the Fiscal Year 1905 appropriations act provided for the consolidation of the individual power plants previously established under

[192] Progress Photos, Mar.-July 1910, Contract No. 1415, C.M. Leach, Boston Naval Shipyard Photo Collection, NPS Cat No. BOSTS-9876, Box 1-55.

[193] Roberts and Marie, *Historic Structure Report, Building 136.*

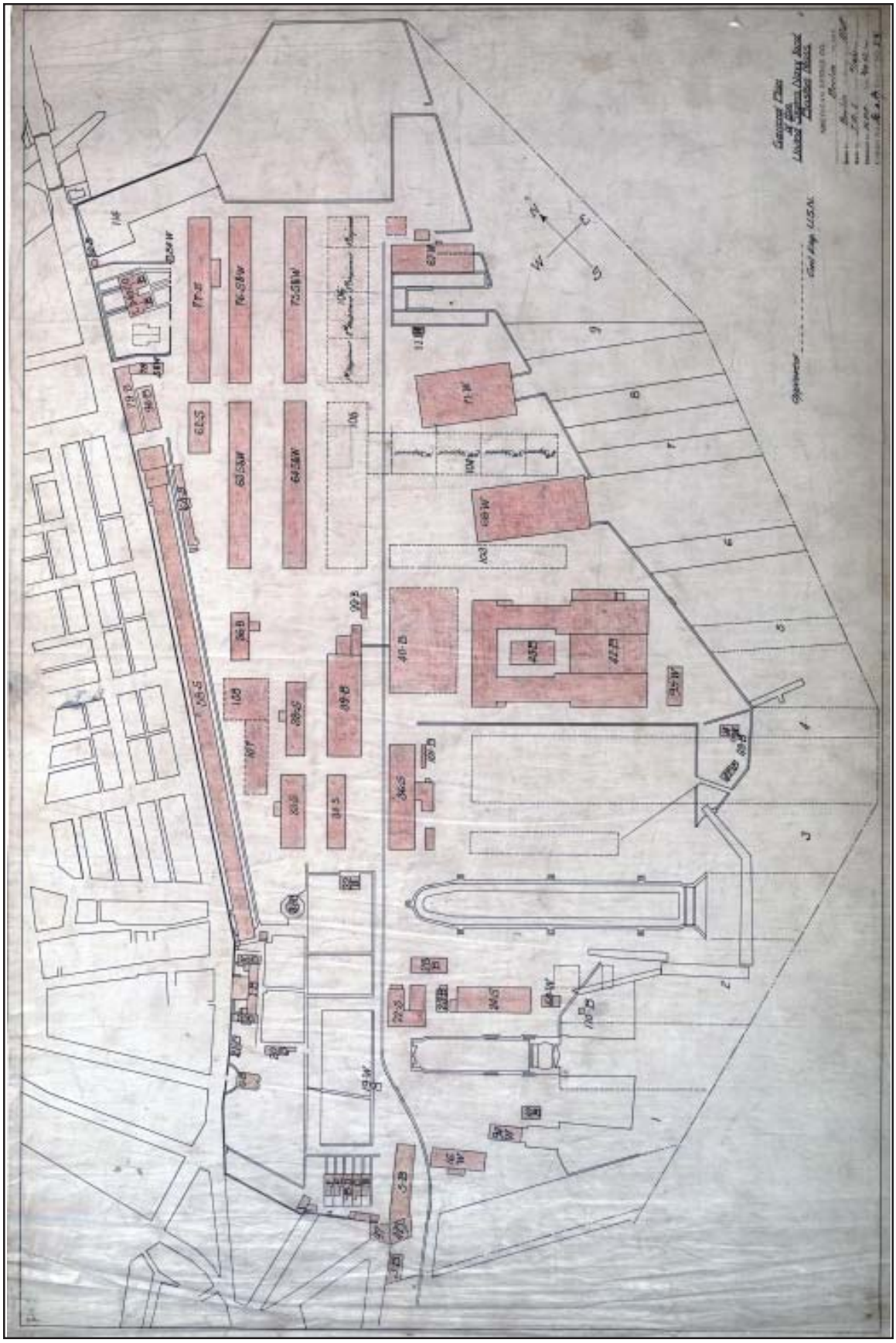


Figure 2-14 – Plan of Navy Yard, 1901

"General Plan of the United States Navy Yard, Boston, Mass.," Nov. 15, 1901. This plan was prepared by the American Bridge Co. to show the shipments of steel framing for the construction of Buildings 104 and 106. Existing buildings show a letter after their numbers to denote their building materials—brick (B), stone (S), wood (W). Note the cofferdam surrounding Dry Dock 2, still under construction at the time. *BOSTS-13494*

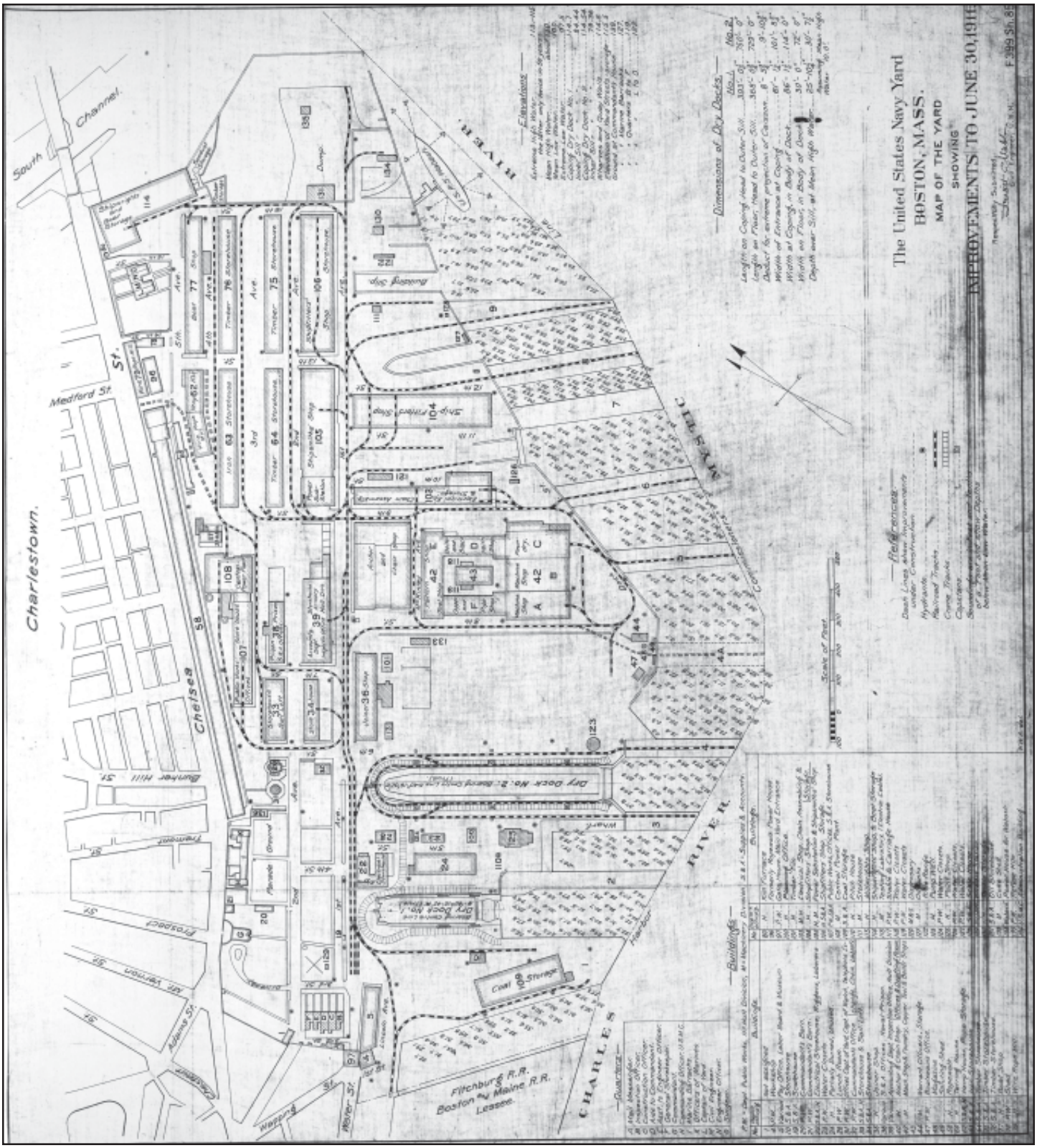


Figure 2-15 – Plan of Navy Yard, 1911

"Map of the Yard Showing Improvements to June 30, 1911," June 30, 1911. This plan depicts the yard at the conclusion of the major modernization efforts begun in the late 1890s. *BOSTS-13502*





The early 1900s saw new wood finger piers extending out from the shore to an expanded water boundary for the yard established in 1898. At top, Pier 5 is seen under construction on April 1, 1905. Above, Pier 8, seen on March 4, 1910, is typical of these wooden piers. A torpedo boat is moored to the pier's west side. *BOSTS-8742 (top); BOSTS-8763 (bottom)*

each of the yard bureaus, with the plant begun for Yards & Docks being selected for use as the consolidated facility.[194]

Most of the new buildings were constructed to similar designs. The 1904 annual report of the Civil Engineer described this design as follows:

> The construction proposed to be used in all of the buildings … is to be as near fireproof as possible, and unless specifically mentioned … will consist of pile and concrete foundations, steel frames, granite water table, brick walls, limestone sills and trimmings, copper cornices and conductors, reinforced concrete floors with maple wearing surfaces, concrete roofs covered with slate, wooden doors, sash and frames, double thick window glass in windows, and metal frame skylights with ribbed glass and screens.[195]

Although individual plans were prepared locally to meet the needs of the specific shops and site constraints, the general design originated with the Bureau of Yards & Docks in Washington. Buildings similar in design to those at Charlestown can be seen at other navy yards.

[194] Black, *Charlestown Navy Yard, 1890-1973*, 1:171-73, 226-27. The most important of the other power plants, that in Building 105 belonging to Construction & Repair, was retained as an emergency power plant until 1916. See Carolan, *Building 105/The Chain Forge*, p. 9-10.

[195] Civil Engineer, Annual Report, FY 1904, p. 45, Records of the Boston Naval Shipyard, RG 181.3.2, Entry 154, NARA.





In the early 1910s, the yard's railroad tracks were extended onto the new wooden piers, allowing locomotive cranes to access ships berthed at them. These two May 1913 views show Pier 2 (top), with USS *Constitution* at left, and Pier 5 (bottom). *BOSTS-8702 (top); BOSTS-8742 (bottom*)



Infrastructure improvements continued throughout the first decades of the 20th century. This view shows drain line work being accomplished along 16th Street, at the eastern edge of the yard, on March 5, 1914. The project was being performed by "day labor," meaning yard employees, rather than by an outside contractor. Buildings 75, 76, and 77 line the west side of the road, while the Saw Mill (Building 114) is at the end of the street to the right. *BOSTS-8662*

The Yard Modernized, 1900-1912: A Gallery

THE PHOTOGRAPHS in this gallery depict new buildings constructed in the first decade of the 20th century, as well as major changes to older structures. Most of the pictures are construction progress photographs taken by yard photographers. The 1911 yard plan (Figure 2-15) shows the location in the yard of each structure shown.



Building 24, Dec. 3, 1914

Building 24, used as offices for the Construction & Repair Dept., was gutted by fire on Sept. 25, 1910. Three years later, it was reconstructed, the most notable change being the clerestory added to the roof. The rebuilt structure would hold the Riggers Loft as well as an assembly area and museum. *BOSTS-9299*



Building 32, Nov. 1, 1910

The Shell House had been converted into the Commandant's Office in 1891. In 1910 it was extended northward by two bays. Note the tennis courts which had replaced the 19th century Shot Park. *BOSTS-9323*



Building 40, Apr. 10, 1903

In 1900 work began on a doubling of the size of the Forge Shop & Rolling Mill to accommodate a Chain Forge. The new addition, to the right, utilized the same style that Joseph Billings had used for the original structure. *Boston Globe*



Building 42A, Jan. 1, 1903

Extensive modernization of Machine Shop No. 1 saw the reconstruction of the facility's roof as well as interior changes. *BOSTS-9399*



Building 42B, Aug. 3, 1903 & Sept. 1, 1904

Part of the modernization of the Machine Shop saw the total replacement of Machine Shop No. 2, an 1860s' infill of the original open end of the U-shaped structure known informally as the "Crystal Palace," with a more substantial facility. These two views show the original before demolition (above) and the new facility nearing completion (right). *BOSTS-9400*



The Yard Modernized, 1900-1912: A Gallery



Building 58, Mar. 3, 1910
Construction is underway on the extension of the second story of the Ropewalk. Because the single-story section of the structure had no ceiling, the old roof was not removed until the shell of the new structure was completed. *BOSTS-9513*



Building 66, Apr. 2, 1900
Reconstruction of the Iron Platers Shop, damaged by fire in Nov. 1899, is well underway in this view. The enlarged facility had a short life, as the structure was demolished in 1903 to make way for the Shipsmiths' Shop (Building 105). *BOSTS-9580*



Building 97, Mar. 2, 1903
This view of the Main Gate under construction looks out towards Water St. The roof trusses on the interior side were exposed rather than brick clad as they were on the exterior. *BOSTS-8943*



Building 101, Aug. 4, 1900
Not all new structures were large. The Dry Kiln was constructed to the south of Building 36. The building would be enlarged in 1911 and 1912 for use as a Millwrights Shop. *BOSTS-9604*



Building 62, Nov. 30, 1915
The Wire Rope Mill addition to the Hemp House is seen in this view of Locomotive Crane 15. Self-propelled steam cranes, which traveled on the yard's extensive rail network, greatly improved the yard's ability to move heavy materials. *BOSTS-8901*



Building 67, June 28, 1901
In 1900-1901 the Saw Mill was moved from its original location along First Ave. opposite Building 66 to the east side of the yard's Building Slip. Most of the building would be demolished in 1906. *BOSTS-9585*



Building 100, Apr. 4, 1904
The Shipkeepers & Foremen's Office was built in 1899 south of Building 24. The structure would be moved east of that structure in 1905 and demolished in 1913. *BOSTS-8808*



Building 103, Feb. 1, 1903
The Chain & Anchor Storage Building nears completion. Note Building 104 to the left in this view looking across First Ave. and down 9th Street. *BOSTS-9606*

The Yard Modernized, 1900-1912: A Gallery



Building 104, Jan. 1, 1903
This view of the Shipfitters Shop looks into the yard from Pier 8. Note that the West Shiphouse (Building 68) at left and East Shiphouse (Building 71) at right have yet to be demolished. *BOSTS-9616*



Building 106, Feb. 1, 1903
The Metalworkers Shop was a virtual duplicate of the Shipfitters Shop (Building 104). It extended along First Ave. from 13th to 16th Streets. In the foreground is the Timber Dock (Structure 87) which would be filled in a decade later. *BOSTS-9732*



Building 105, Dec. 1, 1902
Building 105 was constructed in two phases. The first section to be completed was the Power House for the Construction & Repair Department, intended to serve the complex including Buildings 103, 104, 105, and 106. Note the large stack on the roof. The power plant function was transferred to the Central Power Plant (Building 108) later in the decade. *BOSTS-9643*



Building 105, July 1, 1904
The main portion of the Shipsmiths Shop is seen here. The chainmaking function now so closely identified with the structure was still contained in the newly-enlarged Building 40. The cruciform layout of the facility, which has led to its being termed a "Cathedral of Industry," was chosen to allow an overhead crane link to Building 104 on the opposite side of First Ave. Note the elaborate detailing of the windows, cornice, and doorways which was common for industrial architecture of the time. *BOSTS-9643*

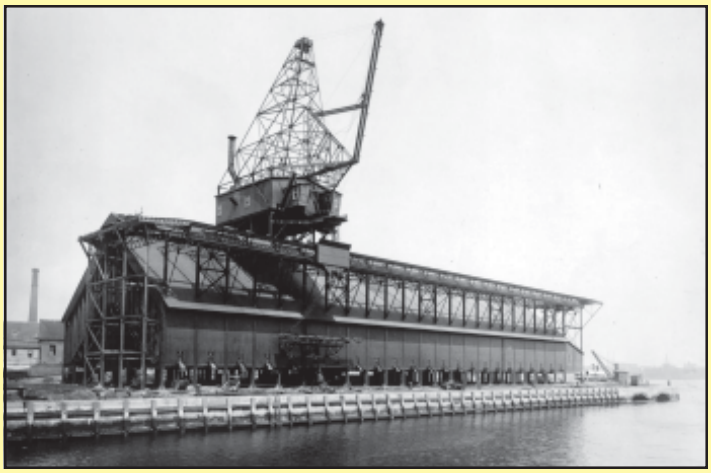


Building 107, July 1, 1904
The Yards & Docks Shop was intended for the use by the department responsible for the yard's physical plant. The extension in front of the cupola window is part of a blueprint processing system which used natural sunlight. Note the small boiler addition on adjoining Building 33. *BOSTS-9752*

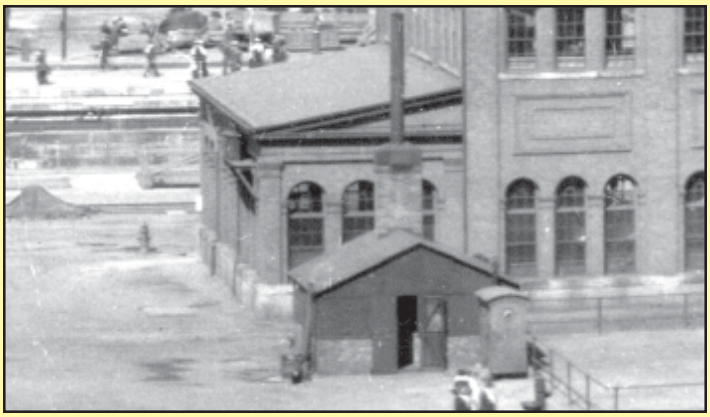


Building 108, June 1, 1904
The Power Plant for Yards & Docks was of the same style as Building 107, to which it was attached. Following the 1905 decision to consolidate all power plants into a single facility, the structure would be enlarged, and further additions would continue over the years as it kept up with the yard's growing needs for both electricity and steam. *BOSTS-9760*

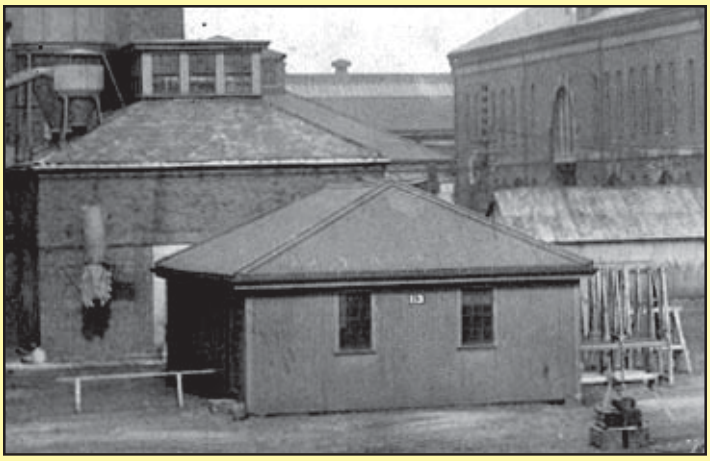
The Yard Modernized, 1900-1912: A Gallery



Building 109, Aug. 3, 1904
The Coal Storage & Handling Plant dominated the west side of Pier 1. As the Navy began to convert from coal to fuel oil, its usefulness lessened, and it would be demolished in 1930. *BOSTS-9807*



Building 110, May 13, 1916
The Pitch House was constructed in 1901 at the expense of the Fitchburg Railroad to replace an older Pitch House (Building 12) removed during the reconstruction of the Fitchburg Slip and Pier 1. In 1918 the structure was moved to the north side of Building 125, seen in the background, to make room for the construction of the Marine Railway. *acc. BOSTS-772*



Building 113, Apr. 6, 1912
Built in 1901 as the Millwrights Shop, Building 113 was empty at the time of this photograph as the shop had recently moved into expanded space in Building 101. Later used for storage, it would be demolished in 1921. The Boiler House for Building 36 is behind the structure, while Building 42 can be seen in the right background. *BOSTS-10830*



Building 114, Dec. 1, 1903
The Saw Mill & Spar Shop was an L-shaped structure which occupied the site of former Mast House & Spar Shed which had been destroyed by a fire in 1900. The contractor for this project was Norcross Bros., who had built the Dorchester Heights Monument in South Boston in 1902.
BOSTS-9814

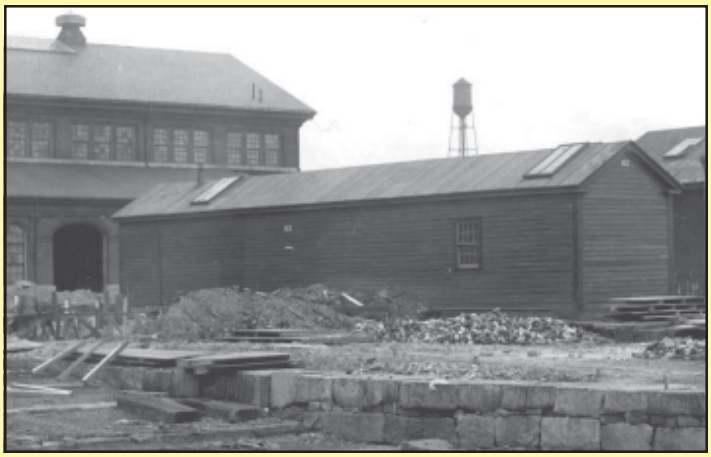


Building 117, Aug. 1, 1902
Although the yard's last oxen were retired in 1898, animal power still dominated transportation in the yard. Thus, when the Brick Barn (Building 56) had to be demolished for the construction of Building 108, a new Stable & Carriage House was constructed nearby. Note the horse and cart.
BOSTS-9845



Building 120, Nov. 1, 1904
The Dispensary, which dealt with the medical needs of yard workers and residents, was located across Second Ave. from the Commandant's Office (Building 32). The Ropewalk can be seen behind the building, while the Sail Loft is at right. *BOSTS-9850*

The Yard Modernized, 1900-1912: A Gallery



Building 122, July 6, 1914
The Marine Corps Rifle Range, built in 1902 near the berth of the Receiving Ship *Wabash*, is seen in its final location east of the Building Slip, to where it had been moved in 1910-11. It was last shown on the 1920 yard plan.
BOSTS-9887





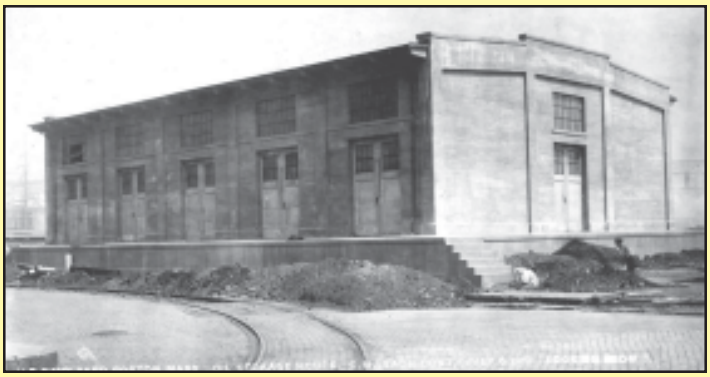
Building 123, Nov. 1, 1904
This circular structure was the Pump House for both the new Dry Dock 2 as well as the older Dry Dock 1. Note the size of the pipes which await lowering into the pump well, seen under construction at left on May 2, 1904. The structure and its equipment remain intact in 2008, although no longer operable. *BOSTS-9862*



Building 125, Nov. 2, 1916
The Paint Shop, completed in 1906, is seen looking towards the water just prior to the start of construction of a second wing on its north end.
BOSTS-9867



Building 127, Feb. 3, 1913
A major part of the yard modernization program was the upgrading of the sanitary facilities for yard workers. Building 127 was one of two Latrines built by yard forces at the east end of the waterfront in 1904.
BOSTS-8883



Building 131, July 6, 1910
The Oil Storage House was located on a portion of land reclaimed from the Timber Dock. It was the first yard structure constructed of reinforced concrete rather than brick or stone. *BOSTS-9876*



Building 135, Oct. 10, 1910
The Refuse Kiln (incinerator) was built in a portion of the former Timber Dock being used as a dump. *BOSTS-15749*

In the course of the construction of these new buildings, the last of the shiphouses and many of the less substantial 19th century structures were demolished, including the Brick Barn (Building 56), Iron Platers Shop (Building 66), and Saw Mill (Building 67). Ironically, the Iron Platers Shop had been rebuilt and enlarged in 1900 and 1901 after being damaged by a fire. Fire also destroyed the Mast House & Spar Shed (Building 85); it was replaced by the new Building 114.[194]

The early 1900s' improvement program also saw modifications to existing buildings, most notably the Equipment Shops (Building 40)[195] and Machine Shop Nos. 1 and 2 (Building 42).[196] At the end of the decade, the second story of the Ropewalk (Building 58) was extended.[197] At the same time, the Hemp House (Building 62) received an addition to accommodate a Wire Rope Mill.[198] The former Shell House (Building 32), which had held the Commandant's Office since the early 1890s, was enlarged in 1910,[199] while Building 24, gutted by fire in 1910, would be totally reconstructed in 1913.[200]

With a few exceptions, the grid pattern of the yard was maintained. The yard's streets were paved, primarily in brick or granite block pavers. First Ave. was widened, and a "conduit" or underground utility tunnel topped by a concrete sidewalk was built along its north side in 1902 and 1903.[201] This underground utility distribution system would be extended throughout the yard over the next few years. The Shot Park was replaced by tennis courts, while the Gun Park's contents were either scrapped or used as bollards around the dry docks and piers.

The internal yard railroad system was improved, with track laid throughout the yard and out onto the new piers, and the yard acquired its own steam locomotives and self-propelled locomotive cranes. Also built at this time were 20-foot gauge tracks to accommodate portal cranes serving both dry docks. In order to allow the two docks to be connected, Building 23 was moved from its location between Buildings 22 and 24 to a position east of Building 24 and the southern end of Building 28 was removed.[202]

Beginnings Of Steel Shipbuilding



On October 31, 1901, the yard launched its first steel hull, the Caisson for Dry Dock 1. This project, as well as subsequent vessels and service craft, utilized the Building Slip located at the eastern end of the yard. At right is the Saw Mill (Building 67). The Caisson still serves Dry Dock 1 a century after her construction. *NHC NH-2136*



The only powered vessel the yard built in the first decade of resumed ship construction was the harbor tug USS *Pentucket* (YT-8). She is seen here on trials in Boston Harbor on Jan. 20, 1904. *BOSTS-13939*



Crowds watch as USS *Cumberland* (IX-8) slides into the water on Aug. 17, 1904. Training Ship No. 1, while having a steel hull, would possess only sails for propulsion. *BOSTS-10842*



Ammunition Lighter No. 23 (YE-23), seen on Feb. 20, 1910, ready for launching, is typical of the steel-hulled barges and service craft built by the yard in the early 1900s. *BOSTS-14957*

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[194] Black, *Charlestown Navy Yard, 1890-1973*, 1:213-14, 221, 222-23.

[195] Ibid., 1:215-216; Progress Photos, Nov. 1901-Apr. 1903, Building No. 40, Rolling Mill, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9385, 9390, Box 1-43.

[196] Progress Photos, Feb. 1902-Mar. 1903, Machine Shop No. 1, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9399, 9400, Box 1-43; Progress Photos, Aug.-Dec. 1903, Machine Shop No. 2, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9400, Box 1-43.

[197] Progress Photos, Feb.-May 1910, Contract No. 1401, NPS Cat. No. BOSTS-9513, Box 1-46.

[198] Progress Photos, June 1910-Feb. 1911, Wire Rope Mill, Building 62, J.E. Locatelli Co., NPS Cat. No. BOSTS-9570, 9571, Box 1-47. Prior to the decision to attach it to Building 62, the Wire Rope Mill was referred to as Building 132.

[199] "Plan of Alterations to Building No. 32 [formerly Ordnance Shell House] for use as Commandant's Office" [drawing], Apr. 24, 1891, File 32-7, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13363; Progress Photo, Exten. Bldg. 32, C.M. Leach, Nov. 1, 1910, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9323, Box 1-41.

[200] Goody, Clancy & Associates, *Building 24 Historic Structures Report*, p. 13-14.

[201] Archetype Architecture, *Historic Pavement Study, Charlestown Navy Yard, Charlestown, MA* (Sept. 1, 1995), TIC 457/D113; Progress Photos, Oct.-Dec. 1902, Conduit, Boston Naval Shipyard Photo Collection, BOSTS-8653, 8654, Box 1-24.

[202] Black, *Charlestown Navy Yard, 1890-1973*, 1:210-13; Barton, et al., *Historic Structure Report: Building 28 and Electrical Substation, Building*

Shipways 1 And The Auxiliary Ship Program





The receipt of an order for a 422-foot Supply Ship in 1914 led the Navy Yard to construct a modern Shipways on the site of the ways for the West Shiphouse (Building 68). Above, work is underway on Apr. 14, 1915. The small building in the center is Building 126, one of several Water Closets (Latrines) built in 1904. At right, the completed Shipways, with its four Hammerhead Cranes, awaits the start of construction for USS *Bridge* (AF-1) on June 12, 1915. *BOSTS-8980 (above); BOSTS-10536 (right)*

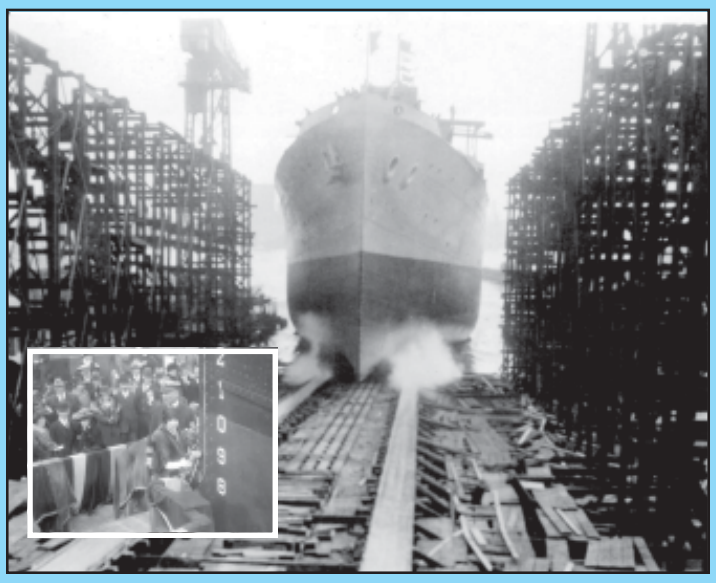


Taken from the cab of Hammerhead Crane 4, *Bridge* is seen under construction on Jan. 6, 1916. In the background are the Electrical Shop & Chain Storage Building (Building 103), the Central Power Plant (Building 108), and the Headhouse for the Smithery & Chain Shop (Building 105).

BOSTS-10536



USS *Brazos* (AO-4), the first of three Fuel Ships (Oilers) built by the yard, is seen in Dry Dock 2 on Oct. 15, 1919. Her construction had progressed slowly due to the pressure of wartime outfitting, conversion, and repair work. *BOSTS-10527*



USS *Whitney* (AD-4) slides down the Shipways on Oct. 12, 1923, following her christening by Mrs. Roderick (Flora Whitney) Tower (inset). Mrs. Tower was the granddaughter of former Secretary of the Navy William C. Whitney, for whom the destroyer tender had been named.

BOSTS-14693

Ship Construction Resumed

The yard resumed ship construction on a limited basis in this period. On October 31, 1901, it launched a new steel caisson for Dry Dock 1. The tug *Pentucket* (YT-8) followed in July 1903.[203] Over the next decade the yard built a series of barges of various types needed to serve the yard and its customers. These craft, with pedestrian names such as *U.S. Navy Coal Barge No. 90* (YC-90) or *Garbage Lighter No. 5* (YG-5), were so little regarded by the yard that they never appeared on any of the yard-compiled listings of ships built by it.[204] One of the most significant of these craft was the 150-ton *Floating Derrick No. 21* (YD-21) assembled by the yard in 1912 and a prominent waterfront feature into the 1920s.[205]

The only true ship built in this era was both its first steel-hulled ship and a throwback to an earlier era. USS *Cumberland*, Training Ship No. 1, was built of steel but had only sail propulsion. Launched in mid-1904 and completed in 1907, *Cumberland* (IX-8) would survive through World War II, being scrapped in 1947.[206]

The Auxiliary Ship Construction Program

As the U.S. Navy began to expand its operations on a global basis, it became cognizant of a need for ships to support the battle fleet at sea. At first, these auxiliary vessels were converted from merchant ships or older naval warships. But such conversions were often inefficient, and starting in 1905 Congress began to fund construction of specialized naval auxiliaries. The Charlestown Navy Yard's initial association with this auxiliary program occurred in 1912, when it was assigned the task of converting the fairly-new fleet collier USS *Vestal* (AC-1) into a repair ship (AR-4). *Vestal* would achieve prominence on December 7, 1941, when her captain, Commander Cassin Young, won the Medal of Honor for getting her underway from her berth next to USS *Arizona* (BB-39) and thus saving her from destruction during the Japanese attack on Pearl Harbor.[207]

On February 19, 1914, the Navy Department assigned the construction of Supply Ship No. 1 to the Navy Yard. The receipt of this order, which had been won by the yard in competition with proposals from private shipbuilders, led to major improvements in the yard's Shipways. Included in this improvement were the erection of four large hammerhead cranes that would visually dominate the yard's skyline until demolished by the Navy following the yard's closure in the 1970s.[208] It was with great fanfare that the yard laid the keel in May 1915 and saw her launched as USS *Bridge* (AF-1) thirteen months later.[209]

The 1916 Naval Expansion Act authorized the construction of numerous auxiliaries for the Navy, including three fuel ships (oilers). Funds for the first ship were provided in the Fiscal Year 1917 budget, and it was assigned to Charlestown. Two years later, the remaining two vessels also were assigned to the yard. Actual construction of Fuel Ship No. 16, to be named USS *Brazos*, however, proceeded slowly due to the more immediate demands on the yard workforce to deal with the conversion of civilian vessels, outfitting of new naval ships built elsewhere, and repair work generated by World War I. USS *Brazos* (AO-4) was laid down in June 1917, but was not launched until almost two years later.[210] Her sisters, USS *Neches* (AO-5) and USS *Pecos* (AO-6) followed her at one year intervals.[211]

The final auxiliary assigned to the Navy Yard was the destroyer tender USS *Whitney* (AD-4), ordered in December 1919 and commissioned in 1924.[212] Probably no one present recognized the irony as *Whitney* slid down the ways in October 1923 that the ship's namesake had been the Secretary of the Navy who in 1886 had ordered the yard transformed into a manufacturing facility and to cease direct ship support activities.

The Yard In World War I

The entrance of the United States into World War I in the spring of 1917 brought about a considerable increase in work at the Navy Yard. Employment in the yard grew from 2,500 at the end of 1915 to 4,500 shortly after the nation officially entered the war to a high of 12,844 in February 1919.[213] As it had during the Civil War and Spanish-American War, the yard undertook the conversion of civilian vessels for naval duty. Many of these were small motor boats and yachts taken over for coastal patrol and minesweeping duties.[214]

But others were major vessels. Among these were several German-flag freighters or passenger liners interned in American ports in 1914 and seized by the United States in April 1917. The work on these vessels, needed to help transport American troops and supplies to Europe, was complicated by efforts of the original German crews to sabotage them and, in a few cases, the lack of dry docks large enough to handle them.[215]

The two most extensive conversions involved the transformation of the passenger steamers *Massachusetts* and *Bunker Hill* into the mine layers *Shawmut* (CM-4) and *Aroostook* (CM-3). Both vessels continued to serve in the postwar Navy. *Shawmut*, renamed

22, 1:17; Scott Jacobs, Alain Guitian, and Childs Engineering Corporation, *Historic Structure Report, Architectural Data Section: The Railroad Tracks, Charlestown Navy Yard, Boston National Historical Park, Charlestown, Massachusetts* (Denver: National Park Service, 1983), TIC 457/D2127. The evolutionary drawings in this report cover only tracks in the NPS portion of the Navy Yard.

[203] Black, *Charlestown Navy Yard, 1890-1973*, 1:203, 293-94.

[204] Carlson, *Ships Built by the Charlestown Navy Yard*, p. 53, 62-65.

[205] Progress Photos, Sept. 1912-Mar. 1913, 150 Ton Floating Crane, Wellmann Seaver Morgan Co., Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8883, Box 1-33. Because the yard assembled the vessel, the Navy officially considered it as having been built by the yard, even though the hull (pontoon) had been launched as Hull No. 127 by New York Shipbuilding at Camden, N.J., on Aug. 8, 1912, under contract with Wellman-Seaver-Morgan Co., which supplied the machinery to the yard. See U.S. Navy Dept., *Ships' Data, U.S. Naval Vessels, July 1, 1924* (Washington: Govt. Printing Office, 1924), p. 266.

[206] Black, *Charlestown Navy Yard, 1890-1973*, 1:294; *DANFS*, 2:215.

[207] *DANFS*, 7:494-96.

[208] Black, *Charlestown Navy Yard, 1890-1973*, 1:364-66; Progress Photos, Apr.-May 1915, Bldg. Ways, Crandall Eng. Co. Contract 2108, Boston Naval Shipyard Photo Collection, NPS Cat No. BOSTS-8980, Box 1-36.

[209] Stephen P. Carlson, "USS *Bridge*: Boston Navy Yard's First Major Steel Vessel," *The Broadside/Boston National Historical Park* (No. 3, 1998), p. 12.

[210] Black, *Charlestown Navy Yard, 1890-1973*, 1:367-68.

[211] Ibid., 1:371-72.

[212] Ibid., 1:431-33.

[213] Ibid., 1:336.

[214] Ibid., 1:359.

[215] Ibid., 1:360-64.

The Yard In World War I



This view of the yard's waterfront ca. 1916 appeared on a ceramic calendar for 1917 issued by Boston firm Jones, McDuffee & Stratton Co., which described itself as "Crockery, China & Glass Merchants." The hole for hanging the calendar is visible at left. In the 1910s, in addition to its shipyard role, the yard served as the home port for a major element of the Atlantic Fleet, thus accounting for the large number of tall cage masts of battleships at the yard's piers. *BNHP*



The Navy acquired numerous civilian pleasure boats for use in harbor security, anti-submarine patrol, and minesweeping duties. The Navy Yard was responsible for arming, repainting, and otherwise outfitting for naval service craft acquired in the eastern Massachusetts area. Here, USS *Lynx* (SP-2) leaves Pier 2 on Mar. 13, 1917. She is armed with naval personnel aboard, although she would not be officially requisitioned until after the formal declaration of war in April. Note the Caisson for Dry Dock 1; Buildings 24, 36, 110, and 125; and the automobile on Pier 2.
NHC NH-102012





Among the largest vessels converted by the Navy Yard were a number of ex-German vessels which had been interned in American ports in 1914 and seized upon the declaration of war in April 1917. At top, SS *Cincinnati* is seen Dry Dock 2 on July 25, 1917, three days before her renaming and commissioning as USS *Covington* (Id. No. 1409). Below, yard painters have carefully painted out the name *Kronprinzessin Cecilie* on the bow of what would become USS *Mount Vernon* (Id.No. 1466). Both ships were used to transport American troops to and from Europe. *Covington* would be sunk by a German U-boat on July 1, 1918, while *Mount Vernon* would be turned over to the U.S. Army in Sept. 1919.
BOSTS-10820 (top); BOSTS-13680 (bottom)



Workers swarm over USS *Aroostook* (1256), the former coastal steamer *Bunker Hill*, in Dry Dock 2 on May 2, 1918. Along with her sister, USS *Shawmut* (1255), ex-SS *Massachusetts*, she was converted into a minelayer and saw service in the North Sea during World War I. Retained after the war, she was transferred to the Army in 1943. *BOSTS-10296*

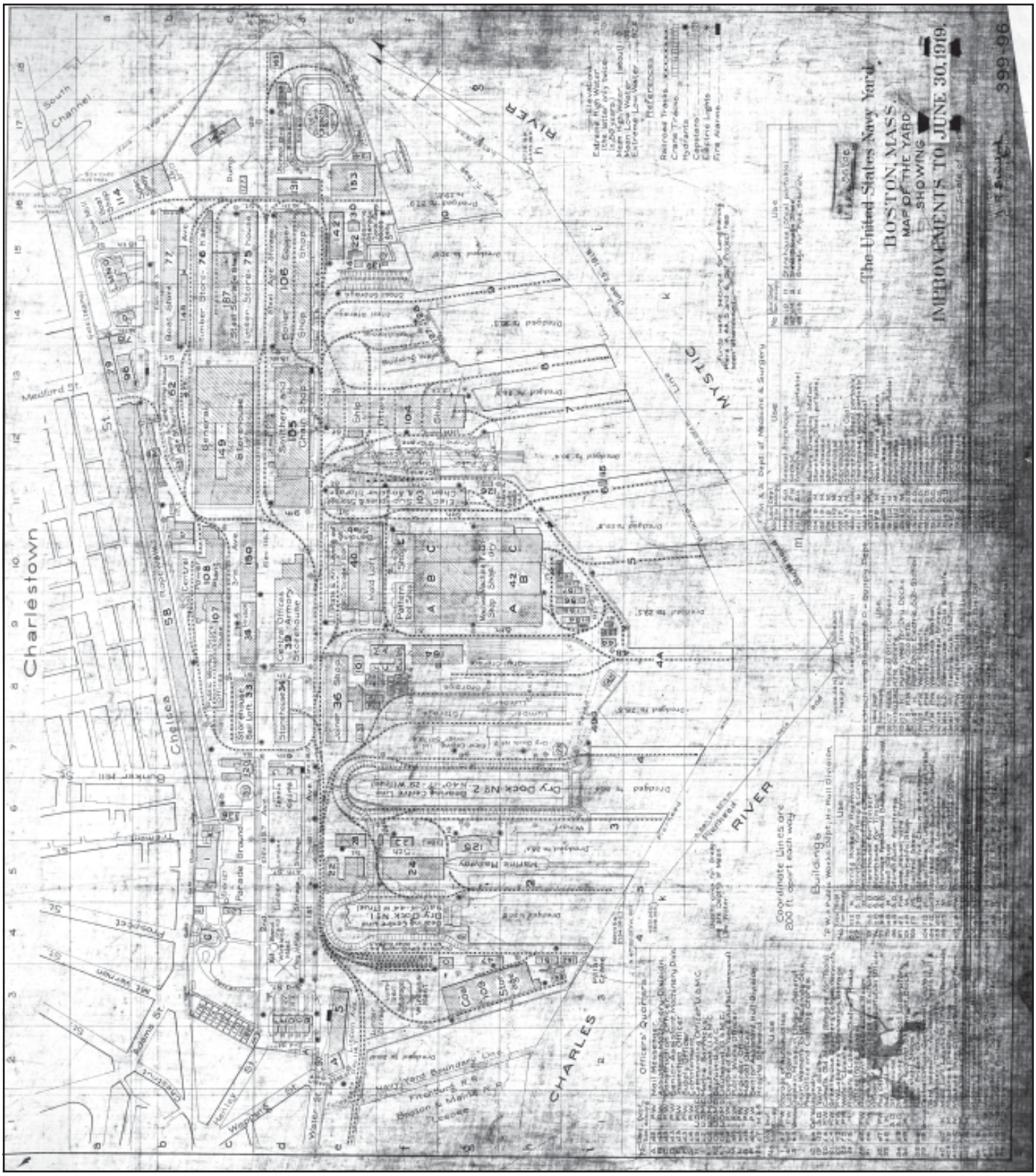


Figure 2-16 – Plan of Navy Yard, 1919

"Map of the Yard Showing Improvements to June 30, 1919," June 30, 1919. This plan depicts the yard at the conclusion of World War I. Note the proposed extensions of Piers 4, 4A, 5, and 6 to the new Harbor Commissioners' line. *BOSTS-13502*

Oglala, would be sunk during the Japanese attack on Pearl Harbor, but would be salvaged to fight again.[216]

The yard also outfitted and commissioned vessels built by private shipbuilders, mostly destroyers built by Bethlehem Steel at the Fore River Shipyard in Quincy and at a specially-constructed Destroyer Plant at Squantam, Mass.[217]

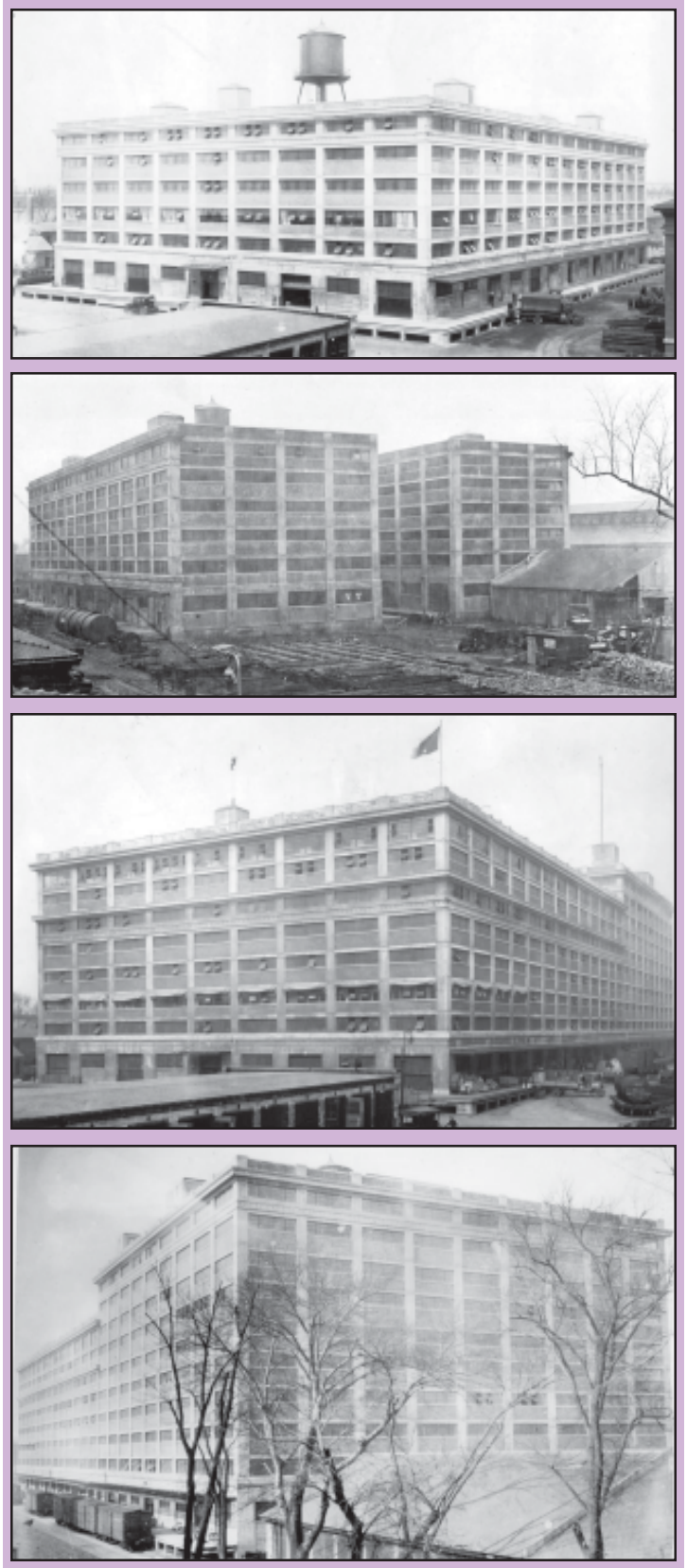
While the modernization efforts of the early 1900s had left the yard in a fairly good physical condition at the start of the war, additional facilities appeared to meet increased needs (see Figure 2-16). Many of these were small, temporary structures, but others would change the face of the yard for the future. The program also included modifications to existing structures. Expansion of the Foundry and Machine Shop portions of Building 42 saw the demolition the former Copper, Pipe, and Testing Shops and Buildings 43, 118, and 119. As part of this effort, a landmark, the facility's brick chimney, was also demolished. Other improvements were made to the Central Power Plant (Building 108).[218]

The General Storehouse

By the mid-1910s, the demand for storage space at navy yards far exceeded that available. To meet these needs, the Bureau of Yards & Docks began development of plans for new general storehouses. They were to be of reinforced concrete column and flat slab construction, with the first floor elevated four feet above grade to facilitate unloading from railroad cars or trucks. They were to have large freight elevators, designed to easily accommodate storage-battery trucks for movement of materials. Interior fire walls with automatic fire doors and automatic sprinkler systems that met contemporary code requirements were specified. The exterior faces consisted of concrete wall columns and spandrel beams, hollow brick spandrel walls, and steel sash with heavy wire glazing.[219]

These general designs were adapted to meet the requirements of the individual yards. The General Storehouse for the Charlestown Navy Yard (Building 149) as originally begun in 1917 was to have 252,000 square feet of space in six stories. A year later, the initial 265-foot-long building was increased to eight stories and a 180-foot-long ten-story extension added, changing the original U-shaped footprint to a rectangle enclosing a central light well and increasing capacity to 637,000 square feet.[220] To make way for the building, two Timber Sheds (Buildings 63, 64) were removed, and Third Ave. discontinued between 9th and 13th Streets.[221]

The General Storehouse



These views show the west, south, and east sides of the General Storehouse (Building 149) as originally completed in the spring of 1918 as a six-story U-shaped structure (top two views) and a year later following the addition of two stories to the original building and the construction of a ten-story extension (lower two views).

BOSTS-9895 (top two); BOSTS-9896 (bottom two)

[216] Ibid., 1:360; *DANFS*, 5:141.

[217] Black, *Charlestown Navy Yard, 1890-1973*, 1:369-70.

[218] Ibid., 1:325-28; U.S. Navy, Bureau of Yards & Docks, *Activities of the Bureau of Yards and Docks, Navy Department, World War, 1917-1918* (Washington: Govt. Printing Office, 1921), p. 169-70, 271-72.

[219] U.S. Navy, Bureau of Yards & Docks, *Activities of the Bureau of Yards and Docks, 1917-1918*, p. 317, 322-28. The design owed much to the pioneering work in reinforced concrete factory construction by Detroit architect Albert Kahn.

[220] Ibid., p. 327; A. [Anne] Booth, E. [Edward] Zimmer, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 149, Boston Naval Shipyard at Charlestown* (1977), TIC 457/D6029.

[221] Black, *Charlestown Navy Yard, 1890-1973*, 1:326, 2:822. Part of Building 63 had been destroyed by fire in March 1913, while Building 64 had burned in 1915. See ibid., 1:213, 220, 326. The chosen site had been recommended as the location of a General Storehouse as early as 1903. See Civil Engineer, Annual Report, FY 1903, Records of the Boston Naval Shipyard, RG 181.3.2, Entry 154, NARA.

The Marine Railway

ONE OF THE MORE IMPORTANT IMPROVEMENTS made to the Navy Yard during World War I was the construction of a Marine Railway to allow it to service smaller vessels without encumbering either of its large dry docks.



The site of the Marine Railway is seen on July 5, 1918. In the foreground are the remains of the Pitch House (Building 110), which was relocated to clear the area. *BOSTS-8962*



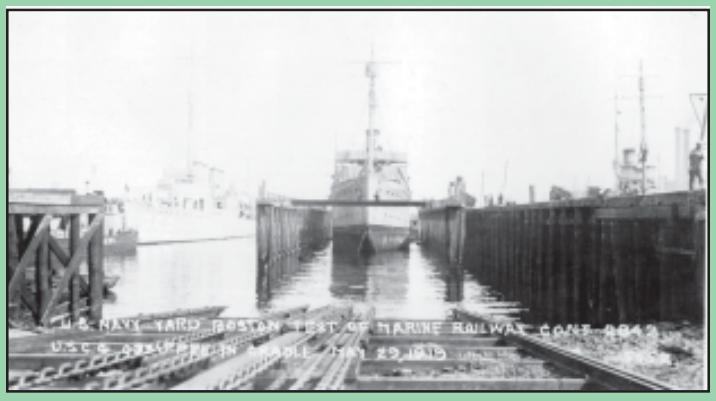
By Aug. 21, 1918, excavation of the area for the inclined ways is well underway. Note pilings from prior piers and structures which had been on the site. *BOSTS-8962*



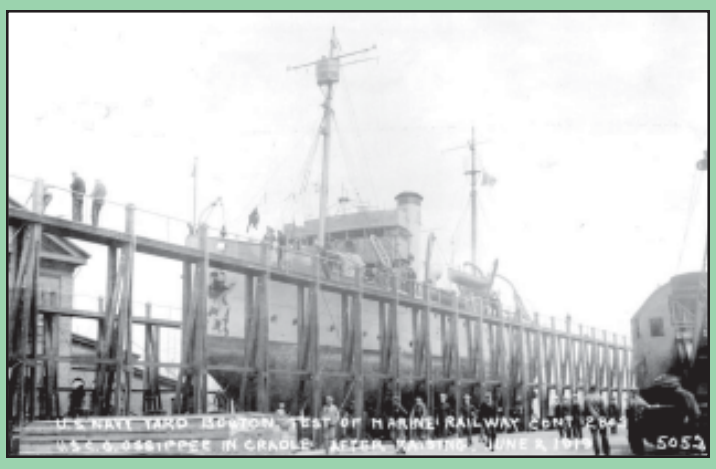
Construction of the track is seen on Dec. 3, 1918. The cradle's undercarriage rode on rollers set on the longitudinal beams and was raised and lowered by chains. *BOSTS-8962*



The completed cradle is seen on May 29, 1919. Note the chains along the center of the track. *BOSTS-8962*

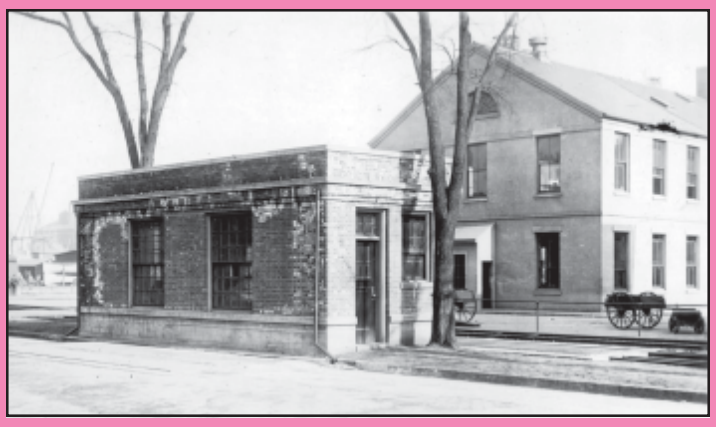


On May 29, 1919, the Coast Guard cutter *Ossippee* entered the cradle (above). Four days later, the cradle was hauled out of the water (right) in the first test of the completed facility. *BOSTS-8962*



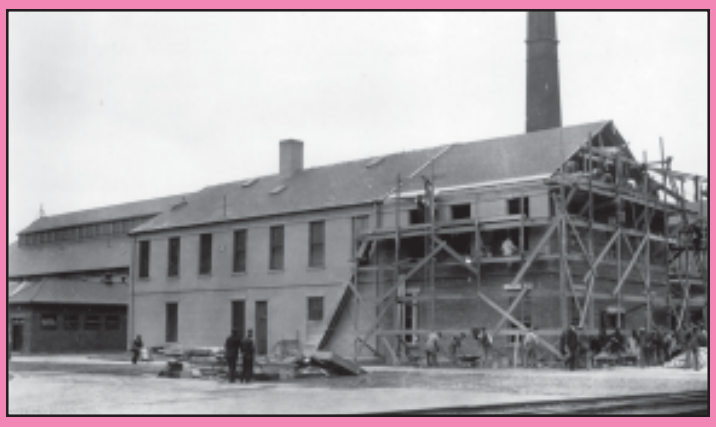
New Facilities, 1914-1919: A Gallery

THE PHOTOGRAPHS in this gallery depict new buildings constructed between 1914 and 1919, as well as major changes to older structures, except for the General Storehouse, Marine Railway, and Shipways, depicted elsewhere. The 1919 yard plan (Figure 2-16) shows the location in the yard of each structure shown.



Building 19, Mar. 3, 1919

In 1918 and 1919 "day labor" (i.e., yard workers) constructed a new brick Scale House east of the original Scale House. Unusually for a structure at a different location, it was given the number of the building it replaced rather than a new one. *BOSTS-9280*



Building 28, July 5, 1918

In the early 1900s, three bays at the south end of Building 28 were removed to allow installation of portal crane rails connecting the two dry docks. In 1918, three bays were added at the north end, bringing the building back to its original size. *BOSTS-9309*



Building 32, June 5, 1918

In 1918 a wooden addition was added to the north end of Building 32, now the Yard Pay & Disbursing Office. Note that the windows on the northeast (right) corner have been filled in where a safe has been installed. *BOSTS-9323*

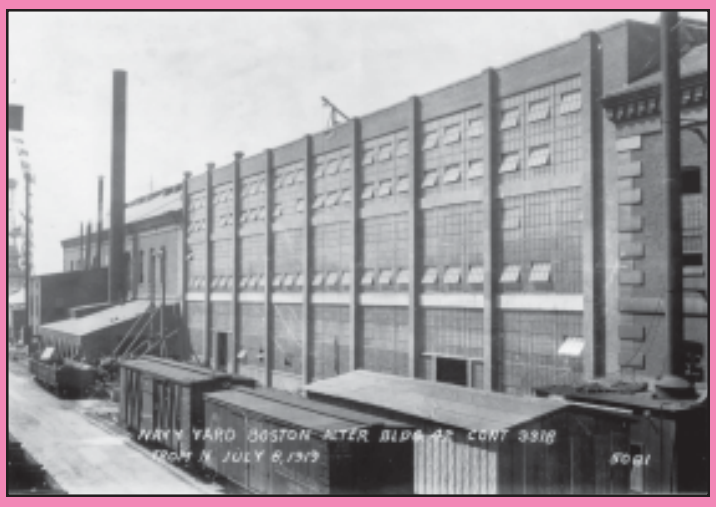


Building 42, Jan. 31, 1919



Building 42, July 8, 1919

In 1918 the yard began the modernization of Building 42 by demolishing the section between the Pattern Shop (north) wing and the Foundry and Machine Shops at the south end as well as Building 43 and the landmark chimney. The photo at top right shows the cleared space. By July 1919, a new Machine Shop had been constructed as an infill between the two surviving portions of the building, seen above looking down 8th Street and above right down 9th Street. *BOSTS-9401*



Building 42, Mar. 2, 1921

Following the completion of the new Machine Shop, the shed additions to the Foundry, seen in the view looking down 9th Street above, were removed and a new Foundry addition built. *BOSTS-9402*



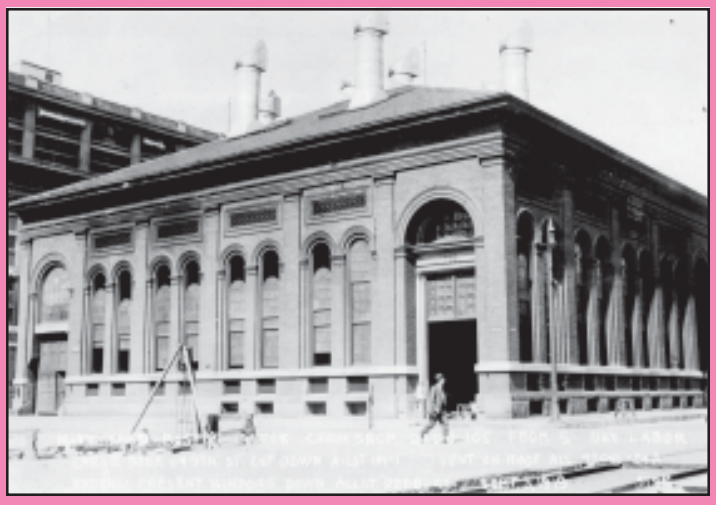
New Facilities, 1914-1919: A Gallery



Building 77, July 24, 1918
In 1914 and 1915 the interior of Building 77 was gutted and a new steel framework and overhead crane servicing the Boat Shop installed. In 1918, the southeast corner of the building was opened up to allow railroad cars to enter the building. *BOSTS-9590*

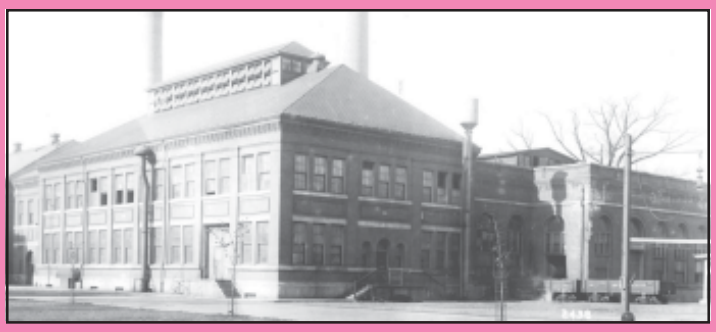


Building 104, May 3, 1917
Although many of the additions to existing structures were relatively small, the yard in most cases attempted to blend them in architecturally. Note the arched window frames in this construction view of this small addition. *BOSTS-9618*





Building 105, May 16, 1919 & Sept. 5, 1919
Among projects affecting the Smithery & Chain Shop were the installation of roof ventilators on the Headhouse (left) and the construction of a shed addition on the north side of the main structure (above). *BOSTS-9644*



Building 108, Nov. 3, 1916 & Aug. 2, 1917
Changes to the Power Plant began in 1913 when a monitor was added to the roof. It is seen in the view at left, taken just before the start of work on a major addition, in the same style as the original, at the east end. The addition is seen nearing completion at lower left. *BOSTS-9761*



Building 108, July 5, 1918
No sooner had the extension been completed than the yard began work on a further addition. This stucco-coated brick appendage made no effort to blend in with the remainder of the structure. *BOSTS-9761*



New Facilities, 1914-1919: A Gallery



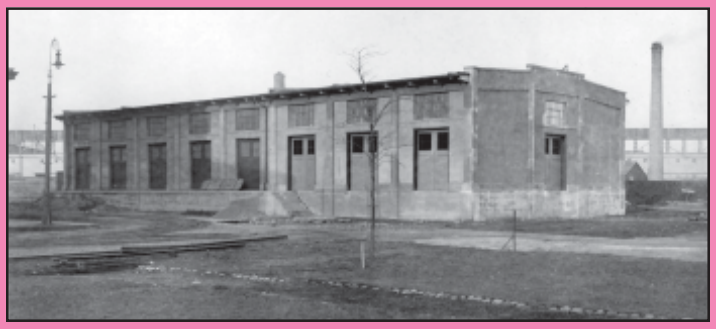
Building 109, Apr. 1, 1916

The original coal tower on the top of the Coal Handling Plant was demolished in 1911. In 1915 and 1916 a new one was constructed by Bergen Point Iron Works. *BOSTS-9809*

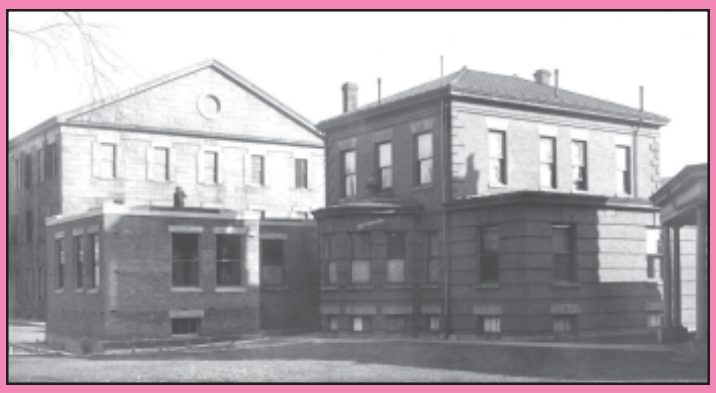


Building 125, Jan. 4, 1917

In 1916 the yard added a wing at the north side of the Paint Shop which paralleled the shed wing at the south side which had been a part of the original structure, although not executed in the same style as the rest of the building. *BOSTS-9867*





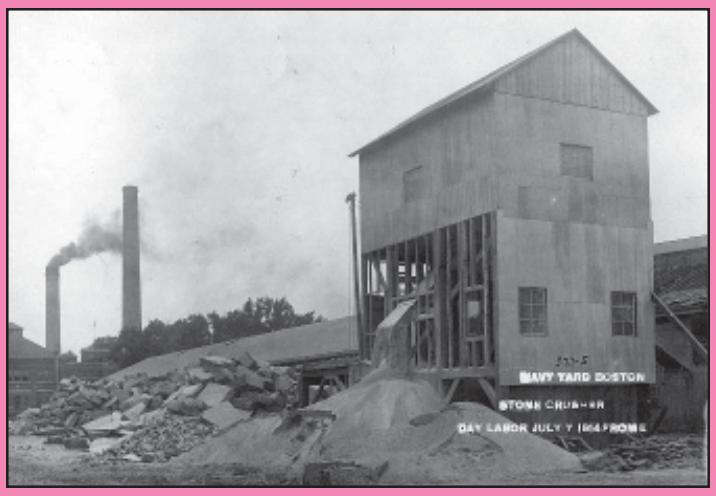


Building 120, Feb. 2, 1914



Building 120, Jan. 6, 1919

The 1910s saw two additions made to the Dispensary. In 1913 and 1914, a single story wing was added on the east side (top). Five years later, that addition was incorporated into a major two-story addition to both of the structure's wings (above). *BOSTS-9851*



Building 140, July 7, 1914

In the summer of 1914 yard forces built this Stone Crusher on Third Ave. between Buildings 63 and 64, Timber Sheds then being used as Storehouses. All three structures would be removed in 1918 to make way for the General Storehouse (Building 149). *BOSTS-8985*

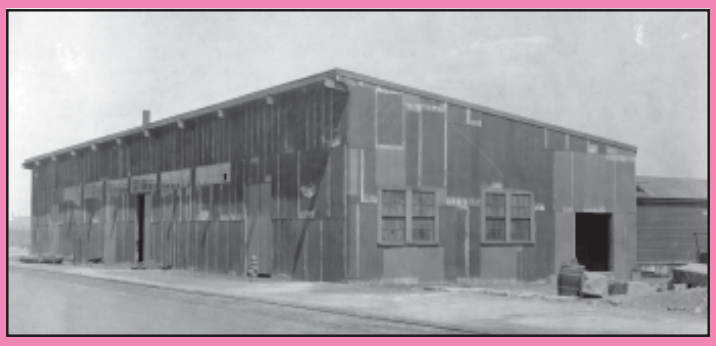
Building 131, Dec. 3, 1914 & May 4, 1918

The Oil Storage House saw additions made at each end. In 1914, yard forces added three bays to the south end (upperleft), while in 1918 Evatt Construction Co., the same firm which built the General Storehouse (Building 149), added two bays at the north end (left). *BOSTS-9877*

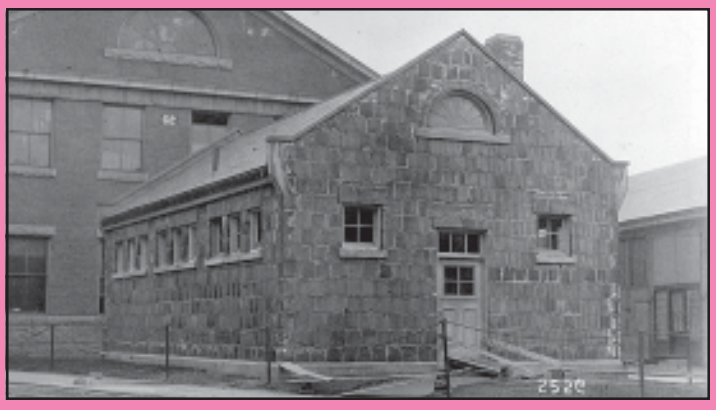
New Facilities, 1914-1919: A Gallery



Buildings 141 and 139, Jan. 9, 1918
The Pump House (Building 141) for the Fuel Oil Tank located in the former Timber Dock at the yard's east end and the Pump House (Building 139) for the 90,000-gallon Gasoline Tank were constructed alongside the Building Slip. Building 122 is behind Building 141. *BOSTS-8962*



Building 142, June 30, 1915
Formerly a lean-to on Building 103, the Storehouse for Condemned Stores was a steel-framed structure on First Ave. opposite Building 106. This view was taken prior to installation of its corrugated iron siding. Building 122 is at right. *BOSTS-9888*

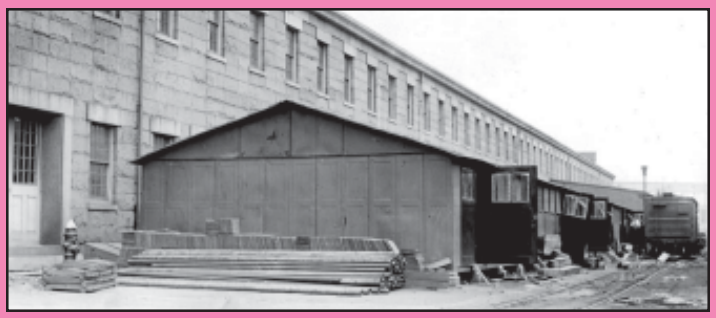


Building 143, May 3, 1917
One of the largest of many Washroom & Water Closets, Building 143, sited near the Hemp House (Building 62), was also unusual in being built of stone rather than brick. In 1950 it became the yard's Chapel. *BOSTS-9889*



Building 147, July 5, 1917
The increase in activity due to World War I led to the construction of numerous storage sheds. In this view of Building 147, note the coal cars ascending to the top of Building 109 in the background. *BOSTS-9813*

Building 148, July 5, 1917
In 1917 and 1918 the yard acquired numerous portable steel storage buildings. Each received its own number in the yard's inventory. This particular Storage Shed stood on the south side of the Boat House (Building 77). *BOSTS-9590*









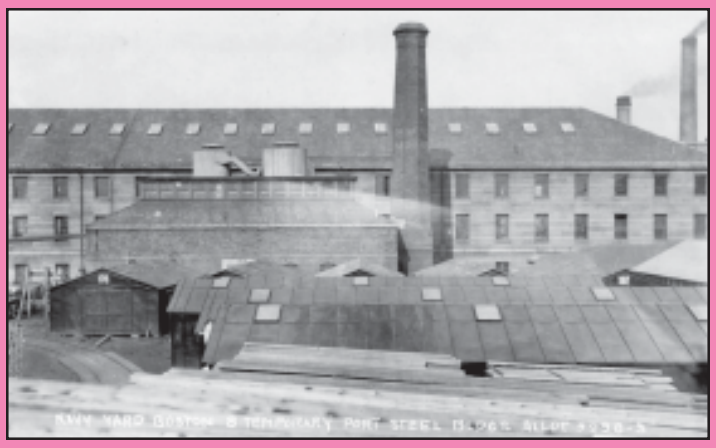
Building 150, Dec. 5, 1917 & May 4, 1918
The growing importance of motorized transport to the yard is seen in the construction of this ten-bay Garage (above left, looking north). Shortly after the Garage was completed, an extension containing shop facilities was added at its east end (above right, looking southeast). A year later, an electrical substation was added to the building right). It serviced the electrical lines from the commercial Edison Electric Illuminating Co. which provided a backup auxiliary power source for the yard in case of a failure in the yard's Power Plant (Building 108) located on the other side of Third Ave. *BOSTS-9917 (above); BOSTS-9919 (right)*

New Facilities, 1914-1919: A Gallery



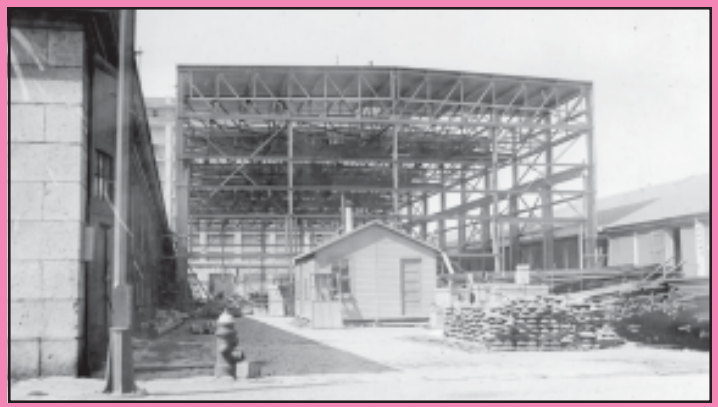
Buildings 154, 155, 156, 152, Jan. 3, 1918

The Davis Watson Co. furnished three Storage Sheds which were located south of the Machine Shop (Building 42) and west of Pier 5. What appears to be the foundation for another shed, labeled Building 152, is a Temporary Coal Storage Bin. Note the cage masts of a battleship in Dry Dock 2 above the sheds. *BOSTS-8990*



Buildings 178 to 185, Mar. 3, 1919

What had been a Recreation Field between Dry Dock 2 and Building 42 became a lumber and steel storage yard during World War I and the home to many of the yard's temporary steel Storage Sheds. Eight of them are grouped in front of the Boiler House for the Joiner Shop (Building 36). Buildings 178, 179, 180, 181, and 182 can be seen from left to right, while, in front of them from top to bottom are Buildings 183, 184, and 185. *BOSTS-8990*



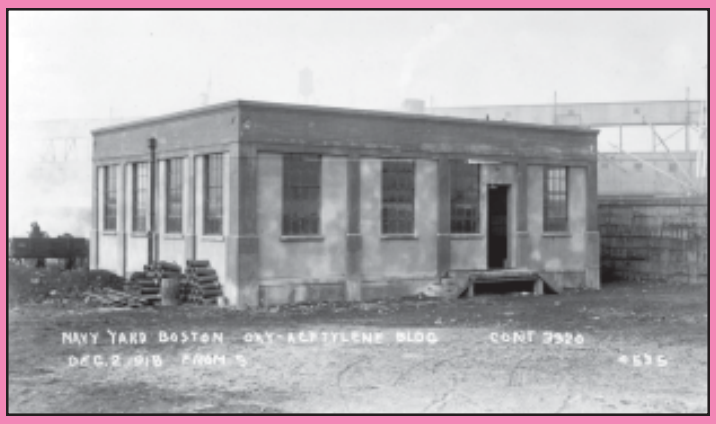
Building 187, May 6, 1919

This view shows the Steel Storage Shed under construction between the yard's two surviving Timber Sheds, Building 75 (left) and Building 76 (right). The area in the foreground was used as open storage for chain. *BOSTS-9934*



Building 161, Dec. 21, 1917

The most unusual temporary building in the Navy Yard during World War I was Building 161, which consisted of the pilot house of SS *Bunker Hill*, removed during the vessel's conversion into the minelayer USS *Aroostook* (CM-3). It survived until 1927. *BOSTS-13838*



Building 165, Dec. 2, 1918

The yard placed hazardous materials at the east end of the yard, away from most of the shops and piers. The Acetylene Plant produced one of the essential gases for oxy-acetylene welding. *BOSTS-9928*



Fuel Oil Tank, Dec. 3, 1914

In 1913 and 1914 the yard constructed a 2.1 million gallon Fuel Oil Tank in the former Timber Dock at the east end of the yard. Note the embankment surrounding it in case of spills. In this view looking southeast, the Refuse Kiln (Building 135) is at left and the former *Wabash* Power Station (Building 134) is at right. The tank, which never received a formal structure number, was demolished in 1941-42. *BOSTS-8987*

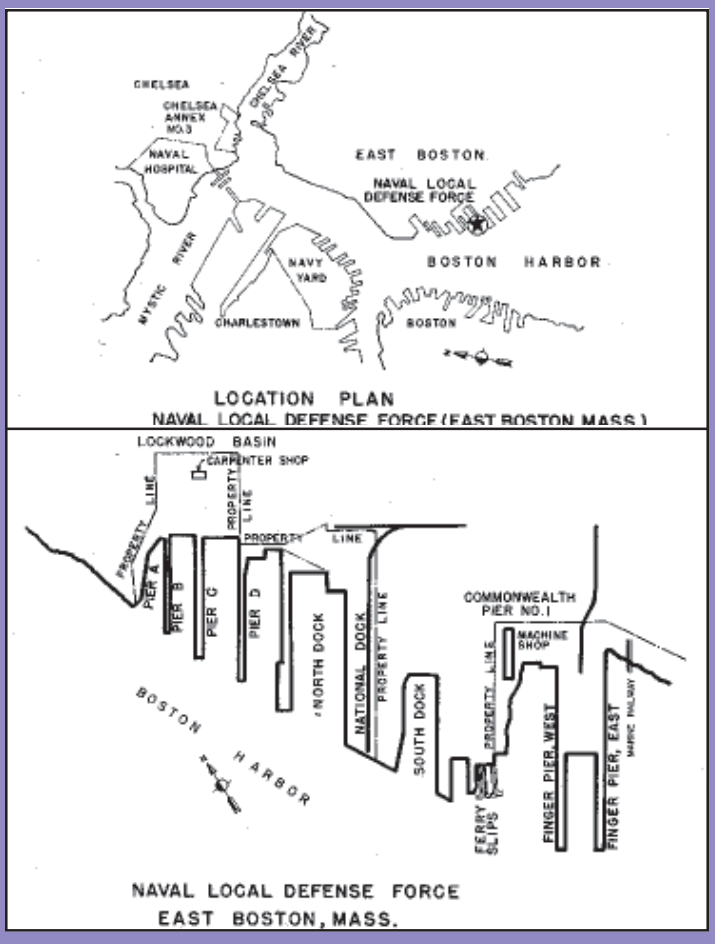
Lockwood's Basin



These two photographs form a panorama of Lockwood's Basin in 1933, when it was serving as U.S. Coast Guard Section Base 6, supporting small boats used by that service in its battles against rum runners. From left to right are the Marine Railway and Buildings 2, 8 (Carpenter's Shop), and 1 (General Headquarters). *BOSTS-7930; BOSTS-7931*



This photograph was taken by Alton Hall Blackinton, better known as "Boston Blackie," in 1918. The section patrol craft include, from left to right, USS *Lynx II* (SP-730), *Whistler* (SP-785), unidentified, and *Skink* (SP-605). *NHC NH-42145*



"Naval Local Defense Force, East Boston, Mass.," Jan. 1, 1944. This plan shows Lockwood's Basin as well as other East Boston waterfront property that the Navy took over during World War II.
*U.S. Navy, Bureau of Yards & Docks, [*Ship Repair Facilities*]*



During World War II, Lockwood's Basin served as a base for small patrol craft used for harbor defense. Most of these vessels were former civilian yachts or fishing vessels. Newly-acquired USS *Aide De Camp* (IX-224) is tied up at Pier D on June 14, 1945. *BOSTS-10151*

The Marine Railway

The other major addition to the yard's physical plant during World War I was the Marine Railway. Although marine railways, which consisted of a movable cradle on tracks that could be raised out of or lowered into the water along a sloping surface, had existed in the United States even before the first dry docks, the Navy in 1916 possessed only one such facility, at the Washington Navy Yard. With the outbreak of hostilities, the Navy began to acquire large numbers of small vessels for use as harbor patrol craft, minesweepers, and for anti-submarine activities. Since it would be a waste of valuable resources to service such vessels in large dry docks, the Navy decided to construct a series of marine railways to accommodate them.

In early 1918, the Navy awarded a contract to the Boston firm, Crandall Engineering Co., to build two railways, one at Charlestown and one at Charleston, capable of handling ships up to 2,000 tons displacement. The Charlestown Navy Yard railway was located immediately east of Pier 2, with its machinery being housed in Building 24.[222] For reasons not fully documented, its cradle was to be of timber construction; that at the South Carolina yard (as well as others built elsewhere by the Navy) had a steel cradle. The railway was first utilized on June 2, 1919, when it lifted the Coast Guard cutter *Ossippee*.[223]

Lockwood's Basin

World War I also saw the expansion of the yard outside of Charlestown. Although the yard commandant had general supervision of facilities such as the Chelsea Naval Hospital, the Nitre Depot in Malden, and the Ammunition Depot in Hingham, these were not directly related to the yard's primary mission. During the war, the Navy acquired Lockwood's Basin in East Boston, across the harbor from the yard (see Figure 2-15); it was formally designated as an annex to the yard in September 1919; two years later, the Navy rebuilt the facility's pier.[224]

The Navy used Lockwood's Basin, which had a small marine railway, for work on small civilian vessels acquired for section (harbor) patrol duties. It also served as an operating base for these forces. In the late 1920s, as the Coast Guard expanded its small craft forces to deal with the enforcement of Prohibition, the facility became U.S. Coast Guard Section Base 6. In 1934, it was leased to the Massachusetts Bureau of Marine Fisheries, reverting to the Navy later in the 1930s. Along with Commonwealth Pier No. 1 and other leased property in East Boston, it was used as a local defense force base through World War II. At some time prior to 1944 the marine railway was removed. Lockwood's Basin was declared surplus by the Navy on December 12, 1948, and turned over to the War Assets Administration for disposal. Actual disposal of the property occurred in the early 1950s.[225]

The Yard Expands To South Boston

Even before the completion of Dry Dock 2, the Navy began to look at the possibility of constructing an additional dry dock at Charlestown. Although the proposed Dry Dock 3, to be located to the east of Dry Dock 2, was shorter, it would have the additional depth to accommodate newer battleships. While the dock was included in the Civil Engineer's recommendations to Washington from 1904 until at least 1911, it never became part of the Navy's budget submission to Congress.[226]

Thus, the yard became interested in the plans by the Commonwealth of Massachusetts to include a large dry dock as a part of its development of the South Boston waterfront. Even as construction started in 1917, the Navy obtained Congressional authorization to lease the dock; a year later, Congress authorized its purchase. This transaction took place in April 1920.[227]

The "Commonwealth Dry Dock" became Dry Dock 3, and gave the yard the capability of docking the largest vessels then afloat, civil or military. Full development of the South Boston property into a functional shipyard would not occur until the eve of World War II and is detailed in Chapter 3 of this report.

The Yard In The 1920s

The Navy Yard began to cut back from its wartime peak employment shortly after the signing of the Armistice ending World War I. However, because of the auxiliary construction program, it maintained a somewhat high level of productivity into the mid-1920s. But with the delivery of *Whitney*, construction work ceased.[228] The

[222] A January 1918 photograph indicates that the yard originally considered locating the facility at the east end of the yard, in the area of the Building Slip. See Progress Photo, "Site of Marine R.R. From Bldg. 106," Jan. 9, 1918, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8962, Box 1-32.

[223] U.S. Navy, Bureau of Yards & Docks, *Activities of the Bureau of Yards and Docks, 1917-1918*, p. 211-14; Black, *Charlestown Navy Yard, 1890-1973*, 1:373-376; Mary Jane Brady and Crandall Dry Dock Engineers, Inc., *Historic Structure Report, Marine Railway No. 11, Architectural Data Section, Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts* (Denver: Denver Service Center, National Park Service, 1982), TIC 457/D1879, p. 2-9, 21-23. James L. Crandall was a leading engineer in the field, and his expertise was employed by the Navy for all of the railways built in this time period. See Crandall Dry Dock Engineers, *A Short History of Railway Dry Docks Since Their Inception in 1854* (Cambridge, Mass., 1950).

Originally termed Dry Dock No. 3 and then Dock No. 4, the facility became known as Marine Railway No. 11 after the acquisition of the Chelsea Annex during World War II, since that site housed two railways, designated as Marine Railways No. 12 and No. 13 by the Navy. See Black, *Charlestown Navy Yard, 1890-1973*, 1:374; U.S. Navy, Bureau of Yards & Docks, [*Ship Repair Facilities*], Jan. 1, 1944, p. 2, 4.

[224] Black, *Charlestown Navy Yard, 1890-1973*, 1:377-78; Progress Photos, July-Aug. 1921, New Section of Pier, Contract 4480, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-7929, Box 1-12.

[225] Black, *Charlestown Navy Yard, 1890-1973*, 1:378, 2:528, 538; U.S. Navy, Bureau of Yards & Docks, [*Ship Repair Facilities*], p. 27-27a; "Map of U.S. Naval Small Craft Facility, East Boston, Mass., Showing Conditions on June 30, 1947" [drawing], File 923-399-4, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13502. While this is the last plan in the collection, the Public Works Dept. card file index to the drawing collection in the Division of Cultural Resources, BNHP, lists a 1949 site plan and others relating to the facility dated as late as 1952.

[226] See Civil Engineer, Annual Reports, FY 1904-1911, Records of the Boston Navy Yard, RG 181.3.2, Entry 154, NARA.

[227] Black, *Charlestown Navy Yard, 1890-1973*, 1:379-80; "Bay State's Harbor Development Aided Navy To Acquire South Boston Annex," *Boston Naval Shipyard News*, vol. 20, no. 37 (Mar. 23, 1956), p. 3.

[228] Black, *Charlestown Navy Yard, 1890-1973*, 1:369-72. Employment in the yard dropped from 5,865 on January 1, 1921, to 1,697 a decade later. See ibid., 1:406.



This waterfront view dates to ca. 1920. In the background at left, with a water tower on its roof, is the General Storehouse (Building 149). The new Machine Shop portion of Building 42 can be seen behind the circular Pump House (Building 123). The Recreation Field between Dry Dock 2 and Building 42 is still being used for materiél storage. USS *Old Constitution* (IX-21) is at Pier 4, while the cage masts of two battleships can be seen further east. *BOSTS-8643*

yard would do only three major ship reconstruction projects for the remainder of the decade: the battleships *Florida* (BB-30) and *Utah* (BB-31) in the 1925 to 1927 period and the sail frigate *Constitution* (IX-21).[229] The docking log for Dry Dock 1 shows no dockings during 1928 and 1929 because that facility was occupied by the Navy's oldest vessel.

In April 1920 the Navy Department requested that each shipyard provide a report on its industrial facilities. This document, completed in February 1921, provided a detailed account not only of the buildings and their major facilities but also the yard's dry docks, shipways, and piers.[230] In the spring of 1921, the yard accomplished a photographic survey of all facilities in the First Naval District.

The following list shows the usage of the industrial facilities of the yard as described in the 1921 report:

Building 22 – Public Works Shop 80
Building 24 – Rigging Loft
Building 33 – Sail Loft; Supply Dept. storage
Building 34 – Supply Dept. storage; Yard Chemist; lunch room; Post Office; Trade School
Building 36 – Joiner Shop
Building 39 – Industrial Offices
Building 40 – Mold Loft, Angle Shop
Building 42, Machine Shop – Machine Shops A and B; Foundry; Brass Foundry; Pattern Shop; Offices; Toilets
Building 58 – Ropemaking
Building 60 – Tarring
Building 62 – Hemp Storage; Ropemaking
Building 75 – Lumber Storage
Building 76 – Lumber Storage
Building 77 – Boat Storage
Building 79 – Ropewalk Offices; Boatbuilding
Building 103 – Electric Shop
Building 104 – Shipfitters Shop
Building 105 – Smith Shop
Building 106 –Boiler Shop; Plumber and Pipefitting Shop; Copper Shop
Building 107 – Public Works Dept. Offices; Supply Dept. Storage
Building 108 – Central Power Plant
Building 109 – Coaling Plant
Building 114 – Sawmill; Boatbuilding
Building 125 – Paint Shop
Building 131 – Oil and Paint Storage
Building 142 – Storage of Condemned Stores
Building 149 – Supply Dept. Storehouse
Building 153 – Storage Battery Station
Building 187 – Steel Storehouse

The yard possessed two dry docks at Charlestown and the still-incomplete Navy Dry Dock at South Boston. The Charlestown docks were served by a single portal crane. There was also extensive railroad trackage, with connections to outside railroads. Charlestown had seven railroad cranes and South Boston had four. Charlestown possessed a Marine Railway and Shipbuilding Ways, which were served by four hammerhead cranes. There were eleven piers (1, 2, 3, 4, 4A, 5, 6, 7, 8, 9, 10) at the yard. All except Pier 1 were of wood construction. South Boston possessed two wooden piers—the North Approach Pier and South Approach Pier—but neither were equipped with fenders and only the South Approach Pier had standard-gauge railroad tracks on it. Each of the yard's four floating cranes had nicknames: *YD-11* ("Hercules"); *YD-13* ("Marion"); *YD-35* ("Agnes"); *YD-38* ("Nan"). There was also a Floating Machine Shop (*YR-15*). Completing the industrial facilities at Charlestown were a Fuel Oil Tank and Gasoline Storage Tank.

There were few changes to the physical plant of the yard in the decade. Several of the World War I temporary sheds disappeared, while others were moved to the east end of the yard, where a more formal storage area was laid out; coincident with this activity, the area between Dry Dock 2 and the Machine Shop (Building 42) resumed its role as a Baseball & Recreation Field.[231] In the mid-1920s, and then again in the early 1930s, the yard rebuilt many of its wooden

[229] Ibid., 1:406; Norman R. Friedman, *U.S. Battleships: An Illustrated Design History* (Annapolis: Naval Institute Press, 1985), p. 419.

[230] "Compilation of Industrial Facilities at Navy Yard, Boston," enclosed in A.A. Baker et al. to Commandant, "Compilation industrial facilities at Navy Yard, Boston," Feb. 9, 1921, Public Works Dept., Design Division (Code 440), Completed Design Projects, File 388, General Building Data, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 82.

[231] These changes are documented by comparing the yard's Annual Site Plans, 1919-1931, File 399-96 to 399-108, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13502.

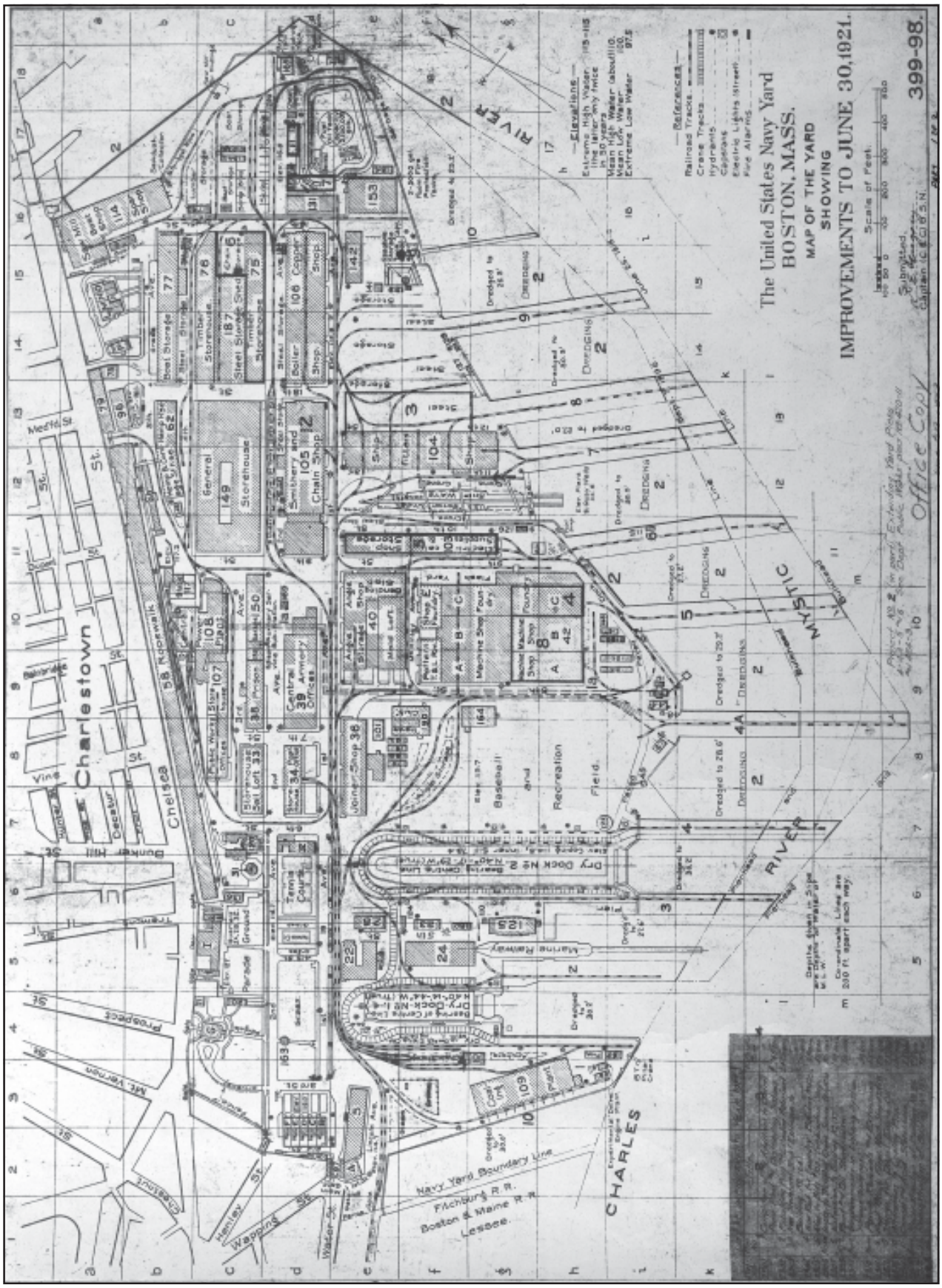


Figure 2-17 – Plan of Navy Yard, 1921

"Map of the Yard Showing Improvements to June 30, 1921," June 30, 1921. By this time, several of the World War I temporary structures have already been removed. Note the reorganization of the storage areas at the east end of the yard and the proposed pier extensions which were not carried out.
BOSTS-13502

The Yard In 1921: A Gallery

DURING THE FIRST HALF OF 1921, the Navy Yard produced a series of photographs documenting the existing conditions of the yard. This gallery presents pictures from this documentary record. Unfortunately, the surviving files are incomplete, and numerous structures, including Buildings 4, 19, 24, 39, 40, 42, 62, 75, 76, 103, 104, 105, 106, 108, 110, 114, 123, 124, 125, and 149, as well as the piers and dry docks, are not represented. The 1921 yard plan (Figure 2-17) shows the location in the yard of each structure shown.



Building 1, Mar. 21, 1921
Built in 1867, Building 1 had been used for storage of raw materials for the yard's masons until the mid-1910s. At this time, it was used as a Garage for automobiles. *BOSTS-9249*



Building 5, Feb. 18, 1921
In 1921 the yard's third-oldest building housed a variety of functions, including the First Naval District, the Chaplain, Museum, Library, Pay Office, Commissary, Small and Clothing Stores, Barber Shop, and Printing Office. *BOSTS-9258*



Building 10, Mar. 25, 1921
In 1921, Building 10 housed the Laundry operated by the Navy Welfare Fund for the benefit of sailors stationed at the yard. *BOSTS-9271*



Building 20, Mar. 18, 1921
Used in 1921 for Tool Storage, the Commandant's Barn had been built a century earlier, replacing an older barn dating to 1805. It would be demolished within the year. *BOSTS-9284*



Building 21, Mar. 18, 1921
Used in 1921 as a Greenhouse, Building 21 had been built in 1825 as a Stable for the adjoining Commandant's House. The Navy Yard Boundary Wall forms the northern wall of the building. The Greenhouse would be removed in the 1960s. *BOSTS-9285*



Building 22, Mar. 19, 1921
This view of Building 22, used for Public Works Laborers and Mechanics, shows the brick boiler house addition, built in 1856, and the 1870 chimney, which would be demolished in 1936. *BOSTS-9289*

The Yard In 1921: A Gallery



Building 23, Mar. 19, 1921
In order to install crane tracks connecting Dry Docks 1 and 2, the former Chapel was moved from the north to the east side of Building 24 and rebuilt as a Latrine. The building would be demolished during World War II to allow construction of an addition to Building 24. *BOSTS-9296*



Building 31, Feb. 18, 1921
The Muster House in 1921 housed the Captain of the Watch and the Telephone Exchange. The surrounding porch would be removed at the end of the decade. *BOSTS-9318*





Building 28, Mar. 21, 1921
The 1918 addition at the north end of the Restaurant & Recreation Room can clearly be seen in this view. Note Building 124 at far left, with Building 24 behind it, and Building 22 at the right. *BOSTS-9309*



Building 32, Feb. 18, 1921
The 1918 wooden addition to the Pay Office is seen here. *BOSTS-9324*



Building 33, Mar. 30, 1921
In 1921 Building 33 was still in use as a Sail Loft, as well as a Storehouse. In the 1930s it would be converted into the Frazier Barracks as a replacement for the Receiving Ship *Southery* (IX-26). *BOSTS-9329*

Building 34, Mar. 25, 1921
In 1921 this Parris-designed building housed the Officer-of-the-Day, Transportation Officer, Post Office, Trade School, Storehouse, and Chemical Laboratory. *BOSTS-9340*

The Yard In 1921: A Gallery

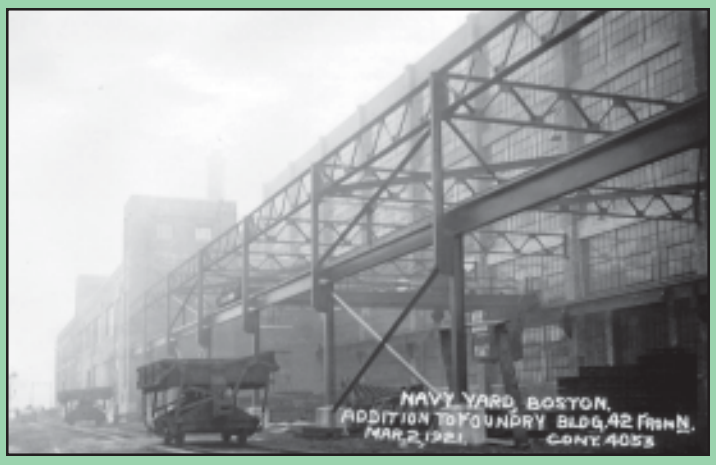


Building 36, Mar. 19, 1921
Building 36 housed the Joiner, Cabinet, Shipwright, Block, and Upholstery Shops. Note the collector for sawdust on the roof of the building's boiler house at right. *BOSTS-9353*



Building 38, Apr. 19, 1921
Note the washroom addition, added in the 1890s and enlarged in 1902, on the north side of Building 38, used in 1921 as a Storehouse, Chapel, and Prison. *BOSTS-9362*





Building 42, Mar. 2, 1921
This construction progress photo shows the outside Flask Yard associated with the extension to the Foundry. *BOSTS-9402*



Buildings 44 & 48, Mar. 30, 1921
Two Civil War-era structures surviving in 1921 were Building 44, used for Temporary Storage for "Parts of Ships Under Repair," and the octagonal Magazine (Building 48), used as for "Storage of Old Material." *BOSTS-9507*



Building 47, Mar. 30, 1921
The Heavy Shell House had been converted into Waterfront Offices for the Assistant Captain of the Yard. Note the second story and balcony overlooking the yard's piers. *BOSTS-9508*

The Yard In 1921: A Gallery

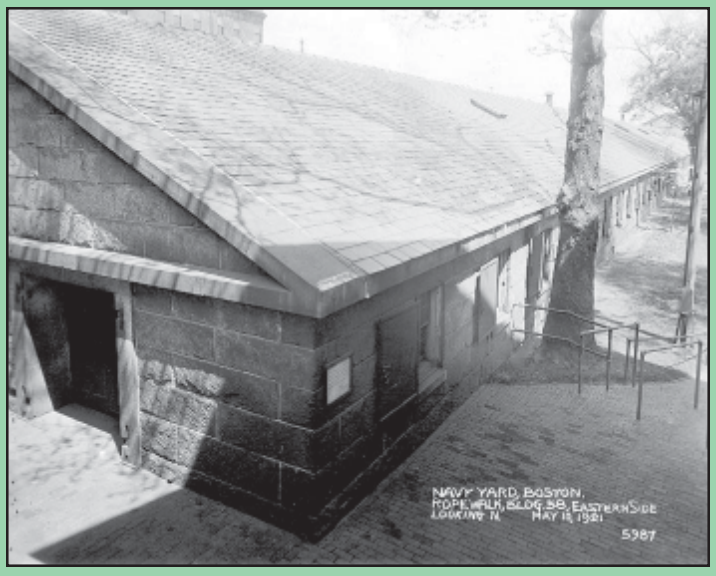


Building 58, May 10 & 11, 1921

No single photograph could do justice to the quarter-mile-long Ropewalk. These views show the Headhouse (above), the end of the second floor (above right), and the west end (right). Note that there is still a tree-lined walk along the length of the building, although by this time granolithic pavement had replaced the original wood walkway.

BOSTS-9513 (above); BOSTS-9514 (others)







Building 60, Apr. 15, 1921

Note the overhead connections from the Tar House to the Hemp House (Building 62) at both the center and far ends of the structure.

BOSTS-9569



Building 78, Apr. 15, 1921

The Cart Shed adjacent to Building 79 was being used for Storage of Small Boats.

BOSTS-9597



Building 77, Apr. 15, 1921

The former Boat Shop & Mould Loft was in use for Storage for Small Boats & Equipment.

BOSTS-9591



Building 79, Apr. 15, 1921

The Wire Rope Mill was being used as a Boat Shop in 1921. Note the ivy covering both the building and the adjoining granite wall along 14th Street. Gate 5 is at right.

BOSTS-9598

The Yard In 1921: A Gallery



Building 96, Apr. 15, 1921
The Power House for the Ropewalk was listed as a Storehouse in 1921. Note the brick pavement on 13th Street. *BOSTS-9601*



Building 97, Feb. 18, 1921
The Main Gate to the Navy Yard provided a monumental entrance to the facility. Note the entrance to Building 4 at right, provided for job applicants coming to apply to the yard's Labor Board. *BOSTS-8943*



Building 101, Apr. 15, 1921
In 1911 and 1912 the Dry Kiln was enlarged to create the Millwrights Shop. The break between the original building and the addition is clearly visible between the window and the door at right. *BOSTS-9605*



Building 107, Feb. 11, 1921
One of the stacks and parts of the extensions of the Power Plant (Building 108) can be seen in this view of the Public Works Shop. Note the chain stored to the right. *BOSTS-9751*







Building 117, Mar. 19, 1921
The growth of motor transport in the yard is reflected by the listing of Building 117 as "Garage, Stable & Carriage House" and by the truck in the foreground. *BOSTS-9846*

Building 109, June 16, 1921
These two views show the ends of the Coaling Plant. Note the track which allowed coal to be brought to the top of the facility to be unloaded. Note, in the lower photograph, Locomotive Crane 24 at right and the side-dump coal cars in the foreground. *BOSTS-9810*

The Yard In 1921: A Gallery



Building 120, Dec. 31, 1920

The earliest photograph in the series documenting the yard, this view shows the original Dispensary and its additions. Note the ambulance parked outside the building at the right. *BOSTS-9852*

The early 1900s yard modernization included a number of sanitary facilities, sometimes labeled Latrines and other times Water Closets, for use by yard employees. Five structures of this same general design (Buildings 118, 119, 124, 126, 127) were completed between 1901 and 1904. Building 126 (top right) stood south of Building 103 adjacent to Shipways No. 1, while Building 127 (right) stood halfway between Piers 8 and 9. Buildings 118 and 119, built against Building 43, were demolished in 1918, but Building 124, constructed south of Building 28, survives in 2008. The edge of Building 128, originally listed as a Scale House, but used since 1918 as a Watchman's House for Pier 9, can be seen to the left of Building 127.

BOSTS-9874 (top right); BOSTS-9875 (right)



Building 126, Mar. 30, 1921



Building 127, Mar. 28, 1921



Building 131, Mar. 30, 1921

Note the portable steel Storehouse (Building 177) to the left of the Storehouse for Oil & Paints. *BOSTS-9877*



Building 134, Mar. 30, 1921

Originally the Power House for the Receiving Ship *Wabash*, Building 134 was converted into an Electric Substation following the 1912 decommissioning of the vessel. *BOSTS-9881*



Building 143, Mar. 19, 1921

Building 143, a Water Closet & Wash Room, was of a style compatible with nearby Building 117 rather than any of the other sanitary facilities in the Navy Yard. *BOSTS-9889*



Building 136, Mar. 18, 1921

The Marine Corps Administration Building had been constructed with a raised basement so that the first floor was level with the rising grade of the Marine Barracks Parade Ground. *BOSTS-9882*

The Yard In 1921: A Gallery



Building 144, Feb. 1, 1921
The Locomotive & Crane Shed is seen here during the reconstruction of railroad tracks at the east end of the yard. The building would be gone by the following June. *BOSTS-9894*



Quarters A, Mar. 21, 1921
Quarters A was located immediately inside the Main Gate. Note the porch and dormer added in the late 1910s, as well as the board fence enclosing the small yard at the north end of the house. *BOSTS-9159*

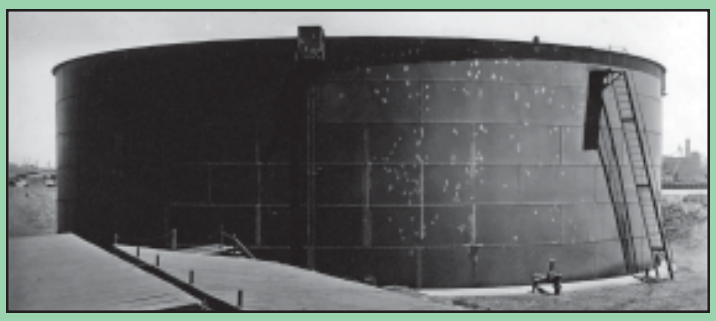


Quarters I, Mar. 19, 1921
By this time, Marine Corps officers' quarters were identified as Quarters 1, 2a, 2b, and 2c rather than as Quarters H and K. Note how the Marine Barracks Parade Ground sloped down to the Second Ave. sidewalk and the cannon display. *BOSTS-9222*

Quarters L-M-N-O, Apr. 15, 1921
Occupants of this group of rowhouses included the Captain of the Yard/ Aide to the Commandant (L), Public Works Officer (M), Engineer Officer (N), and Medical Officer (O). *BOSTS-9232*



Building 149, Dec. 5, 1921
This view of the General Storehouse from the roof of Building 108 was taken in conjunction with improvements to the Power Plant rather than as part of the documentation project. *BOSTS-9762*



Fuel Oil Tank, June 16, 1921
The photographic survey included unnumbered structures such as the 2.1 million gal. Fuel Oil Tank in the former Timber Dock at the east end of the yard. *BOSTS-8987*



Quarters B-C-D-E-F, Mar. 19, 1921
At this time, the houses were occupied by the Junior Aide to the Commandant (B), Construction Officer (C), Senior Assistant, Hull Division (D), Yard Disbursing Officer (E), and Supply Officer (F). *BOSTS-9165*



The Yard In 1921: A Gallery

THE 1921 PHOTOGRAPHIC SURVEY also included the South Boston Annex, together with the Chelsea Naval Hospital and other First Naval District facilities. This portion of the gallery presents the images of South Boston and the radio station at Chelsea.



Dry Dock 3 & South Approach Pier, June 10, 1921
The Caisson for Dry Dock 3 is seen here, along with a portion of the South Approach Pier. *BOSTS-8534*



Building 1, South Boston, June 10, 1921
The Pump House for the Dry Dock is seen here as originally completed. In 1922 the Navy constructed a three-bay addition at the west end (right) to house an electrical substation. *BOSTS-7870*

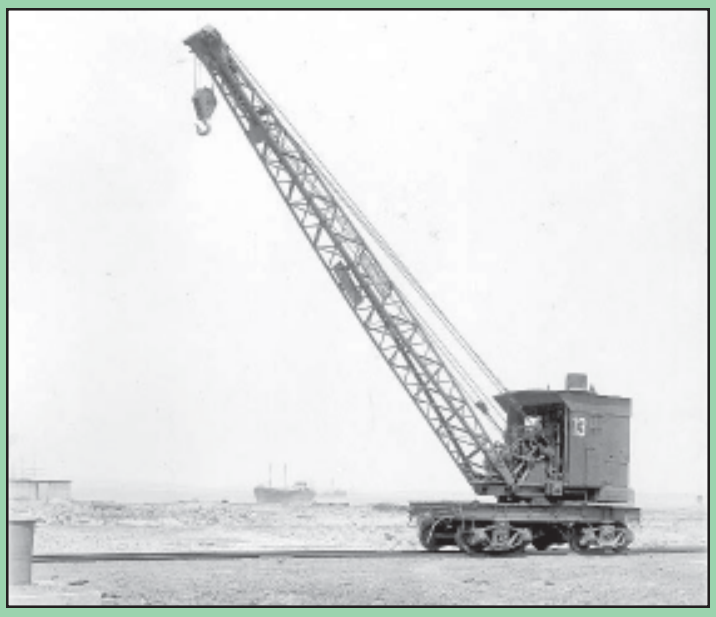
Locomotive Crane 13, June 10, 1921
To serve Dry Dock 3, the Navy had transferred Brownhoist Crane 13 to South Boston. Work was already underway on the construction of a portal crane system at the facility to supplement the railroad crane.
BOSTS-8900



Building 4, Chelsea Naval Hospital, Aug. 9, 1921
The photographic survey included facilities beyond the shipyard such as the Chelsea Naval Hospital. Building 4 was part of the radio station established at Chelsea in the buildings which became available once the Naval Magazine moved to the new Ammunition Depot in Hingham. Note the radio tower in the background of the view at right. *BOSTS-7977*



Dry Dock 3, June 10, 1921
This view looks from the head of Dry Dock 3 to the Caisson. Note the concrete for the intermediate dock seat. In the distance at right is the Pump House (Building 1). *BOSTS-8534*







This aerial photograph was taken on Aug. 18, 1925. Most of the temporary structures which had been located on the Recreation Field during World War I have been removed other than those in the northeast corner and a baseball diamond has been placed in the southeast corner. Note the bright color of the recently completed roof on the Foundry (Building 42-C). Two small vessels are seen on the Marine Railway while the battleship USS *Florida* (BB-30) occupies Dry Dock 2. USS *Constitution* (IX-21) can be seen at Pier 4 in the center of the image, while the Receiving Ship USS *Southery* (IX-26) is at Pier 4A. A number of barges and other service craft are tied up at Pier 10 at the eastern end of the waterfront. *BOSTS-8613*

finger piers.[232] The early 1930s saw repair work on the Marine Railway as well.[233] Alterations were made to the Power Plant (Building 108) between 1921 and 1923.[234] In 1927 the first of the two new buildings erected in this period was constructed, a Pump House & Suction Well (Building 191) to provide cooling water for the Power Plant.[235] Two years later the section of the Boundary Wall along the Ropewalk was replaced by a concrete-and-iron picket fence.[236]

In 1931 the Forge Shop (Building 105) received a new roof, and in 1932 its Headhouse was modified to become the Roundhouse for servicing the yard's locomotives and locomotive cranes.[237] The



In 1926 the Navy undertook a series of small beautification projects around the yard. These before and after images of the work at Building 104 were taken on May 6 and June 28, 1926, respectively. *BOSTS-9618*

[232] Black, *Charlestown Navy Yard, 1890-1973,* 1:401, 402-403.

[233] Brady and Crandall Dry Dock Engineers, *Historic Structure Report, Marine Railway No. 11,* p. 11-13.

[234] Black, *Charlestown Navy Yard, 1890-1973,* 1:402; Progress Photos, Oct. 1921-Apr. 1922, Alterations to Power Plant, Cont. 4495, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9763, Box 1-52; Progress Photos, Sept. 1922-Jan. 1923, Coal Handling Equipment, Cont. 4583, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9764, Box 1-52.

[235] Black, *Charlestown Navy Yard, 1890-1973,* 1:401-402; Progress Photos, Sept. 1927, Circulating Loop Pump House and Suction Well, Contract NOy-14, Spec. 5190, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9935, Box 1-57.

[236] Specification No. 5895, Fencing at the Navy Yard, May 18, 1929, Public Works Dept., Design Division (Code 440), Completed Design Projects, File 462, Fences and Gates, Records of the Boston Naval Shipyard, RG 1.4, BNHP, Box 92.

[237] Black, *Charlestown Navy Yard, 1890-1973,* 1:402; Progress Photos, Dec. 1931-May 1932, Roundhouse, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9647, Box 1-49.

New Buildings, 1927-1931





Two new structures were added to the yard in the period from 1927 to 1931. At top, the Pump House & Suction Well (Building 191), located east of Pier 4A, is seen on Sept. 20, 1927, while above, the new Substation (Building 192) south of Building 103 nears completion on July 8, 1931.
BOSTS-9935 (top); BOSTS-9937 (above)

biggest change to the waterfront came in 1930, when the Navy, by now mostly powered by fuel oil rather than coal, demolished the massive Coaling Plant (Building 109) except for a small portion retained as an electrical substation.[238] In the following year, a new Substation (Building 192) was constructed south of Building 103.[239]

The Yard As A Manufacturing Establishment: The Chain Forge

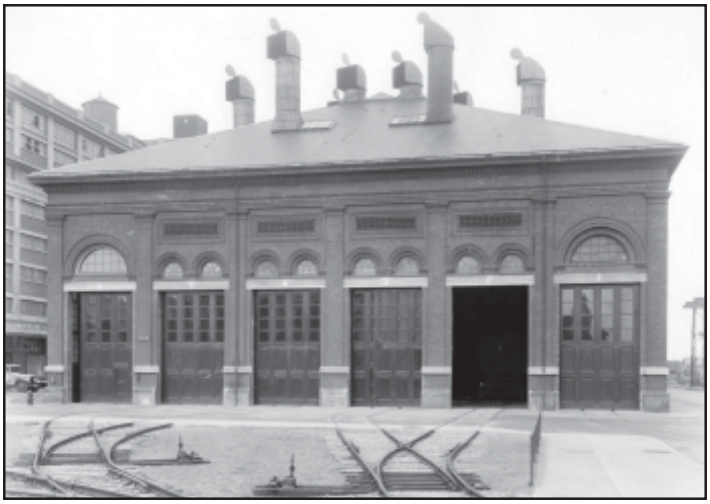
One of the more important events in the 1920s was the development of die-lock chain by employees of the Forge Shop.[240] Since 1913, the Chain Shop had been located in Building 105, having been transferred from the southern wing of Building 40 so that Building 40 could take over the Mould Loft function formerly housed in Building 77.[241]

[238] Black, *Charlestown Navy Yard, 1890-1973*, 1:403-404; Specification No. 6151, Removal of Coaling Plant, Building 109 and Appurtenances, Apr. 2, 1930; Specification No. 6294, Removal of Building No. 109, Aug. 22, 1930,Public Works Dept., Design Division (Code 440), Completed Design Projects, Building 109, Records of the Boston Naval Shipyard, RG 1.4, BNHP, Box 67; Progress Photos, Mar.-Oct. 1930, Coaling Plant, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9811, Box 1-53.

[239] Progress Photos, Mar.-July 1931, Substation, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9937, Box 1-57.

[240] The discussion of chain-making which follows is based on Black, *Charlestown Navy Yard, 1890-1973*, 1:435-38, 2:501-503, 745; Carolan, *Building 105/The Forge Shop*, p. 29-31; Paul Ivas, William E. Mullen, and William Palmer, "Development of Die-Lock Chain," Forge Shop, Boston Naval Shipyard, ca. 1950, reproduced in Carolan, *Building 105/The Chain Forge*, App. F.

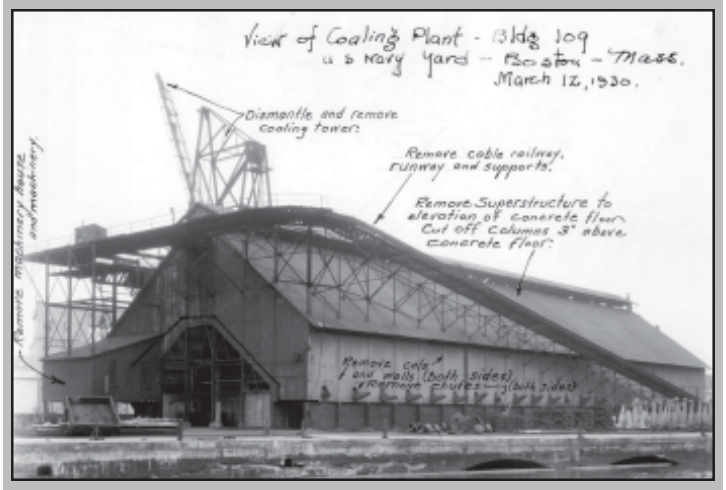
[241] Black, *Charlestown Navy Yard, 1890-1973*, 2:821, 825.



The Headhouse of Building 105 was converted into a Roundhouse to service the yard's locomotives and locomotive cranes in 1931 and 1932. This view was taken on May 9, 1932, as the work approached completion.
BOSTS-9647

Since the 1880s, the Navy Yard had been the primary manufacturing facility for chain used by the Navy. Prior to the early 1910s, chain was forged by hand from wrought iron bars produced in the yard's Rolling Mill. In the period 1912-1914, the yard introduced mechanization in the form of the use of steam hammers to eliminate the tedious hand-welding process. In 1918, cast steel

Demolishing The Coaling Plant





In 1930 the Navy demolished the Coaling Plant (Building 109). At top, this photograph was annotated to show the scope of work for the project, while the view above taken on July 30, 1930, shows the work well underway.
BOSTS-9811

Reconstructing The Yard's Piers, 1930-1932

BUILT IN THE PERIOD FROM 1903 to 1912, most of the yard's wooden finger piers were in need of repairs by the late 1920s. Major public works funding for such purposes was provided in the early 1930s. Despite the need for additional pier space, these projects did not include any extensions out to the 1918 harbor line. The following photographs are part of the construction record pictures taken by yard photographers showing various phases of work as these projects progressed.



Pier 3, Jan. 2, 1930 *BOSTS-8711*



Pier 4A, June 2, 1931 *BOSTS-8732*



Pier 5, Apr. 2, 1931 *BOSTS-8743*



Pier 8, Oct. 1, 1930 *BOSTS-8764*



Pier 9, Dec. 1, 1931 *BOSTS-8770*



Pier 10, May 9, 1932 *BOSTS-8777*

chain began to be produced. When it was adopted as the Navy standard in 1921, the Norfolk Navy Yard was designated as the sole facility for its production.

The first step leading to die-lock chain, and the re-emergence of the yard as the Navy's primary supplier of chain, came in 1921, when Forge Shop employees M. Reid and Albert M. Leahy developed the detachable link. Further experiments followed, and in 1926 Leahy and Carlton G. Lutts developed a new type of chain, die-lock chain. This steel chain, produced using dies to form chain links, proved to be twice as strong as wrought iron chain and 50 percent stronger than cast steel chain. Its first successful use, in the form of combination chain having traditional forged links and die-lock links, was for the Panama Canal Commission. With further refinements, die-lock chain became the standard anchor chain for the Navy in 1928. It was made in sizes up to 3-3/8 inch diameter for use on battleships.

In the early 1950s, the Forge & Chain Shop received new machinery to allow it to produce 4-3/4 inch die-lock chain required for the anchors for the new *Forrestal*-class aircraft carriers. But there was increasing pressure on the military to get out of the manufacturing business. In 1955 the Navy proposed closure of both the Ropewalk and the Chain Forge, but Congressional objections killed the plans.[242] The yard continued to produce the larger anchor chain, a product useful only to the Navy and thus not of interest to private industry, completing its last major order, for the aircraft carrier USS *Dwight D. Eisenhower* (CVAN-69), in late 1973.[243]

The Yard Resumes Shipbuilding

The resurrection of the Navy Yard as a shipbuilding facility began on September 29, 1931, when it was assigned the construction of two destroyers.[244] For the remainder of the decade, the yard would be one of the shipbuilders to receive orders for pairs of ships included in the annual naval construction programs.[245] Indeed, on May 3, 1934, the Navy defined the yard's primary function as being destroyer construction with a secondary role as a manufacturer of rope and chain.[246] The first destroyer, USS *Macdonough* (DD-351), was laid down on May 15, 1933, launched on August 22, 1934, and commissioned on March 15, 1935.

One of the unique features of this effort was the use of Dry Docks 1 and 2 as construction basins. During the period through October 1939, one destroyer (and two tugs) were constructed in Dry Dock 1 and thirteen in Dry Dock 2.[247] At one time, four destroyers

[242] Carl Hayden to Thomas P. Pike, Feb. 1, 1956, in Himmelfarb, *Ropewalk Study Final Report: Vol. II, History Section*, p. 189-90.

[243] Boston Naval Shipyard, Command History, 1 January 1973-1 December 1973, OPNAV Report 5750-1, Command Histories, 1961-1974, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 11.

[244] Carlson, *Ships Built by the Charlestown Navy Yard*, p. 48, 51. Prior to this order, the yard had been authorized to construct two tugs. The motor tug *YMT-15* was constructed in the Structural Shop (Building 104) and launched in Feb. 1932, while the larger harbor tug *YT-119*, later named *Geronimo*, was built in Dry Dock 1 between June 1932 and Jan. 1933. See ibid., p. 60, 64; Black, *Charlestown Navy Yard, 1890-1973*, 2:495.

[245] U.S. Navy, Bureau of Ships, *Ship Contracts Awarded, 1 January 1934-1 July 1956, Private and U.S. Naval Shipyards*, NAVSHIPS 250-641 (Washington: Dept. of the Navy, 1956), p. 357.

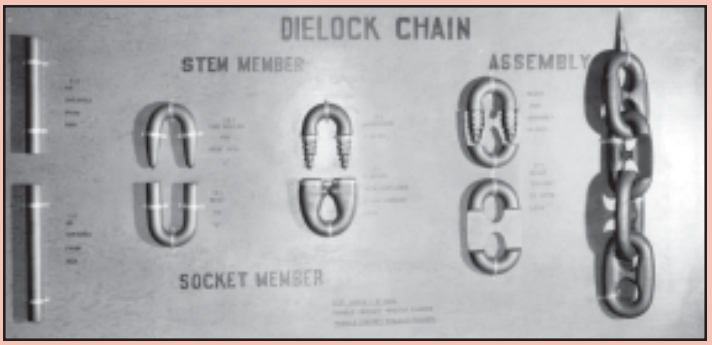
[246] Ibid.; Acting Secretary of the Navy to All Bureaus, etc., May 3, 1934, cited in Black, *Charlestown Navy Yard, 1890-1973*, 2:441.

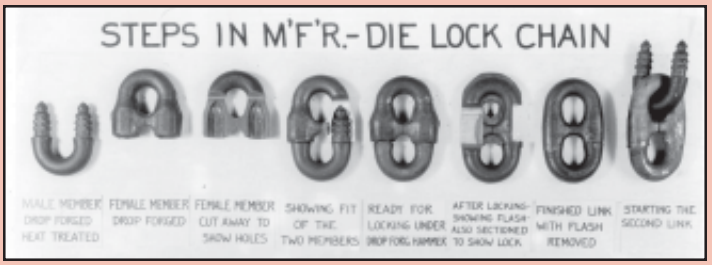
[247] Black, *Charlestown Navy Yard, 1890-1973*, 2:495, 500.

Die-Lock Chain









These displays prepared by the Navy Yard compare die-lock chain with wrought iron and cast steel chain and show the steps in its manufacture. Note the unusual spellings "Dielok" and "Dilok" in the top display.

BOSTS-9684

Ship Construction In The 1930s



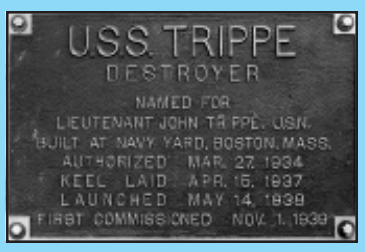
The first destroyer constructed by the Navy Yard is seen in Boston Harbor on June 24, 1935. USS *Macdonough* (DD-351) saw service in the Pacific in World War II and would be sold for scrapping in 1946. *BOSTS-11871*



The first pair of destroyers to be built together in Dry Dock 2, USS *Case* (DD-370) and USS *Conyngham* (DD-371) sit at Pier 5 on Apr. 1, 1937, several months after their commissioning in the fall of 1936. Note the car on Dock St. and the grass field. Part of Building 167 can be seen at left. *BOSTS-10644*



USS *Mugford* (DD-389) and USS *Ralph Talbot* (DD-390) are floated out of Dry Dock 2 on Oct. 31, 1936. Construction had taken about a year to this point, and it would be another ten months of pierside work before they were complete. *BOSTS-13695*



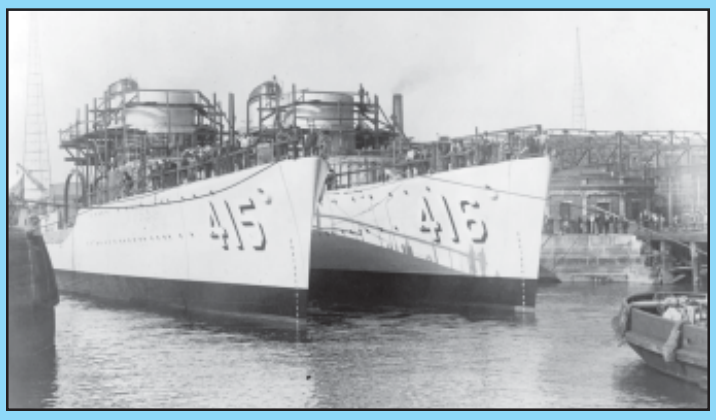
Each ship built by the yard had a cast "historical data" plaque identifying the name source and the key dates in the ship's history. This plaque is for USS *Trippe* (DD-403) *BOSTS-14479*



Preceding *Macdonough* in Dry Dock 1 was the then-unnamed harbor tug *YT-119*. Seen here on Dec. 15, 1932, one month before her launching, she would later be named *Geronimo*. *BOSTS-11233*



In 1938 the yard laid down the keels of four destroyers in Dry Dock 2. These were USS *Lansdale* (DD-426) and USS *Madison* (DD-425) in the background and USS *O'Brien* (DD-415) and (barely visible) USS *Walke* (DD-416) in the foreground. *BOSTS-13817*



All four ships were launched on the same day, Oct. 20, 1939. Here *O'Brien* and *Walke* are towed from the dock. Both, along with *Lansdale*, would be lost to enemy action during World War II. *BOSTS-13817*

were under construction in that facility simultaneously. Rather than being launched in the traditional way by sliding down inclined ways into the water, ships built in the dry dock were "floated" by having the dock flooded.

The Yard In The 1930s

The Navy Yard in the early 1930s was not that different from the yard at the end of World War I (see Figures 2-17, 2-18). The only real modernization had occurred along the waterfront, with the repair of most of the yard's wooden piers, and in the organization of the materiél storage area at the yard's eastern end. Ship construction had resumed, using the dry docks as building basins in part because the Shipways required extensive rehabilitation. There were also serious problems with many of the yard's shop and office buildings, ranging from leaking roofs to obsolete plumbing and wiring.[248]

The 1930s saw an acceleration of activity at the Navy Yard. The ship construction program moved forward both in response to growing threats from Japan and, after the March 1933 inauguration of President Franklin D. Roosevelt, as an effort to help combat unemployment. The number of yard workers, which had stood at 1,533 in November 1932, would grow slowly during the 1930s (with a brief reduction during the 1937 Recession) to a level of 5,169 in December 1939.[249]

The Roosevelt Administration sought to help the nation recover from the massive unemployment caused by the 1929 stock market crash and the subsequent Great Depression by creating numerous public works programs. One of these was the Works Progress Administration (WPA), which, in its mission of putting the unemployed "back to work in jobs which would serve the public good and conserve the skills and the self-esteem of workers," undertook everything from programs to employ artists and writers to the construction of public buildings and infrastructure.[250]

Starting in 1936 and continuing into 1941, the WPA completed a number of projects within the Navy Yard (see Figure 2-19). At the peak of WPA activity, in November 1938, there were 1,406 WPA employees working in the yard.[251] As the authors of the administrative history of the yard's Industrial Department during World War II put it, "the WPA rendered a very useful service in times when naval funds were not yet available for a large amount of very necessary work."[252]

Among the projects that the WPA accomplished were the replacement of porches and the construction of an addition to house a new kitchen on the Commandant's House (Quarters G); the addition of a stair tower and porches to the Marine Barracks (Quarters I); and extensive interior renovations to Buildings 5, 33, 38, 39, 107, and 153 and more modest work on the interiors of many others. Several buildings were totally rebuilt or replaced with new ones, including Buildings 1, 109, 131, 141, and 165, while Buildings 47, 77, 103, 104, 105, 108, 136, and 191 received additions. The door at the west end of Building 36 was enlarged to allow railroad cars to enter the building. Among more routine exterior maintenance work was the reroofing of Building 5 and the repointing of Building 114.[253]



The Navy Yard benefitted from both the economic recovery and preparedness programs of President Franklin D. Roosevelt. On August 10, 1940, Roosevelt (seen in the right rear seat of the presidential limousine with Secretary of the Navy Frank Knox and U.S. Senator David I. Walsh) became the first President since Andrew Johnson to visit the yard when he toured Charlestown as part of a series of inspection trips to national defense plants. *BOSTS-13352*

Waterfront work included the reconstruction of the south end of Pier 1, replacement of the seawall at Building 153, and improvements to the Shipways. Site work involved the enlargement of Gate 5; reconstruction of the Tennis Courts; and extensive improvements to the Plate Field east of Building 104, including construction of an overhead crane system.

Between 1936 and 1939 the WPA also built several new buildings. These included the Salvage Stores Building (Building 193) and a Gasoline Filling Station (Building 194) at Charlestown and the Marine Barracks (Building 15) at South Boston. In combination with Navy funding, the WPA constructed the Ship Machinery Test Plant (Building 196) on ground south of the Machine Shop (Building 42).

The most extensive WPA project, however, involved erection of a new Pipe Shop (Building 195) on what had been open space used as athletic fields between Dry Dock 2 and the Machine Shop (Building 42). No sooner had the structure been completed in 1938 than the Navy and WPA began work on what ultimately would be three extensions of the structure.

Other projects being undertaken by the Navy as the decade ended included major extensions of the Structural Shop (Building 104) and the Machine Shop (Building 42).[254] While the WPA did not construct the new Machine Shop addition, it did preparation work

[248] Ibid., 2:476, 478-79, 485.

[249] Ibid., 2:446-48, 457-58, 479.

[250] Don Adams and Arlene Goldbard, *New Deal Cultural Programs: Experiments in Cultural Democracy* [web page] (1995) [http://www.wwcd.org/policy/US/newdeal.html], accessed Oct. 15, 2001. The Works Progress Administration became the Work Projects Administration on July 1, 1939. For a summary of WPA activities and accomplishments from 1935 to 1940, see Franklin D. Roosevelt, *The Public Papers and Addresses of Franklin D. Roosevelt – 1940 Volume: War–And Aid to Democracies*, Samuel I. Rosenman, comp. (New York: Macmillan, 1941), p. 40-48.

[251] Black, *Charlestown Navy Yard, 1890-1973*, 2:458. At the same time there were 3,875 civilian employees of the yard itself. See *United States Naval Administration, World War II: Commandant, First Naval District*, 11 vols. (typescript; 1946), vol. 8, *Wartime History of Major Naval Industrial Establishments*, part 1, *The Navy Yard Boston (The Naval Shipyard)* [hereafter *Navy Yard Boston in World War II*], chap. 1, p. 2.

[252] *Naval Yard Boston in World War II*, chap. 1, p. 4.

[253] Ibid.; Black, *Charlestown Navy Yard, 1890-1973*, 2:479-80, 485-87. The list of WPA projects has been compiled from a review of construction progress photos in the Boston Naval Shipyard Photo Collection.

[254] McGinley Hart & Associates, *Shipfitters' Shop, Building 104.*

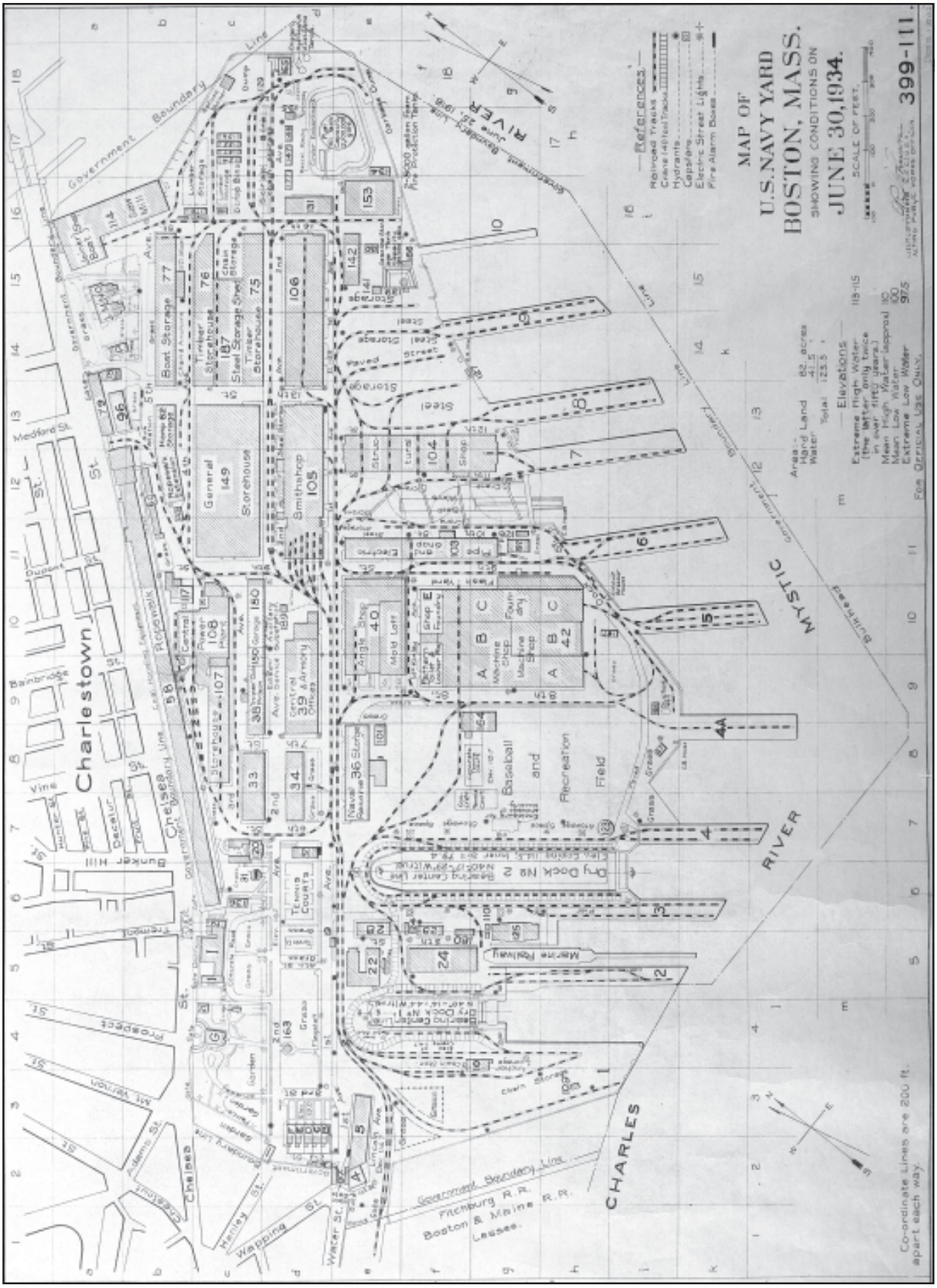


Figure 2-18 – Plan of Navy Yard, 1934

"Map of U.S. Navy Yard, Boston, Mass., Showing Conditions on June 30, 1934," June 30, 1934. While there had been little new construction since the end of World War I, the storage areas had been reorganized at the east end of the yard. *BOSTS-13502*

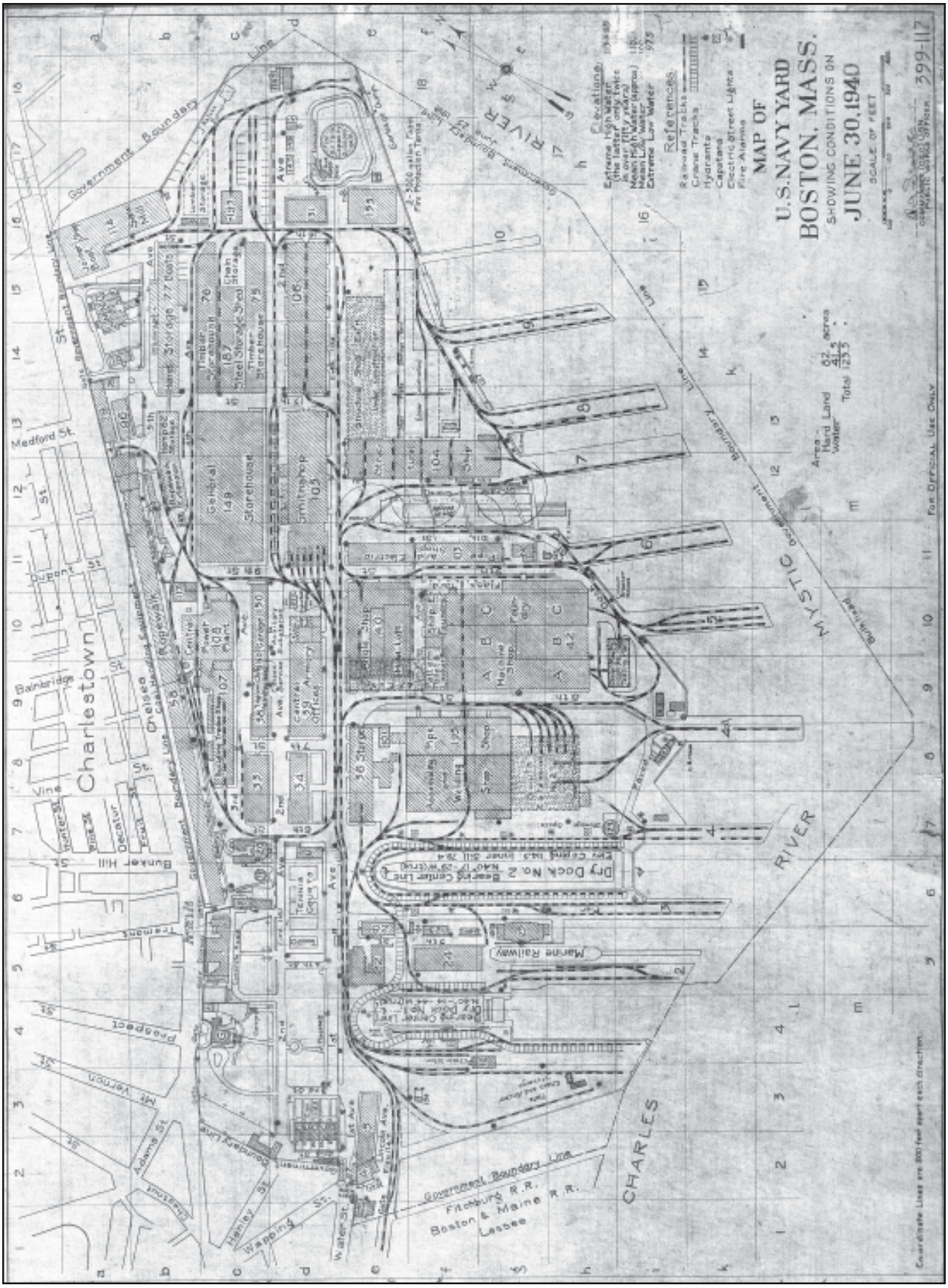


Figure 2-19 – Plan of Navy Yard, 1940

"Map of U.S. Navy Yard, Boston, Mass., Showing Conditions on June 30, 1940," June 30, 1940. This plan shows the changes in the physical plant resulting from projects undertaken by the WPA. *BOSTS-13502*

The WPA And The Navy Yard: A Gallery

DURING THE LAST HALF OF THE 1930s, the WPA undertook numerous public works projects in the Navy Yard. This gallery presents pictures depicting many of those projects, except for the Pipe Shop (Building 195), treated separately. The 1940 yard plan (Figure 2-19) shows the location in the yard of each structure shown.





Pier 1, Mar. 17, 1937 & Sept. 10, 1937

The replacement of the southern end of Pier 1 was the most extensive waterfront improvement project undertaken by the Navy and the WPA. It involved removal of the existing structure except for the two corner piers and placement of a concrete deck over concrete arches and steel beams extending from the bulkhead behind which the pier was solid fill. The view above shows the driving of fender piles on the pier's west side, while that at right shows the preparation for repaving using large and small granite blocks and brick pavers. Note the rail for the portal crane tracks which were added along the east side of the pier as a part of the reconstruction project. *BOSTS-8696 (above); BOSTS-8695 (right)*





Seawall at Building 153, Dec. 2, 1936

Between Aug. 1936 and Nov. 1937, the WPA reconstructed a portion of the seawall south of the Ordnance Storehouse (Building 153). The work would not last long, for in November 1941 construction began on a building dock (Dry Dock 5) in this area of the yard. *BOSTS-9927*



Plate Yard, Dec. 1, 1938 & Dec. 1, 1939

The WPA undertook a major reorganization of the yard's steel storage area, installing two overhead electric cranes (Structure 262) and plate racks to hold steel plates. The finished Plate Yard is seen at left. A year later, above, as the framing for the Structural Shop Extension (Building 104) rose behind it, the WPA began work to expand the Plate Yard further south. *BOSTS-8970*

The WPA And The Navy Yard: A Gallery



Shipways 1, Oct. 6, 1938



Shipways 1, Mar. 1, 1939

In the 1930s the yard constructed vessels in its dry docks because the Shipways, unused since the launching of USS *Whitney* in 1923, required rehabilitation. As a part of this project, the ways were widened and extended inland to allow the yard to build either large ships or more than one vessel at the same time. *BOSTS-8983*



Building 1, Aug. 28, 1936

The Garage & Chauffeur's Quarters, built adjoining the older Building 1 along the yard's western boundary, was an L-shaped structure with three garage bays and quarters for the Commandant's chauffeur. Building 1 is the only complete WPA building to survive in 2004. *BOSTS-9250*



Building 5, June 5, 1937

Among the exterior work the WPA performed on Building 5 was the replacement of its slate roof. Here, the northeastern roof has been stripped in preparation for reslating. Note the radio antenna extending from the ridge pole. There was a similar antenna at the east end of the roof. *BOSTS-9259*



Building 10, Nov. 1, 1937

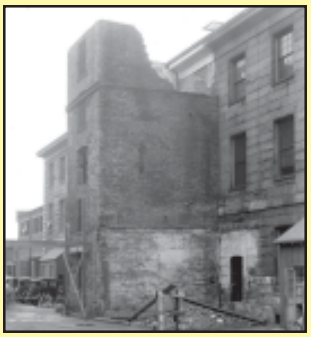
The WPA completely rebuilt the first 9 feet at the north end of the west wall which had cracked due to foundation settlement and repointed the entire structure's brickwork. *BOSTS-9272*



Building 36, Aug. 24, 1936

The WPA laid new railroad tracks in various locations in the yard, including this spur into the newly-enlarged west doorway of Building 36, then used as a storehouse. *BOSTS-9354*

The WPA And The Navy Yard: A Gallery





Building 38, June 5, 1935 & Mar. 30, 1936
While the WPA usually constructed additions to existing structures, it demolished the brick washroom addition on the north side of Building 38. This work was done in conjunction with extensive interior modifications that saw the removal of the Naval Prison from the structure. At left, demolition has begun, while at right only the base of the addition remains. *BOSTS-9363*



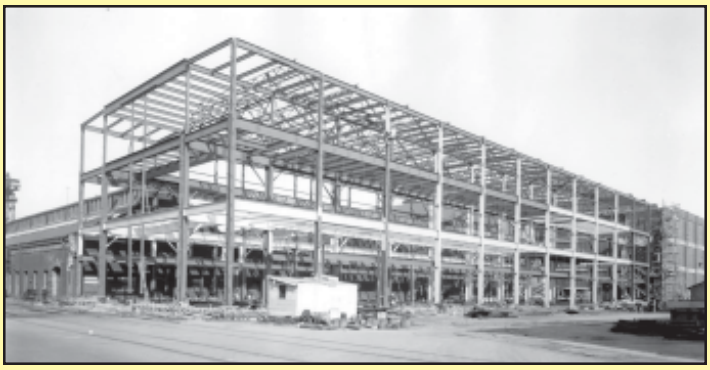


Building 47, Nov. 1, 1938
In 1938 the WPA added wings on both ends of the Waterfront Office (the Civil War-era Heavy Shell House) and converted it into a Galley & Mess for crews of ships undergoing repair in the yard. *BOSTS-9508*





Buildings 40 and 42, Dec. 1, 1939
The WPA did the demolition of the western ends of Building 40 and the north wing of Building 42 as part of the site preparation work for an extension of the Machine Shop. *BOSTS-9387*



Building 42A, Apr. 11, 1940
By April 1940, the steel framework for the Machine Shop Extension was in place. The construction of this structure was done by the Navy Yard's own workforce rather than the WPA. *BOSTS-9387*



Building 77, Apr. 13, 1937
The WPA built this brick addition to the granite Boat Storehouse to provide garages for residents of Quarters L-M-N-O and Quarters P. This addition remained after the original building was demolished in 1941, but would fall victim to the Boston Redevelopment Authority in the late 1970s. *BOSTS-9593*

Building 103, May 19, 1936
This lean-to for pipe storage was constructed along the 10th Street side of the Pipe Shop. Not long after this project was completed, the WPA would begin construction of a completely new Pipe Shop (Building 195) and this addition would be demolished in 1939 in conjunction with the extension of the Shipways. *BOSTS-9609*

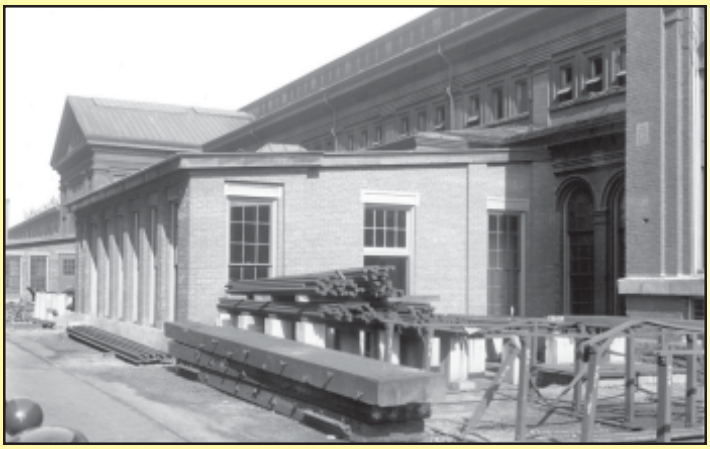
The WPA And The Navy Yard: A Gallery



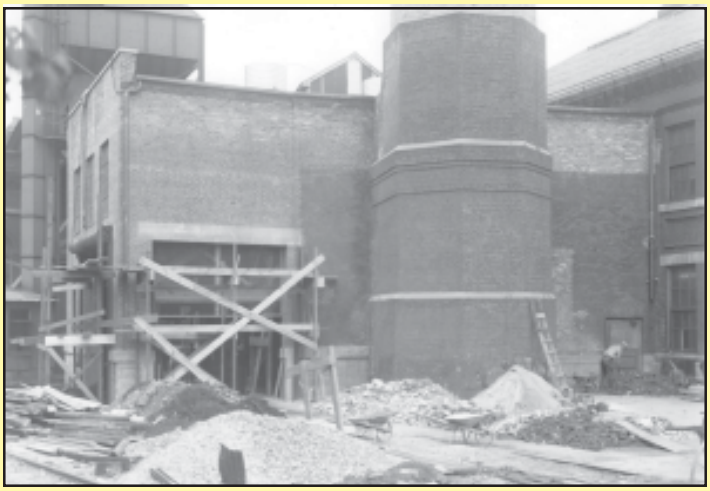
Building 104, July 2, 1936
This substation addition at the southeast end of the Structural Shop would survive after the main building was shortened in 1941 to make way for Shipways 2. In 1950 the Substation was designated Building 224.
BOSTS-9619



Building 104, ca. May 1940
In 1939, the Navy began construction of an extension to the Structural Shop along First Ave. at a right angle to the original structure. With the exception of the steel framework, most of the work was accomplished by yard forces with assistance from the WPA. *BOSTS-9620*



Building 105, Sept. 9, 1936
This Shear House addition was added to the north side of the Forge Shop.
BOSTS-9648



Building 108, Oct. 7, 1936
A new Incinerator was added to the Power Plant complex. Building 107 is at right.
BOSTS-9766



Building 109, Oct. 7, 1937
The Substation, the last remnant of the old Coaling Plant, was stripped to its steel framework and rebuilt by the WPA. *BOSTS-9812*



Building 114, Oct. 7, 1937
The repointing of the Saw Mill & Boat Shop included repairing damage to the building's brick work from the Nov. 1934 explosion of Building 165. Note the die-lock chain stored in the foreground. *BOSTS-9817*

The WPA And The Navy Yard: A Gallery



Building 131, July 14, 1939
In 1938 the WPA demolished the concrete Oil Storehouse dating from World War I and constructed this three-story brick replacement.
BOSTS-9878



Building 141, Sept. 1, 1939
The WPA moved the Fuel Oil Pump House to the site of Building 134 from its original location further to the west as part of the site preparation work for the Structural Shop Extension (Building 104). In its new location, it was much closer to the Fuel Oil Tank, seen in the background. *BOSTS-9887*



Building 191, 1940
The WPA construction an addition which doubled the size the Pump House for the Suction Well for cooling water for the Power Plant. *BOSTS-9935*



Building 136, Aug. 11, 1937
The Marine Corps Administration Building was doubled in size with the construction of this addition which brought it to the edge of Second Ave.
BOSTS-9883



Building 165, Nov. 13, 1934



Building 165, Mar. 11, 1937
In Nov. 1934 the Acetylene Plant was destroyed by an explosion of such severity as to cause damage to brickwork on Building 114 nearly 500 feet away. Starting in May 1936, the WPA cleared the site and constructed the replacement structure seen in the lower photo.
BOSTS-9929 (top); BOSTS-9930 (bottom)



Building 193, Aug. 28, 1936
The first major new building constructed by the WPA was the Salvage Stores Building, located along 16th Street opposite Building 187. As a part of this project, several World War I temporary Storage Sheds (Buildings 148, 154, 155, 156, 157) were demolished. *BOSTS-15753*

The WPA And The Navy Yard: A Gallery



Building 194, Mar. 17, 1937
The Gasoline Filling Station was constructed on Pier 1 in an area which had been grass rather than pavement. Building 5 can be seen in the background, with recent changes in window openings surrounded by as yet unpainted brick. *BOSTS-15755*



Building 196, Apr. 3, 1940
Begun by the WPA in 1939 as the Ordnance & Pipe Covering Shop, this structure was completed, with the assistance of naval funding, as the Ship Machinery Test Plant. The south end of the Machine Shop (Building 42) is at left. *BOSTS-9969*



Quarters G, Aug. 28, 1936 & Dec. 2, 1938
The WPA worked on all of the yard's quarters, mostly doing repairs or modifications to porches. The most extensive work was done on the Commandant's House, above, where the older porches were completely removed and replaced with new ones on brick piers which incorporated a sun room on the yard side (technically the back) of the house. Two years later, the WPA returned to the Commandant's House to construct a two-story wing incorporating a new kitchen for the house, seen nearing completion at right. *BOSTS-9185*





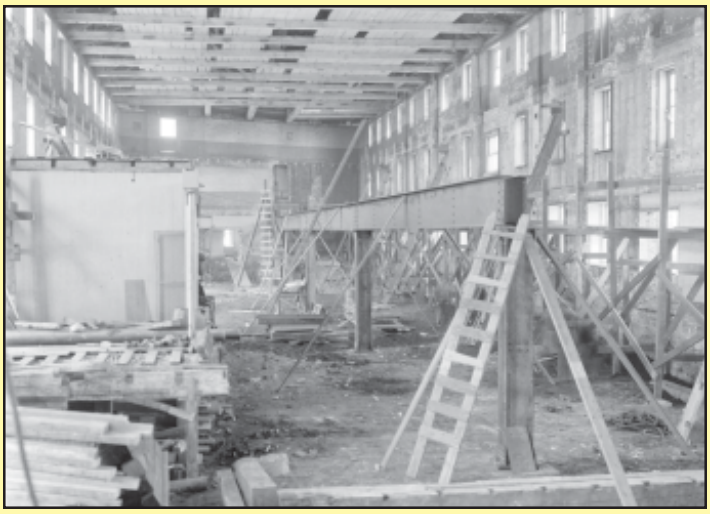
Building 15, South Boston, Mar. 11, 1937
The only major project undertaken by the WPA at the South Boston Annex was the construction of a Marine Barracks. *BOSTS-14998*



Marine Barracks (Quarters I), Mar. 6, 1941
In one of its last projects, the WPA added two fireproof escape towers and porches to the Marine Barracks. *BOSTS-9223*

The WPA And The Navy Yard: A Gallery

NO REVIEW of the work accomplished by the WPA can be complete without a sampling of some of the interior projects it undertook. As can be seen, they ranged from minor rehabilitation to total gut reconstruction, with many projects focusing on outdated plumbing and electrical services. This page illustrates just some of the WPA's interior projects.



Building 5, Apr. 9, 1936
Building 5, originally constructed in 1813, was completely gutted and rebuilt with steel framing. This view looks west, toward the angled wall which followed the original yard boundary. *BOSTS-9265*



Building 33, Mar. 11, 1937
Workers lay brick for a new fireproof stairway on the third floor as part of changes to convert the former Sail Loft into barracks for the Receiving Station. *BOSTS-9334*



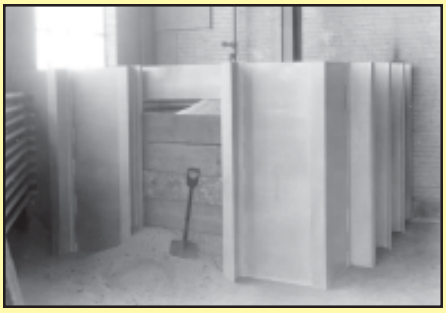
Building 107, Aug. 25, 1936
Among the work done on the first floor of the Building Trades Shop was the relaying of the railroad track within the building. *BOSTS-9754*



Building 22, Jan. 27, 1937
This new Toilet & Washroom on the second floor of Building 22, for Dry Dock workers, was in the area originally occupied by the dock's pumps and today used as the Samuel Eliot Morison Library of the USS Constitution Museum. *BOSTS-9294*



Building 38, Mar. 30, 1936
This view shows the removal of the cells of the former naval prison at the east end of Building 38 as part of the remodelling of the structure for the Garage Repair Shop and Movie Hall. *BOSTS-9363*



Building 42, Nov. 13, 1936
Not all projects were major ones. This view shows a sand bin constructed in Building 42. *BOSTS-9416*

The Pipe Shop And Assembly & Welding Shop (Building 195)



The Recreation Field, the largest open space in the yard, was chosen for the site of the new Pipe Shop. This Nov. 1, 1937, view shows preliminary site work and soon-to-be-demolished Building 164, a Storehouse & "Clearing" House built as a temporary structure in 1918. *BOSTS-9940*





By June 2, 1938, the new Pipe Shop had arisen along the 8th Street side of the site. Three weeks later, on June 22, 1938, Master Plumber John F. Keane and Miss Elizabeth Jean Kell lay the cornerstone for the building as an officer in dress uniform looks on.
BOSTS-9940 (above); BOSTS-9941 (right)



By Dec. 1, 1938, steelwork for an extension to hold the Assembly & Welding Shop had arisen to the west of the original structure. *BOSTS-9940*



The new extension was a mirror image of the original, so that the resultant structure's south facade, seen in the snow on Feb. 6, 1939, showed no indication that it had not been built as a single building. *BOSTS-9940*



The three walls of the small Locker Room addition on the west side, seen at right under construction on Apr. 3, 1939, are the only portion of the massive structure to survive in 2008. *BOSTS-9940*





By Sept. 1, 1939 (top), work had begun on a South Extension of the building, which was nearing completion in the Mar. 8, 1940, view above.
BOSTS-9940



The North Extension is seen on June 3, 1941. It filled the space between the original building and its West Extension and Building 36, and resulted in the demolition of both Building 101 and the Boiler House extension of Building 36. *BOSTS-9940*

in the form of demolition of the west ends of Building 40 and the north wing of Building 42.[255]

The Yard In World War II

On September 8, 1939, President Roosevelt declared a national emergency as a result of the outbreak of war between Germany and Great Britain and France a few days earlier. Congress moved quickly to increase the size of the Navy, not only because of the war in Europe but also due to the potential of a conflict in the Pacific with Japan. The "Two-Ocean Fleet" became the basis of naval policy. The Navy began to order increasing numbers of combatant ships, and to acquire merchant vessels for conversion into auxiliaries to support fleet operations remote from land bases. The Charlestown Navy Yard was soon heavily involved in both activities.

To enable the yard to meet its shipbuilding targets and to carry out its other activities, employment soared dramatically. In June 1938, there were 2,860 employees on the yard's payroll. This nearly doubled over the next year, and by mid-1941 had grown to just under 17,000. That number doubled again over the next year, and continued to increase until reaching the wartime (and all-time) high of 50,128 on June 30, 1943. Thereafter, the numbers declined somewhat, so that shortly after V-E Day in May 1945 it was down to 36,329.[256] For the first time, the workforce included significant numbers of minorities and women.

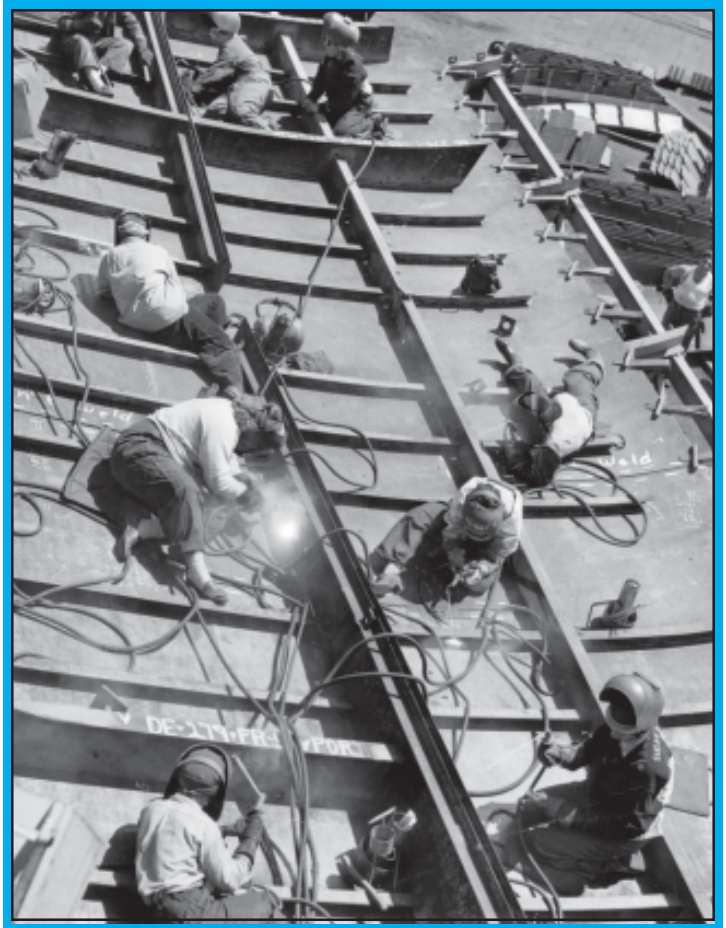
While approximately 150 women had been employed in the Ropewalk during World War I, World War II saw the employment of women in large numbers in all types of industrial jobs. By mid-1943 some 17 percent of the workforce was female; the number would peak at 8,520 on November 1 of that year.[257] Because the Navy would not assign women to work on commissioned ships, which had male crews on board, women worked largely in the shops and on new ship construction.[258] In 1943, to help cope with the increasing stream of applicants, a two-story wooden structure was added to the west end of the Ropewalk (Building 58), with a direct entrance to Chelsea Street so that applicants did not need to enter secure areas of the yard.[259]

In addition to numerous minor structures, such as temporary service sheds on piers, the Navy Yard built a number of new facilities during the early years of the war (see Figure 2-20).[260] As had occurred in World War I, there was a tremendous need for storage facilities. A large wooden Temporary Storehouse (Building 198) was erected in 1941 between Building 32 and 4th Street, an area formerly occupied by tennis courts. This structure was modified in 1944 to

The Workforce In World War II



The Navy Yard achieved its highest levels of employment during World War II, peaking at just over 50,000 in mid-1943. This photograph of a shift change on Jan. 18, 1943, gives an indication of the huge numbers of workers. *Boston Globe*



A major change in the workforce came in the form of the employment of women in industrial jobs. In a still-paternalistic yard, they were assigned to shops and new ship construction so as to avoid exposure to sailors on ships in the yard for repairs. Here, a crew of women welders work on the hull of the escort vessel DE-279 shortly after her keel-laying on June 5, 1943. Originally assigned the name USS *Trumpeter*, the ship would be completed for Britain as HMS *Kempthorne* (K.483). *BOSTS-14958*

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[255] *Navy Yard Boston in World War II*, chap. 1, p. 4; App. B, p. 2.

[256] "Appendix 19 – Employment Record, 1938-1957," in Mansfield, *Boston Naval Shipyard, 1938-1957*, p. 89

[257] Ibid.

[258] Black, *Charlestown Navy Yard, 1890-1973*, 2:568. On the roles of women in the shipyard during the war, and of management reluctance to accept women in non-traditional occupations, see Celeste Bernardo, *There Were No "Sheila Shipfitters": Gender Segregation at the Boston Navy Yard, 1942 to 1945* (M.A. thesis, Northeastern, 2001), TIC 457/D6389. Refuting the popular perception that wartime employment of women promoted sexual equality, Bernardo concludes that "although women and men worked side by side, existing ideologies prevented men from accepting women as equals in the workplace." See ibid., p. iii.

[259] *Navy Yard Boston in World War II*, chap. 1, p. 18; chap. 4, p. 16-17.

[260] Mansfield, *Boston Naval Shipyard, 1938-1957*, p. 13, 26, 68.

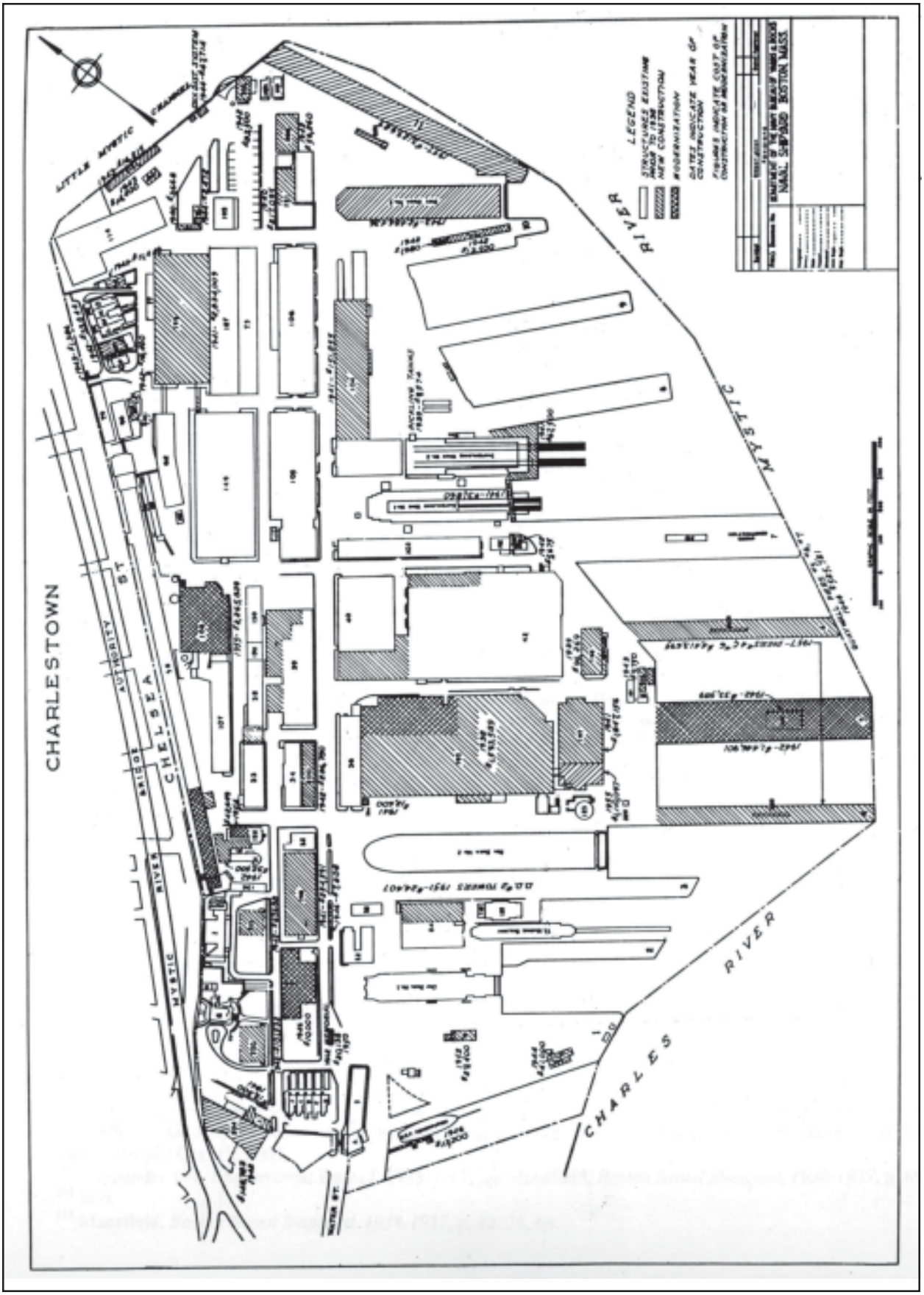


Figure 2-20 – Construction of Facilities During World War II

Growth of Boston Naval Shipyard Since 1938, ca. 1957. This drawing shows the year completed and the total cost for improvements made at the Charlestown Navy Yard during and after World War II. *Mansfield*, Boston Naval Shipyard Historical Review, 1938-1957

The Navy Yard In 1945



This color aerial photograph taken on July 3, 1945, shows the Navy Yard at the end of World War II. While green space still exists in the area of the Marine Barracks Parade Ground, Commandant's House, and the yard's Flag Pole, even those areas had been affected by wartime construction as the Navy installed concrete Water Storage Tanks (Buildings 220, 221) under two of them. Following World War II, the Commandant's House tank was converted to a Fuel Oil Storage Tank. Elsewhere, open space had been taken up by either new buildings, additions to older ones, or materiél storage yards. *BOSTS-8615*

provide barracks for Navy WAVEs on its roof.[261] A new Storehouse (Building 199) was erected to the east of and to the same design as the existing Storehouse (Building 149), connected to it with bridges at several levels. This project, done in two phases, resulted in the demolition of two of the yard's 19th-century granite buildings, a Timber Shed (Building 76) and the Boat Storehouse (Building 77).[262] The Oil & Paint Storehouse (Building 131) was extended in 1941 on a contract which also saw an Incinerator (Building 203) and a Locker Building (Building 206) constructed at the east end of the yard.[263]

That same contract saw a two-story wooden addition added at the east side of Building 24, resulting in the demolition of Building 23, as well as additions to the Buildings 31, 33, and 39.[264] A new high-rise Electrical Shop (Building 197) was erected between the Assembly & Welding Shop (Building 195) and the waterfront by Piers 4 and 5.[265] Yard and WPA forces constructed a new Public Works Building (Building 200) on the open space between Building 34 and First Ave.[266] A concrete garage, constructed just outside the Navy Yard in 1927, was purchased as a Garage & Maintenance Shop (Building 204) for the Transportation Shop.[267] To help meet the increased needs for steam and electricity, an extension of the Power Plant (Building 108) was started in August 1940.[268] In 1943, the south wing of the Forge Shop (Building 105) was raised one story, while the north wing was demolished and replaced by a new extension.[269]

Improvements to the waterfront started in early 1941 with the award of a contract to replace wooden Pier 4A with a new concrete Pier 5. Over the next two years, Piers 4, 6 (formerly 5), 7 (formerly 6), 8, and 9 were all extended to the 1918 Harbor Commissioners' line.[270] Bulkheads between piers and at the east end of the yard were reconstructed, and a new pier, Pier 11, added along the southeast side of the new configuration.[271] To assist in the management of increased water traffic, the Pier 1 Substation (Building 109) was enlarged in mid-1942 and again two years later to house offices for the yard's harbormaster.[272]

Modernization of the yard's railroad system came about with the purchase in 1939 of the first diesel locomotives, which were to

[261] Edwin C. Bearss, et al., *Historic Structure Report, Building 198, Charlestown Navy Yard, Boston National Historical Park, Massachusetts* (Denver: Denver Service Center, 1982), TIC 457/D1888.

[262] Judith McDonough, "Chronological Profile," Nov. 1976, in Boston Redevelopment Authority, *Building 199, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6031.

[263] *Navy Yard Boston in World War II*, chap. 1, p. 9-10; App. B, p. 6; "Incinerator (Building 203)," in McGinley Hart & Associates, *Historic American Engineering Record: Historical Documentation of Selected Structures at the Charlestown Navy Yard* (Sept. 1993), TIC 457/D6302.

[264] *Navy Yard Boston in World War II*, chap. 1, p. 9-10; App. B, p. 6.

[265] Ibid., chap. 1, p. 7-8; App. B, p. 5.

[266] Ibid., chap. 1, p. 21, 23.

[267] Bearss, Marie, and Schroeder, *Historic Structure Report, Building 204*.

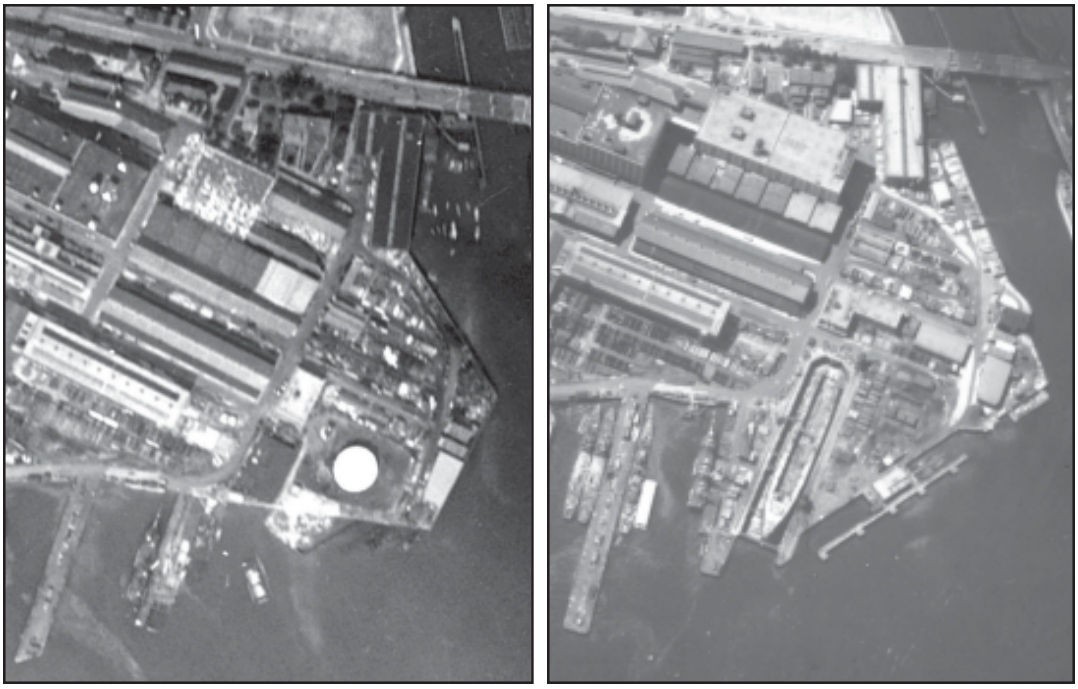
[269] *Navy Yard Boston in World War II*, chap. 1, p. 6; App. B, p. 3.

[269] Carolan, *Building 105/The Forge Shop*.

[270] *Navy Yard Boston in World War II*, chap. 1, p. 9, 12-13, 18; App. B, p. 3, 5, 7; "Pier 9," in McGinley Hart & Associates, *Historic American Engineering Record*. The renumbering of Piers 4A, 5, and 6 as Piers 5, 6, and 7 was facilitated by the removal of Pier 7 for construction of Shipways 2.

[271] *Navy Yard Boston in World War II*, chap. 1, p. 20; App. B, p. 4, 5; "Pier 11," in McGinley Hart & Associates, *Historic American Engineering Record*.

[272] Craig, *Building 109 Historical Survey*.



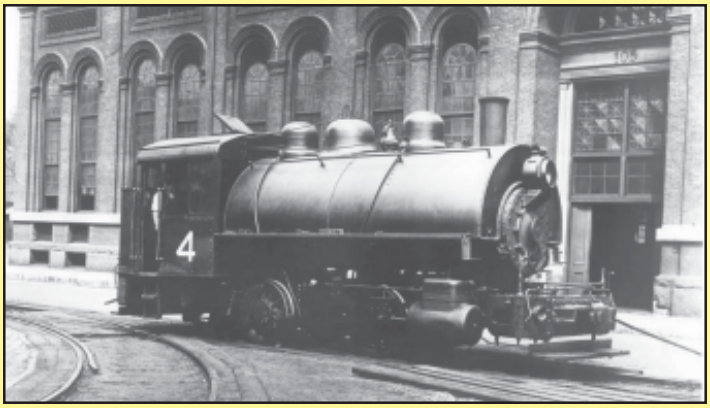
The most dramatic changes to the Navy Yard during World War II came at its east end. These two aerial photographs, taken on Aug. 18, 1941 (left), and July 3, 1945 (right), clearly depict these changes. Gone are the Fuel Oil Tank and old seawalls dating back to the 19th century. In their place are new bulkheads, a new Pier 11, and, most important of all, Dry Dock 5. *BOSTS-8609*

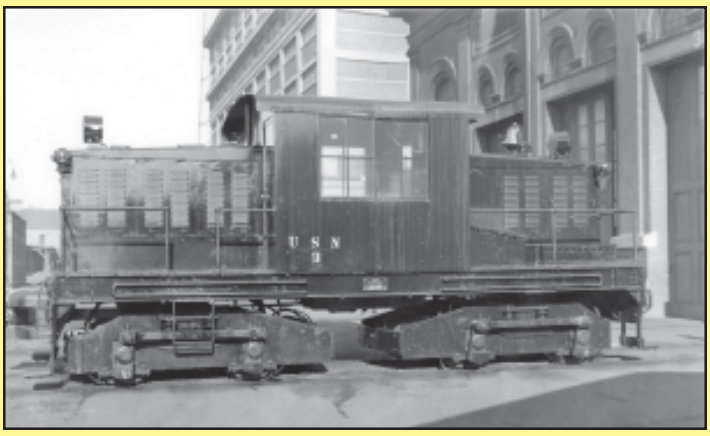
replace the steam engines that had been used since the early 1900s.[273] Additional weight-handling equipment in the form of both portal and locomotive cranes was acquired. Three of the eight high portal cranes (30 [ex-63], 62, and 65) purchased in 1942 from American Hoist & Derrick Co. remain at the Charlestown Navy Yard in 2008; several sisters, along with others, can be found at both Dry Docks 3 and 4 in South Boston.[274] They are among the most often overlooked but most character-defining features of a maritime industrial site.

A further expansion of the Navy's presence in Boston Harbor occurred in 1941 with the acquisition of two marine railways in Chelsea; these became the Chelsea Annex of the yard.[275] In addition to these shipyard facilities, the Navy operated the Naval Local Defense Force at Lockwood's Basin, National Dock, and Commonwealth Pier No. 1 in East Boston.[276] Also in East Boston, the Navy constructed a Fuel Pier and a Fuel Depot Annex, connected by a pipeline along the right-of-way of the recently abandoned Boston Revere Beach & Lynn Railroad.[277] The Navy took over Commonwealth Pier in South Boston for use by the Supply Department.[278]

A 1944 publication of the Bureau of Yards & Docks revealed that about 90 percent of the yard's employees were working on either new ship construction or ship repair. At Charlestown, there were 22 berths (4 at quay walls and 18 at finger piers) for ships, 1 marine railway, and three graving docks. The shipways and piers were served by 7 fixed (hammerhead and stiff-leg derrick) cranes, 7 portal cranes, 26 locomotive cranes, 20 traveling (truck and crawler) cranes, and 3 floating derricks (*YD-11, YD-13, YD-35*) (see Figure 2-

Railroad Modernization: From Steam To Diesel





The modernization of the Navy Yard's railroad system reflected the general trend in the railroad industry to replace steam locomotives in switching and industrial service with those powered by diesel engines. This change can be seen in these views of 0-4-0T steam switcher No. 4 (top), taken on First Ave. next to the Building 105 Headhouse on June 17, 1921, and U.S.N. 3, a 50-ton B-B diesel locomotive (above), outside the Roundhouse (Building 105 Headhouse) on Jan. 29, 1940.

BOSTS-8971 (top); BOSTS-8972 (above)

[273] Progress Photo, Jan. 29, 1940, 50 Ton Diesel-Electric Locomotive, Contract 68046, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8972, Box 1-25.

[274] Stephen P. Carlson, "Portal Cranes at the Charlestown Navy Yard," *The Broadside/Boston National Historical Park* (Autumn 1992), p. 9; U.S. Navy, Bureau of Yards & Docks, [*Ship Repair Facilities*], p. 2, 3.

[275] *Navy Yard Boston in World War II*, chap. 1, p. 7, 13, 17.

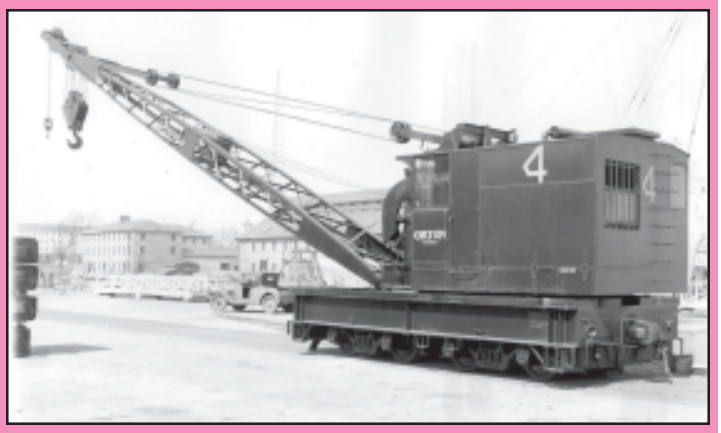
[276] Black, *Charlestown Navy Yard, 1890-1973*, 2:538.

[277] *Navy Yard Boston in World War II*, chap. 1, p. 16-17.

[278] Black, *Charlestown Navy Yard, 1890-1973*, 2:515.



Portal And Locomotive Cranes



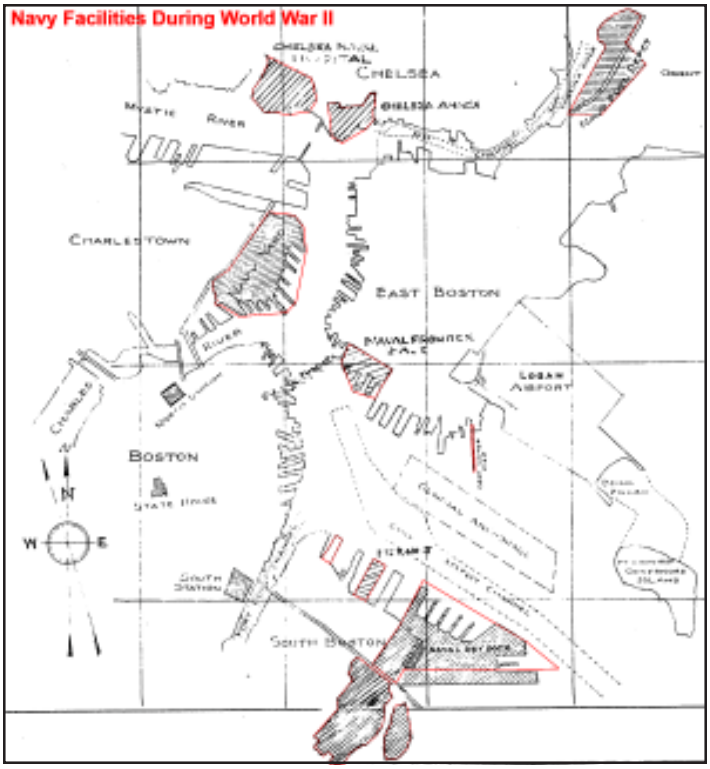
Weight-handling equipment was also modernized and increased just before and during World War II. At left, Low Portal Crane 19, a 50-ton capacity unit built by Kaltenbach, is seen at the end of Pier 1 on Feb. 2, 1940. Above, Locomotive Crane 4 is seen at the southwest end of Dry Dock 1 on Apr. 3, 1940, shortly after the diesel-powered 40-ton unit had been received from Orton of Chicago, Ill.

BOSTS-15670 (above); BOSTS-15673 (left)

21).[279] At South Boston, there were 16 berths (4 at quay walls and 12 at finger piers), 2 graving docks, and 2 wooden floating dry docks (*YFD-24*, *YFD-29*). Weight-handling equipment consisted of 11 portal cranes, 16 locomotive cranes, 8 mobile cranes, and 1 floating derrick (*YD-77*) (see Figure 2-22).[280] The Chelsea Annex had 7 berths (all at finger piers), 2 marine railways, and 2 crawler cranes (see Figure 2-23).[281]

During World War II, as discussed in detail in Chapter 3, the yard developed the South Boston Annex to assume much of the repair load of the shipyard, freeing Charlestown for new ship construction. Both locations performed conversion work. Charlestown dealt primarily with changes to combatants while the Annex handled auxiliaries and small patrol craft. Among the work accomplished at Charlestown in 1944 was the completion of six newly-delivered destroyers as light minelayers (DM) and the conversion of six older ships as high-speed minesweepers (DMS). During 1944 and 1945 it converted eleven landing craft of two different types into coastal minelayers (underwater locator) (AMcU).[282]

Initial conversion work at South Boston in 1942 involved transforming 13 fishing vessels into patrol craft for both the Navy and the Coast Guard. Most of its work thereafter focused on amphibious forces, modifying two naval cargo ships into attack cargo ships (AKA); converting seven escort vessels into high-speed transports (APD); and outfitting a variety of ships, including one naval transport, two newly-delivered Maritime Commission type C2 freighters,



This drawing has been annotated to identify Navy facilities in Boston during World War II, including the Charlestown Navy Yard and its annexes in Chelsea and South Boston (Naval Dry Dock, "E" St. Annex, "K" St. Annex); the Chelsea Naval Hospital; the Naval Frontier Base (Lockwood's Basin) in East Boston; the Naval Fuel Depot and Fuel Pier in East Boston; and Piers 2 and 5 (Commonwealth Pier) in South Boston. Note how the Navy erroneously had included the Boston Army Base in the shading depicting Navy property. Not shown is the route of the pipeline connecting the Fuel Pier to the Fuel Depot. *BOSTS-13528*

[279] U.S. Navy, Bureau of Yards & Docks, [*Ship Repair Facilities*], p. 2.

[280] Ibid., p. 3.

[281] Ibid., p. 4.

[282] Black, *Charlestown Navy Yard, 1890-1973*, 2:630; List of Vessels Converted at the U.S. Navy Yard, Boston, Aug. 14, 1945, Histories of BNS, 1937-1970, Records of the Boston Naval Shipyard, RG 1.1, BNHP,NPS Cat. No. BOSTS-13344, Box 16.

Chelsea Annex No. 3

In 1941 the Navy purchased two small repair yards in Chelsea, seen here on Mar. 25, 1942, shortly before their formal designation as Chelsea Annex No. 3. Marine Railway No. 13, left, was acquired from Boston Dry Dock Co., while Marine Railway No. 12, right, had been the Richard T. Green Shipyard. Between 1941 and 1946 the two railways were used 677 times for small craft. The facility was disposed of in 1949. *BOSTS-7966*

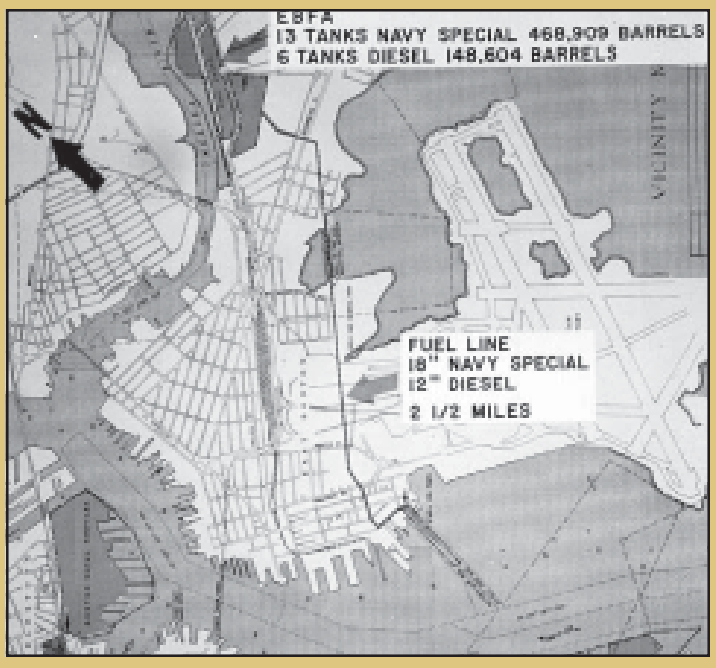


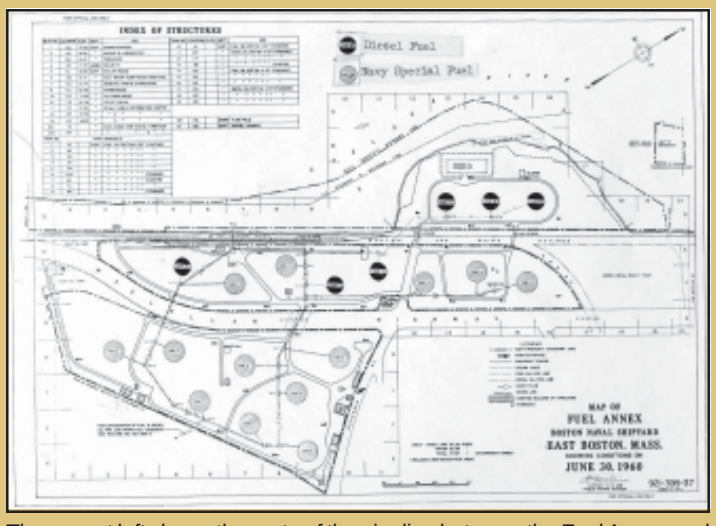
East Boston Fuel Annex And Pier





As a part of the development of a Fuel Depot Annex in East Boston, the Navy built a deepwater Fuel Pier on the East Boston waterfront east of the Bethlehem Steel Co.'s shipyard (left). Seen here on Aug. 16, 1943, it was connected to the storage tanks constructed along the Chelsea River (commonly known as Chelsea Creek) (right) via a pipeline which largely followed the roadbed of the recently abandoned Boston, Revere Beach & Lynn Railroad. The Fuel Depot Annex closed in Feb. 1961. *BOSTS-7903*





The map at left shows the route of the pipeline between the Fuel Annex and Pier, as well as the facility's relationship to the Charlestown Navy Yard. The plan above shows the final layout of the Annex. Note how the McClellan Highway, built in the 1930s as Route C-1 to serve the Sumner Tunnel, bisects the property. *BOSTS-7905*

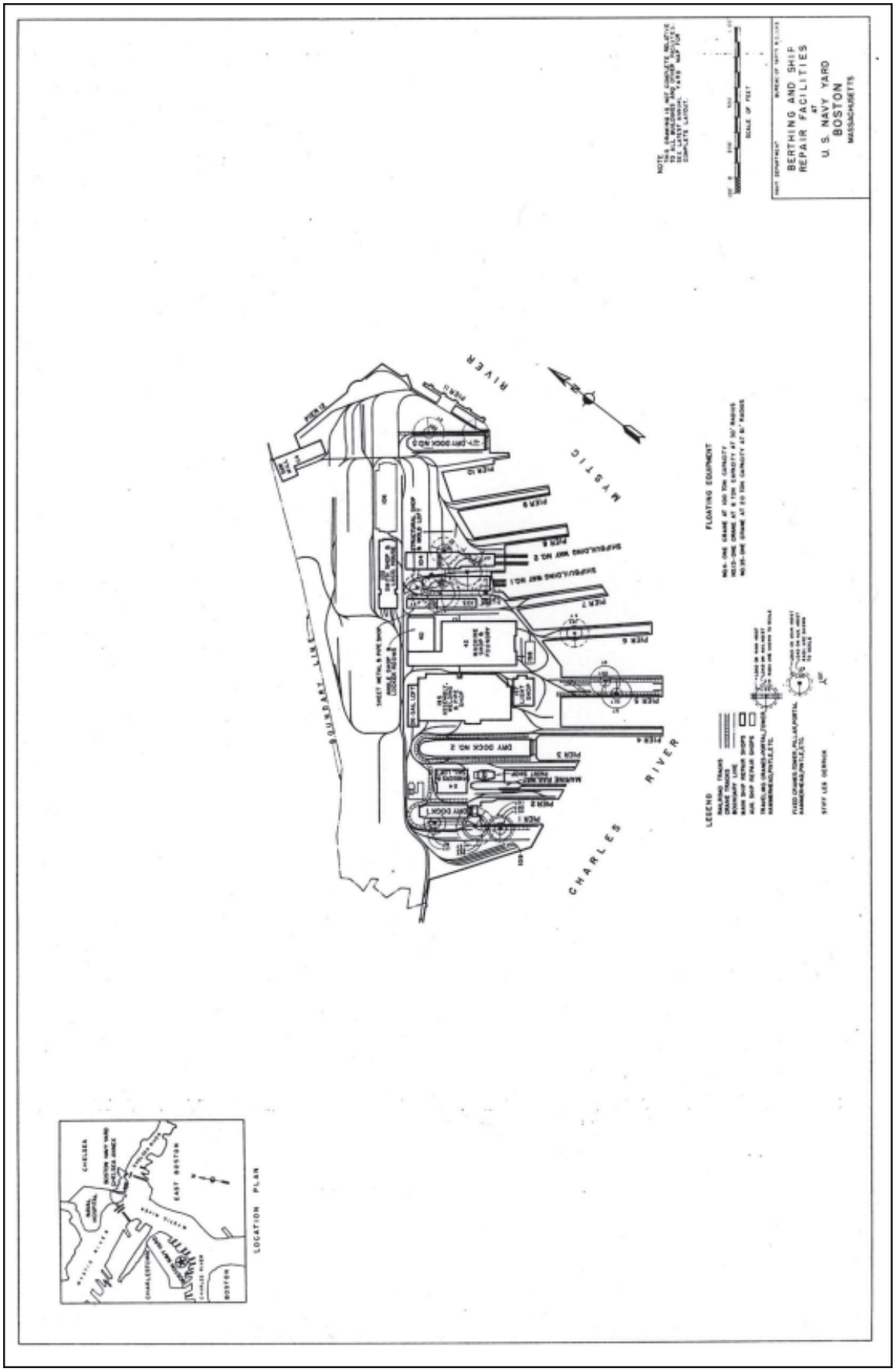


Figure 2-21 – Ship Repair Facilities at Charlestown, 1944

"Berthing and Ship Repair Facilities at U.S. Navy Yard, Boston," Jan. 1, 1944. This drawing shows facilities relating to berthing space and ship repair, including details on the yard's weight-handling equipment. *U.S. Navy, Bureau of Yards & Docks, [*Ship Repair Facilities*]*

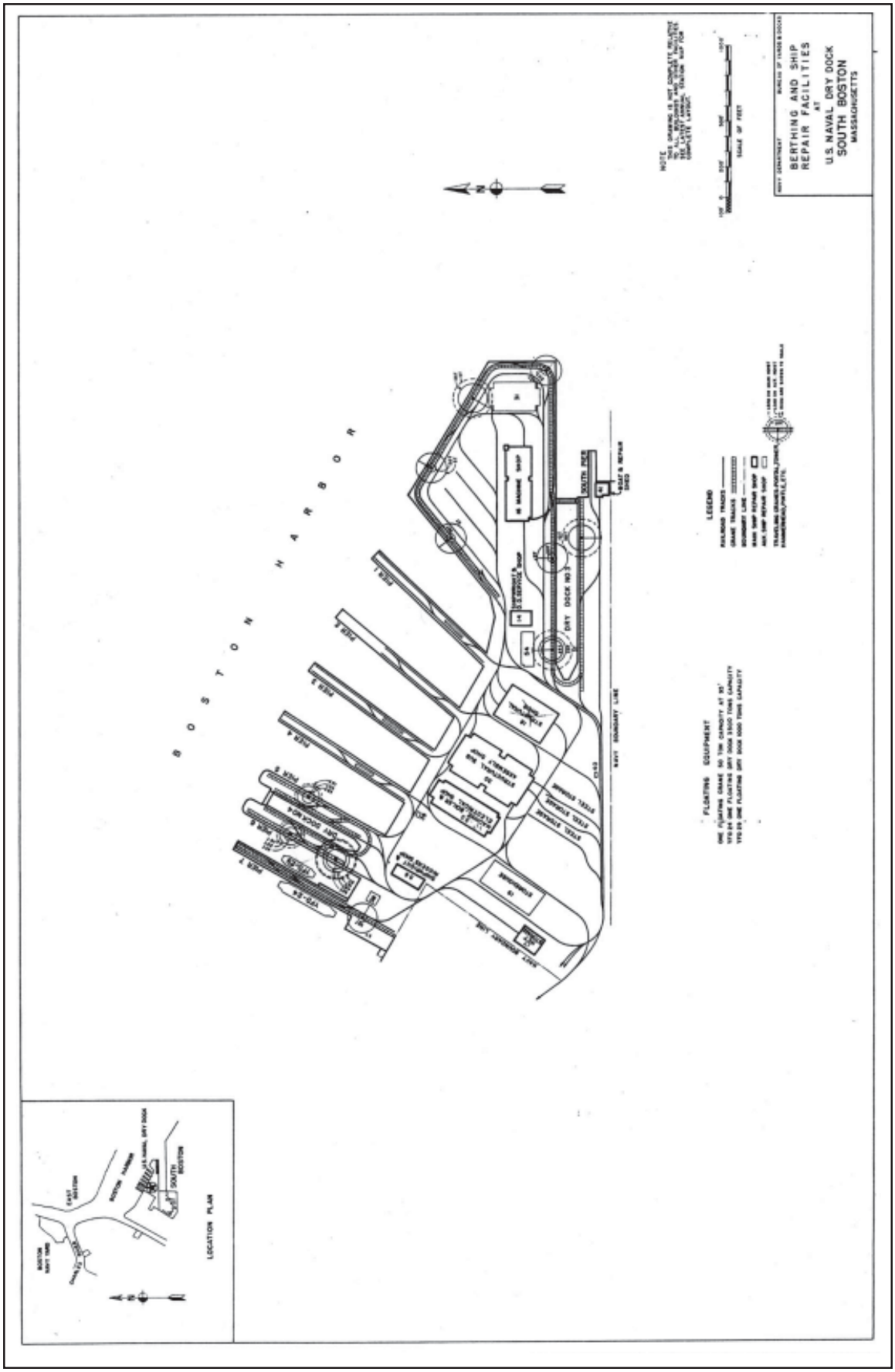


Figure 2-22 – Ship Repair Facilities at South Boston, 1944

"Berthing and Ship Repair Facilities at U.S. Naval Dry Dock, South Boston," Jan. 1, 1944. This drawing shows facilities relating to berthing space and ship repair, including details on the yard's weight-handling equipment. *U.S. Navy, Bureau of Yards & Docks, [*Ship Repair Facilities*]*

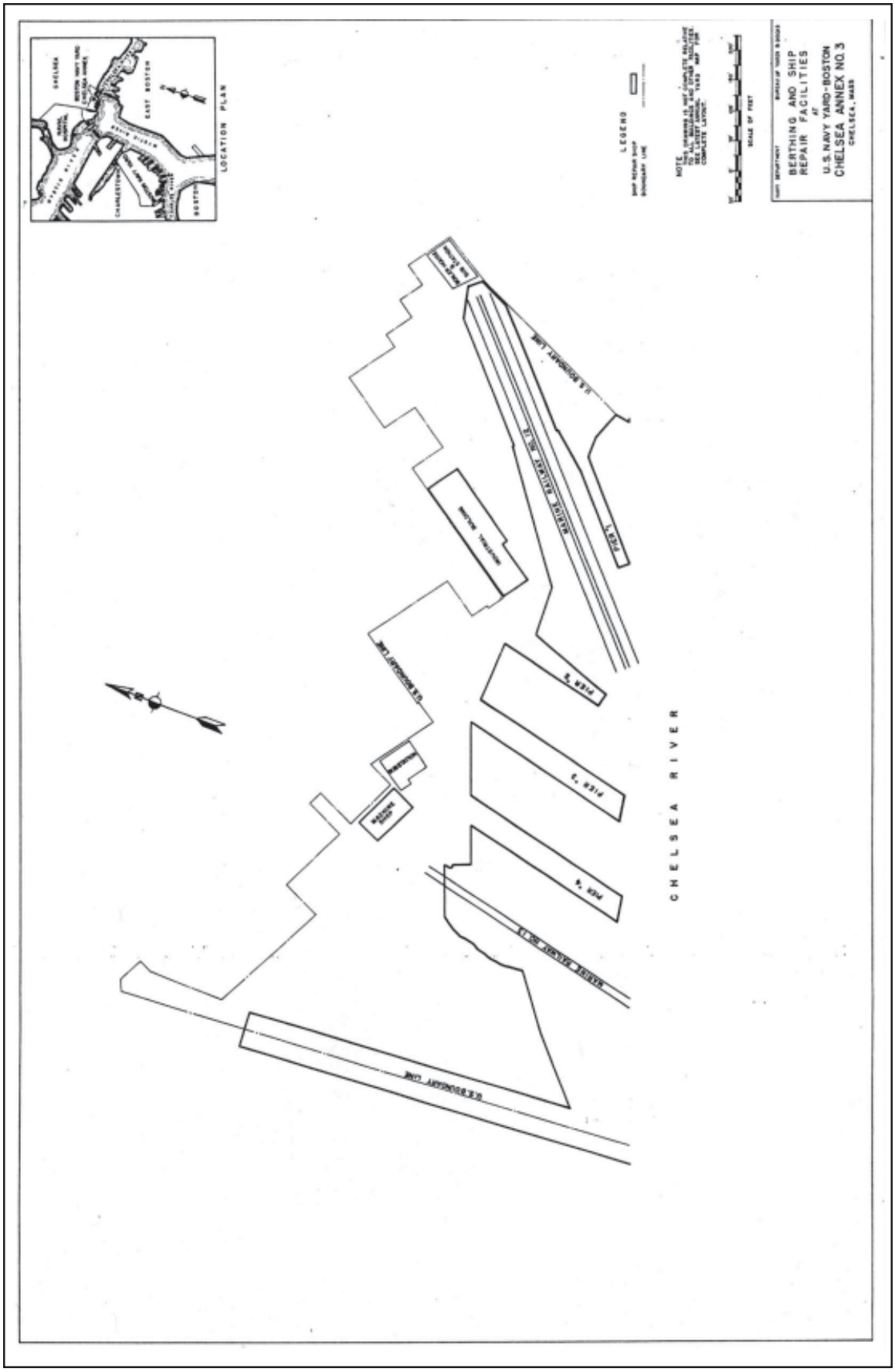


Figure 2-23 – Ship Repair Facilities at Chelsea, 1944

"Berthing and Ship Repair Facilities at U.S. Navy Yard–Boston, Chelsea Annex No. 3," Jan. 1, 1944. This drawing shows facilities relating to berthing space and ship repair. *U.S. Navy, Bureau of Yards & Docks, [*Ship Repair Facilities*]*

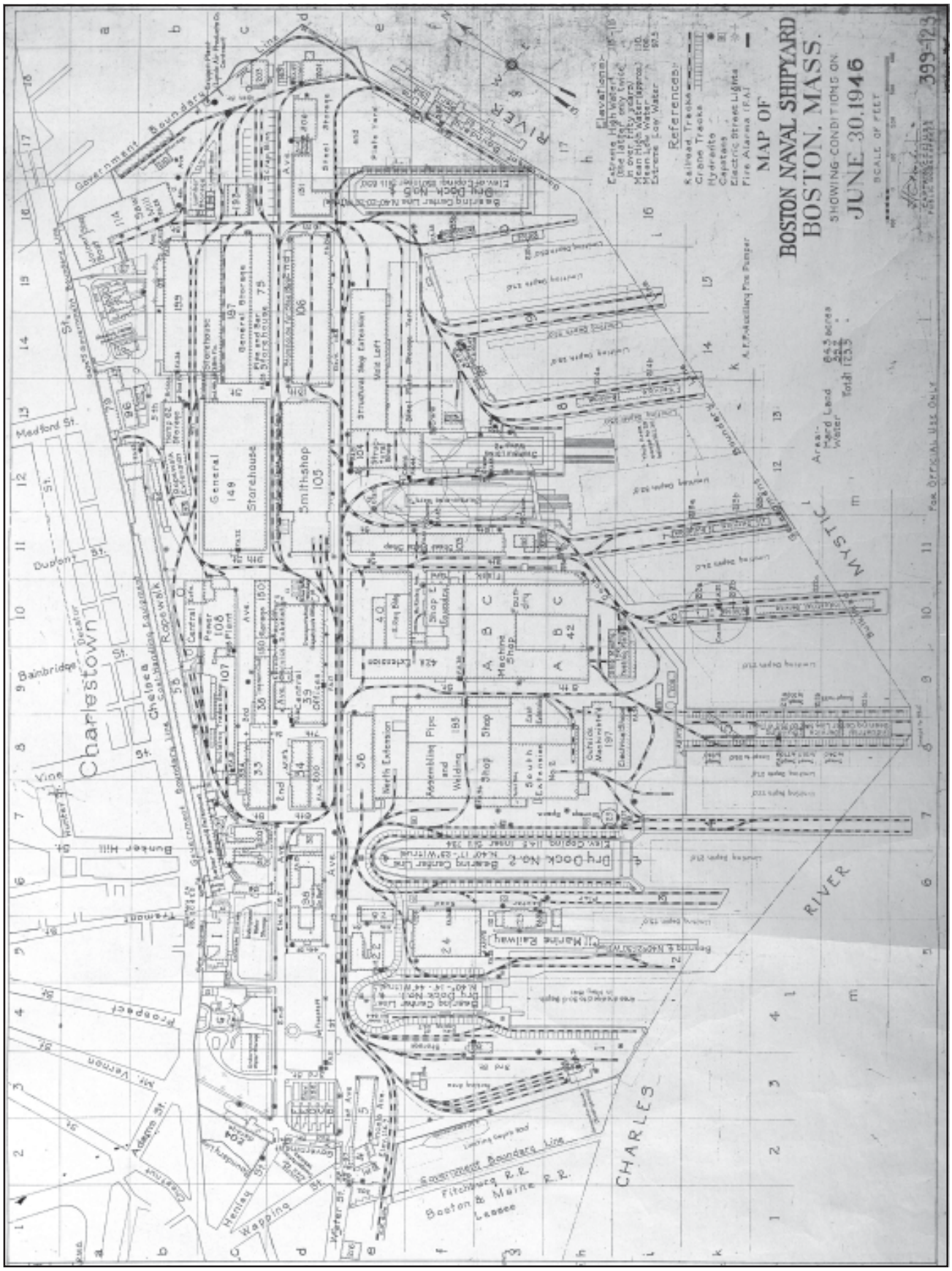
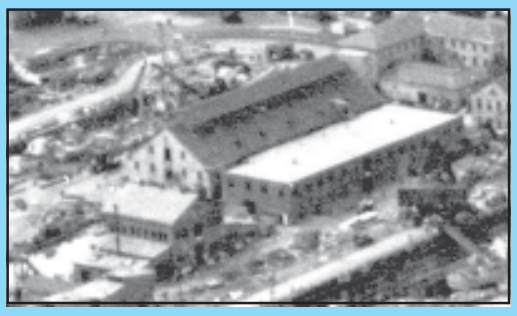


Figure 2-24 – Plan of Navy Yard, 1946

"Map of Boston Naval Shipyard, Boston, Massachusetts, Showing Conditions on June 30, 1946," June 30, 1946. This plan shows the changes in the physical plant during World War II. *BOSTS-13502*

New Facilities, 1940-1945: A Gallery

THE PHOTOGRAPHS in this gallery depict new buildings constructed between 1940 and 1945, as well as major changes to older structures, except for the Shipways and Dry Dock 5, depicted elsewhere. Because of both security and the hectic pace of work, there are far fewer construction progress photos from this period than any other since 1900. Thus, in several instances facilities are shown as details from aerial photographs taken in August 1943, July 1945, and November 1950. The 1946 yard plan (Figure 2-24) shows the location in the yard of each structure shown.



Building 24, Aug. 17, 1943
In 1941 the Navy awarded a contract to Thomas O'Connor & Co. for the construction of a number of additions to facilities at the Navy Yard. Among them was a two-story wooden addition to the Riggers' Loft, a project that saw removal of Building 23. *BOSTS-8631*





Buildings 195 and 42, Aug. 17, 1943
During World War II, an East Extension was added to the area between the South Extension and the original Pipe Shop (Building 195), while wooden additions appeared on top of the Foundry Flask Yard structure along the 9th Street side of Building 42. In front of Building 195 is the Electrical & Outside Machinists Shop (Building 197), while the Ship Machinery Test Plant (Building 196) is in front of Building 42. *BOSTS-8631*



Building 39, ca. 1942
Because of the congestion of the Navy Yard, many wartime additions impinged on its streets. This extension of the yard's Administrative Offices was built across Second Ave. *BOSTS-9369*

Buildings 58, 108, 150, 39, 107, 38, 33A, 33, 34, 200, 120, 31, and 136, July 13, 1945
This aerial view shows the various additions made to older yard buildings during World War II. These included the two-story Labor Board addition at the west end of the Ropewalk (Building 58), the extensions at the north and east sides of the Administration Building (Building 39), and the North Extension (Building 33A) of Frazier Barracks (Building 33), as well as the new Public Works Shop (Building 200) south of Building 34. All of these additions would be removed by the Boston Redevelopment Authority in the late 1970s. *BOSTS-8622*



Buildings 77 and 76, ca. June 1941
In order to make room for a new Storehouse (Building 199), the Boat Storehouse and Timber Shed were shortened. The Steel Storage Shed (Building 187) is at right. The remainder of the two 19th-century granite buildings would be removed in 1942 for an extension of the Storehouse. *BOSTS-9589*

New Facilities, 1940-1945: A Gallery



Building 105, ca. 1943



Building 105, Oct. 9, 1943

Expansion of the Forge Shop involved the raising of the roof on the south side and the removal of the north wing and its additions and the construction of an enlarged full-height wing. *BOSTS-9649*





Building 109, Aug. 17, 1943

The Waterfront Office grew up around the brick Substation, the last remnant of the original Building 109. The penthouse was used by the yard's harbormasters to control movement of ships in the yard. *BOSTS-8622*

Building 108, Nov. 26, 1940

Improvements to the Power Plant included construction of an extension of the Boiler Room. Just as the original building had swept away the 1849 Brick Barn (Building 56), the extension led to the demolition of that structure's replacement, Building 117. *BOSTS-9768*



Building 131, Apr. 14, 1942

Among the many projects accomplished on the 1941 contract with Thomas O'Connor was an extension of the Paint & Oil Storehouse. This addition is seen nearing completion in this view which looks across the new Dry Dock 5. The east extension of the Storehouse (Building 199) can be seen at the left. *BOSTS-8855*



Buildings 187 and 199, July 22, 1941

Workers place the third floor of the new Storehouse (Building 199). The two-bay easterly extension of the Steel Storage Shed (Building 187) can be seen at the far end of the structure. Note the roof of the remaining section of Building 77. *BOSTS-10015*

New Facilities, 1940-1945: A Gallery



Building 197, May 3, 1941
The high-rise "Light Shop," which housed the Electrical & Outside Machinists Shop, was constructed south of the Assembly & Welding Shop (Building 195). *BOSTS-9976*



Building 199, Oct. 6, 1941
The new Storehouse, occupying the site of Buildings 77 and 76, is seen under construction. The building's design followed that of the standard Navy storehouse developed in World War I. *BOSTS-10015*

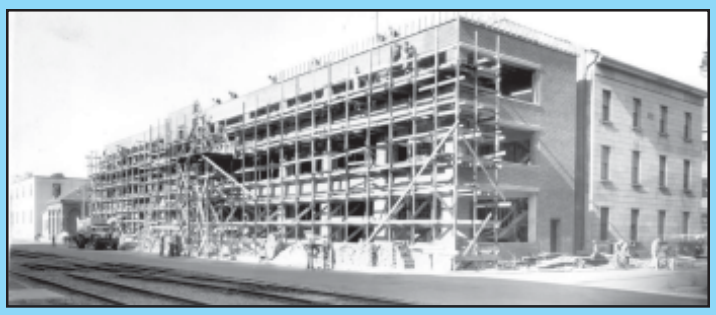


Buildings 201, 206, 131, 165, and 203, Aug. 16, 1943
New structures at the yard's east end included a Storehouse (Building 201) and Incinerator (Building 203) on either side of Building 165 and a Locker Building (Building 206) between them and the extension of Building 131. *BOSTS-8626*





Building 198, Mar. 6, 1941 & ca. 1944
A large wooden Temporary Storehouse was constructed in 1941 in the area between Building 32 and 4th Street formerly occupied by tennis courts. The newly-completed structure is seen at top. In 1944, above, barracks for WAVEs assigned to the Navy Yard were added on its roof.
BOSTS-10008 (top); NARA RG 181 (above)



Building 200, 1941
A new Public Works Building was constructed along First Ave. in the open space in front of Building 34. The west end of the structure housed the yard's Fire Department. *BOSTS-10019*



Building 205, Aug. 6, 1942
The Storehouse at Pier 11 was used in conjunction with the Deperming Station, which made ship's hulls less susceptible to magnetic mines.
BOSTS-8855

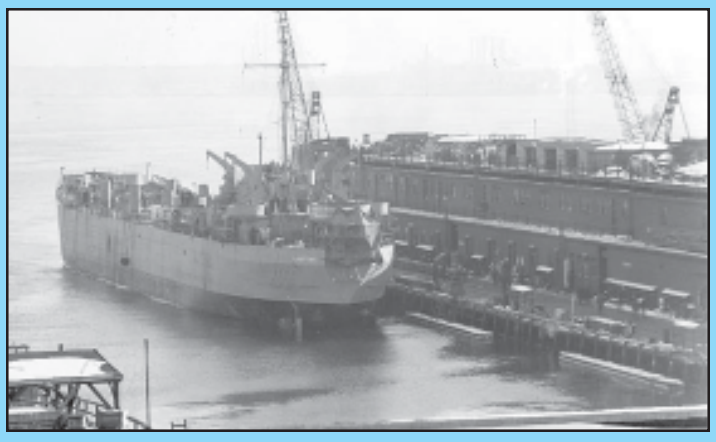
New Facilities, 1940-1945: A Gallery



Building 202, Nov. 10, 1950

The Labor Board Office, later the Antisubmarine Warfare Instructors School, was constructed at the western end of the yard in the location where Building 3 had stood until 1906. It would be demolished in the mid-1950s as part of the development of a visitor parking area for USS *Constitution.*

BOSTS-8527



Building 211, Jan. 8, 1943

Pier 5, which had been rebuilt in concrete in 1941, was developed to handle considerable shipbuilding work, and its Industrial Service Buildings were the largest of those constructed on most of the yard's piers during the war. Here, Buildings 211C and 211B, two of the three such structures on the pier, can be seen along with High Portal Cranes 62 and 65 (both of which remain in the Navy Yard in 2008) and incomplete *LST-310*.

BOSTS-11702



Pier 5, Oct. 6, 1941

The first wartime pier improvement consisted of replacing wooden Pier 4A with a wider concrete Pier 5. Here, in this view from the roof of new Building 197, the work nears completion. Note the portal crane rails on either side of the new pier. *BOSTS-8733*



Building 204, ca. 1941/42

In 1942, the Navy purchased this large concrete garage which had been built between Chelsea and Henley Sts. in 1927 directly against the yard's boundary wall. *BOSTS-8514*



Building 215A, July 6, 1945

This two-story temporary wooden building was typical of several built at both Charlestown and South Boston as waterfront offices, first for crews working on waterfront improvements and then for crews working on ships. This building, located south of the Substation (Building 192) near Shipways 1, was listed in June 1944 as the Office for Submarine Construction. By 1946, the structure was vacant, and it disappears from yard maps shortly thereafter. *BOSTS-15663*



Pier 10, Sept. 19, 1941

Work on rehabilitation and extension of the yard's other piers retained their wooden construction. Here, the east side of Pier 10 is being widened. USS *Constitution* (IX-21) is seen at Pier 10 West, the location where the venerable frigate would spend most of the war. *BOSTS-8778*

one small seaplane tender, and two Coast Guard cutters, into amphibious force flagships (AGC). Finally, in 1944 and 1945 it modified five World War I-era destroyers into miscellaneous auxiliaries (AG) for use as training ships.[283]

Shipbuilding In World War II

In anticipation of increased shipbuilding, the yard's Shipways had been lengthened and widened in 1938, and first used for the destroyers *Gwin* (DD-433) and *Meredith* (DD-434), laid down in June 1939.[284] A second shipways (Shipways 2) was begun shortly thereafter, being completed in September 1941. To accommodate this facility, Pier 7 and a large portion of the original Building 104 were removed.[285] In the same year, the yard broke ground for a new building dock, sometimes referred to as Shipways 3 but subsequently labeled as Dry Dock 5, at the eastern end of the yard. This project saw the Battery Charging Facility (Building 153) and the Fuel Oil Tank and its Pump House (Building 141) demolished, and improvements to Pier 10. Even before the dock was finished, in April 1942, the Navy laid the keels of two escort vessels in it.[286]

These ships were part of an order for 12 escort vessels (DE)[287] placed with the yard in November 1941. Escorts, envisioned as a smaller version of the destroyer intended to accompany convoys and help defeat German submarines, were ordered by the Navy under the authority of the Lend-Lease Act passed in March 1941. That legislation allowed the United States to furnish military equipment to Great Britain and other countries. During World War II, 31 of the escorts built by the yard were transferred to the Royal Navy upon completion. Four would be lost in combat, while nine would briefly be commissioned as American vessels in August 1945 for return to the United States from Britain.[288]

Escort orders would supersede those for destroyers, and reflected a ship construction program that continued unabated throughout the war while adapting to meet changing strategic objectives.[289] Thus, in 1942, a high priority program to produce tank landing ships (LST) was instituted. Along with the escorts, these vessels, which were designed to beach themselves and unload tanks through massive bow doors and ramps, would constitute the bulk of the ships that the yard would produce during the war. In all, between September 1939 and September 1945 the yard delivered 30 destroyers, 60 escorts, and 44 LSTs.[290]

The next largest group of ships built by the yard was the barracks ship (APL), six of which were delivered between September

Overhauls And Repairs



Between 1938 and 1945 the Navy Yard and its annexes performed overhauls and repairs on some 3,476 vessels. While most of the work was fairly routine, there were exceptions. In Nov. 1942 the destroyer USS *Hambleton* (DD-455) was torpedoed amidships at Casablanca. Under supervision of yard workers, a 40-foot section of hull was removed and the two sections temporarily joined to allow her to be brought back to Boston. This view taken on July 1, 1943, shows *Hambleton* in Dry Dock 1 as the yard separates the two halves in preparation for the installation of a new hull section fabricated by the Navy Yard. *NARA RG 181*



Repair work was not confined to American vessels, and ships flying the White Ensign of the Royal Navy and the French Tricolour were no strangers to the yard. Here, HMS *Aquitania* is seen in Dry Dock 3 at South Boston on Sept. 4, 1942. While the Navy had contracted the transport's repair to Bethlehem Steel's yard in East Boston, the yard provided docking services because Dry Dock 3 was the only one in Boston capable of handling the former Cunard liner. Assembly of Portal Crane 63 is underway in the foreground; note that its boom has yet to be attached. *BOSTS-14961*

[283] Black, *Charlestown Navy Yard, 1890-1973*, 2:629-30; List of Vessels Converted at the U.S. Naval Dry Dock, South Boston, Aug. 14, 1945, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 16.

[284] Black, *Charlestown Navy Yard, 1890-1973*, 2:500, 601.

[285] Ibid., 2:530.

[286] Ibid., 2:534-35; J.F. Fitzgerald Construction Co., "Narrative Report of Construction of Shipbuilding Dock at Pier No. 10, Boston Navy Yard," Public Works Dept., Design Division (Code 440), Completed Design Projects, Dry Dock 5, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 85.

[287] Almost from their inception, escort vessels have been referred to as "destroyer escorts" because of their DE type symbol. The official definition, however, was always "escort vessel." See Samuel Loring Morison, "A Matter of Class, Part IV," *Naval History*, vol. 9, no. 4 (July/Aug. 1995), p. 40. As the Naval Historical Center points out, "hull number letter prefixes are not acronyms, and should not be carelessly treated as abbreviations of ship type classifications." See Naval Historical Center, *Online Library of Selected Images: U.S. Navy Ships—Listed by Hull Number* [web site] [http://www.history.navy.mil/photos/shusn-no/usnsh-no.htm], accessed Nov. 2, 2002.

[288] Black, *Charlestown Navy Yard, 1890-1973*, 2:604; Carlson, *Ships Built by the Charlestown Navy Yard.*

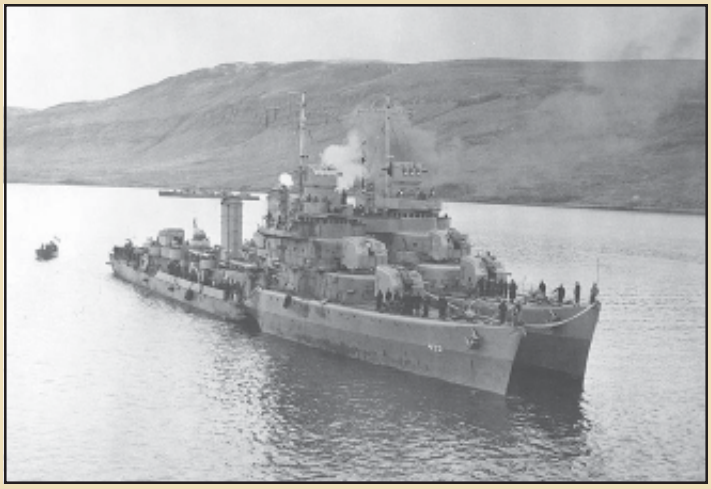
[289] On naval shipbuilding programs in World War II, see H.F.D. Davis, "Building Major Combatant Ships in World War II," U.S. Naval Institute *Proceedings*, vol. 73 (May 1947), p. 565-79; Stephen S. Roberts, "U.S. Navy Building Programs During World War II," *Warship International*, vol. 18, no. 3 (1981), p. 218-61.

[290] U.S. Navy, Bureau of Ships, *Ship Contracts Awarded*, p. 357-360.

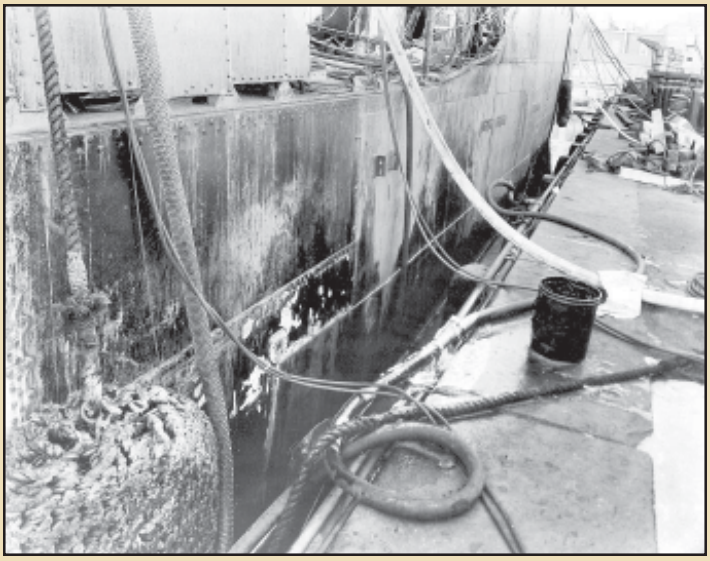
Repairing USS *Kearny* (DD-432): A Gallery

ON OCTOBER 17, 1941, while on convoy escort duty in the North Atlantic, the destroyer USS *Kearny* (DD-432) was struck midships on the starboard side by a torpedo fired by the German submarine *U-568*. *Kearny*'s crew confined flooding to the forward fire room enabling the ship to get out of the danger zone with power from the aft fire room. She arrived at Reykjavik, Iceland, two days later. After temporary repairs performed by the repair ship USS *Vulcan* (AR-5), *Kearny* got underway on Christmas Day 1941, arriving at the Charlestown Navy Yard for permanent repairs six days later.

Probably because this was the first battle damage repair job performed by the yard, it was extensively photographed. The resulting album provides the only comprehensive visual record of such work undertaken during World War II.



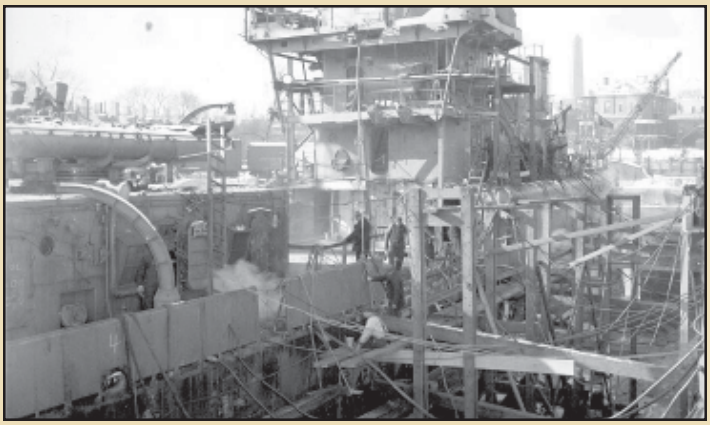
The torpedo damage to the starboard side is clearly visible in this view taken at Reykjavik on Oct. 19, 1941. USS *Monssen* (DD-436) is moored alongside. Later that same day, *Kearny* was brought alongside USS *Vulcan* (AR-5), whose workforce would install a temporary hull patch to enable the vessel to sail to Boston. *NARA 80-G-28788*



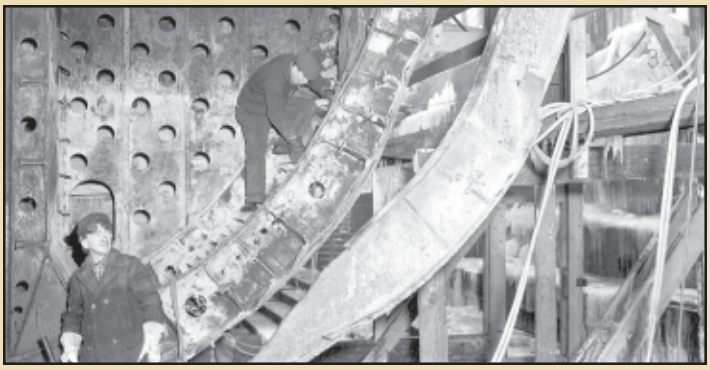
The temporary patch installed under the harsh winter conditions of Iceland is seen in this view taken on Jan. 3, 1942. *Kearny* is berthed at Pier 1 West. *BOSTS-11621*



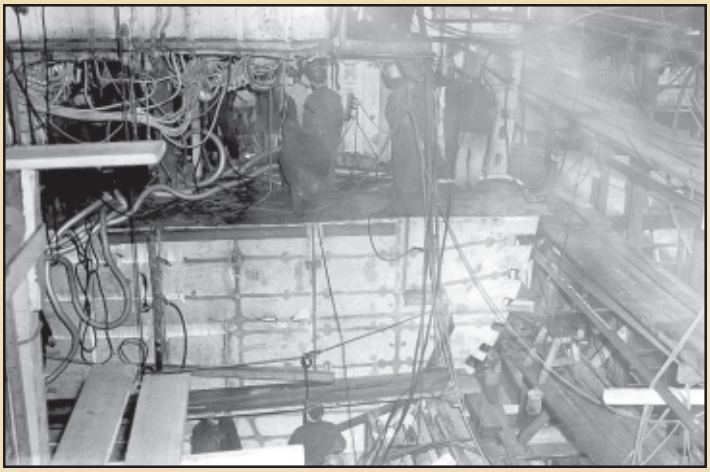
While at Pier 1 West, yard workers cut away the superstructure over the forward fire room to allow access for removal of the damaged machinery. Here, a damaged boiler is lifted out on Jan. 6. *BOSTS-11621*



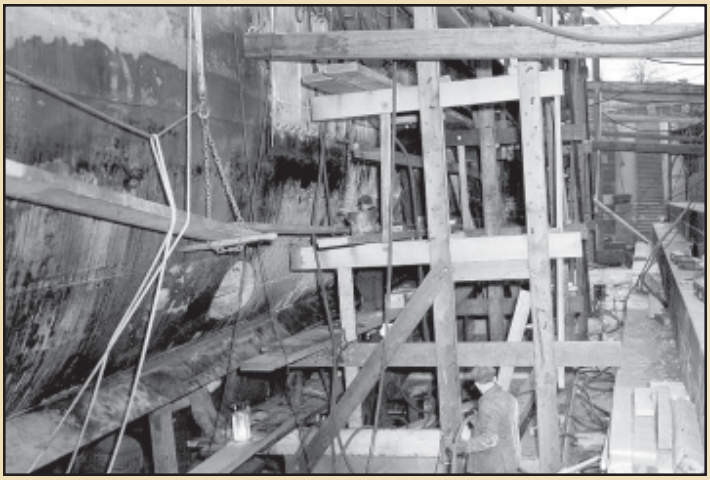
On Jan. 12, *Kearny* was taken into Dry Dock 1 to enable the damaged section of her hull to be completely cut away for repair. Two days later (*below*), workers have removed all of the hull plates are are working on the remaining frames. *BOSTS-11621*



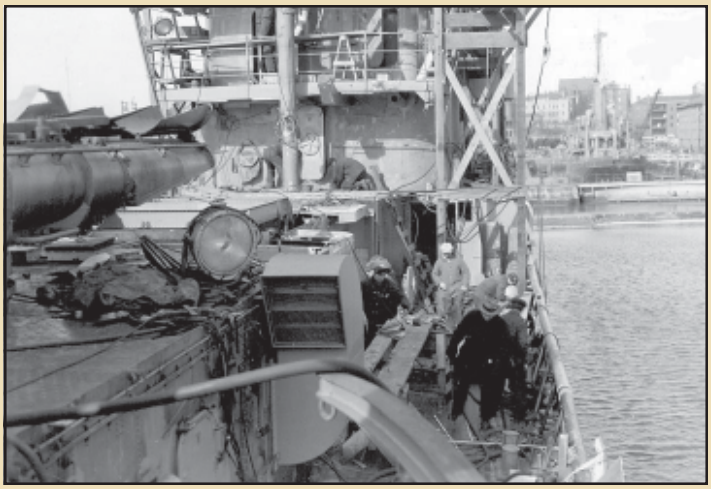
Repairing USS *Kearny* (DD-432): A Gallery



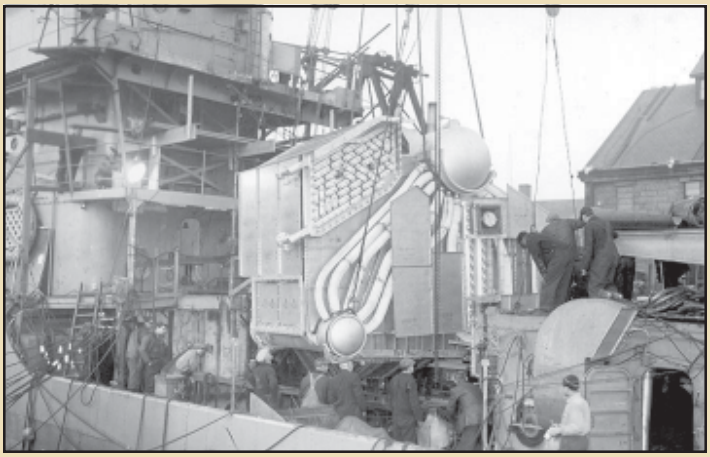
By Jan. 19 the new fire room was beginning to take shape. The new forward bulkhead is seen in this view. *BOSTS-11621*



This view taken on Jan. 31 shows the progress of hull plate replacement. *BOSTS-11621*

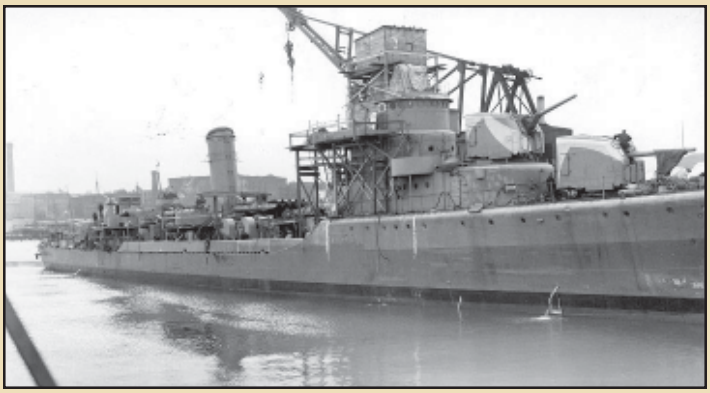


By Feb. 13, the deck house and uptake for the forward stack was in place. The extant album on the repair project ends at this point in time. *BOSTS-11621*

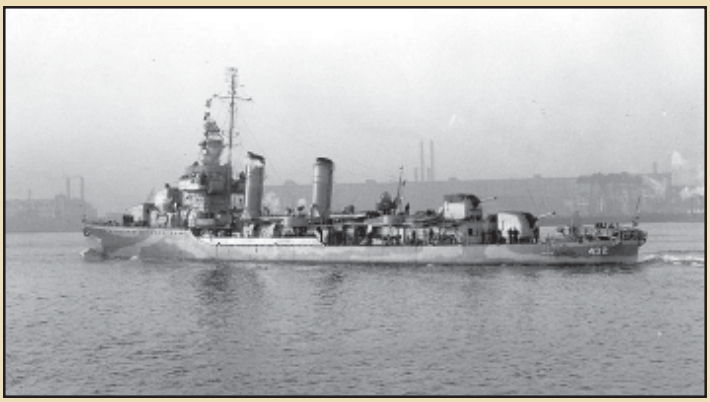




Even as workers swarmed over the ship, other yard employees were at work in the shops fabricating new machinery for her. On Jan. 27 a new boiler (*above*) is lowered into the restored forward fire room (*left*). *BOSTS-11621*



By Feb. 9, hull repairs had been completed and *Kearny* had left Dry Dock 1. She is seen here the following day berthed at Pier 1 East, where remaining repair work would be accomplished. *BOSTS-11621*



Fully repaired, USS *Kearny* is seen steaming in Boston Harbor on Mar. 31, 1942. Within a week, she was back on escort duty in the North Atlantic. *BOSTS-11620*

Shipways 2



Construction of Shipways 2, east of the existing Shipways, began in Aug. 1940 with the demolition of a portion of Building 104 to make way for the new facility. This view of the launch of the covered lighter *YF-258* on Aug. 22, 1940, shows demolition in progress. *BOSTS-14786*



In this Jan. 2, 1941, view, the new wall of Building 104 can be seen as work on the new ways, which also required the elimination of Pier 7, is underway. Note that one of the Hammerhead cranes for Shipways 1 has been moved to serve both areas. *BOSTS-8983*



Four days after the view above, the yard laid down the keels of two destroyers on the new ways. Here, USS *Forrest* (DD-461) and USS *Fitch* (DD-462) are being prepared for their launching on June 14, 1941. *BOSTS-11148*

A Last Survivor



Mercer (IX-502) is seen at the Naval Ship Repair Facility, Sasebo, Japan, ca. 2000. One of three Boston-built barracks ships still in naval service in 2008, she regained her original hull number of APL-39 in April 2001. Major changes to the ship since her original construction involved the addition of a helicopter landing platform and a raised bridge for service in Vietnam. *Robert Gregory, NavSource*

1944 and May 1945. The APL had no independent propulsion and was intended to provide berthing for sailors whose ships were being repaired at overseas bases. In mid-1944, a second group of six APLs were reordered as self-propelled vessels (APB), with a modified design based on the LST hull. Completed too late for World War II service, several of the APBs would see combat in Vietnam as "mother ships" for the Navy's riverine warfare force.[291] Two of these ships, *Mercer* (APL-39) and *Nueces* (APL-40), along with the unnamed *APL-32*, are the only Boston-built vessels remaining on the Naval Vessel Register as of mid-2008.[292]

In addition to the four main classes of ships, the yard produced two small seaplane tenders (AVP) in 1941 and two dock landing ships (LSD) in 1945, along with several barges and other service craft.[293] The yard's Boat Shop manufactured 150 mechanized landing craft (LCM) and over 800 small boats. The 50-foot LCMs were manufactured on a production line basis in the Assembly Shop (Building 195) at Charlestown and at South Boston.[294] Following the end of hostilities, an additional two DEs, two LSTs, two APBs, two LSDs, and four submarines (SS) were completed, while four DE hulls launched by the yard were scrapped incomplete.[295] Due to changing requirements, orders for 4 destroyers, 67 escorts, 1 LST, 12 submarines, and several service craft were cancelled prior to the start of construction.[296]

During the war, the yard continued its traditional role of outfitting and commissioning naval vessels built by private shipyards. The 1,108 ships ranged from aircraft carriers and battleships to minesweepers and submarine chasers and primarily were ships

[291] Ibid.; Edward J. Marolda, *By Sea, Air, and Land: An Illustrated History of the U.S. Navy and the War in Southeast Asia* (Washington: Naval Historical Center, 1994) [web version] [http://www.history.navy.mil/seairland/chap3.htm], chap. 3. In addition to four Boston-built APBs—*Benewah* (APB-35), *Colleton* (APB-36), *Mercer* (APB-39), and *Nueces* (APB-40)—which earned combat stars in Vietnam, the dock landing ship *Tortuga* (LSD-26) also saw service with the riverine force.

[292] U.S. Naval Sea Systems Command, NAVSEA Shipbuilding Support Office, "Active Vessels," *Naval Vessel Register* [web site] [http://www.nvr.navy.mil/quick/active.htm], accessed Mar. 31, 2008.

[293] U.S. Navy, Bureau of Ships, *Ship Contracts Awarded*, p. 357-60.

[294] Black, *Charlestown Navy Yard, 1890-1973*, 2:613-14; Norman Friedman, *U.S. Amphibious Ships and Craft: An Illustrated Design History* (Annapolis: Naval Institute Press, 2002), p. 488.

[295] U.S. Navy, Bureau of Ships, *Ship Contracts Awarded*, p. 357-60.

[296] Ibid.

Dry Dock 5

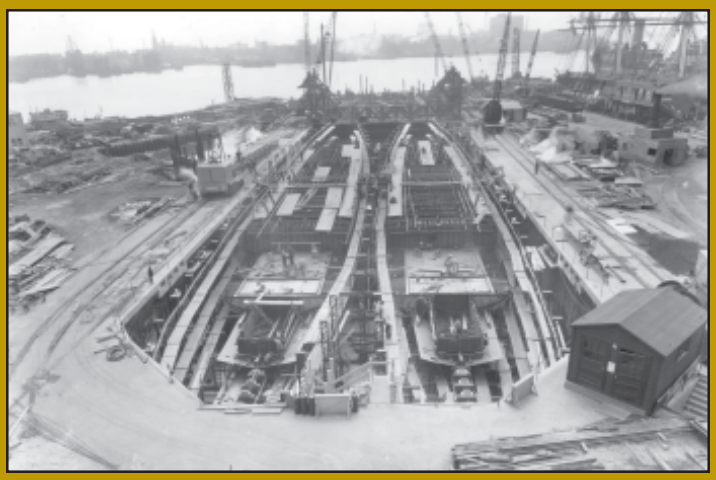
IN NOVEMBER 1941 the yard commenced construction of a ship-building dock at the east end of the yard. Initially referred to as Shipways 3, Dry Dock 5 was constructed of concrete and steel. Such was the pressure of wartime requirements for anti-submarine escorts that a temporary bulkhead was installed so that the inner 360 feet of the dock could receive the keels of the first two escort vessels—HMS *Bayntun* (BDE 1) and HMS *Bazely* (BDE 2)—in early April 1942.

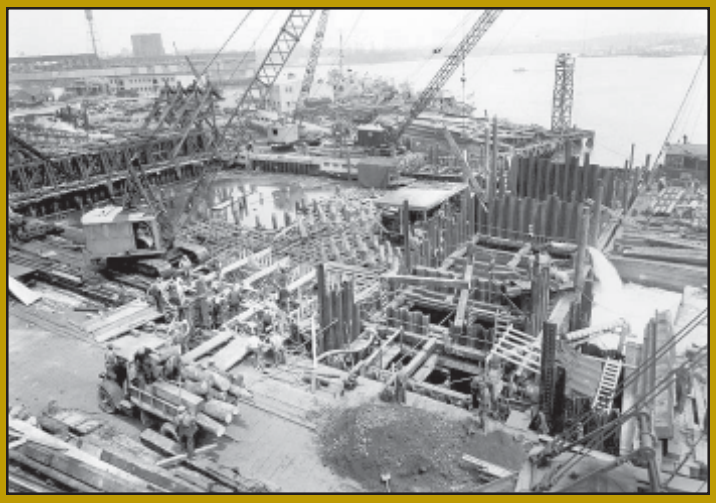


The project began with the removal of Building 153, built during World War I as a Battery Charging Facility and last used as an Ordnance Storehouse. This Nov. 14, 1941, view shows demolition largely complete. The project would later demolish the elevated foamite tanks, Gasoline Tank, Fuel Oil Tank, and Pump House (Building 141) seen in the background. *BOSTS-8855*



By Feb. 14, 1942, the sheet piling for the cofferdam and side walls was in place and the dock area dredged out. *BOSTS-8855*





In these May 16, 1942, views, the hulls of the first two escort vessels are taking shape (left) even as work continues on the outer end of the dock (above). The ships would be launched on June 27, 1942. *BOSTS-8855*

built by Bath Iron Works in Maine, Bethlehem Steel in nearby Quincy and Hingham, and George Lawley & Son in Neponset.[297] A cross between fitting out and construction occurred in the case of the submarines *Lancetfish* (SS-296) and *Ling* (SS-297), which had been launched by Cramp Shipbuilding in Philadelphia in August 1943 and towed to Charlestown for completion in April 1944. *Lancetfish* would sink at Pier 8 on March 15, 1945, shortly after her commissioning, the only case in the yard's history where a ship became a constructive total loss while at the Navy Yard.[298]



This frame from a motion picture shows the raising of USS *Lancetfish* (SS-296) on Mar. 23, 1945, eight days after her accidental sinking while tied up at Pier 8 of the Navy Yard. The ship was subsequently decommissioned and sold for scrap. *BOSTS-16392*

[297] Black, *Charlestown Navy Yard, 1890-1973*, 2:631-32.

[298] Ibid., 2:616. Two additional Cramp hulls (SS-298, SS-299) were also sent to Boston, but were retransferred to Portsmouth before work had begun on them. See Carlson, *Ships Built at the Charlestown Navy Yard*, p. 61. *Ling*, preserved at Hackensack, N.J., is the only vessel with World War II connections to Charlestown to survive as a memorial in the United States.

Shipbuilding In World War II: A Gallery

THE CHARLESTOWN NAVY YARD reached its peak as a shipbuilder during World War II. This gallery is intended to illustrate each of the types of vessels constructed by the yard between 1940 and 1945, arranged in alphabetical order by type symbol. Many of the images taken by yard photographers have the advantage of showing yard facilities in them.

Barracks Ships

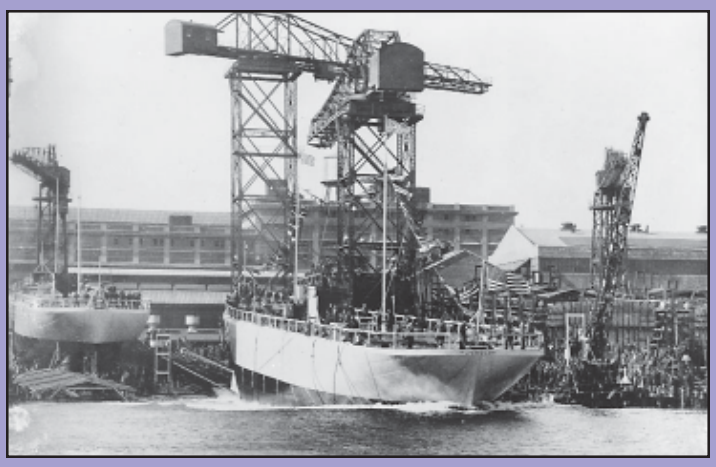


USS *APL-32*, the fourth of the yard's six non-self-propelled barracks ships, is seen on Jan. 3, 1945, eight days before her commissioning and assignment to the Pacific. Known informally as "hotel ships," many APLs were unofficially named for famous hotels. Thus, *APL-32* was known as *Statler*. The vessel remains active with the Navy in 2008. *BOSTS-10123*



Following the six APLs, the yard constructed six self-propelled barracks ships. On Jan. 3, 1945, USS *Marlboro* (APB-38) and USS *Mercer* (APB-39) are seen at Pier 5 East. In the background on Pier 6, behind an incomplete escort vessel, is Industrial Service Building 212C. Like *APL-32*, *Mercer* still serves the Navy in 2008. *BOSTS-11969*

Small Seaplane Tenders





The Shipways were generally used to construct pairs of ships at the same time. Here, the first of two small seaplane tenders, USS *Humboldt* (AVP-21) slides down Shipways 1 on Mar. 17, 1941, after being christened by Mrs. William T. Tarrant (left), wife of the yard's Commandant. USS *Matagorda* (AVP-22), seen at left, would be launched the following day. The General Storehouse (Building 149) can be seen in the background looming above the Forge Shop (Building 105). *NARA 19-N-30381 (above); NARA 19-N-30376 (left)*



USS *Matagorda* (AVP-22) is seen in camouflage paint in Boston Harbor on Apr. 3, 1942. Following World War II, both seaplane tenders would be transferred to the Coast Guard, being initially homeported across the harbor from their birthplace. *NARA 19-N-28802*



Humboldt returned to the Navy Yard in July 1943 for a yard availability during which an additional 5-inch gun mount was added at her stern and her crane was replaced. The refitted vessel is seen in Boston Harbor on Aug. 23, 1943. *NARA 19-N-49686*

Shipbuilding In World War II: A Gallery

Destroyers



USS *Meredith* (DD-434), launched in Apr. 1940, is seen from USS *North Carolina* (BB-55) during the latter's sea trials in the summer of 1941. Transferred to the Pacific in 1942, *Meredith* would be torpedoed and sunk by the Japanese off Guadalcanal on Oct. 16, 1942. *NARA 80-G-K-16432*



USS *Charrette* (DD-581) is launched on June 3, 1942, after being christened by Mrs. George (Nadeja Pronita) Charrette (inset). The sixth of fourteen *Fletcher*-class destroyers built by the Navy Yard, *Charrette* was transferred to the Greek Navy in 1959 as *Velos* (D-16) and has been preserved as a museum ship at Poros, near Athens. *BOSTS-10677*



Photographs of actual construction work on ships are fairly rare. This Jan. 8, 1943, view of Shipways 1 shows the destroyers *Halligan* (DD-584) and *Haraden* (DD-585) rising amid a forrest of scaffolding and the yard's Hammerhead cranes. The ships would be launched in Aug. and Sept. 1943, respectively. *BOSTS-11332*

Mrs. John Fore (Mary) Hines, Jr. (inset) was the sponsor for USS *Earle* (DD-635), which slid down Shipways 2 into the harbor on Dec. 10, 1941, three days after the Japanese attack on Pearl Harbor brought the county officially into World War II. *BOSTS-11011*





Seen in Boston Harbor on Apr. 5, 1944, USS *Heywood L. Edwards* (DD-663) was the next-to-last destroyer built by the Navy Yard. In 1959, the vessel, which had earned seven battle stars and a Navy Unit Commendation for service in the Pacific in World War II, was transferred to her former enemy. She served the Japanese Maritime Self-Defense Force as *Ariake* (DD-183) until 1974. *BOSTS-11407*

Shipbuilding In World War II: A Gallery

Escort Vessels



Launched on the first anniversary of Pearl Harbor, the unnamed BDE-6 was named *Wyffels* (DE-6) on Feb. 19, 1943, following a decision by the Navy to retain her rather than transfer her to Britain. She is seen here around the time of her commissioning in Apr. 1943. *BOSTS-14772*



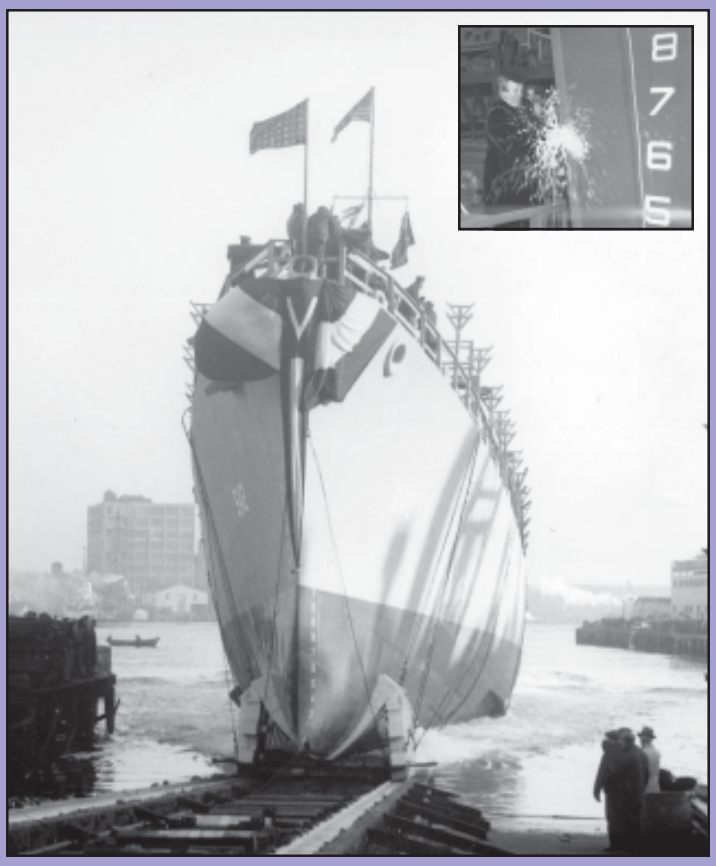
HMS *Keats* (K.482) had been laid down as USS *Tisdale* (DE-278) on June 5, 1943, but had been allocated to Britain two weeks later. She is seen off the yard around the time of her formal transfer in Oct. 1943. *BOSTS-14441*



Seamen 2nd Class Joseph W. "Jack" Davis and Moselle White pose in the snow in front of their ship, USS *Mason* (DE-529), on Pier 8 in Mar. 1944. *Mason* was the first Navy ship to have a predominantly African-American crew, and for that reason is probably the most significant of the escorts built by the Navy Yard. *BOSTS-11925*



For ships built in dry dock, their christening took place immediately before their commissioning rather than at their launching. Here, Mrs. Don T. (Margaret N.) Griswold, Sr., mother of the ship's namesake, Ens. Don T. Griswold, Jr., who won a posthumous Distinguished Flying Cross at the Battle of Midway, does the honors for USS *Griswold* (DE-7) while the ship sits at Pier 8 on Apr. 28, 1943. *BOSTS-11287*



USS *Oswald A. Powers* (DE-542) was christened by Mrs. G.E. (Ella M.) Powers (inset), mother of the man for whom the ship was named, at the time of her launching on Dec. 17, 1943. Shortly thereafter, the Navy suspended work on the vessel, and she sat idle at a yard pier until her completion was formally cancelled on Jan. 7, 1946. The incomplete vessel was subsequently sold for scrapping. *BOSTS-13861*

Shipbuilding In World War II: A Gallery

Mechanized Landing Craft



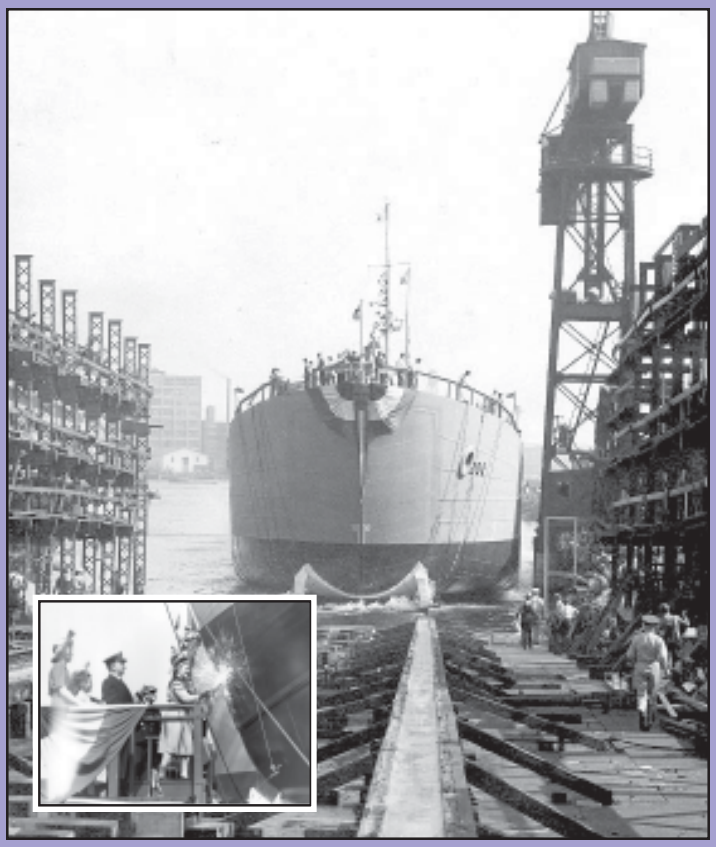
In Apr. 1942 the yard was given an order for 150 mechanized landing craft (LCM). Built on an assembly line basis in the yard's Assembly Shop (Building 195) and at South Boston, the 50-foot craft, given serial numbers 18186-18335 on the Navy's small boat list, were completed that summer.
NARA RG 181

Dock Landing Ships



The second of the yard's four dock landing ships, USS *Fort Mandan* (LSD-21), is seen at Pier 5 East on Aug. 20, 1945. At 457 feet long, the LSDs, which contained a large stern well which could be flooded to allow smaller landing craft to float off, were the largest ships constructed by the yard. Note the infill of two floors to the right of the projecting central portion of Building 197 in the background. *BOSTS-11171*

Tank Landing Ships



The Navy Yard launched its first two tank landing ships on Sept. 15, 1942. Here, *LST-302* slides into the water after being christened by Mrs. Elizabeth D. Walsh (inset). The first five of the yard's LSTs (301-305) would be turned over to Britain, and would participate in various invasions of Europe in 1943 and 1944 under the White Ensign rather than the Stars and Stripes.
BOSTS-11693



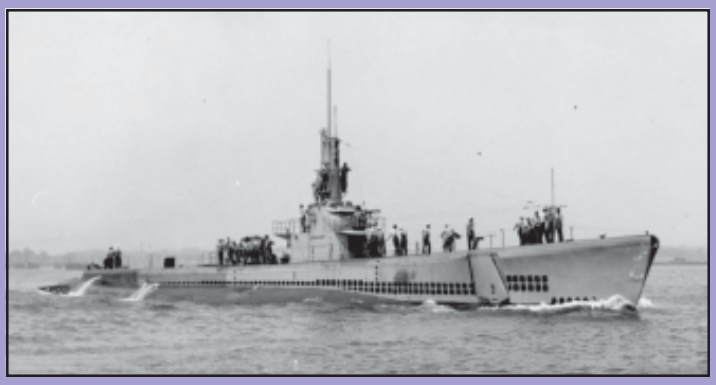
The LST was designed to beach itself and to discharge tanks and other vehicles through a ramp extended through large bow doors. USS *LST-1034* is seen in Boston Harbor around the time of her completion in Aug. 1944. *BOSTS-11727*



The bow doors which were a prominent feature of the LST can be seen clearly in this view of *LST-1033* at the quay wall between Piers 6 and 7 on July 10, 1944. *BOSTS-11725*

Shipbuilding In World War II: A Gallery

Submarines



The Navy Yard completed two submarines whose hulls had been built by Cramp Shipbuilding of Philadelphia. USS *Ling* (SS-297) is seen in Boston Harbor on July 6, 1945. The boat is maintained as a memorial ship at Hackensack, N.J. *BOSTS-11808*



The four submarines launched by the yard on Dec. 15, 1944, were suspended before completion. After World War II, work resumed and they were completed to a revised, streamlined design. Here, USS *Grampus* (SS-523) is commissioned at Pier 10 West on Oct. 26, 1949. *BOSTS-11270*

Service Craft





The Navy Yard treated the launchings of the non-self-propelled service craft it built with the same ceremony it gave to other vessels. At left, Pharmacist Mate 2nd Class Ardie May Hubbell breaks a bottle of champagne over the bow of the covered lighter *YF-893* on July 30, 1945. Following her christening, the barge slid down the ways. Renamed *YFN-893* the following year, the barge would be sold to Kerr-McGee Oil Industries, which converted her into *Ker-Mac Drilling Barge No. 1* in 1948. *BOSTS-14792*



The yard constructed four self-propelled seaplane wrecking derricks in 1940 and 1941. *YSD-22* is seen on trials off the South Boston Annex on Apr. 28, 1941, two days before being officially placed in service. Work on the construction of the jetties at South Boston can be seen at left, while the basilica-shaped Net Depot (Building 17) can be seen above the derrick's boom. At right is the Fargo Building, soon to be acquired by the Navy for use as the Receiving Station. *BOSTS-14887*

Ship Conversion In World War II: A Gallery

IN ADDITION to contracting for thousands of new ships, the Navy in World War II acquired numerous civilian vessels for conversion to naval use. These ranged from large merchantmen and liners which became cargo and troop transports to fishing vessels employed as minesweepers and on coastal defense duty. As well as performing conversions, the Navy Yard managed the conversion efforts for the entire First Naval District. Later in the war, the yard also converted naval vessels for different uses. This gallery presents views of some of the conversions undertaken at both the Charlestown and South Boston facilities.



Among the earliest conversions were a series of fishing vessels which became unnamed district patrol craft (YPs). USS *YP-409*, formerly *Katy D*, is seen on July 9, 1942. She was the only patrol craft converted at Charlestown. *BOSTS-14814*



All of the other YP conversions took place at South Boston. With her former haunt of the Boston Fish Pier in the background, *Triton* is seen at South Boston on May 29, 1942. She would emerge in July as the Coast Guard vessel USCG *Arvek* (WYP-165). *BOSTS-10299*



The trawlers *Philip and Grace, Columbo*, and *Superior* await conversion at South Boston on June 12, 1942. They became, respectively, USS *YP-436,* USS *YP-432*, and USS *YP-433.* The converted *YP-436* and *YP-432* are seen at right at Pier 3 in South Boston on July 31, 1942, while *YP-433* is seen below in Boston Harbor on Oct. 5, 1942.

BOSTS-14850 (above); BOSTS-14852 (top right); BOSTS-14848 (bottom right); BOSTS-14849 (below)

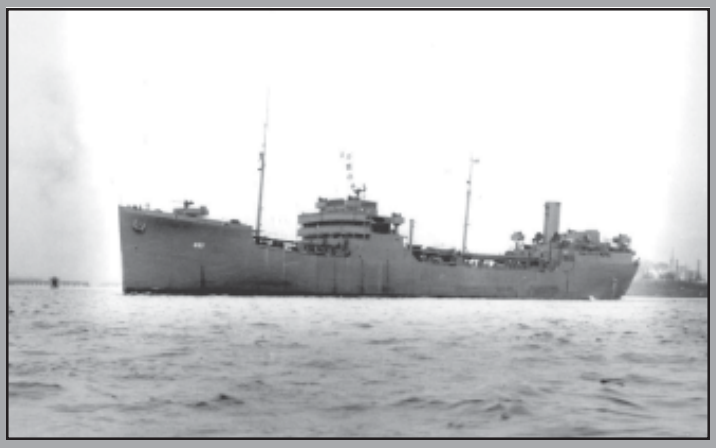






Ship Conversion In World War II: A Gallery





One of the more unusual conversions performed by the Navy Yard involved the oiler USS *Big Horn* (AO-45). In April 1942 she entered the yard for conversion to a "Q"-ship, intended as a decoy for use in the war against German U-boats in the North Atlantic. Although heavily armed, the vessel, seen at left in Boston Harbor on July 2, 1942, gave off the appearance of an unarmed merchantman. *Big Horn* served in her decoy role for the remainder of 1942 and all of 1943, but, with the exception of one attack on a suspected submarine in May 1943 not confirmed in German records, had little success. In January 1944 she returned to Boston for conversion into a weather monitoring ship for the Coast Guard (WAO-124). The converted *Big Horn* is seen at right on Mar. 11, 1945, about a month after she was reinstated on the Navy list as IX-207. *BOSTS-10440*



The former Panama Railroad Co. liner *Ancon* was transferred from the Army to the Navy in the summer of 1942. The South Boston Annex performed her conversion to her new role as a naval transport. The completed USS *Ancon* (AP-66) is seen on Sept. 12, 1942. *BOSTS-10274*



Between Dec. 1943 and July 1944 the South Boston Annex converted the Maritime Commission-built freighter *Eclipse* into an amphibious command ship, USS *Mount Olympus* (AGC-8). The yard would subsequently perform similar conversions on two Coast Guard cutters. *NARA RG 181*



The Navy Yard served as the point of delivery for destroyers built by Bath Iron Works in Maine. Carrying skeletal Navy crews, the vessels sailed from Bath to Boston, where they were formally delivered to the Navy and completed their outfitting. In the summer and fall of 1944, six Bath-built ships (DD-735 to DD-740) were taken into the shipyard upon arrival and converted into destroyer minelayers (DM-23 to DM-28). The first of these vessels, USS *Robert H. Smith* (DM-23) is seen in Boston Harbor on Sept. 18, 1944. *BOSTS-14344*



In Nov. 1944, seven months after leaving Boston following her reconstruction to repair damage received at Casablanca in Nov. 1942, the destroyer USS *Hambleton* (DD-455) returned to Charlestown for conversion into a high-speed minesweeper (DMS-20). East Boston is in the background of this view taken on Dec. 16, 1944. *BOSTS-11334*

The Yard After 1945

As World War II came to an end, the Charlestown Navy Yard and its annexes entered a period of lessening activity. While the piers at South Boston were filled, it was with the vessels of the Atlantic Reserve Fleet. In the immediate postwar period, the yard built no new ships. In the late 1940s it did, however, complete several vessels that had been started during the war, construction of which had been suspended as the need for them decreased with final victory in sight. These included two LSTs (with an experimental steam propulsion plant),[299] and three of the four submarines it had launched. Those boats, along with the fourth, sent north to Portsmouth for completion, finally emerged to a revised, streamlined design that reflected the lessons learned during the war.[300] The last two incomplete wartime hulls, a pair of escort vessels, were finally finished in 1955 as radar pickets, the value of which had been established during the Japanese kamikaze attacks off Okinawa.[301]

The official mission of the Navy Yard as defined in 1947 included "construction, docking, overhaul, and alteration" of destroyers, landing craft, and escort ships; "overhaul and conversion of various types of ships, including submarines, with emphasis on destroyers and auxiliaries"; serving as host for and "docking and overhaul of local reserve ships"; acting as the planning yard for various classes of surface ships; and "manufacture of cordage … and other items as assigned."[302] In addition to the yards at Charlestown and South Boston and the East Boston Fuel Annex, the Navy Yard oversaw a number of other sites—inactive facilities considered as potential mobilization assets in time of war—which were gradually disposed of in the 1950s and 1960s, including the Chelsea Annex, Lockwoods Basin, and the former Bethlehem Steel Hingham shipyard.[303]

While the yard's mission would be periodically updated, it remained essentially the same throughout the remainder of its active service. By 1971, for example, it was defined as to "perform authorized shipwork in connection with new construction, conversion, overhaul, repair, alteration, activation, inactivation, drydocking, and outfitting of various types of ships and service craft including aircraft carriers, with emphasis on destroyer-type ships and auxiliaries"; to "design, construct, and convert destroyer-type ships, auxiliaries, landing craft, and other naval ships," including the design and conversion of both "destroyer and cruiser-type ships to guided missile ships"; to act as a planning yard for various classes of surface ships; to "perform manufacturing, as assigned, including chain and appendages"; and to "operate the East Coast Sonar Equipment Assemblies Repair Facility."[304]

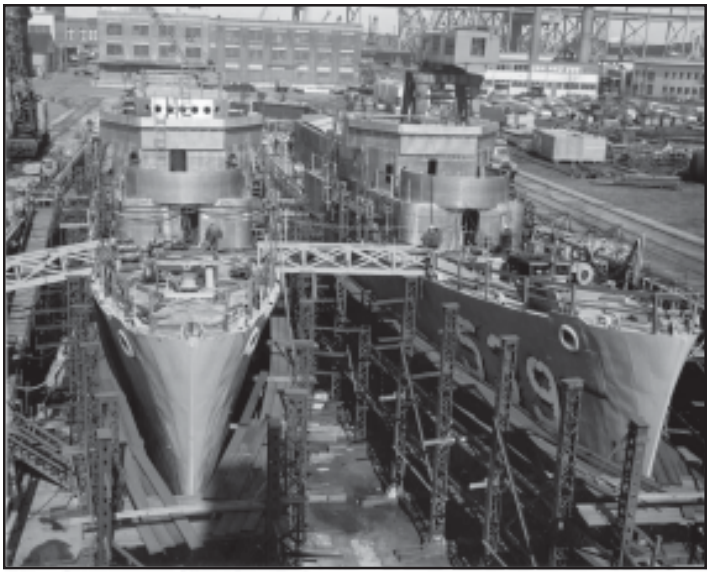
The yard's workforce underwent a drastic reduction in the immediate postwar period. Between mid-1945 and mid-1946, it fell in



USS *LST-1154* (which would be named *Tallahatchie County* in 1955) sits at Pier 10 on Jan. 3, 1949. The next-to-last ship of the World War II program to be launched by the yard, she and her sister *LST-1153* (later *Talbot County*) featured experimental steam propulsion systems rather than the diesel engines of all other LSTs. Note the Service Buildings (Building 215B, 215C) on the pier and floating crane *YD-21* to the right at Pier 9. *BOSTS-14364*



Not all of the vessels assigned to the Atlantic Reserve Fleet were returning combat veterans. Two escorts, USS *Vandivier* (DE-540) and USS *Wagner* (DE-539), launched by the Navy Yard in Dec. 1943 but not completed due to changing priorities, were officially suspended in Feb. 1947 and towed to South Boston for storage with the Reserve Fleet as candidates for future completion. The two ships are seen here at the North Jetty on Apr. 18, 1950. *BOSTS-14587*



In October 1953 the Navy directed that the two ships be converted into radar picket escorts. The two vessels were again towed across the harbor in July 1954, this time being taken into Dry Dock 5, where they are seen on Mar. 23, 1955. USS *Vandivier* (DER-540), left, and USS *Wagner* (DER-539), right, would be completed in Oct. and Nov. of that year, respectively. *BOSTS-14588*

[299] Black, *Charlestown Navy Yard, 1890-1973*, 2:714-15.

[300] Ibid., 2:714.

[301] Ibid., 2:716.

[302] Commander to Bureau of Ships, Nov. 17, 1947, quoted in Black, *Charlestown Navy Yard, 1890-1973*, 2:665.

[303] Black, *Charlestown Navy Yard, 1890-1973*, 2:662, 746; "Chelsea Annex Is Sold For $140,000," *Boston Naval Shipyard News*, vol. 13, no. 27 (Mar. 14, 1949), p. 1.

[304] Boston Naval Shipyard, Command History, 1 January 1971-31 December 1971, OPNAV Report 5750-1, Command Histories, 1961-1974, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 12.

The Yard At 150: A Sesquicentennial Look

IN AUGUST 1950 the Navy Yard celebrated the sesquicentennial of its establishment with a series of events for its employees and the public. This was the first time that it had officially taken note of its birthday. On November 10 of that year, the yard had a series of aerial photographs made of the three shipyard properties under its control—the Charlestown Navy Yard, the South Boston Annex, and the Naval Industrial Reserve Shipyard, Hingham—which are presented here.



1800-BOSTON-1950

BNS CELEBRATES 150TH BIRTHDAY

PUBLIC PROGRAM ON ESPLANADE TO HIGHLIGHT WEEKEND EVENTS

SHIPYARD NEWS

HUGE BIRTHDAY PARTY PLANNED

Celebration Opens With Family Outing, Aug. 20th

Home to the U. S. Fleet since 1800



Shipyard Commander Capt. R. Morgan Watt, Jr., and Miss Sesquicentennial, Mary Connelly, cut a cake at a dinner-dance held on Aug. 26, 1950, at the Recreation Center, Navy (Fargo) Building, as part of the yard's 150th birthday celebrations. Miss Connelly's ladies-in-waiting, Kathleen Roche and Marie Buckley, look on. Note the replica of the Main Gate (Building 97) on the top of the cake. *BOSTS-7544*



The most visible changes in the vicinity of the Navy Yard in the post-World War II period involved the construction of the Mystic River Bridge between Charlestown and Chelsea paralleling the northern boundary of the yard and the reconstruction of Hoosac Pier No. 1 by the Port of Boston Authority. USS *Constellation* (IX-20) sits inboard of USS *Constitution* (IX-21) at Pier 1. Note the large number of automobiles parked on Pier 1 and various railroad boxcars along the track paralleling Buildings 4 and 5 and First Ave. The brick walls of Buildings 4 and 5 are still painted and would remain so until 1960. An unidentified seaplane wrecking derrick and the covered lighter *YFN-256* are tied up at Pier 1 West. Note the addition to Building 10, in the center of Pier 1, to accommodate a sonar test tank. *BOSTS-8527*

The Yard At 150: A Sesquicentennial Look



Recently-recommissioned USS *Conway* (DD-507) sits at Pier 1 East, which was the usual location for commissioning and transfer ceremonies. USS *Francis M. Robinson* (DE-220) is at Pier 2, while USS *LST-1154* occupies Dry Dock 2. Covered lighters *YF-298* and *YF-455* sit across the caissons of Dry Docks 1 and 2, respectively, while floating derrick *YD-35* is across the end of Pier 2. *BOSTS-8527*



This view looks from Pier 2 east to Pier 5. USS *LST-1154* is in Dry Dock 2. The Assembly & Welding Shop (Building 195) fills the area between the high-rise Electric Shop (Building 197) and the Cafeteria & Sail Loft (Building 36). *BOSTS-8527*



The submarine tender USS *Howard W. Gilmore* (AS-16) sits at Pier 5 during an overhaul period. Alongside are floating derrick *YD-13* and sludge removal barge *YSR-37*, while Portal Cranes 62 (left) and 65 provide support from pierside. Sister crane 63 is on the east side of the pier. *BOSTS-8527*



Open lighter *YC-763* is at the end of Pier 5, while three escorts are seen at Pier 5 East and Pier 6 West. Floating derrick *YD-77* and sludge removal barge *YSR-32* are alongside a *Fletcher*-class destroyer at Pier 7. *BOSTS-8527*



The Assembly & Welding Shop (Building 195) and the Machine Shop & Foundry (Building 42) occupied the largest footprints of any yard buildings, although the two high-rise Storehouses (Buildings 149, left, and 199), seen in the right background, had greater floor space. *BOSTS-8527*



With two covered lighters, including *YFN-902*, alongside, *Crane Ship No. 1* (AB-1) sits ar Pier 8 West. Note boats stored on Shipways 1 while Shipways 2 is being used as a parking lot. At Pier 9 are two escorts being prepared for transfer to the Greek Navy. *BOSTS-8527*

The Yard At 150: A Sesquicentennial Look



The western end of the South Boston Annex is seen here. Even Dry Dock 4 is being used for berthing of Atlantic Reserve Fleet ships. Those which can be identified are USS *Barnes* (CVE-20) at far left and the light cruiser USS *Dayton* (CL-105) at Pier 6 West. *BOSTS-8527*



From left to right are Buildings 53, 30, 48, 18, and 54, while Building 15 is in the lower center. The shadow of the Boston Army Base's Storehouse is falling on the edges of Buildings 20, 49, 21, and 1. *BOSTS-8527*



Buildings 54, 14, 29, and 16 can be seen on the far side of Dry Dock 3, which holds two escort carriers, while Building 21 and the Army Base Storehouse are in the foreground. The barracks ship USS *Colleton* (APB-36) is at Pier 1 East, inboard of a non-self-propelled cousin. The escorts *Wagner* (DE-539) and *Vandivier* (DE-540) and the destroyer *Livermore* (DD-429) are nested at the outer end of the West Jetty. *BOSTS-8527*



The oiler USS *Calahoosahatchee* (AO-98) is at the North Jetty. The Machine Shop (Building 16) is at left, with the Ordnance Repair Shop (Building 31) at right. *BOSTS-8527*



The Navy Yard was responsible for the maintenance of what was called the Naval Industrial Reserve Shipyard, Hingham. This facility had been constructed as part of the shipbuilding effort for World War II and had been operated as the Bethlehem-Hingham Shipyard by Bethlehem Steel. During the war, it constructed escort vessels and larger landing craft (LCILs and LSTs) on the building ways seen at the top center. The facility was retained as a potential mobilization asset, but by the mid-1950s the property was considered surplus and ultimately turned over to the General Services Administration for disposal. *BOSTS-8527*

half, with the number of female workers dropping from 6,911 to only 1,326. By early 1950, as the Navy began to respond to Cold War needs, it began a gradual increase, a development accelerated by the outbreak of the Korean War that June and the need to reactivate and modernize mothballed ships. The postwar employment peak occurred in mid-1952 at a little over 13,000 people. It would gradually decrease through the 1960s, reaching 5,343 as of the end of 1972. A year later, with the yard on track for closure, it stood at only 1,808.[305]

A Destroyer, Sonar, And Guided Missile Yard

Although the Navy Yard never worked exclusively on destroyers, it gained the reputation in the years following World War II as being a "destroyer yard." As such, it was the lead, or design, yard for several major modernization projects for the Navy's large fleet of wartime destroyers. As a lead yard, it developed the detailed plans for the work, which were then distributed to other navy and private shipyards working on the program, and was assigned the initial conversion project. Two of the more significant projects were the SCB-74A modernization of *Fletcher*-class ships in the early 1950s and the SCB-206 Fleet Rehabilitation and Modernization, Mark I (FRAM I) program for *Gearing*-class vessels starting in 1959.[306] Among the destroyers in the SCB-74A program at Charlestown was USS *Cassin Young* (DD-793), which received her conversion between September 1952 and January 1953.[307] Between 1959 and 1965, the yard performed FRAM I overhauls on 18 destroyers, along with three of the more austere FRAM II modernizations.[308]

The development of sonar in the years following World War II remained a high priority for the Navy. In 1947, probably in recognition of the yard's location near the Massachusetts Institute of Technology and other research establishments, the Navy Yard was designated as the Navy's East Coast Transducer Repair Facility.[309] As a part of this effort, the yard Laundry (Building 10) was modified as a sonar test facility. This work included the construction of an addition containing a concrete test tank for sonar equipment.[310] In the mid-1950s, with sonar units growing in size beyond the capacity of the Charlestown facility, the work was transferred to South Boston.[311] The yard would continue to develop sonar, and install sonar

[305] "Appendix 19 – Employment Record, 1938-1957," in Mansfield, *Boston Naval Shipyard, 1938-1957*, p. 89; Boston Naval Shipyard, Command Histories, 1961-1974, OPNAV Report 5750-1, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 12.

[306] Following World War II, naval shipbuilding and conversion programs were developed under the cognizance of the Ship Characteristics Board (SCB). The project numbers assigned to proposals by the SCB were used in both official and unofficial sources as a shorthand way of referring to ship construction and conversion designs. For a description of the SCB-74A and SCB-206 projects, see Norman Friedman, *U.S. Destroyers: An Illustrated Design History* (Annapolis: Naval Institute Press, 1982), p. 118-21, 285-87.

[307] Carlson, *Ships Built by the Charlestown Navy Yard*, p. 71. The prototype SCB-74A ship was USS *Picking* (DD-685), work on which began in June 1951. See Friedman, *U.S. Destroyers*, p. 118, 121.

[308] Carlson, *Ships Built by the Charlestown Navy Yard*, p. 79. The prototype FRAM I ship was USS *Perry* (DD-844), begun in Apr. 1959. The FRAM overhauls took on the average nine to twelve months to complete. See ibid.

[309] Black, *Charlestown Navy Yard, 1890-1973*, 2:707-708.

[310] Weinbaum, *Building 10 Historic Structure Report*, p. 9-11.

[311] Black, *Charlestown Navy Yard, 1890-1973*, 2:708.

SCB-74A Modernization



Following World War II, most of the Navy's *Fletcher*-class destroyers, which had seen heavy service, were placed in reserve. The Korean War resulted in a decision to activate them, and the SCB-74A project was instituted to modernize them. USS *Picking* (DD-585) was selected as the prototype SCB-74A modernization, entering the Charlestown Navy Yard in June 1951. The completed vessel is seen here in Oct. 1951. *BOSTS-13964*

FRAM Overhauls



The Fleet Rehabilitation And Modernization (FRAM) program was intended to extend the life of World War II-era destroyers by eight years. The Navy Yard was designated as lead yard for the FRAM I program in Mar. 1959. The prototype conversion, USS *Perry* (DD-844), is seen at Pier 6 on Feb. 1, 1960. Note how Industrial Service Building 228 has been designed to allow Portal Crane 20 to pass over it. *BOSTS-13943*



The yard's first FRAM II overhaul was USS *Hugh Purvis* (DD-709), seen here in Dry Dock 5 in May 1960. The FRAM II project involved a less-extensive rebuilding than did the FRAM I. Building 104 is at left, while Building 199 is in the background. *Richard Leonhardt*

domes and equipment, on destroyers and frigates[312] for the remainder of its history as an active shipyard. Among the more frequent visitors to the yard in the 1960s was USS *Willis A. Lee* (DL-4), which, starting in 1961, served as an evaluation ship for new sonar equipment.[313]

The Charlestown Navy Yard was also involved in the fitting of guided missiles to both destroyers and cruisers. These missiles (Terrier, Tartar, and Talos) were of the surface-to-air type and were intended to replace the anti-aircraft guns of the World War II era to meet the threat of jet aircraft and even anti-ship missiles. In the spring of 1955, the yard was assigned the conversion of the destroyer USS *Gyatt* (DD-712) into the Navy's first guided-missile destroyer (DDG-1). Work began in November of that year and was completed in March 1957.[314]

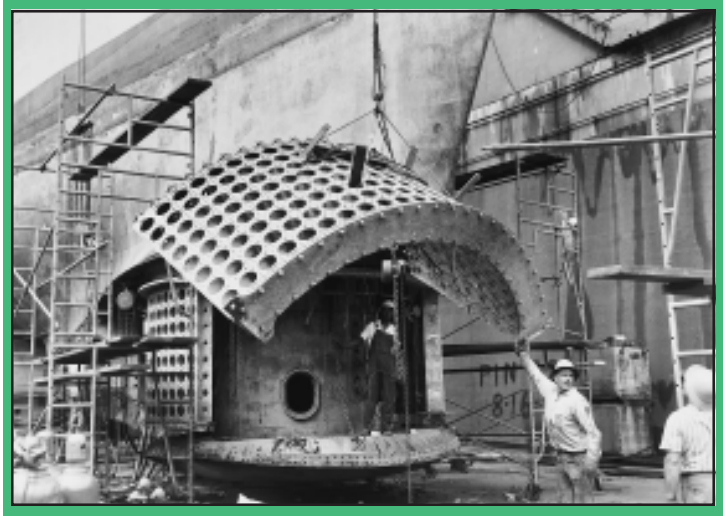
Even as *Gyatt* was under conversion, the yard received a second, more extensive project, the conversion of the light cruiser USS *Providence* (CL-82). Between June 1957 and December 1959, the yard performed extensive work on the ship (reclassified CLG-6), replacing the after guns with missiles and completely modernizing her electronics.[315] In March 1960, the yard took over the conversion of USS *Springfield* (CLG-7, ex-CL-66) after a strike stopped work on the ship at the Bethlehem Steel Fore River Shipyard in Quincy, Mass.[316]

The most extensive guided-missile conversion project, however, was the USS *Albany* (CG-10, ex-CA-123). Not only did the yard undertake the conversion of the ship into a "double-end" vessel, it also served as the lead yard for the entire heavy cruiser conversion project, originally projected as involving as many as six ships, but ultimately reduced to only three due to fiscal constraints, particularly the funding of Polaris ballistic missile submarines, and the long time required for the work. Starting in January 1959, the yard removed *Albany*'s superstructure to the main deck level and totally rebuilt her. She was ultimately recommissioned in November 1962.[317]

Sonar Installation



The frigate USS *Willis A. Lee* (DL-4) was selected by the Navy for testing sonar equipment. Here, floating crane *YD-196* lowers a new bow sonar dome for her into Dry Dock 2 on May 18, 1961. *BOSTS-15953*



On Aug. 9, 1965, *Lee* is in Dry Dock 4 at South Boston receiving yet another sonar installation. *BOSTS-14733*

Four and a half years later, in March 1967, she reentered the shipyard for a major overhaul that lasted until June 1969.[318]

The yard's role as a major conversion facility came to an end following the reconstruction of USS *Decatur* (DD-936) as a guided-missile destroyer (DDG-31) in the mid-1960s.[319] Although the Navy had originally intended to convert all eighteen of the postwar *Forrest Sherman* and *Hull* classes, high costs and problems with the Tartar missile system led it to terminate the program after four ships. Thus, instead of missile conversions, the yard performed more modest anti-submarine warfare upgrades for three of *Decatur*'s sisters between 1967 and 1970.[320]

[312] From the late 1940s until 1975, the U.S. Navy used the designation "frigate" (type symbol DL) for a class of ships that was based on destroyer-type hulls but intermediate in size between destroyers and cruisers. All other navies in the world used "frigate" to designate what the U.S. Navy termed as "Escorts" (type symbol DE), a class of vessel smaller than the destroyer. In 1975, the Navy adopted the nomenclature "Frigate" (type symbol FF) for the Escorts, and the existing Guided-Missile Frigates (DLG) were redesignated as either Guided-Missile Destroyers (DDG) or Guided-Missile Cruisers (CG). See Samuel Loring Morison, "A Matter of Class, Part III," *Naval History*, vol. 9, no. 2 (Mar./Apr. 1995), p. 27; Morison, "A Matter of Class, Part IV," p. 40-41.

[313] *DANFS*, 8:381; "New Sonar Dome Placed On Bow Of USS Willis A. Lee," *Boston Naval Shipyard News*, vol. 25, no. 47 (May 26, 1961), p. 1, 4; "Willis A. Lee Departed From Yard," *Boston Naval Shipyard News*, vol. 30, no. 21 (Apr. 15, 1966), p. 1.

[314] Friedman, *U.S. Destroyers*, p. 297; "BNS Given Guided Missile Ship Conversion Design Job," *Boston Naval Shipyard News*, vol. 19, no. 43 (May 6, 1955), p. 1; "Shipyard Converted USS Gyatt Into The Navy's First Guided Missile Destroyer," *Boston Naval Shipyard News*, vol. 21, no. 45 (May 24, 1957), p. 8.

[315] Black, *Charlestown Navy Yard, 1890-1973*, 2:782; "Conversion of USS Providence Underway," *Boston Naval Shipyard News*, vol. 21, no. 50 (June 21, 1957), p. 1.

[316] Black, *Charlestown Navy Yard, 1890-1973*, 2:786-87.

[317] Ibid., 2:782-786; "USS Albany Will Be Converted To Guided Missile Cruiser Here," *Boston Naval Shipyard News*, vol. 22, no. 25 (Dec. 27, 1957), p. 1; K. Jack Bauer and Stephen S. Roberts, *Register of Ships of the U.S. Navy, 1775-1990: Major Combatants* (New York: Greenwood Press, 1991), p. 155.

[318] Carlson, *Ships Built by the Charlestown Navy Yard*, p. 69; Norman Friedman, *U.S. Cruisers: An Illustrated Design History* (Annapolis: Naval Institute Press, 1984), p. 398.

[319] Carlson, *Ships Built by the Charlestown Navy Yard*, p. 72; "USS Decatur Rejoins Fleet Tomorrow," *Boston Naval Shipyard News*, vol. 31, no. 22 (Apr. 28, 1967), p. 1, 5.

[320] Friedman, *U.S. Destroyers*, p. 21; John S. Rowe and Samuel L. Morison, *The Ships and Aircraft of the U.S. Fleet*, 9th ed. (Annapolis: Naval Institute Press, 1972), p. 21; Samuel L. Morison and John S. Rowe, *The Ships & Aircraft of the U.S. Fleet*, 10th ed. (Annapolis: Naval Institute Press, 1975), p. 25.

Guided-Missile Conversions



The first guided-missile destroyer, USS *Gyatt* (DDG-712), is seen off the Navy Yard on Dec. 13, 1956, ten days after her recommissioning. She would become DDG-1 a few months later. *BOSTS-11305*



Stripping of the after guns and deckhouses of USS *Providence* (CL-82) is well underway in this June 1958 view of the cruiser in Dry Dock 2. She would emerge from the yard as a guided-missile cruiser (CLG-6) in Dec. 1959. *BOSTS-14007*



USS *Springfield* (CLG-7) is seen at Pier 7 in May 1960. This sister to *Providence* had been brought to the yard for completion from nearby Quincy after progress on her had come to a halt due to a strike against the Bethlehem Steel Fore River Shipyard. *Richard Leonhardt*



USS *Decatur* (DDG-31), her hull painted in red primer, is seen at Pier 5 West in Oct. 1965, during her conversion from a gun to guided-missile destroyer. At left is Portal Crane 20. *BOSTS-16216*



The most extensive guided-missile conversion carried out by the Navy Yard was that of USS *Albany* (CG-10), which saw the heavy cruiser stripped to the main deck and totally rebuilt. She is seen here in primer being brought into Dry Dock 2 on Aug. 26, 1961. Note the caisson for the dock tied up to Pier 3 in the foreground. At left is the Paint Shop (Building 125), while the Temporary Storehouse (Building 198) is in the distance. *Albany* would be recommissioned in Nov. 1962, almost four years after work had begun. *BOSTS-15926*

The End Of Shipbuilding

The only new-construction vessel awarded to the yard in the postwar period was the tank landing ship USS *Suffolk County* (LST-1173).[321] The yard served as the lead yard for the class, but hoped-for additional orders never came. The project saw the improvement of Shipways 1, where, beginning in July 1955, sections prefabricated in the yard's shops were assembled. Sliding down the ways on September 5, 1956, *Suffolk County* effectively brought the yard's role as a naval shipbuilder, the task for which it had been founded, to an end.[322]

The yard, however, remained active in its role as the facility where the Navy took delivery of, completed final outfitting, and commissioned new ships built by private shipyards, some as far away as the Great Lakes. In this period, foreign naval personnel were a common sight in the yard, as it oversaw the transfer of either new or refurbished minesweepers, escorts, and destroyers to foreign governments under the Military Assistance Program.[323]

Phasing Out Of Manufacturing Activities

Manufacturing operations still were important in the post-World War II era. In the early 1950s, the Forge & Chain Shop (Building 105) received new machinery to allow it to produce the 4-3/4 inch die-lock chain required for the anchors for the new *Forrestal*-class aircraft carriers.[324] Congressional objections killed the Navy's 1955 planned closure of both the Ropewalk and the Chain Forge,[325] but the pressure for the government to stop its manufacturing operations continued. While work at the Ropewalk was reoriented more toward research and development, it remained under attack from private industry. It was finally closed, with all of its equipment except for a few items retained for historic purposes auctioned off, in December 1971.[326] The Forge Shop continued to produce the larger anchor chain, a product useful only to the Navy and thus not of interest to private industry, until just before the yard's final closure.[327]

[321] "Shipyard to Build New Type LST," *Boston Naval Shipyard News*, vol. 19, no. 4 (Aug. 6, 1954), p. 1.

[322] *Suffolk County* was not the last naval vessel built by the yard. In 1965 it constructed four covered lighters (*YFN-1226* to *YFN-1229*, later *YC-1461* to *YC-1464*). Like the service craft built in the 1900s and 1910s, these vessels never appeared on lists of vessels constructed compiled by the yard. See Stephen P. Carlson, "Not *Suffolk County*: The Last Naval Vessels Built at Charlestown Navy Yard," *The Broadside/Boston National Historical Park* (No. 1, 2002), p. 7.

[323] Black, *Charlestown Navy Yard, 1890-1973*, 2:793; Mansfield, *Boston Naval Shipyard, 1938-1957*, p. 34-35, 102-107, 109-10; Public Affairs, Public Relations & Ceremony Files Maintained by the Assistant to the Shipyard Commander, 1936-1976, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. 15404, Boxes 1-40.

[324] Black, *Charlestown Navy Yard, 1890-1973*, 2:707; "Forging Hammer Christened," *Boston Naval Shipyard News*, vol. 18, no. 21 (Apr. 30, 1954), p. 1; "BNS Forges Super Carrier Chain," *Boston Naval Shipyard News*, vol. 18, no. 24 (June 11, 1954), p. 5.

[325] Hayden to Pike, Feb. 1, 1956, in Himmelfarb, *Ropewalk Study Final Report: Vol. II: History Section*, p. 189-190.

[326] Black, *Charlestown Navy Yard, 1890-1973*, 2:745-46.

[327] Ibid., 2:745; Boston Naval Shipyard, Command History, 1 January 1973-1 December 1973, OPNAV Report 5750-1, Command Histories, 1961-1974, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 11.

Commissioning And Transferring Of Vessels



The yard was responsible for final outfitting and commissioning of new naval vessels built at private shipyards in Maine and Massachusetts, as well as those on the Great Lakes. Here, USS *Long Beach* (CGN-9), the first nuclear-powered guided-missile cruiser, is placed in commission at the West Jetty at South Boston on Sept. 9, 1961. *BOSTS-11838*



Foreign transfers included both ex-American vessels and craft built specifically for foreign navies. On Oct. 26, 1967, the Turkish flag is raised on TCG *Fatsa* (M-502), an inshore minesweeper (MSI-17) built by Peterson Builders at Sturgeon Bay, Wisc. *BOSTS-11104*

Modernizing The Chain Forge



In 1953 and 1954, the yard installed a new drop hammer in the Forge Shop (Building 105) for producing 4-3/4 inch die-lock chain. On Apr. 16, 1954, Mrs. Thomas Benton christens it as "Monarch." To her right, in white hard hat, is Forge Shop Master Paul Ivas, while her husband, who had suggested the name, is on her left. *BOSTS-9710*

Building USS *Suffolk County* (LST-1173)



On July 15, 1955, workers laid the keel for *Suffolk County* on the recently-improved Shipways 1. Leadingman Rigger John Chorba, with his left arm in the air, directs the operator of Hammerhead Crane 3 as Rigger Wally Woods maneuvers the end of the plate being set. Note the prefabricated hull sections at left. *BOSTS-14328*

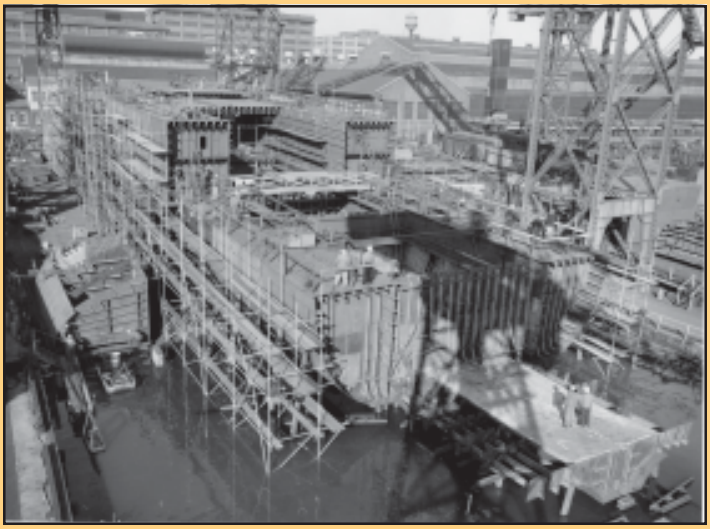


Because of their size, the prefabricated components of the vessel had to be transported from the Assembly Shop (Building 195) by water. On Feb. 3, 1956, floating crane *YD-196* brought part of *Suffolk County*'s stern to the Shipways. *BOSTS-14320*





Much work remained to be done after launching. Following a period in Dry Dock 2 (above left) and at Pier 5 (above right), the ship was finally completed and placed in commission with much ceremony on Aug. 15, 1957 (right). The location is Pier 1 East.
BOSTS-14324 (above); BOSTS-14331 (right)



By Dec. 1, 1955, much of the forward portion of the hull was in place, the speed of construction owing much to the prefabrication process.
BOSTS-14319



Suffolk County was launched on Sept. 5, 1956, following her christening (inset) by Mrs. Thomas P. (Mildred) O'Neill, Jr., wife of the Congressman whose district included the Navy Yard. *BOSTS-14330*



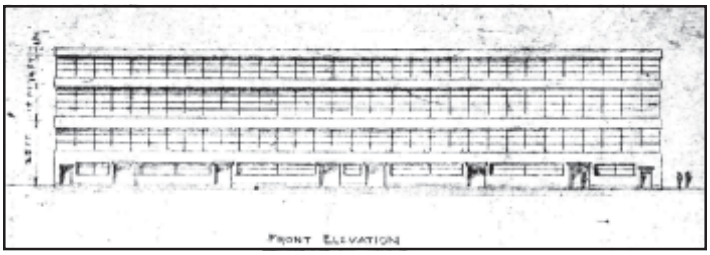
Yard Modernization After 1945

In the post-World War II period, the yard underwent little physical change. Some temporary structures were removed, and more and more open areas were paved over to provide parking and storage space. The return of the yard to a peacetime basis was heralded in 1946 by the construction of new Tennis Courts (Structure 236) between First and Second Aves. west of 4th Street to replace those removed five years earlier for the construction of Building 198.[328]

A new Shore Station Development Plan (master plan) was prepared in the late 1940s. Like the ambitious master plan prepared following the Civil War, it would have totally changed the face of the yard. In addition to replacing all wooden piers with new ones of concrete and steel and improving the three dry docks and two shipways, the plan would have swept away Buildings 31, 32, 34, 36, 42C, 75, 103, 105, 106, 114, 120, 131, 187, 192, 198, 200, 201, 203, 206, and 210, as well as the remaining original portion of Building 104. The Forge, Foundry, and Boat Shop would all move to the South Boston Annex, while Charlestown would see construction of two service buildings, a central office building, a new ten-story warehouse connecting Buildings 149 and 199, an extension to the Structural Shop (Building 104), a Woodworking Shop, an extension to Building 42 for Outside Machinists and Ordnance Shops, and a Sheet Metal Shop.[329]

Plans for South Boston reflected the move of shops from Charlestown, but the major planning element affecting the Annex related to the proposed assignment of a major submarine overhaul role to that facility. In the early 1950s, the yard began preparing plans for a series of new structures at South Boston especially for submarine conversion work, but in April 1953 the Navy chose instead to locate its new overhaul complex at Charleston, S.C.[330]

The master plan would be continually updated throughout the 1950s and 1960s but there was little money to implement it. Perhaps reflecting that reality, the plans became more modest over time. For example, the 1958 version, while still including replacement of the Marine Railway with a new Pier 3 and the replacement of Piers 8, 9, and 10, had few new structures. The most significant of these involved extensive additions to the south side and east end of Building 104.[331] Eight years later, the new Pier 3 remained, while Piers 8 and 9 were to be replaced by a single new Pier 8. Demolition of Building 103 was back in the program, but the additions to Building 104 had been dropped. Major new buildings were a Missile Systems Shop replacing Building 198, an addition on top of the Ropewalk for Enlisted Men's Barracks, and a new Chapel on the open space east of 3rd Street.[332] (See Figure 2-26)



This Oct. 21, 1948, architect's rendering of the proposed 24,000-square foot Dry Dock 1 Service Building, intended to replace Building 198, is one of the few drawings from the 1948 master plan to survive in the yard's files. The first floor of the reinforced concrete, steel, and masonry building would provide space for the various yard shops, the second would contain offices for ship's superintendents and supervisors as well as employee wash and locker rooms, and the third would be a lunch room.

BOSTS-13441

Among the few capital projects completed in the late 1940s were an extension of Dry Dock 1 and the reconstruction of the outer end of Dry Dock 2.[333] A new finger pier was provided west of Pier 1 as an entrance for USS *Constitution* (IX-21).[334] An addition was made to Building 10 to house a sonar test tank,[335] and a new Saluting Gun Battery (Structure 261) and Ammunition Bunker (Building 272) were installed at the outer end of Pier 1.[336]

The 1950s saw the construction of an addition to the Dispensary (Building 120) for the Dental Department;[337] the replacement of wooden Piers 4, 6, and 7 with concrete piers and the extension of portal crane tracks to serve them;[338] the reconstruction of Pier 11 to support aircraft carriers;[339] modifications to the Foundry (Building 42C)[340] and the Power Plant (Building 108);[341] and an expansion of

[328] Mansfield, *Boston Naval Shipyard, 1938-1957*, p. 68; "New Tennis Courts Placed in Service," *Boston Naval Shipyard News*, vol. 11, no. 20 (Oct. 21, 1946), p. 8.

[329] Black, *Charlestown Navy Yard, 1890-1973*, 2:674-76. The drawings which show this plan, and indeed the majority of the drawings listed in the Master Shore Station Development category (File 610) in the Public Works Dept. drawing index card file, are not in the park collection.

[330] Black, *Charlestown Navy Yard, 1890-1973*, 2:665-66, 675.

[331] "Master Shore Station Development Plan, Part II-Section 2, General Development Plan, Existing & Planned Peacetime" [drawing], rev. Oct. 24, 1958, File 610-136, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13441.

[332] "General Development Map, Existing and Planned Pre M-Day" [drawing], June 22, 1966, File 610-136, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13441.

[333] Brady and Foster, *Historic Structure Report, Dry Dock 1*, p. 28-29; Progress Photos, Jan.-July 1948, Reconstruction of Dry Dock 1, Contract NOy 14448, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8796, Box 1-29; Progress Photos, Apr.-Aug. 1949, Reconstruction of Dry Dock 2, Contract NOy 14818, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8817, Box 1-30.

[334] "Pier No. 1, Berth for U.S.F. Constitution" [drawing], Apr. 2, 1946, File 421-74, 421-75, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13458.

[335] Weinbaum, *Building 10 Historic Structure Report*, p. 9-11.

[336] "Pier No. 1, Foundation for 3″ Saluting Battery" [drawing], Sept. 15, 1947, File 421-77, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13458; "Pier No. 1, Propos. Ammunition Storage For 3 Inch Saluting Guns" [drawing], rev. Oct. 22, 1948, File 421-78, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13458.

[337] "New Dental Department Of Shipyard Open For Business," *Boston Naval Shipyard News*, vol. 19, no. 26 (Jan. 7, 1955), p. 4; Zimmer, "Chronological Profile," in Boston Redevelopment Authority, *Building 120*.

[338] Black, *Charlestown Navy Yard, 1890-1973*, 2:677-678; "Progress of Piers," *Boston Naval Shipyard News*, vol. 21, no. 7 (Aug. 24, 1956), p. 7; "Public Works Announces New Projects," *Boston Naval Shipyard News*, vol. 22, no. 1 (July 12, 1957), p. 1, 4; "New Pier Seven Completion In November," *Boston Naval Shipyard News*, vol. 23, no. 17 (Oct. 31, 1958), p. 1..

[339] "Pier 11," in McGinley Hart & Associates, *HistoricAmerican Engineering Record*; "Pier 11 Job Underway," *Boston Naval Shipyard News*, vol. 20, no. 1 (July 15, 1955), p. 1; "Progress of Piers," *Boston Naval Shipyard News*, vol. 21, no. 7 (Aug. 24, 1956), p. 7.

[340] Progress Photos, July-Dec. 1949, Rehabilitation of Foundry, Contract NOy 17504, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9405, Box 1-44.

[341] Black, *Charlestown Navy Yard, 1890-1973*, 2:678-679; "Shop 03 Improvements," *Boston Naval Shipyard News*, vol. 18, no. 21 (Apr. 30, 1954), p. 2; Progress Photos, Jan.-Aug. 1954, Improvements to Power Plant, Contract NOy 29562, Boston Naval Shipyard Photo Collection, NPS Cat. No. 9769, Box 1-52.

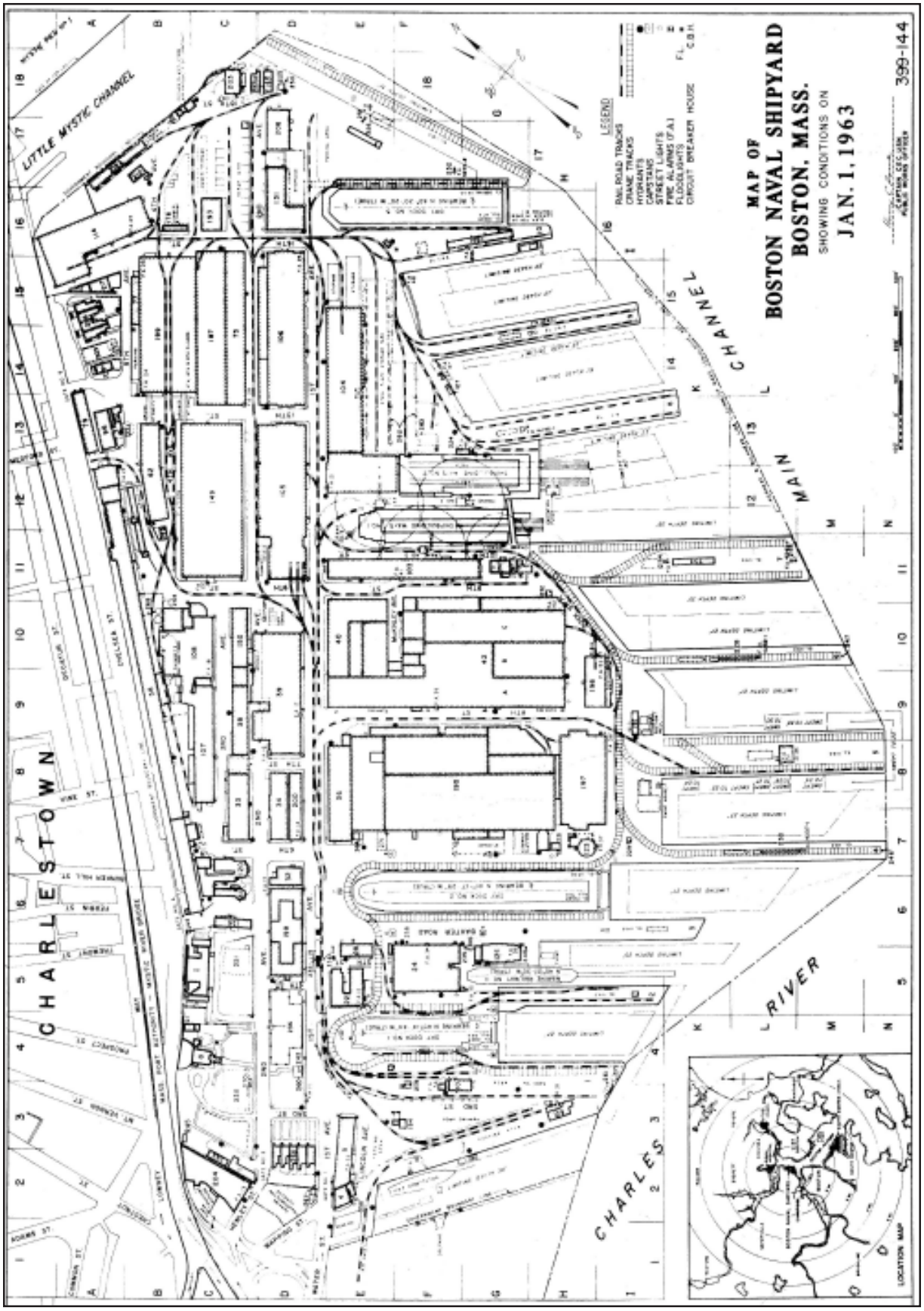


Figure 2-25 – Plan of Navy Yard, 1963

"Map of Boston Naval Shipyard, Boston, Mass., Showing Conditions on Jan. 1, 1963," Jan. 1, 1963. This plan shows the changes in the physical plant following World War II and the numbering, beginning in the mid-1950s, of previously-unnumbered structures such as light towers. *BOSTS-13502*

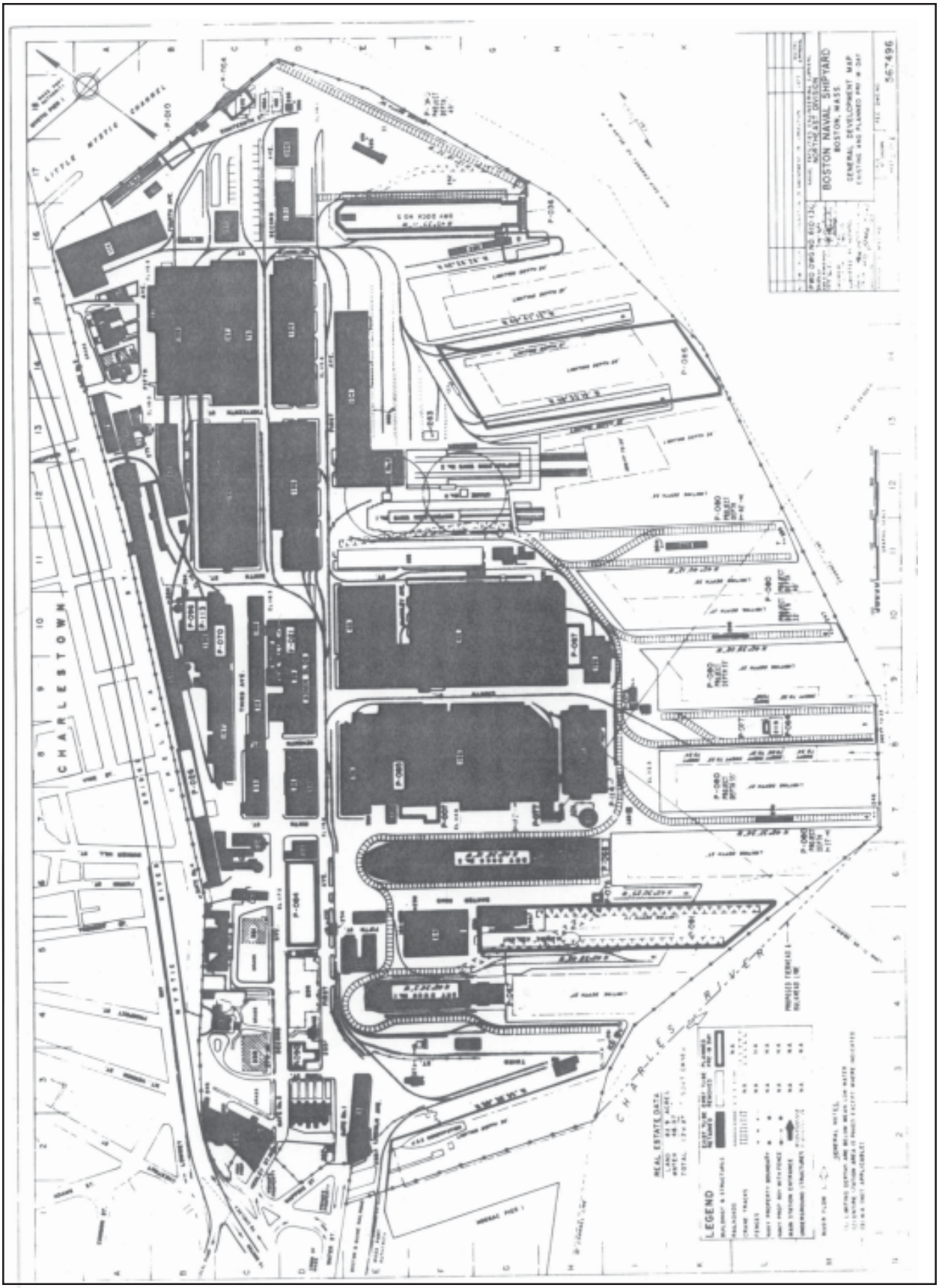
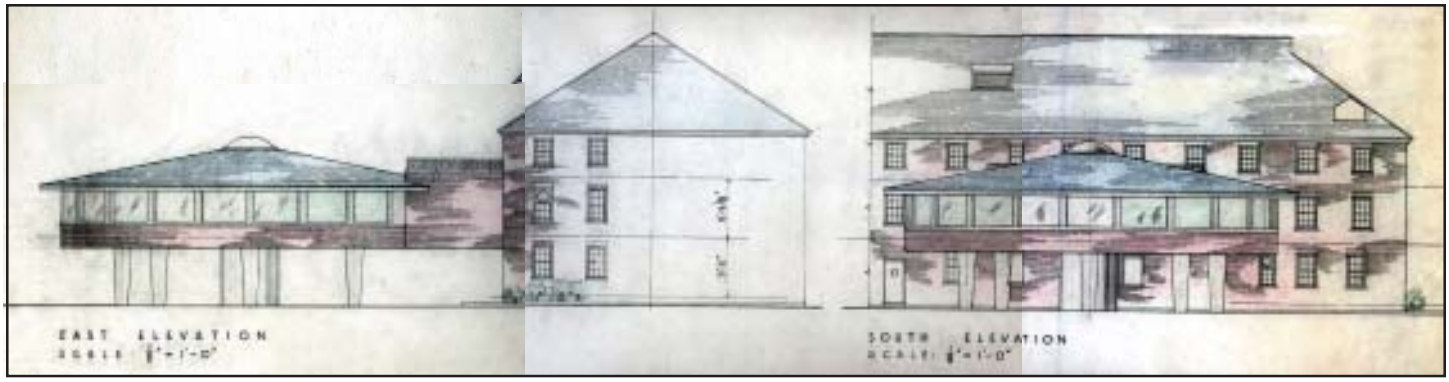


Figure 2-26 – Charlestown Navy Yard Master Plan, 1966

"General Development Map, Existing and Planned Pre M-Day," June 22, 1966. Most of the projects in this version of the yard's master plan involved alterations and improvements to existing facilities. New construction projects included Bottled Gas Storage (P-010), Enlisted Men's Barracks (P-026), Incinerator (P-054), Missile Systems Shop (P-084), Pier 8 (P-086), Building 42 Addition (P-087), Chapel (P-090), and Pier 3 (P-091). *BOSTS-13441*



"Bldg. 5, B.O.Q. Addition to 2nd Floor, Scheme C," July 18, 1966. These excerpts from this plan show one of several proposals for additions to Building 5 to accommodate an expanded Officers' Club. Two versions of this circular addition were done, differing only in that the other scheme was centered on the building rather than offset towards the east end. Other proposals envisioned a more conventional two-story rectangular addition or a semi-circular addition. *BOSTS-13356*

the Electrical & Electronics/Outside Machinists Shop (Building 197).[342]

In 1955 Building 202 was demolished and the area of 1st Street between Building 4 and the yard's western boundary at Hoosac Stores No. 1 & 2 was converted into a parking area for visitors to USS *Constitution*.[343] In that same year Quarters A was demolished and 2nd Street abandoned.[344] In 1958, the monumental Main Gate (Building 97) was demolished and replaced with a small Gate House (Building 267) because the narrow archway through the old gate could not accommodate the volume of traffic at shift changes.[345]

There were few public works projects in the 1960s. The most important were the 1961 work on Dry Dock 2, which involved replacement of the dock floor, acquisition of a new caisson, and renewal of the portal crane tracks, as well as dewatering system improvements.[346] The last major building construction project occurred in 1967 and 1968, when an extension of the Machine Shop (Building 42) was erected in the space between Building 42's south side and the north wall of Building 196.[347]



Although the 1960s saw few major public works projects, the Navy Yard did undertake a number of infrastructure improvements. This Sept. 16, 1966, view shows relaid railroad tracks and paving on First Ave. at the intersection of 16th St. *BOSTS-8664*

Two small projects worth noting occurred in 1972. The first consisted of the addition of large picture windows on the south wall of Building 5, the realization of a project for the upgrading of the Officers' Club which had been proposed in the mid-1960s. At that time, far more radical changes, involving additions to the structure, had been proposed, but never funded.[348] The second involved the construction of a viewing platform around Building 10 so that visitors could see work being done on USS *Constitution* during her overhaul in Dry Dock 1 scheduled to begin in 1973.[349]

Proposed Move To South Boston

In the mid-1960s the Navy hired Kaiser Engineers to undertake studies of modernization of its shipyard facilities. In March 1968 Kaiser submitted its report, with the recommendation that "consoli-

[342] "Building 197 Addition," *Boston Naval Shipyard News*, vol. 18, no. 19 (Apr. 2, 1954), p. 2; "Bldg. 197 Annex Nears Completion," *Boston Naval Shipyard News*, vol. 19, no. 7 (Aug. 27, 1954), p. 3; Progress Photos, Aug. 1953-July 1954, Building 197 Extension, Contract NOy 73786, Boston Naval Shipyard Photo Collection, NPS Cat. No. 9977, Box 1-58.

[343] "USS Constitution Area To Have 'New Look'," *Boston Naval Shipyard News*, vol. 20, no. 3 (July 29, 1955), p. 1, 3; "Constitution Area's 'New Look'," *Boston Naval Shipyard News*, vol. 20, no. 4 (Aug. 5, 1955), p. 4; "Old Ironsides 'New Look'," *Boston Naval Shipyard News*, vol. 20, no. 9 (Sept. 9, 1955), p. 4.

[344] "Second Oldest Building In Yard Closes Long Service To The Navy," *Boston Naval Shipyard News*, vol. 19, no. 43 (May 6, 1955), p. 1, 3; Specification No. 44902, "Demolition and Removal of Structures at the Boston Naval Shipyard," Jan. 4, 1955, Public Works Dept., Design Division (440), Completed Design Projects, Quarters A, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 40.

[345] "Here's How The Main Gate Will Look Five Months From Now," *Boston Naval Shipyard News*, vol. 23, no. 2 (July 18, 1958), p. 4; "Going Down," *Boston Naval Shipyard News*, vol. 23, no. 3 (July 25, 1958), p. 2.

[346] "Public Works Outlines Four Projects For Improvements To Dry Dock No. 2," *Boston Naval Shipyard News*, vol. 25, no. 40 (Apr. 7, 1961), p. 1, 3; Progress Photos, Feb.-Sept. 1961, Dry Dock 2 Floor, Contract NBy 24911, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8825, Box 1-31; Progress Photos, Apr.-Nov. 1961, Replacement of Crane Rails, Dry Dock 2, Contract NBy 16484, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8841, Box 1-32.

[347] Progress Photos, Jan. 1967-Feb. 1968, Machine Shop, Contract NBy 66421, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-9409, Box 1-44.

[348] McGrath and Booth with Wong, *Historic Structure Report, Buildings 4 and 5*, p. 12. For Schemes A to E, see "Bldg. 5, B.O.Q. Addition to 2nd Floor" [drawings], June 23-Oct. 5, 1966, File 5-174-178, 180-181, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. 13356.

[349] Weinbaum, *Building 10 Historic Structure Report*, p. 12; "Bldg. No. 10 Platform for Viewing U.S.S. Constitution" [drawing], July 5, 1972, File 10-33, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. 13361.

Rebuilding The Waterfront After 1945: A Gallery

THE PHOTOGRAPHS in this gallery depict changes to the yard's waterfront, including its dry docks and piers, in the post-World War II period. The 1963 yard plan (Figure 2-25) shows the location in the yard of each structure shown.



Finger Pier & Dolphins, May 25, 1960

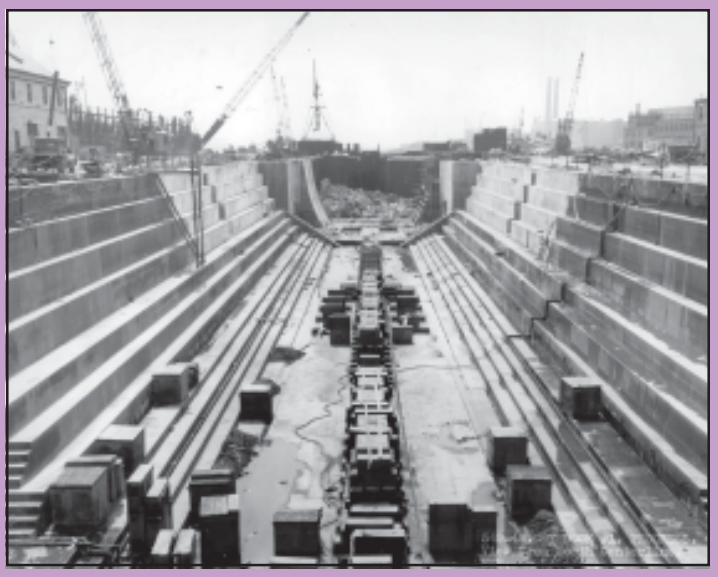
In 1946 the yard relocated the two historic vessels assigned to it—USS *Constellation* (IX-20) and USS *Constitution* (IX-21)—to the Fitchburg Slip. To provide access to *Constitution*, moored outboard of *Constellation*, it constructed a Finger Pier between the two ships. Subsequently, with the removal of *Constellation*, "Old Ironsides" moved to the berth between Pier 1 and the Finger Pier which has been her home for most of the past half century. The four Dolphins were built in 1951 to protect *Constitution* from vessels maneuvering into the adjacent Hoosac Pier. *BOSTS-15638*





Dry Dock 1, Feb. 3, 1948 & Mar. 24, 1948

One of the major projects in the late 1940s involved the extension seaward of Dry Dock 1. In the view above, the outer end of the dock has been demolished. The granite altars in the center of the dock were removed to allow new access stairs into the dock to be installed. At left, seven weeks after the view above, the removed section has been restored and the new south end of the dock is taking shape. *BOSTS-8796*



Dry Dock 1, May 24, 1948



Dry Dock 1, July 23, 1948

The progress of the dock can be seen in these two views looking south. At left, the temporary coffer dam constructed to keep the worksite dry is still in place as construction progresses in the area where the Caisson will be seated. Two months later, the Caisson is seen in place and the work is nearly complete. *BOSTS-8796*

Rebuilding The Waterfront After 1945: A Gallery



Dry Dock 2, July 6, 1949

Work on Dry Dock 2 in the late 1940s was not as extensive as that on Dry Dock 1. The end of the dock, around the seat of the caisson, was rebuilt to solve a leaking problem. Here the caisson is seen in place as new paving is placed on either side. The small shelter on either side of the caisson covers power capstans for the dock. *BOSTS-8817*



Dry Dock 2, Aug. 19, 1949

In addition to reconstructing the end of the dry dock, the Navy replaced many of the access stairs into the dock. The completed stairs at the northern end of the west side are seen here. The wooden extension of Building 24 can be seen above the dock. *BOSTS-8817*



Dry Dock 2, Sept. 27, 1961

In 1961 the yard undertook a series of projects to improve the largest of the three dry docks at Charlestown. Between February and September, contractors replaced the dock's floor, a project which was conducted even as the dock remained in use. *BOSTS-8825*



Dry Dock 2, Nov. 1, 1961

A second project involved the replacement of crane rails around the dock. This work was performed in phases so that the dock could continue to be used. USS *Willis A. Lee* (DL-4) and the new caisson for the dock are seen in the dock in this view of work on the rails on the dock's west side. *BOSTS-8841*



Dry Dock 2 Caisson, Oct. 5, 1961

The final phase of the 1961 upgrade project for Dry Dock 2 involved the acquisition of a new caisson to replace the original dating to the dock's completion in 1905. Here the tug *Sadie Ross* maneuvers the new caisson towards Pier 3 at the end of its trip across the harbor from the Bromfield Corp. yard in East Boston. *BOSTS-8837*

Rebuilding The Waterfront After 1945: A Gallery



Pier 4, July 1, 1957
The mid-1950s saw extensive work on the yard's piers, with wooden Piers 4, 6, 7, and 11 being replaced by new ones of concrete and steel. This view shows the new Pier 4 nearing completion. *BOSTS-8727*



Pier 6, Apr. 4, 1957
The new Pier 6 nears completion. Work on Piers 4 and 6 was done under a single $4,413,694 contract. Note that the crane tracks have been extended so that they are ready for the next phase of waterfront renovation. *BOSTS-8751*

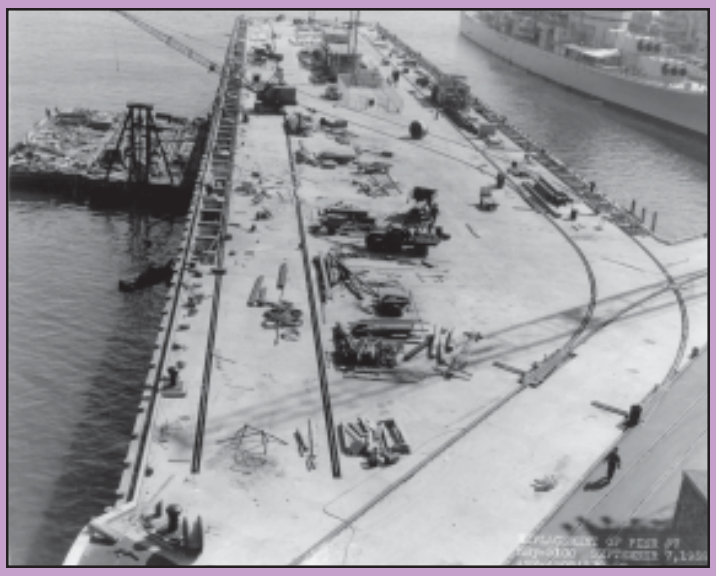


Portal Crane 23 or 24, Aug. 22, 1958
As part of the pier rehabilitation projects, the Navy Yard acquired five new portal cranes from Star Iron Works. This view shows the assembly of one of the two 28-ton cranes (Cranes 23, 24) on the west side of Pier 5. *BOSTS-15675*

Dock Street, June 3, 1966
While the replacement of Piers 8 and 9 was never funded, the mid-1960s saw the widening and repaving of Dock Street between Piers 8 and 10. On the center of the slip between Pier 8 (right) and Pier 9 is Building 127. The aircraft carrier at Pier 11 in the background is USS *Essex* (CVS-9). *BOSTS-15631*



Pier 5, May 1, 1957
A major element of the project to rebuild Piers 4 and 6 involved the construction of portal crane tracks linking those around Dry Dock 2 with the existing ones on Pier 5 and the new tracks on Piers 4 and 6. At top center are the brick Pump House (Building 191), Salt Water Intake (Building 191A), and wooden Buildings 208 and 219. *BOSTS-8727*



Pier 7, Sept. 7, 1958
The new Pier 7 is seen about two months before its completion in Nov. 1958. As with the earlier projects, the crane rails were poised for a further eastward expansion which never came. *BOSTS-8761*



Rebuilding The Waterfront After 1945: A Gallery





Pier 11, Sept. 17, 1951

These two views show Pier 11, a wooden pier that paralleled the yard's bulkhead so that it could berth vessels on both sides. In the background of the view at left looking southwest is *Crane Ship No. 1* (AB-1), while in that at right looking the opposite way are Building 206, the stacks of the Incinerator (Building 203), and the Storehouse (Building 201). Building 201 would be demolished in 1955 and 1956 in conjunction with the replacement of the pier with a new steel and concrete structure capable of berthing aircraft carriers. *BOSTS-8783*



Pier 11, July 31, 1956

Reconstruction of Pier 11 is underway. The old wood pier has been demolished and the central portion of the new concrete and steel wharf is in place. *BOSTS-8784*



Pier 11, Apr. 1, 1960

In one of the best-known images of the yard, USS *Wasp* (CVS-18) sits at Pier 11. A floating dry dock, *ARD-16*, occupies Dry Dock 5, while USS *Macon* (CA-132) is at Pier 9. *BOSTS-10111*





Pier 11, Nov. 30, 1956 & Sept. 11, 1957

At top, USS *Gyatt* (DDG-712) is berthed at the still incomplete Pier 11, while ten months later, above, three destroyers, including USS *Wadleigh* (DD-689), are at the pier. The portal crane tracks on the pier were never linked to those at adjacent Dry Dock 5.

BOSTS-8784 (top); BOSTS-8785 (above)

Post World War II Yard Modernization: A Gallery

THE PHOTOGRAPHS in this gallery depict changes to the yard's physical plant in the post-World War II period, except for those to the waterfront covered elsewhere. The 1963 yard plan (Figure 2-25) shows the location in the yard of each structure shown.



Building 4, June 14, 1972

In 1969 the first floor of Building 4 was converted into public restrooms for visitors to USS *Constitution* as well as offices for the ship's commanding officer. At the same time, the Chief Petty Officers' Club on the second floor was upgraded, including the installation of a picture window. The last Navy project on this building occurred in 1975, when a wheelchair ramp was installed at the restroom doors. *NHC NH-94582-K*



Building 10, Mar. 24, 1948

In the postwar period, the yard became a center for sonar development. In 1948, Building 10 was adapted as a sonar test facility. Here, a massive reinforced concrete sonar test tank has been built at the north end of the building. Work would soon start on an extension of the building itself to enclose the tank. *BOSTS-8796*

Building 21, June 27, 1963

By early 1963 the Greenhouse on the south end of the Carriage House was in poor condition. In this view, its removal is underway. Built in conjunction with the Navy Yard's Boundary Wall, Building 21 is the yard's oldest surviving granite structure. *BOSTS-9286*



Building 5, Feb. 1974

Two major projects on the exterior of Buildings 5 occurred in 1960, when it was sandblasted to remove the paint from its walls, and in 1972, when large picture windows were installed in the south wall as part of the improvement of the yard's Bachelor Officers' Club. The large streetlights on the building corners date to 1959. *BOSTS-9261*



Building 10, Apr. 22, 1958

In 1953 a "lean-to" was added to the north end of the Building 10 extension, but even with this added space, the Transducer Repair Shop had outgrown the space and would move to South Boston in 1958. The building then became a Battery Charging Facility. Work in the foreground is related to the installation of an Aboveground Steam Line that extended the length of what was technically known on yard maps as 3rd St., the road down the center of Pier 1. *BOSTS-9273*



Post World War II Yard Modernization: A Gallery



Building 36, June 25, 1947
In the postwar period, the yard undertook a number of projects to catch up on deferred maintenance of its structures. Here, yard workers (inset) steam clean the granite walls of the north side of the building, which held the yard's Cafeteria as well as the Sail Loft. *BOSTS-9355*



Buildings 39 & 150, June 20, 1958
As a part of the modernization of Building 39 to incorporate an Electronic Data Processing Machine room, the yard constructed a bridge between the Northeast Extension of Building 39 and Building 150. *BOSTS-9372*



Building 42C, Dec. 5, 1949
Major improvements were made to the Foundry during the last half of 1949. At the south end (above) the original building wall above the 1921 addition was totally rebuilt, while at the north end (right) the exterior Flask Yard was enclosed and incorporated into the building's interior. Note that the wooden World War II additions on top of the original Flask Yard roof were not reconstructed as a part of the project.
BOSTS-9405 (right); BOSTS-9418 (above)





Building 39, 1954 & 1955
In September 1954 the yard began a project to rehabilitate the First Ave. entrance to the Commandant's Offices. As part of the project, the wood doors, sidelights, and transom were replaced by new aluminum-framed glass doors and panels, as seen in these before-and-after views.
BOSTS-9369



Buildings 40, 103, & 104, Jan. 1956
In late 1955 and early 1956 the yard reconstructed the railroad tracks on First Ave. in the vicinity of 9th St. This view of the railway track project looks at the switches opposite Building 40 which led into the Roundhouse (Building 105) and 9th Street. Note the large number of automobiles parked along the street, evidence that most workers now commuted by car.
BOSTS-8664



Post World War II Yard Modernization: A Gallery





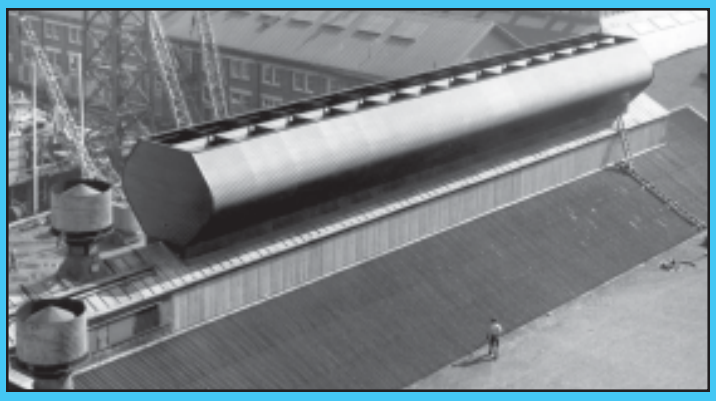
Building 42, Jan. 10, 1967 & Feb. 1968

The last major building construction project undertaken by the Navy Yard involved the construction of an addition to the Machine Shop in the space between its south wall and the Machinery Test Plant (Building 196). At left, in a view looking down from adjacent high-rise Building 197, preliminary work has begun on the structure, while at right, a little over a year later, the new building is complete. *BOSTS-9409*



Building 97, July 1958

A yard landmark fell victim to progress in mid-July 1958 when the Main Gate was demolished because the archway had become too small for modern vehicles. Here, only small pieces and piles of rubble remain. *BOSTS-13352*



Building 105, Apr. 1953

Most of the changes to the Forge Shop in the early 1950s to allow it to produce larger die-lock chain were internal, but a new ventilator structure was added to the roof. This view looks southwest. *BOSTS-9650*



Building 108, Jan. 1954

Throughout its life, the Central Power Plant evolved to meet increased needs or to switch to newer, more efficient equipment. In 1953 the yard began an upgrade of the Power Plant which involved the demolition of the rear center portion of the structure. In this progress view, structural steel for the replacement portion is being erected. *BOSTS-9769*



Building 120, Jan. 1955

This addition to the Dispensary to accommodate a Dental Clinic was constructed in the space between the existing building and the nearby Ropewalk. *BOSTS-13352*

Post World War II Yard Modernization: A Gallery



Building 123, Nov. 27, 1961
In addition to improvements to Dry Dock 2 itself, the dewatering system for both it and Dry Dock 1 was upgraded in 1961. Here, a crane lowers a new 500-horsepower motor for the main dewatering pump through the roof of the Pump House. *BOSTS-9865*



Building 125, July 5, 1966
Not all building modifications involved major changes. This view of the Paint Shop shows the results of a series of smaller projects. In the mid-1950s, picture windows were installed in the second-floor corner office of the shop master. In April 1962 the yard awarded a contract for the removal of the original copper cornices and gutters and projecting brickwork, as evidenced by the lighter-colored brick band around the building. At the same time, the color of the metal roof was changed from red to green. Note portable Building M-37 next to the building and two of the Light Towers (Structures 240, left, and 239) erected along the edge of Dry Dock 2 in 1951. *BOSTS-10893*



Building 143, Nov. 27, 1950
Shipyard workers attend the dedication of the new non-demoninational yard Chapel, a former Toilet & Locker Room. Note at left that the projecting central bay of the Tar House (Building 60) has been removed and infilled with asbestos shingle siding. *BOSTS-9891*

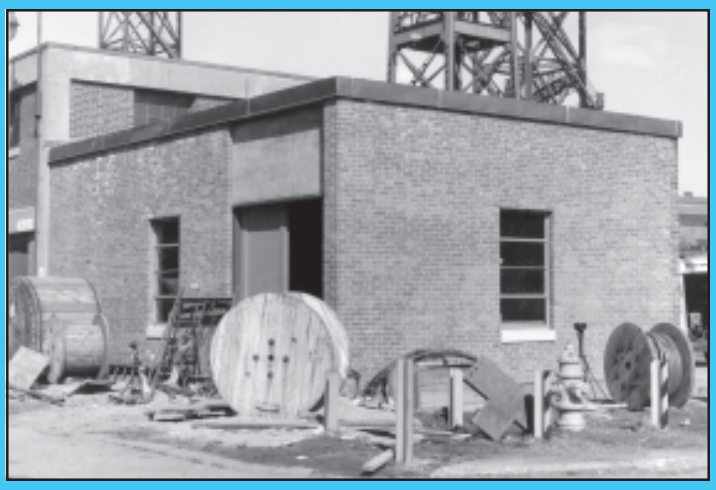


Building 149, Dec. 17, 1948
In 1948 the yard awarded a contract for the waterproofing of the exterior of the Storehouse. Note the west elevator tower which had been added to the structure in 1944-45 in this view taken at the conclusion of the project. *BOSTS-9899*



Building 150, Sept. 1953
Workers repair the north wall of the western section of the Garage & Substation. This portion, which abutted Building 38, had received a second story during World War II for use as a Movie Exchange. *BOSTS-9920*

Post World War II Yard Modernization: A Gallery



Building 192A, Mar. 4, 1957
This extension to the Substation was constructed in conjunction with the project to replace Piers 4 and 6. *BOSTS-9939*



Building 197, Aug. 20, 1953



Building 197, Jan. 20, 1954



Building 197, July 20, 1954

The largest building construction project in the Navy Yard in the post-1945 period involved the enlargement of the Electrical & Outside Machinists Shop. The $1.1 million project included the partial demolition of the western portion of the original building and the construction of a seven-story addition which extended to the edge of 6th Street as seen in this sequence of construction progress photos. Above right, the S. & A. Allen Co. has begun work on the foundation. Note the two-story infill which had been added on either side of the projecting central bays during World War II. At left, demolition of the exterior walls of the original western two bays is well underway, while at right the new structure is nearly complete. *BOSTS-9977*



Building 204, Sept. 1956
The construction of an extension of the Mystic River Bridge from Charlestown to Boston involved the severing of Chelsea St. at the northwest corner of the Navy Yard and the closure of the Chelsea St. entrance to the Garage. As a result, the Navy in late 1952 and early 1953 constructed a ramp leading from Henley St. to a new entrance at the second-story (Chelsea St.) level of the structure. This work was funded by the state. *BOSTS-10028*

Post World War II Yard Modernization: A Gallery



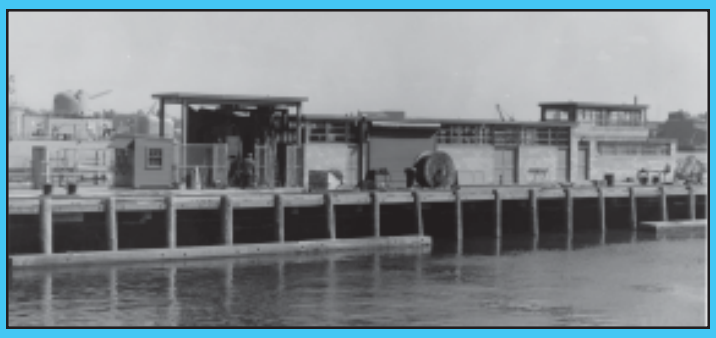
Building 218, 1961



Building 219, Apr. 1962

These photographs of the Lumber Storage Shed (left), located to the east of 16th Street near Building 199, and the Shed (right), originally located south of Building 125 and moved next to Building 208 in the area between Piers 5 and 6 in 1953, were taken to support a report of survey recommending their demolition. Both structures, typical of temporary wooden buildings constructed during World War II, were demolished in 1962.

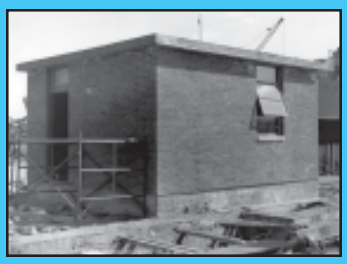
BOSTS-10036 (left); BOSTS-10039 (right)



Building 228, Mar. 4, 1957

As a part of the pier replacement project, new Industrial Service Buildings were constructed on the piers. This view shows the building on Pier 6, which was placed between the 20-foot gauge crane rails so that portal cranes could pass over it.

BOSTS-8751





Buildings 229 & 227, Mar. 4, 1957

The pier replacement project also involved provision of fire protection services on them. These views show the Fire Pump Houses built at the head of Pier 4 (Building 229, left) and Pier 6 (Building 227, right).

BOSTS-10042 (left); BOSTS-15767 (right)



Truck Scale 235, Oct. 1951

In 1951 the yard replaced the Truck Scale on First Ave. at Building 19. In 1956, the scale, along with a variety of structures such as Tennis Courts and Light Towers, were assigned their own structure numbers.

BOSTS-9282



Tennis Courts 236, Nov. 19, 1962

The Tennis Courts located between First and Second Ave. were built at a cost of $10,000 in 1946.

BOSTS-15661

Post World War II Yard Modernization: A Gallery



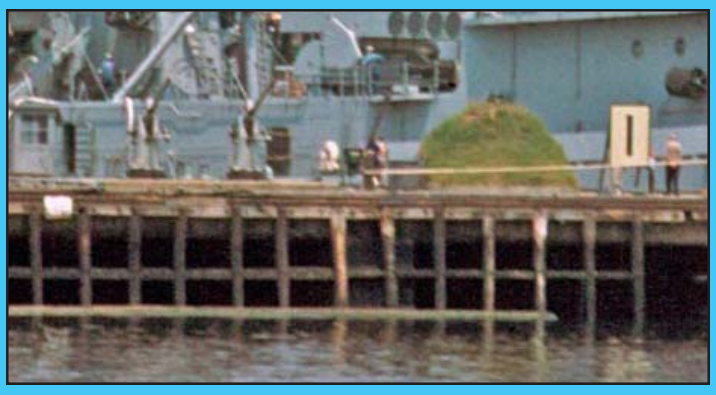
Flag Pole 242 & War Memorial, Nov. 29, 1957
The main Navy Yard Flag Pole displays the flag at half mast as the hearse carrying the casket of Adm. William V. Pratt, Chief of Naval Operations in the 1930s whose funeral had been held in the yard Chapel (Building 143), passes. At the base of the Flag Pole is a wooden Reviewing Stand (Structure 260) which replaced the old Band Stand (Building 163) on the Second Ave. side of the Shipyard Mall which was removed during World War II. In the foreground is the War Memorial honoring shipyard workers who died in military service. The Memorial was unveiled on Aug. 25, 1950, as part of the yard's Sesquicentennial celebrations. *BOSTS-7543*



Building 258, Nov. 1, 1966
The Police Booth seen here in front of Building 4 was used to screen cars and pedestrians passing through the gate from the public parking area onto Pier 1 or into Building 4. This view was taken to show the inadequacies of the public restrooms, which for women were in a rented trailer while those for men were in the wooden addition to Building 4. The project to place restrooms in Building 4, initiated in 1966, would not go to construction until the spring of 1969. *BOSTS-13347*



Band Stand 260 & War Memorial, July 13, 1967
In 1958 the wooden Reviewing Stand became Structure 260. In early 1959 it was replaced by a new Band Stand made of concrete with a railing of chain draped between aluminum posts. At the same time, the War Memorial was moved from its island on the south side of First Ave. to a location in front of the Band Stand. *BOSTS-8667*



Saluting Battery Platform 261 & Ammunition Bunker 272, June 24, 1960
In 1947 and 1948 the Navy installed a pair of 3-inch Salute Guns on a concrete platform at the end of Pier 1 along with an earth-covered Ammunition Bunker. *Richard Leonhardt*



Building 267, Jan. 8, 1959
The new Gate House which replaced the old Main Gate (Building 97) is seen here along with the illuminated stainless steel letters placed on top of the Navy Yard Boundary Wall as part of the Gate 1 improvement program. The wall behind the Gatehouse is the remnant of the brick wall of Quarters A. Note the guard booth in the center of the roadway and the large streetlights attached to Buildings 4 and 5 as part of the gate improvement project. *BOSTS-15654*

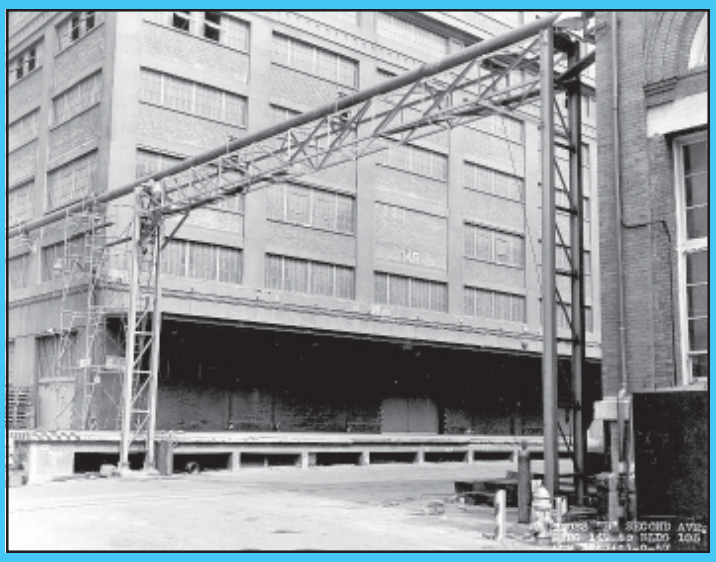
Post World War II Yard Modernization: A Gallery



Grit Hoppers 259 & 273, Feb. 14, 1963
In 1952-53 a large steel hopper to hold abrasive grit for use in sandblasting operations on ships in Dry Dock 1 was erected north of Building 10. A decade later, a second, smaller hopper was added. At left is temporary Building M-2, while Building 10 can be seen in the background.
BOSTS-8958



USS *Constitution* Parking Area, July 1955
In the summer of 1955 the Navy developed the area between Building 4 and the yard's western boundary at Hoosac Stores No. 1 & 2 into a visitor parking area for USS *Constitution*. In the process, 1st St., which had entered the yard next to Building 4, disappeared from yard maps.
BOSTS-13352







Historical Plaques 270 & 276, Aug. 31, 1971
In the 1960s, the Navy began to pay attention to its historical heritage. In 1961 a plaque (Structure 270, left) was erected on the north side of Second Ave. listing the residents of the Commandant's House. In 1966, the Secretary of the Interior designated the Boston Naval Shipyard as a National Historic Landmark. The landmark plaque was installed on a marble base (Structure 276, right) near the Finger Pier along with a historical plaque on USS *Constitution.* Moved to the west side of Pier 1 in the mid-1970s, it was damaged by snow plows and finally demolished in 1999. The landmark plaque was relocated to the Band Stand (Structure 260).
BOSTS-9116 (right); BOSTS-9117 (left)



Hammerhead Cranes 1, 3-5, May 15, 1963
This photograph showing the four Hammerhead Cranes surrounding Shipways 1 was taken to support proposals to remove Cranes 1 (foreground), 3 (left), and 5 (rear). All were demolished in 1965. *BOSTS-8891*

Steam Line, Second Ave., Sept. 1957
As part of the replacement of Pier 7, a steam line was run from the Central Power Plant (Building 108) to the pier. The initial section from Building 108 to Building 105 ran overhead; from Building 105 to the pier it was underground. This view shows the trestle carrying the line over Second Ave. between Buildings 149 (left) and 105. *BOSTS-15751*

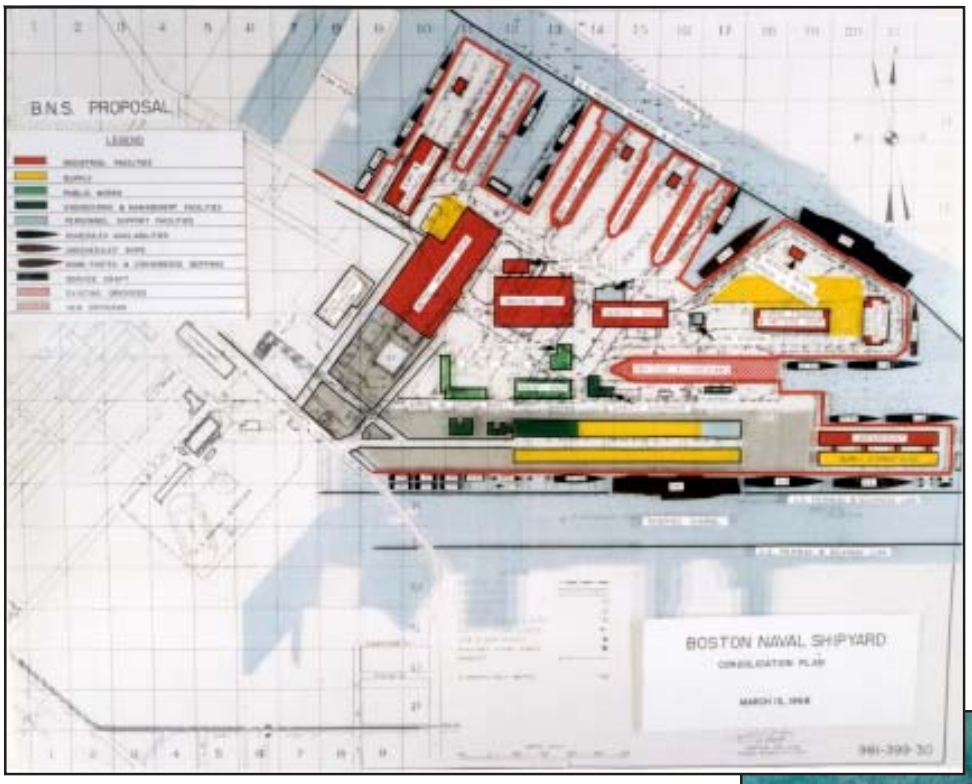
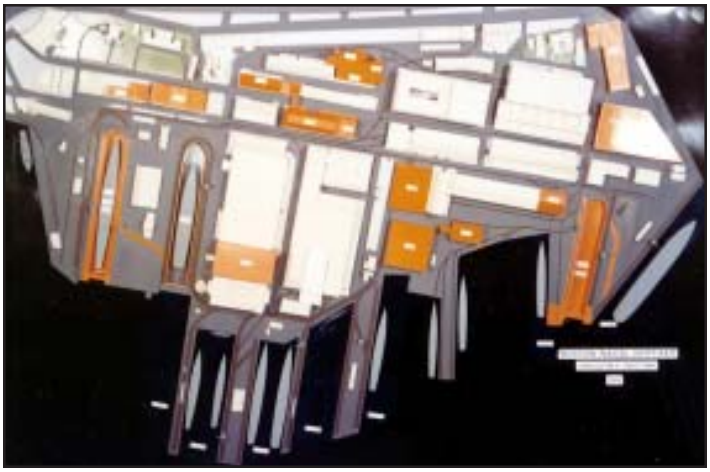


Figure 2-27 - Proposed Consolidated Shipyard at South Boston, 1968
"Boston Naval Shipyard Consolidation Plan," Mar. 15, 1968. This plan shows the proposed consolidated Boston Naval Shipyard at South Boston. This version, based on the Kaiser Engineers report, differed only slightly from the final plan approved in Nov. 1968. That plan was the basis for the aerial perspective view below of the new shipyard prepared by Allan Rohan Crite, an illustrator in the yard's Design Division. *BOSTS-13344*



dation of the shipyard in the South Boston Annex was a more profitable investment than modernization of the existing facilities in Charlestown and the South Boston Annex."[350] This concept was approved by the Secretary of Defense in November, and a master plan for the new 212-acre facility was prepared (see Figure 2-27). The plan envisioned a ten-year project, costing $198.3 million. In addition to new shop buildings, three additional dry docks (Dry Docks 6, 7, and 8) were to be constructed. One of the first results of the decision to consolidate the yard at South Boston was the cancellation of a planned modernization of Dry Dock 5 originally in the Fiscal Year 1968 naval budget.[351] The first positive step towards its implementation came in July 1970, when the Boston Army Base was transferred to the Navy.[352]

By the early 1970s, it became obvious that the funding for this major relocation project would not be forthcoming. In 1972, "based on changing workload conditions and funding climate," plans for a consolidation at Charlestown were again put forward.[353] Among the



This photograph shows a model of the Charlestown Navy Yard as it would have been at the end of Fiscal Year 1984 had the 1972 consolidation plan been implemented and completed as proposed. New or extensively modified facilities are shown in orange, including the replacement of Dry Dock 1 with a new Dry Dock 6, the creation of a solid wharf replacing Piers 2 and 3, and removal of Pier 9 and upgrade of Dry Dock 5. *BOSTS-10109*

[350] Boston Naval Shipyard, Command History, 1 January 1970-31 December 1970, OPNAV Report 5750-1, p. 20, Command Histories, 1961-1974, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 12.

[351] U.S. Congress, House of Representatives, Committee on Armed Services, *Status of Shipyards: Hearings by the Seapower Subcommittee of the Committee on Armed Services, House of Representatives, Ninety-first Congress, Second Session*, H.A.S.C. No. 91-71 (Washington: U.S. Govt. Printing Office, 1970), p. 10534-43.

[352] Black, *Charlestown Navy Yard, 1890-1973*, 2:808-809. Black's statement that the Army Base was not acquired is incorrect. See "Transfer and Acceptance of Military Real Property," FY-70-4, Commanding Officer, Boston Army Base, to Commander, Boston Naval Shipyard, July 1, 1970, Public Works Dept., Records of the Boston Naval Shiupyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 123.

[353] A. Erickson, Jr., "Major Facilities Requirements Information, Boston Naval Shipyard," Nov. 6, 1972, *Current Briefing Data, Boston Naval Shipyard, 6 November 1972*, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 5.

elements of this plan, envisioned as occurring over a ten-year period starting in Fiscal Year 1974, were the replacement of Dry Dock 1 with a new Dry Dock 6; creating a new filled wharf between Piers 2 and 3, eliminating the Marine Railway; demolition of Pier 9; upgrading of the yard's infrastructure; and construction of several new shop buildings and modernization of others.[354]

The Navy Yard And USS *Constitution*

Through its long history, the Charlestown Navy Yard built, repaired, and serviced thousands of United States and foreign naval vessels, vessels of other government agencies, and privately-owned ships. None of those, however, is as closely associated with the yard as is USS *Constitution*.[355] One of the first six ships authorized in the Naval Armaments Act of 1794, *Constitution* was built by Edmund Hartt at his yard in Boston's North End. She saw active service during the Quasi-War with France, the Barbary Wars, and the War of 1812, as well as duty with various naval squadrons around the world prior to the Civil War. She then was utilized as a training ship and as a receiving ship. As she approached her centennial, she was towed from Portsmouth Navy Yard to the Charlestown Navy Yard. With the exception of her 1931-1934 cruise around the country, she has been berthed at the yard ever since.

As early as 1801, the yard provided personnel and supplies for the repair of USS *Constitution*, and performed other work on the frigate over the next three decades, including bottom cleaning and copper restoration (via the method of heaving down, which involved laying the ship over to one side as far as possible without capsizing her), rigging and mast work, and some planking replacement.[356] In February 1831 her first major overhaul was authorized, although work would not start until she could enter the nearly-complete dry dock at Charlestown in June 1833. She remained in the dock for about a year, and was ready for service in early 1835.[357] She would again enter the dock in January 1848 for work to prepare her to be recommissioned for assignment to the Mediterranean.[358] This would be her last overhaul at Charlestown until the early 1900s, her 1870s' restoration being undertaken as one of the last jobs done at the original navy yard site in Philadelphia.[359]

In the mid-1890s, *Constitution* lay at the Portsmouth Navy Yard, having been "housed over" for use as a receiving ship. At the suggestion of Boston Congressman John F. Fitzgerald, she was towed to the Charlestown Navy Yard in 1897 in time to observe her centennial from a berth across the harbor from her birthplace.[360] The Fiscal Year 1907 Naval Appropriations Act provided $100,000 "to repair, equip, and restore the frigate Constitution, as far as may be practicable, to her original condition, but not for active service."[361] This work, which did not include drydocking the ship, saw the house superstructure removed and her masts restored. She was thereafter opened to the public for visitation.[362]



USS *Constitution* is seen at Pier 1 West on July 6, 1906, nine years after her arrival at the Navy Yard. The two-story "house" was added to her by the Portsmouth Navy Yard when she was converted to a receiving ship.
NHC NH-55641

Renamed *Old Constitution* in December 1917 (to allow her original name to be assigned to one of the six battle cruisers recently authorized by Congress) and classified IX-21 in July 1920, the frigate was again reported in bad condition in the early 1920s. To fund her proposed restoration, Secretary of the Navy Curtis D. Wilbur recommended to Congress that it authorize a national subscription campaign. The Fiscal Year 1926 appropriations act, approved on March 3, 1925, included this provision, and the famous "Pennies" campaign was launched. Shortly thereafter, with the battle cruisers being cancelled in accordance with the Washington Treaty, *Constitution* resumed her original name. With money on hand, formal authorization to begin work came in April 1927. Two months later, on June 16, she entered Dry Dock 1, where she would remain until March 15, 1930. After having her masts stepped at Dry Dock 3 in South Boston, the extensive restoration project was completed by the yard and she was placed in commission on July 1, 1931.[363]

Almost immediately, USS *Constitution* began a lengthy tour of the country as a way of thanking people who had contributed to her restoration. Towed for most of her journey by the minesweeper *Grebe* (AM-43), she saw over 4.6 million visitors cross her decks

[354] "BNS Consolidation – Shore Facilities Program," Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-10109, Box 1-60. This collection consists of photographs of a shipyard model showing the changes for each year of the modernization program.

[355] On the history of USS *Constitution*, see Tyrone G. Martin, *A Most Fortunate Ship: A Narrative History of Old Ironsides*, rev. ed. (Annapolis: Naval Institute Press, 1997); Thomas C. Gillmer, *Old Ironsides: The Rise, Decline, and Resurrection of the USS* Constitution (Camden, Me.: International Marine, 1993); Charles E. Brodine, Jr., Michael J. Crawford, and Christine F. Hughes, *Interpreting Old Ironsides: An Illustrated Guide to USS* Constitution (Washington: Naval Historical Center, 2007). The Naval Historical Center Detachment Boston, in charge of the ship's maintenance, does not concur with all of the technical opinions expressed by Gillmer.

[356] Gillmer, *Old Ironsides*, p. 95.

[357] Ibid., p. 91-97; Bearss,*Charlestown Navy Yard, 1800-1842*, 2:665-98.

[358] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 39.

[359] Gillmer, *Old Ironsides*, p. 108-10; Dowart with Wolf, *Philadelphia Navy Yard*, p. 98.

[360] Martin, *Most Fortunate Ship*, p. 338. In 1894 Congress had appropriated $8,000 to repair *Constitution* for use as a training ship. Under the Fiscal Year 1898 appropriations act, the unexpended balance was authorized "for such work as may be necessary for the proper care and preservation of that historic vessel." See Pub. Law 128, 53rd Cong., 2nd sess., July 26, 1894; Pub. Law 128, 54th Cong., 2nd sess., Mar. 3, 1897, Pulsifer, *Navy Yearbook, 1912*, p. 200, 267. It was this appropriation that funded her transfer from Portsmouth to Boston.

[361] Pub. Law 336, 59th Cong., 1st sess., June 29, 1906, Pulsifer, *Navy Yearbook, 1912*, p. 536.

[362] Martin, *Most Fortunate Ship*, p. 340-41.

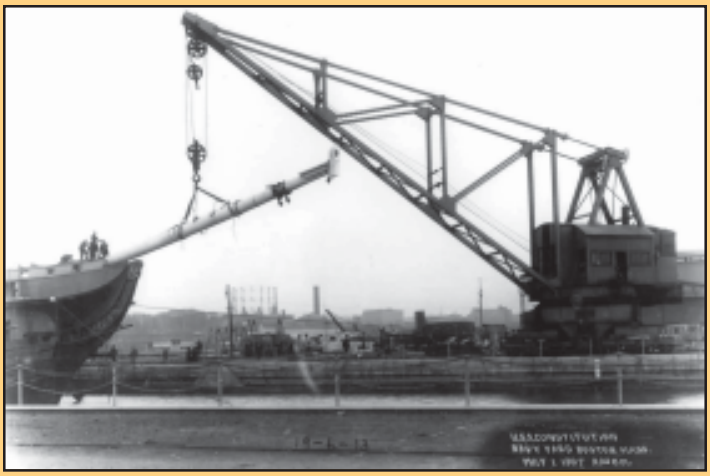
[363] Ibid., p. 342-49; Gillmer, *Old Ironsides*, p. 116-20.

Restoring USS *Constitution*: 1907



The 1907 restoration of USS *Constitution* saw removal of the house superstructure and restoration of her gun ports. These three views, taken on May 1, 1907, show the stepping of her masts. Above, at 10:30 a.m., the lower section of her main mast is positioned by Portal Crane 12. The location is at the end of Dry Dock 2 at Pier 3. Note the caisson tied to Pier 3 between the pier and *Constitution*, and Building 36 in the background.

NHC NH-55678





At top, by 3:30 p.m., when the bowsprit was lowered into place, the ship had been moved to the Pier 4 side of the dock. Above, a half hour later, all three masts and the bowsprit have been installed.

NHC NH-55676 (top); NHC NH-55677 (above)

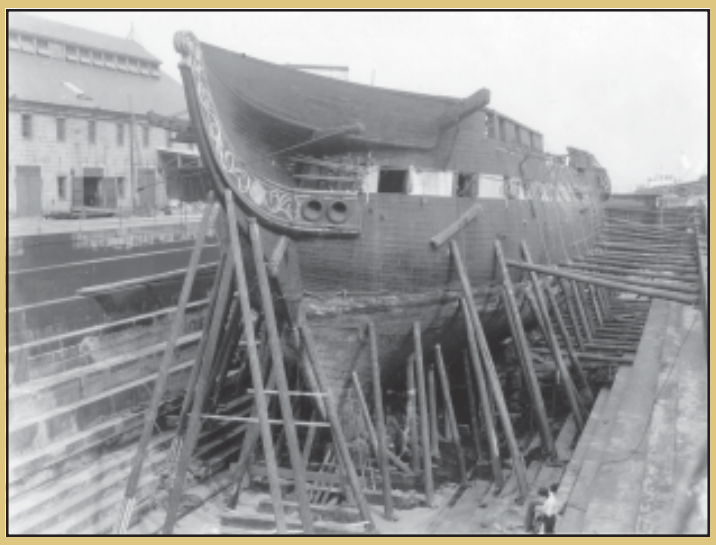




By June 29, 1907, above, work on the standing rigging for the masts is well underway. Two months later, on Aug. 28, 1907, right, the completed ship is seen at Pier 2 East, which would be her berth for many years.

NHC NH-55913 (right); NHC NH-63532 (above)

Restoring USS *Constitution*: 1927-1931



USS *Constitution* is seen in Dry Dock 1 on June 23, 1927, one week after her docking. Note the bracing to support the hull. *BOSTS-10748*



This view shows the ship surrounded by scaffolding on Sept. 25, 1929. Note the temporary steam box for bending timber located next to the base of the chimney on Building 22. *BOSTS-10748*



USS *Constitution* is undocked on Mar. 15, 1930. Her almost 33 months in dock would only be exceeded by the 36 months she spent in the same facility in the 1990s. Note the dock caisson in the foreground and temporary work shed adjacent to Building 24. *BOSTS-10750*



Stepping of *Constitution*'s masts took place at Dry Dock 3 in South Boston. Here, a tug guides her into the dock on Mar. 16, 1930. Note the Pump House (Building 1) at left and the Utility Building (Building 13, later Building 14) at center. *Boston Public Library*



The completed ship sits at Pier 2 West on June 12, 1931, three weeks before her recommissioning. *BOSTS-10739*

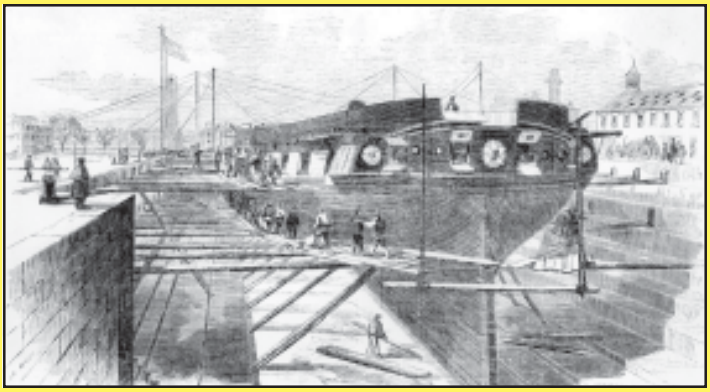


On July 2, 1931, with East Boston in the background, USS *Constitution* is guided down Boston Harbor at the start of her nearly three-year tour which saw her visit ports on both coasts as a way of thanking people for their contributions to her restoration. *BOSTS-10776*

The Navy Yard And USS *Constellation* (IX-20)

WHILE THE ASSOCIATION between the Charlestown Navy Yard and USS *Constitution* is well known, little attention has ever been given to the yard's association with the Navy's only other preserved sailing warship, USS *Constellation*. The 1853 sloop-of-war spent her last nine years in active service at Charlestown.

Unfortunately, one of the yard's hull superintendents became the leading advocate of the erroneous belief that the vessel was in fact the 1797 frigate of the same name, resulting in many inappropriate modifications until the Navy stepped in to ensure a more accurate restoration in the 1990s.



The sloop-of-war USS *Constellation* occupied Dry Dock 1 between Oct. 1858 and Jan. 1859, as seen in this contemporary engraving. *BOSTS-10721*



This view shows *Constellation* (IX-20) from almost the same angle as she rests in Dry Dock 4 at South Boston in Aug. or Sept. 1946. The relic had been brought to Boston to determine the feasibility and cost of making her into a "permanent relic." *BOSTS-10723*



With little hope of official funding for her restoration, USS *Constellation* was decommissioned in 1955 and donated to a group in Baltimore which was intent on restoring her as the 1797 frigate. Here, she is maneuvered into floating dry dock *ARD-16* in preparation for departure from Boston for Baltimore on Aug. 5, 1955. *BOSTS-10725*

Following her undocking, *Constellation* was berthed at Pier 1 with USS *Constitution*. The two ships are seen here in 1947. *BOSTS-10723*



before returning to the Charlestown Navy Yard on May 7, 1934.[364] Decommissioned a month later, she would be recommissioned in August 1940 at the orders of President Franklin D. Roosevelt in recognition of her symbolic value to the Navy and the country. She remains in commission to the present day, the oldest naval vessel afloat in the world on active duty.[365]

Although since the early 20th century the Navy had retained several vessels for historic reasons, it never had a formal program for their care. By the early 1950s, the Navy's historic vessels were in sad condition, with little prospect that Congress would approve funds for their restoration and continuing maintenance. This led to Congressional authorization on July 23, 1954, for the Navy to transfer *Constellation* (IX-20), *Hartford* (IX-13), and *Olympia* (IX-40) to private organizations for preservation. Thus, *Constellation*, the last sailing warship built for the Navy, left the Charlestown Navy Yard, where she had been berthed with *Constitution* since October

[364] Martin, *Most Fortunate Ship*, p. 350-55.

[365] Ibid., p. 355, 358. The older HMS *Victory*, still in commission with the Royal Navy, is permanently berthed in a dry dock at the Portsmouth Dockyard in England.

USS *Constitution* Restoration: 1963-1964



USS *Constitution* entered Dry Dock 1 in late 1963 for additional restoration work. She is seen here on Mar. 24, 1964, shortly before her undocking. *BOSTS-10755*

USS *Constitution* Restoration: 1973-1976



The tugs *Wawasee* (YTM-367) and *Quileute* (YTM-540) guide USS *Constitution* towards Dry Dock 1 on Apr. 24, 1973, as she undergoes a major restoration in preparation for the American Revolution Bicentennial. *NHC NH-99143-K*



Constitution is seen in Dry Dock 1 in Feb. 1974. Note the platform around the end of Building 10 directly behind the main mast which allowed visitors to view the work being done. Building 10 also housed the USS Constitution Museum. *BOSTS-8672*

USS *Constitution* Restoration: 1992-1996



USS *Constitution* crosses the sill of Dry Dock 1 on Sept. 25, 1992, to begin her longest-ever dry dock period, lasting three years. The structure under construction on Pier 2 is a temporary shed for storing the frigate's cannons during her overhaul. *Stephen P. Carlson, BNHP*

1946, for her new home in Baltimore in the floating dry dock *ARD-16* in August 1955.[366]

The 1954 legislation also authorized the restoration of USS *Constitution* to her original condition, but not for active service, and provided that she thereafter be maintained at Boston.[367] Plans for this restoration had been underway since September 1952. As a part of the project, completed in December 1957, she was drydocked for a little less than three weeks in March 1957 to replace copper sheathing on the hull.[368] She was again docked from December 1963 to March 1964 for similar, but more extensive, hull repairs.[369]

The final restoration to be performed while the Charlestown Navy Yard was an active facility was authorized in 1972 and saw

[366] "Constellation Heads 'Home'," *Boston Naval Shipyard News*, vol. 20, no. 4 (Aug. 5, 1955), p. 1, 3; "Naval Architect L.F. Cushing Tells Of Constellation Trip To Baltimore," *Boston Naval Shipyard News*, vol. 20, no. 10 (Sept. 16, 1955), p. 1, 3. At the time of the transfer, the vessel was widely believed to have been the 36-gun frigate built at Baltimore in 1797 which had been extensively rebuilt at Norfolk in the 1850s. The Navy has since concluded that she was in fact a new sloop-of-war built at Norfolk between 1853 and 1855 that had retained the original name since she had been constructed under the guise of "repairs" to the old frigate. See Dana M. Wegner, *Fouled Anchors: The* Constellation *Question Answered*, DTRC-91/CT06 (Bethesda, Md.: David Taylor Research Center, 1991). Leonard F. Cushing, superintendent of hull architecture in the Navy Yard, was a leading proponent of the contention that *Constellation* was the reconstruction of the 1797 ship rather than a new vessel built in the 1850s. See Wegner, *Fouled Anchors*, p. 11, 17-20.

[367] Pub. Law 523, 83rd Cong., 2nd sess., July 23, 1954, 68 Stat. 527.

[368] Mansfield, *Boston Naval Shipyard, 1938-1957*, p. 79; Martin, *Most Fortunate Ship*, p. 362; "'Old Ironsides' Moved To Drydock [*sic*] No. 1," "'Old Ironsides' Heads 'Home'," *Boston Naval Shipyard News*, vol. 21, no. 35 (Mar. 8, 1957), p. 1, 4; "'Old Ironsides' Restoration Near Completion," *Boston Naval Shipyard News*, vol. 22, no. 16 (Oct. 25, 1957), p. 1, 3. The 1957 dry docking was the first since a five-day docking in July-August 1945. *Constitution* had also been dry docked for three days in September-October 1936. See Martin, *Most Fortunate Ship*, p. 357, 359.

[369] Martin, *Most Fortunate Ship*, p. 362; "'Old Ironsides' To Spend Over Three Months In Namesake Drydock [*sic*] In Final Phase Of Her Restoration," *Boston Naval Shipyard News*, vol. 28, no. 21 (Nov. 22, 1963), p. 1, 3; "'Old Ironsides' Safe At Home In Drydock [*sic*] #1," "'Old Ironsides' Moves," *Boston Naval Shipyard News*, vol. 28, no. 24 (Dec. 13, 1963), p. 1, 3.

Constitution occupy Dry Dock 1 from April 1973 to April 1974. The ship reopened to the public in March 1975, but work continued until shortly before the American Revolution Bicentennial celebrations of July 1976.[370] As a part of the restoration, two modern saluting guns, camouflaged to look like period cannons, were installed, first being fired during the various Bicentennial ceremonies and the visit of Queen Elizabeth II to the Navy Yard in July 1976. On November 11, 1976, the ship began firing its saluting cannon at morning and evening "colors" as well as on other ceremonial occasions.[371]

In July 1976 the Navy formally established the USS *Constitution* Maintenance & Repair Group to oversee continued maintenance of the ship. Originally attached to the Supervisor of Shipbuilding, Conversion, and Repair, Boston, it became part of the new Naval Historical Center Detachment, Boston, on its creation in 1991.[372] By that time, plans were well underway to drydock the ship for a twelve- to fifteen-month inspection and repair period in preparation for her bicentennial in 1997. USS *Constitution* entered Dry Dock 1 in September 1992, shortly after her participation in Sail Boston 1992, the city's celebration of the 500th anniversary of Christopher Columbus' epic voyage.[373] The project soon became a more extensive restoration effort that saw the reinstallation of diagonal riders that had originally strengthened the hull. She was undocked in September 1995.[374] Unlike any other prior overhaul, the ship remained open to the public for most of the time she was in dry dock.

Strengthening of the hull led to the Navy agreeing to furnish sails for the ship and get her underway under her own power for the first time since the 1880s. Funded by a "Pennies" campaign similar to that of the 1920s, six sails were fitted to her masts in the spring of 1997, and on July 21 of that year, off Marblehead, Massachusetts, her tow lines were dropped and she moved under sail.[375] The success of this event led to numerous locations requesting visits by the ship, but in June 1998 Chief of Naval Operations Admiral Jay L. Johnson decided that "the risk of unpredicted weather conditions" was too great to allow "this national treasure" to venture beyond the sheltered waters of Massachusetts Bay.[376]

USS Constitution Museum

For many years, artifacts relating to the history of USS *Constitution* were either displayed on the ship or kept in storage. During the historic frigate's 1969 annual turnaround cruise in Boston Harbor, a group of six men developed the idea that there should be a place to properly display the items, many of which were wet and water stained from being in the ship's bilges. This group approached Rear Admiral Joseph C. Wylie, Commandant of the First Naval District, who embraced the idea. On September 22, 1972, the USS Constitution Museum Foundation held its organizational meeting on board *Constitution.* This privately-funded non-profit organization immediately took over the small souvenir sales trailer the Navy had operated next to the ship. In 1974, it opened a temporary gallery on the second floor of Building 10, displaying artifacts removed from the ship when she entered Dry Dock 1 for restoration in 1973. In January 1975 the museum obtained official permission to rehabilitate Building 22, part of the original dry dock complex, into a permanent museum facility. The work, designed by Salem architect and museum founder James H. Ballou, began in March and on April 4, 1976, naval historian Rear Admiral Samuel Eliot Morison cut the ribbon to open the museum.[377]

In the mid-1980s, with Congressional support, the National Park Service began a partnership with the Constitution Museum which saw its expansion into the former electrical substation attached to Building 22 and adjacent Building 28. This project, which began construction in 1993, saw the building of a connector to link the two buildings so that they function as a single complex. Under the partnership, the NPS rehabilitated the building shells and the museum did the final interior finishes and exhibit build-out. The expanded museum opened in phases between 1994 (connector and theater) and 1996 (Building 28), with landscaping being completed in the fall of 1997.[378]

USS *Constitution* Sail 200



Strengthening of *Constitution*'s hull during the 40-month overhaul led the Navy to approve fitting of sails and movement under her own power for the first time in 116 years. Here she fires her starboard guns while under sail off Marblehead, Mass., on July 21, 1997. *USN 970721-N-6483G-002*

[370] Martin, *Most Fortunate Ship*, p. 362-65.

[371] Ibid., p. 368.

[372] Ibid., p. 365, 371.

[373] "USS *Constitution* Enters Dry Dock 1," *The Broadside/Boston National Historical Park* (Autumn 1992), p. 3.

[374] "USS *Constitution* Undocked," *The Broadside/Boston National Historical Park* (No. 4, 1995), p. 3; Patrick Otton, *USS* Constitution *Rehabilitation and Restoration*, Mar. 1997, Naval Historical Center Detachment Boston web site [http: //www.history.navy.mil/constitution/restore.htm], accessed Sept. 19, 2001.

[375] Dan McCarthy, "USS *Constitution* Sail 200 Shows American Spirit Lives," *The Broadside/Boston National Historical Park* (No. 4, 1997), p. 1.

[376] U.S. Navy Office of Information, "U.S. Navy Announces Plans For USS *Constitution*," *The Broadside/Boston National Historical Park* (No. 2, 1998), p. 10. For a critical view of this decision by the ship's commanding officer at the time, arguing that politics, not technical considerations, were the principal reason for it, see Christopher Allan Melhuish, "Will the Navy Unshackle Old Ironsides?,' *Naval History*, vol. 21, no. 3 (June 2007), p. 42-46. See also Phil Primack, "You'll Sink Our Battleship!," *Boston Magazine*, vol. 45, no. 11 (Nov. 2007).

[377] "New Wing Marks Museum's First 20 Years: Board Secretary [Leon] Kaufman Reminisces," *Constitution Chronicle* (Fall/Winter 1996/1997), p. 3; "USS Constitution Museum Foundation Established To Preserve Artifacts," *Boston Naval Shipyard News*, vol. 37, no. 23 (May 11, 1973), p. 1, 8; James H. Ballou, Architect, *Project Manual for U.S.S. Constitution Museum* (Apr. 30, 1975), TIC 457/D6321.

[378] USS Constitution Museum, *USS Constitution Museum Expansion Plan* (Boston, n.d.), TIC 457/D6322; Stephen P. Carlson and Dave Snow, "USS Constitution Museum Expansion Project to Begin," *The Broadside/Boston National Historical Park* (Spring/Summer 1993), p. 1-2; "USS

Closure Of The Navy Yard

The Charlestown Navy Yard had barely been established before the first study with a view to its closure was undertaken. Eight months after the yard came into being, the incoming Jefferson Administration instituted a review of naval policy. While the review resulted in a decision not to move forward with the construction of the six ships-of-the-line the yards had been established to build, all six navy yards survived, largely as depots to store the timber and other materials already gathered for the ships and other naval supplies, and to furnish the same to the remaining ships in active service.[379]

The status of the Navy Yard also underwent a review shortly after President Andrew Jackson took office in 1829. In response to a request from Secretary of the Navy John Branch, the Board of Navy Commissioners made a study of the seven navy yards then in existence and concluded that all of the yards except Charlestown, Washington, and Norfolk could "be dispensed with, without injury to the naval service."[380]

At the same time, the Army's Board of Engineers of Fortifications concluded that Charlestown was in a fairly impregnable position from both land and sea, and that it and Norfolk should be "fortified and organized as [a] great naval and military rendezvous."[381] Both groups felt that Narragansett Bay was a good location for a naval establishment as well, although no action was then taken to establish such an installation.

In the mid-1850s, the idea of a naval base in Narragansett Bay was resurrected with a proposal to move the Navy Yard from Boston to Newport, R.I. Few details of the proposal are known, but it apparently was serious enough that the Boston Marine Society called a special meeting in February 1856 to discuss the subject. The society, which actively advocated improvements to Boston Harbor and promoted Boston as a commercial port, adopted resolutions calling the proposed move "inexpedient" and "subversive to the true interest of the whole country."[382]

The most significant threat of closure during the 19th century, however, came in the early 1880s, just as the Navy reached one of its lowest points in history. In 1882, in the same legislation that took the first tentative steps towards the construction of an all-steel Navy, Congress directed a study of navy yards with a view to their closure and sale. A Commission on Navy-Yards chaired by Commodore Stephen B. Luce was set up to study the yards and make recommendations as to their future.[383]

The commission's preliminary report in June 1883 recommended that the Portsmouth Navy Yard be closed once there was no longer a need for wooden ship repairs; that "no necessity exists that would justify the use" of the Charlestown Navy Yard as a construction and repair facility "in time of peace," although it should continue as a manufacturing yard for rope and canvas products; that the New London and Pensacola yards, neither of which had been extensively developed, be closed completely; that the Philadelphia yard, moved from its original site to the larger League Island in the 1870s, be closed until proper plans for its development were prepared; and that the Washington Navy Yard be redesignated as a naval arsenal. The remaining three yards (New York, Norfolk, and Mare Island) were to be retained as active facilities.[384]

On June 23, 1883, Secretary of the Navy Chandler issued a circular letter ordering the implementation of the commission's recommendations. Work at the Charlestown Navy Yard was to be "suspended as soon as practicable" with the exception that "work in the rope-walk and sail-maker's department will continue."[385] The order was not immediately implemented, as the yard was actively repairing USS *Shenandoah*, although with that work finished, civilian employment dropped from 390 in mid-1883 to 119 two years later.[386] Hopes that the reprieve would become permanent were dashed by Chandler's successor, William C. Whitney, who on December 18, 1886, issued an order directing that as of February 1, 1887, the yard would be used solely "as a permanent, general manufacturing yard for articles of equipment."[387] Ironically, the number of civilian employees in the yard nearly doubled from 138 at the end of Fiscal Year 1886 to 260 a year later, five months after the effective date of Chandler's order.[388]

The Navy Yard limped along, never quite closing as a ship repair facility. Repairs to the dry dock were authorized in Fiscal Year 1888, and minor infrastructure improvements were funded throughout the following decade. The resurrection of the yard, the Boston *Sunday Herald* wrote in October 1897, came "so gradually that it has caused no great stir."[389] But, as discussed above, it was the Spanish-American War in 1898 that would bring about the rejuvenation of the yard in a dramatic fashion.

Although the possibility of closure had been raised as early as 1931,[390] the first serious closure threat the yard faced in the 20th century came in the early 1960s. Secretary of Defense Robert S. McNamara came to his post in 1961 determined to apply to the military the concepts of systems analysis and cost-effectiveness studies. One of his targets was the practice of the military performing industrial operations and manufacturing activities in-house

Constitution Museum Re-Opening Events," *The Broadside/Boston National Historical Park* (Spring 1994), p. 7; Jack Highland, *Completion Report, Rehabilitate Building 28, Charlestown Navy Yard, Contract No. 1443-1600-9-4902* (Feb. 1996), TIC 457/D6320; Stephanie M. Nichols, "'Old Ironsides in War and Peace' Opens in New Wing of USS Constitution Museum," *The Broadside/Boston National Historical Park* (No. 3 & 4, 1996), p. 3; "USS Constitution Museum Landscaping Completed," *The Broadside/Boston National Historical Park* (No. 5, 1997), p. 5.

[379] Bearss, *Charlestown Navy Yard, 1800-1842*, 1:29-30, 34-35.

[380] John Rodgers to John Branch, Oct. 19, 1829, quoted in Bearss, *Charlestown Navy Yard, 1800-1842*, 1:508-510.

[381] Board of Engineers to John H. Eaton, quoted in Bearss, *Charlestown Navy Yard, 1800-1842*, 1:511-514.

[382] Aquilla P. Bartow and Elizabeth Bartow Berg, comps., *Gleanings From the Records of the Boston Marine Society Through its Second Century, 1842 to 1942* (Boston: The Society, 1999), p. 53.

[383] Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 335-336.

[384] Commission on Navy-Yards, *Memoranda*, June 6, 1883, in *Letter from the Secretary of the Navy, Transmitting … the Report of the Commission on Navy-Yards*, Dec. 1, 1883, House Ex. Doc. No. 55, 48th Cong., 1st sess. (Washington: Govt. Printing Office, 1884), quoted in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 338-39, 371-72.

[385] William E. Chandler, Circular Letter, June 23, 1883, quoted in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 340.

[386] Table 8, "Numbers of Civilian Employees, Boston Navy Yard, 1842-1889," in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 199.

[387] General Order No. 356, Dec. 18, 1886, quoted in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 372.

[388] Table 8, "Numbers of Civilian Employees, Boston Navy Yard, 1842-1889," in Black and Bearss, *Charlestown Navy Yard, 1842-1890*, p. 199.

[389] Boston *Sunday Herald*, Oct. 3, 1897, quoted in Black, *Charlestown Navy Yard, 1890-1973*, 1:4.

[390] Black, *Charlestown Navy Yard, 1890-1973*, 2:441-445.

The Boston Naval Shipyard In 1971



These aerial photographs by Airphoto of Wayland, Mass., were taken on Apr. 10, 1971. At this time, the Charlestown Navy Yard was still a fairly busy facility, with all three dry docks being occupied and a variety of ships found at the yard's piers. The LSD at Pier 7 West is possibly USS *Pensacola* (LSD-38), commissioned at the yard in March 1971. When compared with the July 1945 view on page 112, it can be seen that, with the exception of the new concrete piers and the extension of Building 197 in the 1950s, the yard's physical appearance had changed little in the quarter century since the end of World War II. *BOSTS-13344*



In contrast, the South Boston Annex was essentially a moribund facility. Note the lack of ships except at the jetties and at the piers on either side of Dry Dock 4. Wooden Piers 1 through 4 were in extremely poor condition, essentially condemned. Had the consolidation plans gone forward, they would have given way to three new dry docks. Dry Dock 3 is flooded in this view. *BOSTS-13344*

rather than contracting with private industry. By late 1963, he had concluded that at least four of the eleven naval shipyards, including Charlestown, should be closed, although he was only recommending the immediate closure of two, Philadelphia and San Francisco (Hunter's Point), in his initial conversations on the subject with President Lyndon Johnson.[391]

While politics meant that any closure announcements would have to wait until after the presidential election in November 1964, McNamara made a round of shipyard visits in the spring of the year where the possibility of closure was raised. The shipyard's in-house newspaper summarized his words to yard managers and employee representatives quite bluntly: "You must cut costs here, for Boston is a high-cost yard, and we must act to reduce those costs!"[392] The threat to the yard's survival led to the formation of a Retain the Boston Naval Shipyard Committee under the auspices of the National Association of Government Employees (NAGE). This group, whose membership included the Massachusetts State Chamber of Commerce, mayors and selectmen of cities and towns throughout Eastern Massachusetts, and members of the state legislature, actively promoted "not only blocking the phase-out of the yard but to revitalize it."[393]

Boston survived the 1964 closure threat, for in November McNamara announced that the Brooklyn and Portsmouth yards would be closed and those at Mare Island and San Francisco combined administratively, although the planned ten-year phase-out of the Maine shipyard would never be implemented.[394]

But the announcement did not bode well for the yard's future. The report accompanying it did not include the yard as one of the four core yards (Norfolk, Charleston, Puget Sound, Long Beach) and was highly critical of the yard's inefficient layout and aging facilities.[395] This document served as the impetus for the development of a master plan for shipyard modernization. As discussed above, several versions were produced in the mid-1960s, some of which involved wholesale modernization of the Charlestown property while others recommended transfer of most operations to the under-utilized but more spacious South Boston Annex. None of these plans were ever funded, leading to further obsolescence in the physical plant and adding ammunition to the case for closure.

As of November 1972, the yard had submitted its latest modernization plan to Washington for approval. But instead of a go-ahead, the yard, along with the yard at Hunters Point in San Francisco, was selected for inclusion in a major military base closing program being formulated by the Pentagon. Thus, on April 17, 1973, Shipyard Commander Capt. Russel L. Arthur informed yard employees that "we have received official notification yesterday that the yard would close." He went on to state that "the official notice calls for us to close down operations prior to December 1974," but that the actual target date was "to close down the Shipyard operations by May 1, 1974."[396]



On Apr. 17, 1964, Secretary of Defense Robert S. McNamara visited the Navy Yard, bluntly telling representatives of the yard's labor force that while "costs have been reduced commendably at the Shipyard … they are still 15 to 25 percent above what they ought to be." Here, McNamara, accompanied by Secretary of the Navy Paul H. Nitze (left) and Chief of the Bureau of Ships (and former Shipyard Commander) Rear Adm. William A. Brockett (right), confers with Shipyard Commander Capt. Frank C. Jones near Dry Dock 2. *BOSTS-7521*

The official rationale for the closure was set forth in a release circulated to "all hands" from the Chief of Naval Information on April 18, 1973:

> The Navy will undergo a significant series of reductions in the size of the shore establishment beginning in Fiscal Year 1974 to provide greater operating efficiency and better support for the smaller operating fleet. The cutbacks will reduce or eliminate the Navy's presence in various parts of the country. The primary shore establishment reductions on the East Coast will be in the Newport-Quonset Point, R.I., Boston, Mass., and New York City areas. On the West Coast, the Alameda-Hunters Point areas, and the Long Beach complex will experience the major reductions.
>
> These combined actions, known as the "Shore Establishment Realignment Program," are part of the national economic shift from a wartime to a peacetime environment. … [T]he reduction program will provide a higher level of support for the fleet by concentrating the shore support facilities in fewer areas. Since 1963 the Navy has had to reduce the number of ships 42 pct. … During that same period, little cutback was made in the shore establishment. In effect, these realignment actions will bring the fleet and its supporting shore establishment into more effective balance.[397]

While the public perception at the time that the closure announcement came was that the yard had been targeted because Massachusetts had been the only state not to vote for President Richard Nixon's reelection in 1972,[398] the actual reasons are far more rooted in the yard's obsolescence. While the quality of its employees' work was excellent, even Dry Dock 3, at one time the largest on the East Coast, could not accommodate *Forrestal* or later classes of aircraft carriers. And the yard was not certified for work on nuclear-powered vessels. The overall size of the Navy was shrinking, and

[391] Carlson, "Politics of Closure," p. 8.

[392] Ibid.; "Defense Secretary Urges Cuts In Costs," *Boston Naval Shipyard News*, vol. 28, no. 43 (May 1, 1964), p. 1, 5.

[393] Kenneth T. Lyons, "Vital Agency," *The Boston Naval Shipyard: Vital Defense Link*, supplement to *Boston Sunday Globe*, Dec. 6, 1964, p. 2.

[394] Black, *Charlestown Navy Yard, 1890-1973*, 2:805.

[395] Ibid., 2:805-806.

[396] "Shipyard Closing Announced," *Boston Naval Shipyard News*, vol. 37, no. 22 (Apr. 27, 1973), p. 1, 3.

[397] "Special Newsgram from CHINFO (A-73)," RUENAAA2085, Apr. 18, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9.

[398] Black, *Charlestown Navy Yard, 1890-1973*, 2:813, 814.

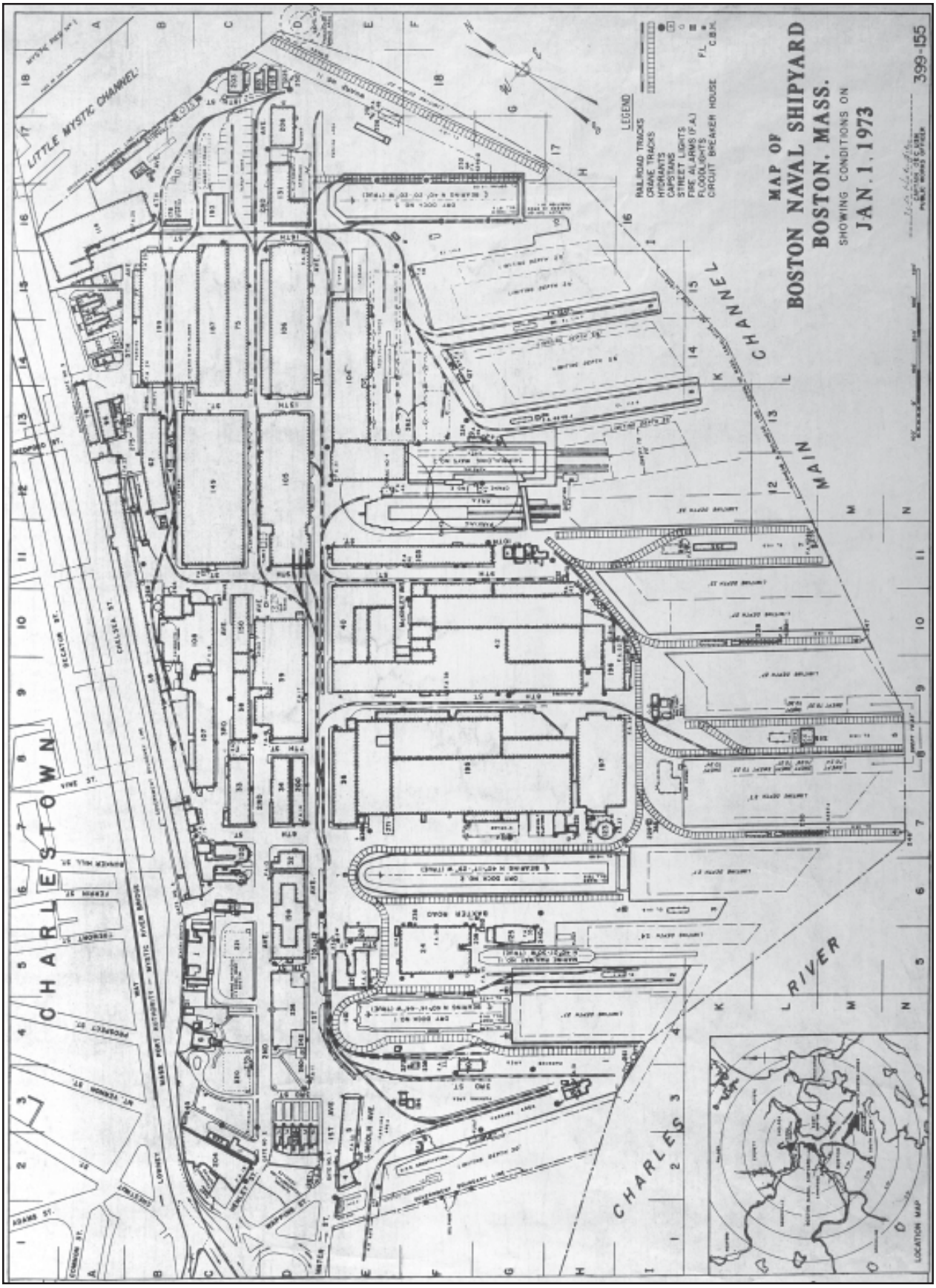
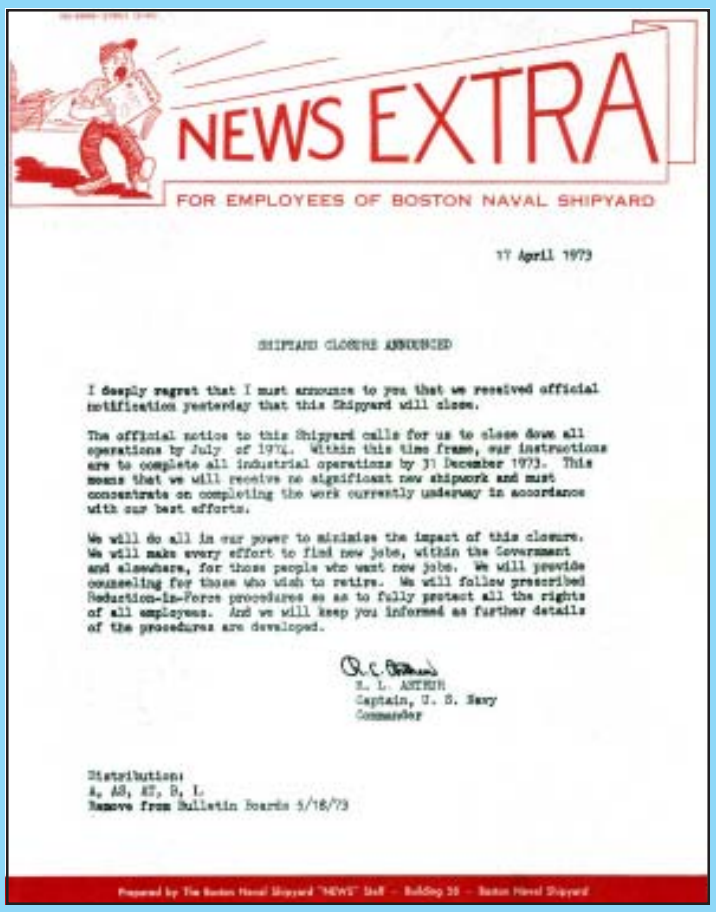


Figure 2-28 – Plan of Navy Yard, 1973

"Map of Boston Naval Shipyard, Boston, Mass., Showing Conditions on Jan. 1, 1973," Jan. 1, 1973. This plan was the last one prepared by the yard. *BOSTS-13502*

Shipyard Closure, 1973-1974



NEWS EXTRA

FOR EMPLOYEES OF BOSTON NAVAL SHIPYARD

17 April 1973

SHIPYARD CLOSURE ANNOUNCED

I deeply regret that I must announce to you that we received official notification yesterday that this Shipyard will close.

The official notice to this Shipyard calls for us to close down all operations by July of 1974. Within this time frame, our instructions are to complete all industrial operations by 31 December 1973. This means that we will receive no significant new shipwork and must concentrate on completing the work currently underway in accordance with our best efforts.

We will do all in our power to minimize the impact of this closure. We will make every effort to find new jobs, within the Government and elsewhere, for those people who want new jobs. We will provide counseling for those who wish to retire. We will follow prescribed Reduction-in-Force procedures so as to fully protect all the rights of all employees. And we will keep you informed as further details of the procedures are developed.

R. L. ARTHUR
Captain, U. S. Navy
Commander

Distribution:
A, AB, AT, B, L
Remove from Bulletin Boards 5/18/73

Prepared by The Boston Naval Shipyard "NEWS" Staff — Building 39 — Boston Naval Shipyard

The official announcement of the planned closure of the yard to its employees came in this notice issued by Shipyard Commander Capt. Russel L. Arthur. *BOSTS-13344*



Shipyard workers watch as the Navy Yard's last industrial customer, USS *Talbot* (DEG-4), departs the yard on Dec. 14, 1973, following completion of a nine-month overhaul. The gloomy weather probably reflected the feelings of the people on the pier. *BOSTS-14359*



As part of the closure process, the yard's service craft, the often overlooked utilitarian barges which served the waterfront, were assembled between Piers 5 and 6 in preparation for their reassignment to other shipyards. *BOSTS-8677*



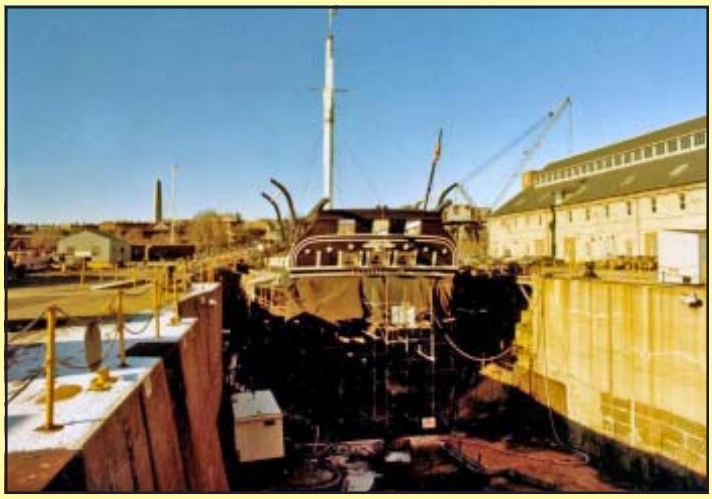
The formal disestablishment of the Boston Naval Shipyard took place at a ceremony held on July 1, 1974, at the Band Stand (Structure 260) on the Shipyard Mall. The Navy Band is seen at far left, while a group of crew members from USS *Constitution*, in their 1812-era uniforms, flank the platform along with sailors in summer whites. This location had been the site of the yard's Flag Pole since the early 19th century and the location of numerous ceremonies over the years. In front of the Band Stand is the yard's War Memorial. *BOSTS-7617*



Marines lower the flag for the last time following the reading of the official orders disestablishing the shipyard. Standing at right with their wives are Shipyard Commander Capt. Russel L. Arthur and Rear Adm. Raymond W. Burk, Deputy Director of the Industrial and Facilities Management Directorate in the Navy Department in Washington and Arthur's immediate predecessor as Shipyard Commander. *BOSTS-7617*

The Navy Yard In 1974: A Gallery

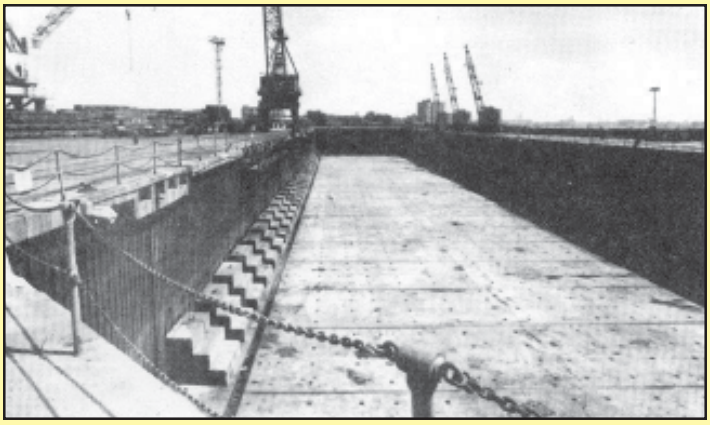
ON FEBRUARY 27, 1974, shipyard photographer John W. "Jack" Doherty made a black-and-white record of the appearance of the yard as it went through its closure process. This record is shown here, supplemented by color photographs taken at the same time (some images show shadows of two photographers standing side by side) and other photographs from this time period, including a series taken in June for the General Services Administration by the consultants Desmond, Childs & Adams. The 1973 yard plan (Figure 2-28) shows the location in the yard of each structure shown.



Dry Dock 1, Feb. 27, 1974
USS *Constitution* is seen in Dry Dock 1 ten months into a year-long drydocking in preparation for the bicentennial of the American Revolution in 1975-1976. *BOSTS-8672*



Dry Dock 2, Feb. 27, 1974
Dry Dock 2 had already seen its last use when this image was taken. On the west side of the dock are Buildings 125 and 24, as well as one of the Star Iron Works portal cranes which had already been claimed by the Portsmouth Naval Shipyard. *BOSTS-8675*



Dry Dock 5, June 3, 1974
The concrete altars along the edge of Dry Dock 5 served to stabilize the dock floor and sheet steel sides. *NPS TIC 457/D6390*



Marine Railway 11, Feb.27, 1974
Except for a brief test in Apr. 1973, the Marine Railway had been out of use since the spring of 1971. *BOSTS-8967*



Finger Pier & Dolphins, Feb. 27, 1974
The Finger Pier originally constructed in the mid-1940s had been replaced in the early 1960s. The Dolphins mark the water boundary line of the Navy Yard. By this time, their original protective purpose was unnecessary as Hoosac Pier was no longer used for commercial ships. *BOSTS-8675*



Pier 1, Feb. 27, 1974
The west side of Pier 1 is seen from the entrance to the Finger Pier. Note the row of cannon taken off USS *Constitution* prior to her drydocking at left and the trailer which served as a gift shop for visitors. *BOSTS-8700*

The Navy Yard In 1974: A Gallery



Pier 2, Jan. 28, 1974
This view of Pier 2 shows the locomotive crane which served the Marine Railway, seen at left, and the enclosure for one of the three electric capstans for Dry Dock 1 at right. *BOSTS-8708*



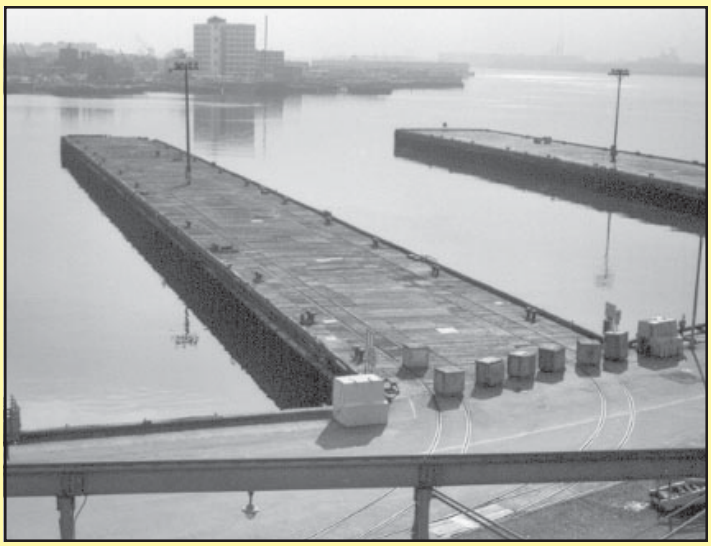
Pier 3, Sept. 26, 1973
This image is one of a series taken to illustrate the deteriorated condition of many of the yard's wooden finger piers. *BOSTS-8720*



Pier 7 & Light Tower 255, 1974
Pier 7 was the last of the wooden piers replaced during the 1950s with concrete piers. *BOSTS-8762*



Pier 8, Jan. 28, 1974
Taken from the top of the Building 104 Extension, this view of Pier 8 shows the Plate Field and Crane Structure 262 in the foreground as well as Building 127 along the edge of Dock St. and Building 224 alongside Shipways 2. *BOSTS-8681*



Pier 9, Jan. 28, 1974
This view of Pier 9 does not show the deteriorated condition of the pier, as indicated by the use of keel blocks to prevent vehicular access onto it. *BOSTS-8682*



Pier 10, Sept. 26, 1973
The deterioration of Pier 10 is quite evident in this view. The locomotive cranes are on the tracks adjacent to Dry Dock 5 rather than on the pier. Note also Portal Crane 204, which the yard had acquired from the closed New York Naval Shipyard in the mid-1960s. *BOSTS-8781*

The Navy Yard In 1974: A Gallery



Quarters B-F (Building 265), Feb. 27, 1974
The Upper Quarters, also known as Captains Row, formed the western edge of a quadrangle encompassing the primary residential and ceremonial area of the Navy Yard. Note the Guard Booths on First Ave. Building 5 is at left, while Building 204 is at right. *BOSTS-8675*



Quarters G, Feb. 27, 1974
A light coating of snow can be seen on the lawn in front of the Commandant's House in this view showing the WPA porch and kitchen additions. *BOSTS-9194*



Marine Barracks (Building I), Feb. 27, 1974
This view shows the Parade Ground in front of the Barracks. Note the cannon displayed on the plinth at the corner of the retaining wall. *BOSTS-9228*



Quarters L-O (Building 266), June 3, 1974
Tennis Court 237 is seen next to the Lower Quarters, also known as Officers Quarters. *NPS TIC 457/D6390*

Quarters P, June 3, 1974
The only quarters constructed during the 20th century, Quarters P was occupied by the Chief of Staff to the Commandant of the First Naval District. *NPS TIC 457/D6390*







Building 4, Feb. 27, 1974

Building 5, July 10, 1974

Following the closure of the yard, the offices for USS *Constitution* would take over the former CPO Club on the second floor of Building 4 while her enlisted crew members moved into the former Bachelor Officers' Quarters on the third floor of Building 5. *BOSTS-8669 (left); BOSTS-8675 (right)*

The Navy Yard In 1974: A Gallery



Building 10, ca. June 1973
The exterior platform was added to Building 10 in 1972 so that visitors could observe USS *Constitution* while the frigate was in Dry Dock 1. The building also was the first home of the USS Constitution Museum. Note the Aboveground Steam Line (Structure 281) running parallel to the fence lining 3rd St. next to the building. *BNHP*



Building 22, Feb. 27, 1974
This structure was identified for use by the USS Constitution Museum. The brick addition, originally a boiler house, served as an electrical substation. *BOSTS-8675*





Building 31,
Feb. 27, 1974
This view of the Telephone Exchange shows the World War II addition to the octagonal structure. *BOSTS-8671*



Building 19 & Truck Scale 235, June 3, 1974
The Scale House served both Truck Scale 235, which occupied one lane of First Ave., and Track Scale 234 on the opposite side of the building. *NPS TIC 457/D6390*



Building 24, Feb. 27, 1974
As a part of the closure process, the equipment required to maintain USS *Constitution* was moved to Building 24. Note the Caisson for Dry Dock 1 in the foreground. *BOSTS-8673*

Building 28, Feb. 27, 1974
This structure, the Reference Standards Laboratory of the Quality Control & Assurance Department, was identified in closure plans for conversion into the headquarters of the First Naval District, which was to leave its offices in the Fargo Building in South Boston. *BOSTS-8675*



Buildings 32 & 198, Feb. 27, 1974
Building 32 housed a branch of the National Shawmut Bank and the yard's Employees Credit Union. Note the lights for Dry Dock 2 located on the roof of Building 198, which was being used as the Electronics Paint Shop as well as for storage. *BOSTS-8675*

The Navy Yard In 1974: A Gallery



Building 33, Feb. 27, 1974
Building 33 was home to Frazier Barracks, the yard's facility for enlisted personnel. Note the wooden addition which linked the structure with adjoining Building 38 as well as the solid green crosswalks and, at the far right, one of the yard's signature yellow trash receptacles. *BOSTS-8675*



Buildings 34 & 200, Feb. 27, 1974
Alexander Parris-designed Building 34 housed the Blueprint & Reproduction Room, Photo Lab, and the Chemical and Metallurgical Laboratories. Building 200, designed by Capt. Charles L. Brand, yard manager from 1938 to 1942, contained the yard's Fire Station and Security Office as well as the Public Works Administrative Offices. *BOSTS-8675*



Building 36, Feb. 27, 1974
Building 36 housed the yard's Cafeteria, Safety Shoe Store, and Sail Loft. Note the large dormer on the end roof which had originally provided access to a long-since removed fire escape. *BOSTS-8675*



Building 38, June 3, 1974
Note the wooden addition at the east end of Building 33 which connected it to Building 38. Building 150 is at left. *NPS TIC 457/D6390*

Building 40, June 3, 1974
Building 40 housed the Temporary Services Shop, which carried out activities such as connecting temporary utility lines for ships at the yard's piers. *NPS TIC 457/D6390*





Building 39, Feb. 27, 1974
The World War II addition spanning Second Ave. is at left in this view of the 7th St. side of the yard's Administrative Offices. *BOSTS-8675*



Building 42, Feb. 27, 1974
This view of the Machine Shop looks down 8th St. The section in the foreground is the 1940 Extension, which continued from the World War I modification to the right of the stair tower. The surviving portion of the original Billings' structure is at the far end. *BOSTS-8675*

The Navy Yard In 1974: A Gallery



Building 58, Feb. 27, 1974
This view looks down the length of the Ropewalk along Chelsea St. from Gate 4. The portion of the street in the foreground was a dead-end used as parking by yard workers. The addition at the west end of the Ropewalk housed the Industrial Relations Office. The stacks of the Power Plant (Building 108) can be seen in the distance. *BOSTS-8670*

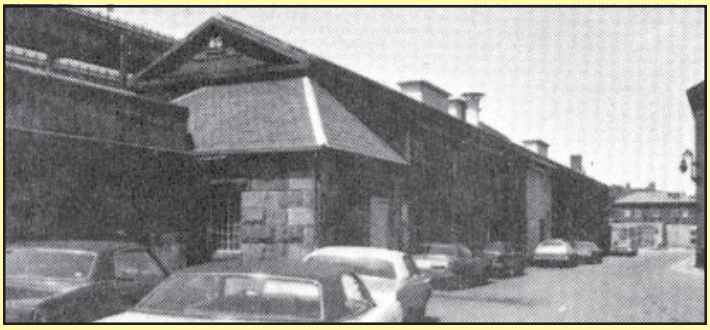


Building 62, June 3, 1974
This view shows the 1911 Wire Rope Mill brick addition to the granite Hemp House. *NPS TIC 457/D6390*

Building 77, June 3, 1974
The WPA garages had originally been attached to the 1848 Boat Shop which had been demolished for the construction of the high-rise Building 199. *NPS TIC 457/D6390*



Buildings 96 & 79, Aug. 24, 1973
Shipyard Commander Russel L. Arthur greets guests at a yard birthday party. Building 96 (left) was used as a Forklift Repair Facility, while Building 79 (right) housed the Navy Exchange Liquor Store. *BOSTS-7549*



Building 60, June 3, 1974
The former Tarring House was listed in the yard's property inventory as being used for Public Works Storage. *NPS TIC 457/D6390*



Buildings 75 & 187, June 3, 1974
Building 75 was the sole survivor of four Timber Sheds. To its left is Building 187, built in 1919 as a Storehouse for Steel. In the background is Building 199. *NPS TIC 457/D6930*





Building 103, June 3, 1974
This view of the Sheetmetal Shop looks along the 9th St. side from First Ave. *NPS TIC 457/D6390*

The Navy Yard In 1974: A Gallery



Building 104, Feb. 27, 1974
The original Shipfitters' Shop had been shortened by approximately half following completion of the Extension along First Ave. The legs of one of the remaining Hammerhead Cranes for Shipways 1 is seen at right.
BOSTS-8675



Building 105, Feb. 27, 1974
In the 1950s, the northern half of the Roundhouse became a Blacksmith Shop, with two of the three doors being changed back to windows.
BOSTS-8675



Building 106, June 3, 1974
This view of the Die Sinker & Boiler Shop shows the lean-to addition on the north, or Second Ave., side. *NPS TIC 457/D6390*



Building 107, Feb. 27, 1974
The shed addition to the west facade of the Public Works Maintenance Shop dated to World War II. At left are the garages for the yard's ambulance fleet which had been added to the Ropewalk. *BOSTS-8675*



Buildings 108 & 150, Feb. 27, 1974
Building 150 can be seen in the foreground of this view of the Third Ave. and 9th St. elevations of the Power Plant. *BOSTS-8675*



Building 109, Feb. 27, 1974
The Waterfront Office housed the yard's tugmasters. The wooden portion of the building had been constructed during World War II around the brick Substation which had been rebuilt by the WPA. Building M-1 is to the right of the Substation portion of the structure. *BOSTS-8675*



Building 110, June 3, 1974
Building 110, which had been moved to this location in 1918, was listed as a Lead Room. *NPS TIC 457/D6390*

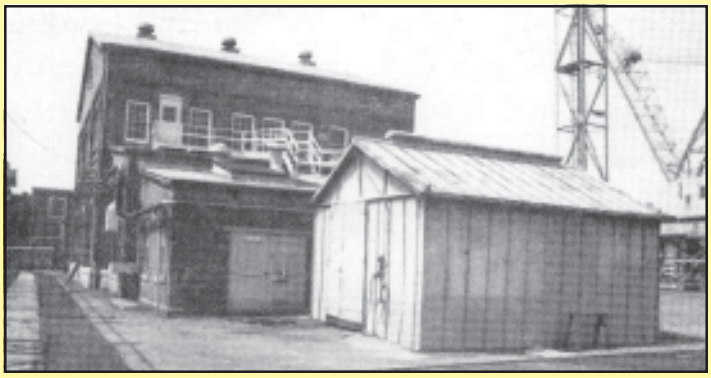


Buildings 114, 210 & 218A, June 20, 1974
During early 1974 equipment in the Woodworking Shop used for the ongoing maintenance of USS *Constitution* was transferred to Building 24. Buildings 210 and 218A are listed as being used for Lumber Storage.
BOSTS-9818

The Navy Yard In 1974: A Gallery



Building 120, Feb. 27, 1974
The Dental Clinic addition to the Dispensary, completed in 1955, is at the far right in this view. *BOSTS-8675*



Buildings 125 & M-37, June 3, 1974
This view shows portable Building M-37 sitting to the south of the Paint Shop. Note Light Tower 240, which provided night illumination for Dry Dock 2, behind it. *NPS TIC 457/D6930*



Building 131, June 3, 1974
The Oil Storehouse was utilized for the storage of flammable materials.
NPS TIC 457/D6930





Building 123, June 3, 1974
Note the rescue basket enclosure and the life preserver mounted on the wall of the circular Pump House for Dry Docks 1 and 2. The concrete block walls on either side of the structure enclose Electrical Substation 274.
NPS TIC 457/D6930



Building 127, June 3, 1974
The addition on the left side of the Workers Latrine was used as an incinerator. *NPS TIC 457/D6930*



Building 136, Feb. 27, 1974
The Marine Corps Administration Building stood along the east side of the driveway leading from Second Ave. to the Marine Barracks (Building I). In the foreground is the retaining wall for the Parade Ground. *BOSTS-8671*

Building 143, June 3, 1974
The yard's Chapel has been converted in 1950 from a Lavatory constructed during World War I. It sat in front of Building 62 on a triangular lot created by the intersection of Fourth and Fifth Aves. at 9th St.
NPS TIC 457/D6390

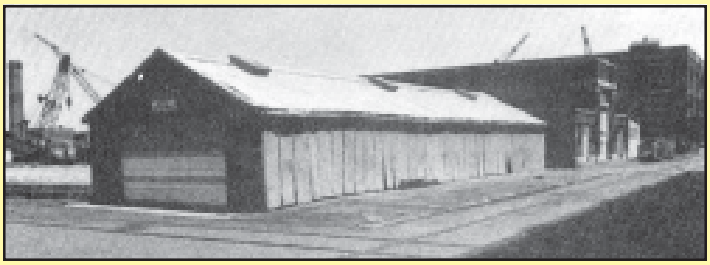
The Navy Yard In 1974: A Gallery



Building 149, Feb. 27, 1974
The Storehouse enclosed a volume of 7.6 million cubic feet on a footprint of approximately 445 x 185 ft. Note the Pier 7 steam line running across the west facade. The Headhouse of the Forge Shop (Building 105) is at right.
BOSTS-8675



Buildings 165 & 165A, June 3, 1974
The Acetylene Plant consisted of two adjoining structures, built by the WPA to replace an earlier structure which had exploded. Note Light Tower 252, one of three which illuminated Pier 11, in the background.
NPS TIC 457/D6930



Buildings 178 & 193, June 3, 1974
Building 178 was the last of the World War I portable steel structures in the yard. Next to it is Building 193, the Salvage Stores Building.
NPS TIC 457/D6390

Buildings 191 & 191A, June 3, 1974
The Salt Water Pumphouse (Building 191) (above right) and the Salt Water Intake Screen House (Building 191A) (below right) were located on the waterfront near Pier 5. They provided salt water for use in the Power Plant.
NPS TIC 457/D6930









Buildings 192 & 192A, June 3, 1974
The Electrical Substation (Building 192) south of Building 103 (left) dated to 1932. Ten years later the Substation Extension (Building 192A) (right) was added it its south.
NPS TIC 457/D6930



Building 194, Feb. 27, 1974
The wing on the south side of the Navy Exchange Service Station had been added to this WPA-built structure in World War II. The building would be demolished in July 1974. Building 5 is in the background.
BOSTS-8672



Buildings 195 & 271, July 10, 1974
The Pipe & Assembly Shop dominated the east side of Dry Dock 2. At left is the Paint Spray Booth (Building 271), erected in 1962. High-rise Building 197 can be seen in the background.
BOSTS-8675

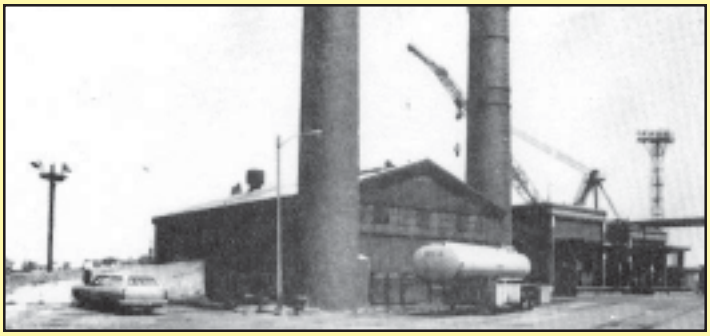


Building 196, June 3, 1974
The Test Plant was built south of the Machine Shop as part of the late 1930s yard modernization.
NPS TIC 457/D6930

The Navy Yard In 1974: A Gallery



Building 197, Mar. 4, 1974
The high-rise Electric Shop, with its water tower, dominated the center of the yard's waterfront. Note how the yard's various service craft have been gathered along the east side of Pier 5. *BOSTS-14784*



Building 203, June 3, 1974
The Incinerator was being used in 1974 as a Sandblasting Facility. Buildings 165 and 165A and Light Tower 250 are at right. *NPS TIC 457/D6930*



Building 204, Feb. 1974
The Automotive Shop and Transportation Shop offices occupied the garage building on Henley St. just outside of Gate 2 to the shipyard. Note the stainless steel letters along the top of the front wall which identified the facility. *BOSTS-8674*



Building 207, June 3, 1974
Built in 1942 as a Decontamination Building, it was later converted into a Motion Picture Exchange for Navy Special Services.
NPS TIC 457/D6930

Buildings 211B & 278, Mar. 4, 1974
The Industrial Service Building was the surviving portion of three such structures erected on Pier 5 during World War II. To its right is an Electrical Substation (Building 278) constructed in 1970. The Light Tower never received a number on the yard inventory. *BOSTS-14784*



Building 199, June 18, 1974
The second of the yard's two high-rise Storehouses had a footprint of approximately 174 x 393 ft. enclosing a volume of 7 million cubic feet. The small brick structure at right is Building 77, the Garages for the Lower Quarters. The edge of Building 187 can be seen beyond the building on the left. *BOSTS-9902*



Building 206, June 3, 1974
The wood frame Administration Building provided locker room facilities as well as offices for ship superintendents at the east end of the Navy Yard.
NPS TIC 457/D6930



The Navy Yard In 1974: A Gallery



Building 217, June 3, 1974
Built in 1942, Building 217 was one of a number of Lumber Storage structures located near the yard's Woodworking & Boat Shop (Building 114).
NPS TIC 457/D6930



Building 225, June 3, 1974
Note the signs for Pier 11 and 18th St. on the Fire Pump House for Pier 11. Similar structures (227, 229, 232) were constructed as part of the reconstruction of Piers 6, 4, and 7, respectively. *NPS TIC 457/D6930*



Grit Hoppers 259 & 273, July 10, 1974
The Grit Hoppers supplied material for sandblasting work done on ships in Dry Dock 1. *BOSTS-8675*

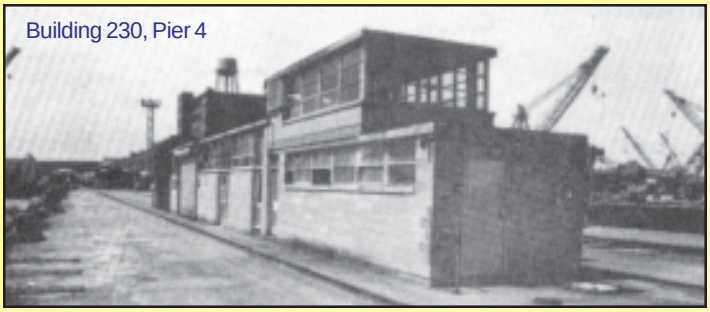




Building 224, June 3, 1974
The yard's two surviving Hammerhead Cranes and Shipways 2 can be seen behind the Electrical Substation which had originally been an addition to Building 104. *NPS TIC 457/D6930*









Buildings 226, 228, 230 & 233, June 3, 1974
As part of the reconstruction of Piers 11, 6, 4, and 7 in the mid-1950s, the yard erected Industrial Services Buildings on each pier.
NPS TIC 457/D6390

Building 277, June 3, 1974
The Oxygen Storage & Filling facility was built in 1944 by Linde Air Products as part of a contract to supply oxygen to the yard. *NPS TIC 457/D6930*

what was left of the fleet was being consolidated at fewer home ports, usually those found in warmer climates, closer to the shipyards at Norfolk and Charleston, S.C. And the Navy was relying more and more on private shipyards to maintain naval vessels, especially as those yards' survival depended on government work because foreign competition was undercutting them on new commercial ship construction and repair.[399]

Manufacturing, the activity that had preserved the yard in the 1880s, had also ceased to be a factor weighing against closure. After 1955, the Ropewalk was reoriented as more a research and development facility. As such, it made major contributions to nylon rope technology, but the facility was shut down in 1971. In that same year, foundry operations were shifted to the Philadelphia Naval Shipyard.[400] The only unique product the yard now made was the largest anchor chain, the 4-3/4-inch die-lock chain, and the Navy could fulfill the needs of the few new vessels coming into service that needed it by transferring the chain from older ships going into retirement or by lending the requisite dies to private industry.[401]

Since the Charlestown Navy Yard no longer performed any unique mission, there was little impetus to save the facility. Thus, while there were public protests and efforts to reverse the decision, it was irrevocable. The yard's last industrial customer, USS *Talbot* (DEG-4), departed the yard on December 14, 1973, having completed a nine-month modernization.[402] Early 1974 saw employees begin the process of shutting down operations, inventorying and securing materials and equipment, and looking for alternative employment.[403] Finally, on July 1, 1974, at a ceremony held at the yard's Band Stand and Flag Pole, the yard was formally disestablished as a naval shipyard.[404]

After The Navy Yard

The official closure of the Navy Yard did not result in the overnight disappearance of the Navy from Charlestown. Workers who on July 1, 1974, worked for the Boston Naval Shipyard reported the next day as employees of the Boston Caretaker Group of the Portsmouth Naval Shipyard.[405] Industrial operations continued in and around Pier 1 as USS *Constitution* completed her overhaul in preparation for the American Revolution Bicentennial. Other yard workers continued the process of closing down buildings, inventorying property for disposition, and preparing paperwork for either separation or transfer to other agencies or locations of yard employees.



One of the major tasks of the Boston Caretaker Group was the removal and disposition of equipment and furnishings from yard buildings. This photograph was submitted in early May 1975 to demonstrate how efficiently it handled the removal of furnishings from Building 39 by loading trailers suspended by cranes at each floor level. *BOSTS-9383*

Boston National Historical Park

On October 1, 1974, President Gerald Ford signed the Boston National Historical Park Act of 1974. This legislation authorized the establishment of Boston National Historical Park, a unit of the National Park System. The park was not a single, contiguous piece of property. Rather, it was a collection of seven sites in downtown Boston and Charlestown, the purpose of which was to "preserve for the benefit and inspiration of the people of the United States … certain historic structures and properties of exceptional national significance … associated with the American Revolution and the founding and growth of the United States."[406]

The seventh site listed in the park's legislation was the Charlestown Navy Yard. The act defined the yard "to include the United States Ship Constitution" and approximately 30 acres at the west end, as shown on a March 1974 map (see Figure 2-29). It also provided that the National Park Service (NPS) was authorized to enter into written agreements with the Navy to "permit the continued use of any such buildings and facilities as the Secretary of the Interior determines to be necessary for the preservation and mainte-

[399] Ibid., 2:809-10, 812. Secretary of Defense Elliott L. Richardson, in a message explaining the planned closures, pointed out that while the fleet had been reduced from 917 to 523 ships since 1964, the size of the shore establishment had remained the same. In assessing how to reduce this excess capacity, he continued, facilities "incapable of handling modern carriers were the most expendable." See Secretary of Defense to Defense Supply Agency et al., "Public Affairs Guidance - Installation and Activity Realignment Announcement," FOUO 3625, [Apr. 17, 1973], DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9.

[400] Black, *Charlestown Navy Yard, 1890-1973*, 2:810.

[401] The responsibility for storing these dies was transferred to the Philadelphia Naval Shipyard on Mar. 22, 1974. See Boston Naval Shipyard, "Chronological List of Events, 1 January 1974-1 July 1974," Command Histories, 1961-1974, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 12.

[402] "'Goodbye And Good Luck'," *Boston Naval Shipyard News*, vol. 38, no. 13 (Dec. 21, 1973), p. 3.

[403] "Piers, Drydocks [*sic*] And Some Buildings Are Secured As Shipyard Moves Into Final Phases of Closure," *Boston Naval Shipyard News*, vol. 38, no. 16 (Feb. 1, 1974), p. 1, 4.

[404] Chief of Naval Operations, OPNAV Notice 5450, "Disestablishment of the Boston Naval Shipyard, Boston, Massachusetts," June 10, 1974; Boston Naval Shipyard, *Disestablishment Ceremony, 1 July 1974* (1974), Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 7.

[405] Commander, Naval Ship Systems Command, to Commander, Boston Naval Shipyard, "Boston Naval Shipyard Caretaker Organization and Functional Responsibilities," May 3, 1974; Boston Caretaker Group Instruction 5450.1, "Organization of the Boston Caretaker Group (Code 900)," June 28, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 1.

[406] Boston National Historical Park Act of 1974, Pub. Law 93-431, Oct. 1, 1974, 88 Stat. 1184.

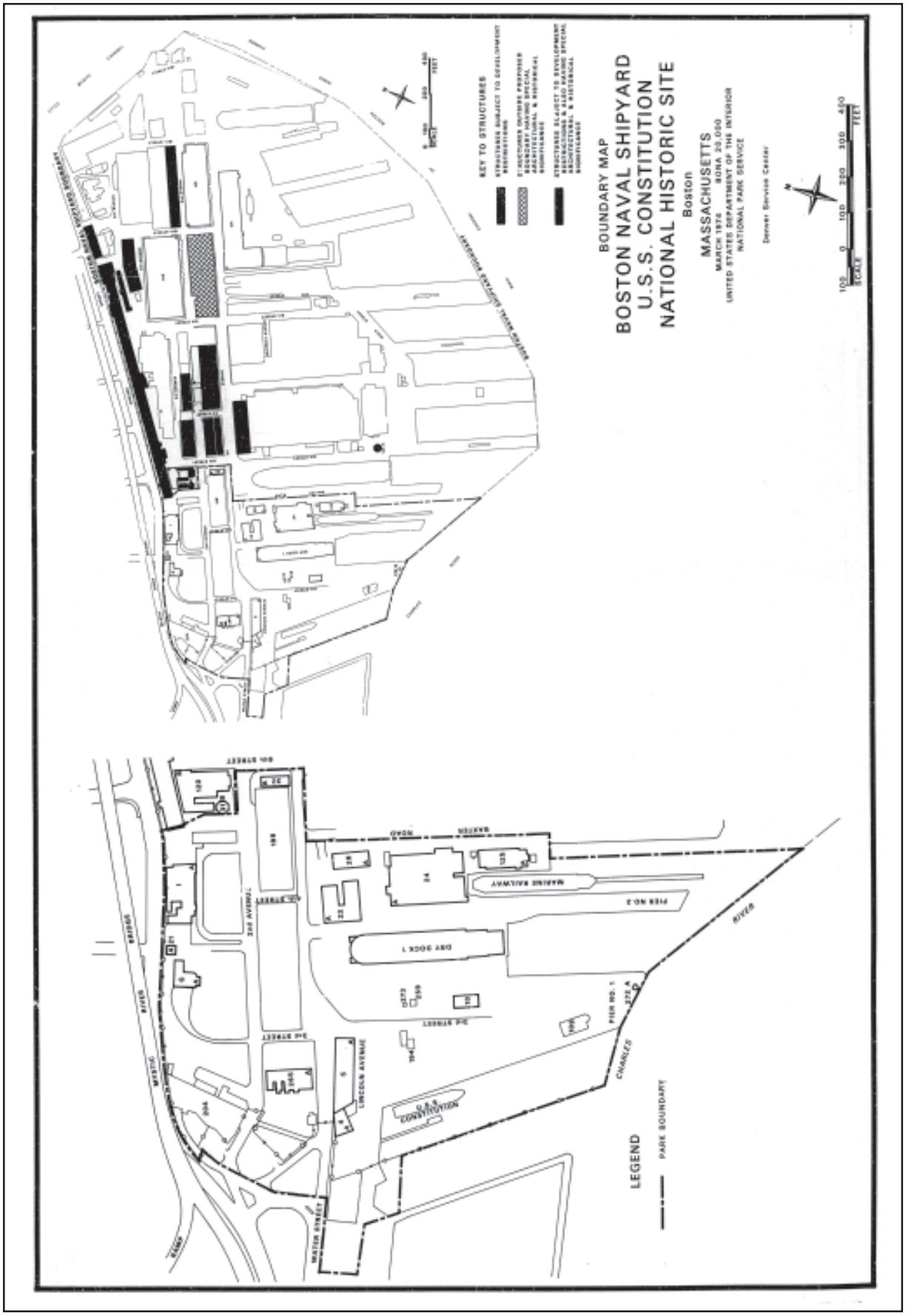


Figure 2-29 – Legislative Boundary Map, Charlestown Navy Yard

"Boundary Map, Boston Naval Shipyard/U.S.S. Constitution National Historic Site," Mar. 1974. This is the official boundary map of the Charlestown Navy Yard referred to in the Boston National Historical Park Act of 1974. *NPS TIC 457/20000*

nance of the Constitution."[407] Subsequent legislation in 1980 amended the original boundary by adding what park planners all along had called the most significant structures in the yard, the Ropewalk Complex (Buildings 58 and 60), as well as the Chain Forge (Building 105), to the park.[408] Two years earlier, as discussed in detail elsewhere, Building 107 had been added to the park to compensate for buildings lost due to highway projects.[409]

The origins of the park date back to the 1950s, when a Boston National Historic Sites Commission had studied historic sites in and around Boston and recommended the creation of two national parks. Minute Man National Historical Park in Lexington, Lincoln, and Concord was authorized in 1959. But Boston National Historic Site, which envisioned a complex public-private partnership to preserve not a contiguous area but several separate structures throughout the city, languished for over a decade.[410]

Two factors appear to have come together in the early 1970s to bring the park from concept to reality. The first of these was the growing interest in the forthcoming celebration of the bicentennial of the American Revolution in 1975 and 1976. The second was the announcement of plans to close the Navy Yard. Although Congress had, under the influence of Congressman John W. McCormack, in the mid-1950s, passed legislation mandating that Boston was to be USS *Constitution*'s permanent home, the planned closure raised questions as to the ship's future. One way to ensure that she remained in Boston was to provide for continued federal ownership of her traditional berthing location in the Navy Yard.[411]

National Historic Landmark Designation

The historical significance of the Navy Yard had long been recognized. In April 1940, at the instigation of President Franklin D. Roosevelt, the Navy began a survey of historic buildings and structures under its control, but the coming of World War II had ended the effort. In the spring of 1963, this project was resumed in coordination with, but separate from, the National Survey of Historic Sites and Buildings being conducted by the National Park Service. In June 1964 the Commandant of the First Naval District issued an instruction to all commands within the district to "institute a survey … and submit a report … listing and describing … buildings, structures and monuments" which met the following criteria:

> Buildings and structures which are one hundred years or older will be considered of historical significance and reported in this survey. Buildings and structures less than one hundred years old will be considered on the basis of their historical and traditional association with the history and achievements of the Navy or of their exceptional value in commemorating and illustrating the history of the United States. All monuments will be considered of historic significance.[412]



In addition to a bronze plaque, the Navy Yard received this certificate denoting the designation of the Boston Naval Shipyard as a National Historic Landmark. *acc. BOSTS-0001*

The initial results of this survey were furnished to the National Park Service in January 1965 in the form of recommendations as to what should be designated as National Historic Landmarks. Citing the precedents set with the Naval Academy and the Washington Navy Yard, the Navy recommended that "in view of the number of historic buildings and structures … and the long historic role of the Boston Naval Shipyard" the entire facility be considered for NHL designation.[413]

As a part of the National Park Service's own program, NPS staff historian S. Sydney Bradford visited the yard in the spring of 1964.[414] Bradford's visit resulted in the yard's inclusion in the National Survey of Historic Sites and Buildings, the result of which was that on November 15, 1966, the Secretary of the Interior designated the entire Boston Naval Shipyard as a National Historic Landmark.[415] The designation automatically entered the Navy Yard onto the National Register of Historic Places, created a month before by the National Historic Preservation Act of 1966. The first paragraph of this designation is worthy of quoting:

> The Boston Naval Shipyard is one of the Nation's oldest, and for over 150 years has built, repaired and serviced naval vessels. The installation introduced the use of shelters for shipways,

[407] Ibid.

[408] Pub. Law 96-344, Sept. 8, 1980, 94 Stat. 1134.

[409] National Parks and Recreation Act of 1978, Pub. Law 95-625, Nov. 10, 1978, 92 Stat. 3478.

[410] See Stephen P. Carlson, "Boston National Historical Park Origins Date to 1950s," *The Broadside/Boston National Historical Park* (Autumn 1994), p. 2. For the report, see Boston National Historic Sites Commission, *Final Report of the Boston National Historic Sites Commission: Letter From the Secretary of the Interior Transmitting the Final Report of the Boston National Historic Sites Commission Pertaining in Particular to Major Problems of Historic Preservation in the Municipality of Boston*, House Doc. No. 107, 87th Cong., 1st sess. (Washington: U.S. Govt. Printing Office, 1961).

[411] Carlson, "Park Origins Date to 1950s."

[412] Commandant, First Naval District, to Distribution List, "Historic Buildings, Structures and Monuments in the Naval Shore Establishments within the First Naval District; Identification and Registration," COMONE Notice 5750, June 10, 1964, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 25.

[413] R.A. Bafus to George B. Hartzog, Jan. 28, 1965, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. 13347, Box 25.

[414] S. Sydney Bradford to George Bradley, May 8, 1964, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. 13347, Box 25.

[415] National Survey of Historic Sites and Buildings, "Boston Naval Shipyard, Massachusetts," Oct. 10, 1966, enclosed in Howard R. Stagner to Paul H. Nitze, Nov. 15, 1966, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. 13347, Box 25. See also National Survey of Historic Sites and Buildings, "Boston Naval Shipyard, Massachusetts," *Theme XVII-b: Commerce and Industry* (1966), 3:28-31.

> erected one of the Nation's first drydocks [*sic*], and pioneered in modern ship construction. She also manufactured all of the Navy's rope for over a century.[416]

The National Park Service provided a bronze plaque denoting the landmark status to the yard. It was installed in 1968 on a marble base constructed near the Finger Pier entrance to USS *Constitution* so as to be visible to visitors. An older Navy plaque about the ship was moved from the outside of the curtain gates to the base at the same time.[417] This structure (Structure 276) was later moved opposite the ship's entrance on Pier 1 West; damaged by snow plows or other vehicles, the monument base was demolished in 1999 and the NHL plaque was relocated to the east side of the Band Stand (Structure 260) in August 2000.[418]

U.S. Navy Historic Site Program

The Navy recognized that the National Historic Landmark program would not necessarily include all places which were of historic significance to the Navy itself. Thus, in August 1965, the Commandant of the First Naval District circulated the list of properties recommended for NHL status to form the basis for a further analysis which would lead to the placement of "U.S. Navy Historic Site" markers "to publicly identify and illuminate the historic significance of particular buildings, structures, sites and monuments within naval activities."[419] The entire yard and the Marine Barracks were the two recommended NHLs for the Navy Yard in this list. In preparing recommendations for markers, facilities were to review the adequacy of existing markers; if they were adequate and in good condition, new markers would not be required.

The Navy Yard responded to this directive on September 24, 1965, with the text of three proposed markers. One, for the entire shipyard, with special emphasis on Dry Dock 1, was to be placed outside Gate 1. A second was to be attached to the Ropewalk (Building 58), while the third was for the Chain & Forge Shop (Building 105). The existing markers for the Commandant's House and USS *Constitution* were considered adequate, as were the markers on Buildings 5 and 105 relating to the landing of British troops during the Battle of Bunker Hill.[420]

The proposed markers for the Ropewalk and Chain Forge were approved by the Chief of Naval Operations in February 1966; that for the yard itself underwent a series of revisions before its final approval in June.[421] There is no record, however, that these three markers were ever produced and installed.

There the issue of recognition of individual structures within the Navy Yard stood until the early 1970s. It again became a subject for the yard as it sought to respond to a 1971 executive order from President Richard M. Nixon directing federal agencies to fulfill their responsibilities under Section 110 of the National Historic Preservation Act of 1966 by identifying and nominating properties under their control to the National Register of Historic Places.[422] On December 18, 1972, the yard, responding to a Navy directive of September 1972 regarding the implementation of this order, prepared individual National Register nomination forms for Dry Dock 1 (Constitution Dock), the Commandant's House (Quarters G), and Buildings 5, 31 (Clock Tower), 58 (Ropewalk), and 266 (Quarters L-M-N-O).[423] Possibly because the entire yard was already on the National Register, these forms do not appear to have been officially submitted to the National Register.

Throughout this period, the Navy Yard did not consider the possibility that the South Boston Annex possessed any historic significance or contained structures meeting the criteria for the National Register despite the fact that both Dry Dock 3 and the former Boston Army Base were over 50 years old.

From Naval Shipyard To National Park

Even before the yard's closure was decided upon, the Navy had considered consolidating operations at the larger, less developed South Boston Annex. It was that possibility that had led the Boston Redevelopment Authority (BRA) in 1971 to commission a study of a national naval park and museum in Charlestown. This proposal called for approximately 24 acres of land to be "converted to a National Historic Park" to include "a major Naval Museum, other special exhibits, a motel and recreational facilities for local residents and tourists." Among the elements of this proposal were a 700-car underground parking facility in Dry Dock 2, a short term marina, a ferry dock, and a motel and restaurant.[424] A revised ver-

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[416] National Survey of Historic Sites and Buildings, "Boston Naval Shipyard."

[417] Code 400 (H.C. Rowe) to Code 100, "Historical Landmark Plaque, BNS (Department of the Interior)," May 1, 1967; S.C. Jones to R. Berthrong, "Designation of Shipyard as a 'National Historic Landmark'; comments concerning," Sept. 29, 1967, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 25.

[418] Memorandum to Files from Acting Superintendent, "Section 106 Compliance – BOST 00-04, Reinstall National Historic Landmark Marker, Charlestown Navy Yard," Aug. 17, 2000, BOST 00-004, Section 106 Case Files, Division of Cultural Resources, BNHP. The USS *Constitution* plaque was placed in the park's museum collection.

[419] Commandant, First Naval District, to Distribution List, "U.S. Navy Historic Site Markers for Buildings, Structures, Sites and Monuments in the First Naval District," COMONE Notice 5750, Aug. 19, 1965, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 25.

[420] Commander, Boston Naval Shipyard, to Commandant, First Naval District (Code 33), "U.S. Navy Historic Site Markers for Buildings, Structures, Sites and Monuments in the First Naval District," Sept. 24, 1965, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 25. Because the Marine Barracks was technically Marine Corps, not Navy Yard, property, it was not addressed by the yard.

[421] Chief of Naval Operations (Op-09B9) to Commandant, First Naval District, "U.S. Navy Historic Site Markers," Feb. 3, 1966; Chief of Naval Operations (Op-09B9) to Commandant, First Naval District, "U.S. Navy Historic Site Markers for Buildings, Structures, Sites and Monuments in the Naval Shore Establishment," June 21, 1966, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 25.

[422] OPNAV Instruction 11011.11, "Executive Order 11593, Protection and Enhancement of the cultural environment," July 12, 1971, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 25.

[423] Commander, Boston Naval Shipyard, to Commander, Naval Facilities Engineering Command, "Boston Naval Shipyard, Boston, Massachusetts; Executive Order 11593, Protection and Enhancement of the Cultural Environment," Dec. 18, 1972, with attachments, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 30. As in 1965 and 1966, the yard did not deal with the Marine Barracks.

[424] Planning Department, Boston Redevelopment Authority, *Charlestown Naval Shipyard Historic Park Proposal (revised)*, Charlestown Naval Shipyard Re-Use Study, Report III: Historic Park Proposal (Aug. 1971 [1975 revision]), TIC 457/D6001A; Boston Redevelopment Authority, *A Development Proposal for the Charlestown Navy Yard* (n.d. [Aug. 1971]), TIC 457/D6001B.

The BRA National Park Proposal For The Navy Yard

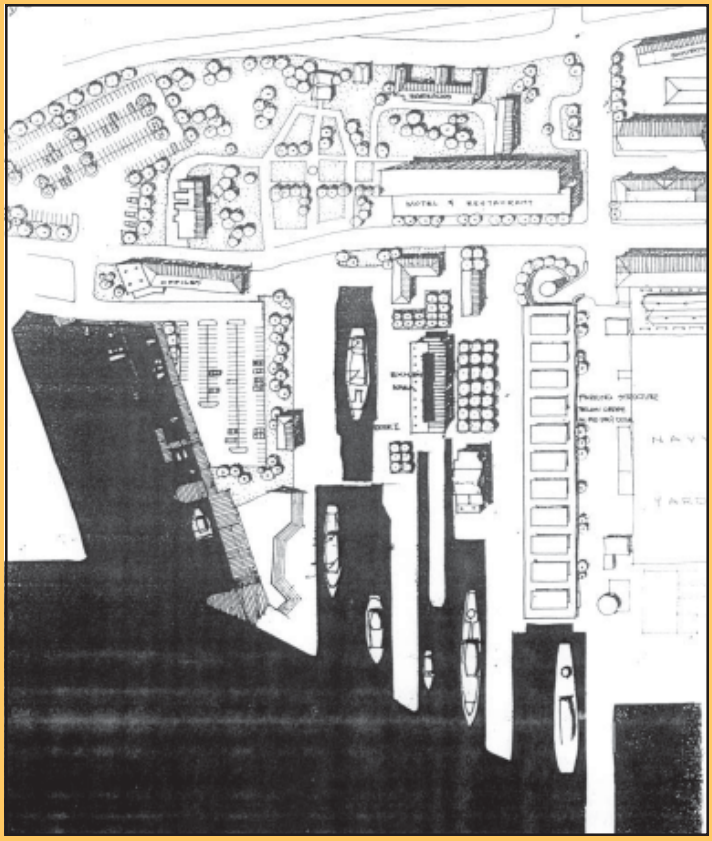


Figure 2-30 – BRA Historic Park Proposal, 1971
"A Development Proposal for the Charlestown Navy Yard," 1971. This drawing depicts the original Boston Redevelopment Authority concept for an historic park in the Navy Yard. *NPS TIC 457/D6001C*

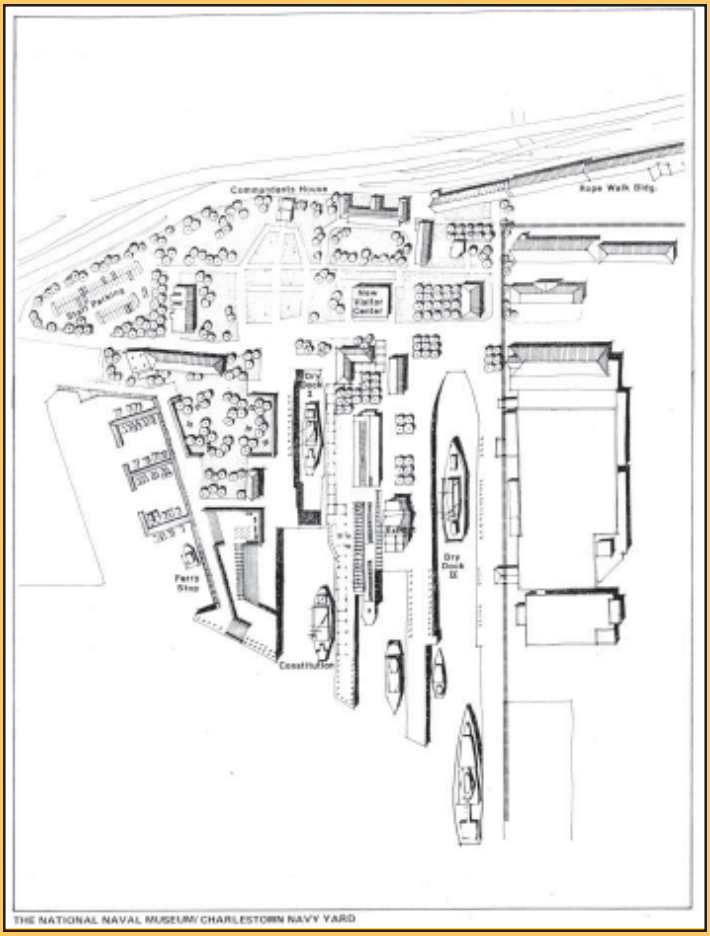


Figure 2-31 – BRA Historic Park Proposal, 1973
"The National Naval Museum/Charlestown Navy Yard," 1973. This plan represents a revision of the 1971 scheme. Note that the emphasis is still on "park/green space" development rather than historic preservation. *NPS TIC 457/D6001B*

sion, issued in 1973, deleted the Dry Dock 2 parking, showing it as a berthing place for historic vessels instead (see Figures 2-30, 2-31).[425]

In that same year, the NPS Eastern Service Center undertook a study that updated the 1960 commission study. This effort included the Boston Naval Shipyard within its scope since "it possesses exceptional historical values associated with the main theme."[426] All three of the alternatives identified in its December 1971 report included a portion of the Navy Yard within the proposed Boston National Historic Sites. The park should "include all historic structures and sites (especially the ropewalk), as indicated by the landmark designation." The planners were aware of the BRA study, but did not necessarily concur with it in all details:

> While the concept is sound, the Service should not necessarily adopt the plan as presented by the Authority. Rather, the Service should define its own conditions for ownership and management of the section which would be under its jurisdiction. Consideration should be given to the inclusion of "U.S.S. Constitution" within the proposed boundary, under continued operation and maintenance by the Navy. A statement must be included regarding the protection of the historic elements of the Shipyard outside this section and the Navy's future role, if any, in the area outside of the proposed site … designated as "Industrial Park" and "New Community Area" in the BRA plan.[427]

Following the announcement of the yard's closure, on May 3, 1973, First Naval District Commandant Rear Adm. Richard E. Rumble proposed that a portion of the yard be "made into a National Naval Park to be administered by the National Park Service." The Navy would continue to operate USS *Constitution*, whose crew would occupy Buildings 4 and 5 along with the USS Constitution Museum, while Buildings 10 and 24 would be used for the ship's maintenance support (see Figure 2-32). Urging Washington to further discuss the idea with the NPS, Rumble also pleaded that "prompt action be taken to earmark the Park Area so that action can be taken now while the Shipyard is being disestablished and in sufficient time to prepare the Area for the Bicentennial."[428]

[425] Boston Redevelopment Authority, *A Proposal for a National Historic Park & Naval Museum, Charlestown Navy Yard, Boston, Massachusetts* (Boston: Boston Redevelopment Authority, 1973), TIC 457/D6001C.

[426] Office of Environmental Planning and Design, Eastern Service Center, *Proposed Boston National Historic Sites, Boston, Massachusetts* (Dec. 1971), TIC 457/D4, p.3.

[427] Ibid.

[428] Commandant, First Naval District, to Secretary of the Navy, "USS CONSTITUTION (IX-21)," May 3, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 1.

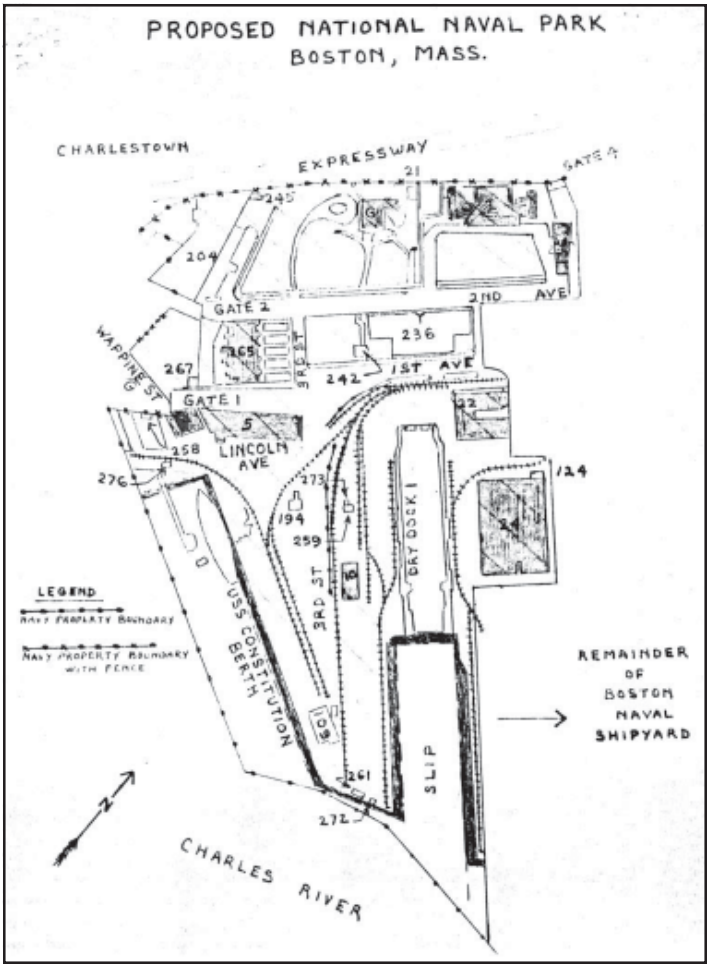


Figure 2-32 – Navy Proposal for National Naval Park, 1973
"Proposed National Naval Park, Boston, Mass.," May 3, 1973. This proposal included the smallest portion of the Navy Yard within the proposed park of any of the plans prepared in the early 1970s. *BOSTS-15157*

On May 24, 1973, NPS Northeast Regional Director Chester L. Brooks directed that a new area study be done on such a proposal. A "working draft" was circulated for review in early August.[429] Responding on August 30, Admiral Rumble stated that he was "in full accord with the basic plan." His major comments concerned the proposed use of the second and third floors of Building 5 for National Park Service offices, citing the need for the building's quarters and galley for support of USS *Constitution*'s crew. He also made a suggestion as to expanding the site's western boundary to include Hoosac Stores No. 1 & 2. The structure, he stated, was in a "state of disrepair" and "will detract from the USS *Constitution* berth." Balancing this recommended addition, Rumble recommended excluding Building 32 from the proposed park.[430] Rumble's response did not include two additional boundary change suggestions proposed by the Navy Yard's commander—excluding Building 125 and the Marine Railway and placing the boundary on the west rather than the east side of Gate 4.[431]

The final document, completed in December 1973, proposed a park boundary similar to that included in the final legislative package. This boundary omitted both Dry Dock 2 and the Ropewalk, both of which had been included in the 1971 BRA and NPS plans, but did add Hoosac Stores to the park. Outside of the park, it urged preservation restrictions (facade easements) on many of the 19th century structures, but only "special attention" to Buildings 104, 105, 106, and 149. It actually recommended that the buildings proposed for preservation restrictions be designated as individual National Historic Landmarks, with the exception of Building 200, which it recommended retaining "as part of the visual background forming the eastern boundary" of the park. It urged eliminating through access across the park into the remainder of the Navy Yard, and contained a series of recommendations as to visitor access and circulation and support facilities (see Figure 2-33).[432]

The boundary drawn for the national park portion of the yard was criticized at the time by NPS historians as being too narrowly focused on USS *Constitution* while speaking of the yard interpretively in its broader context.[433] The issue of boundary changes was the subject of a separate NPS study in 1978. While some fairly extensive additions were considered, the recommended alternative called for a fairly modest revision of the boundary to include the Ropewalk, Tarring House, Chain Forge, and Buildings 31, 107, and 120, and for the transfer of Building 32 to the Boston Redevelopment Authority (see Figure 2-34).[434] The final boundary revisions authorized by Congress in 1980 included only the Ropewalk, Tar House, and Chain Forge,[435] although Building 107 had been added to the park in 1978 as a result of access road work described below.

The Interim Park

Although the Navy appeared convinced that the political support existed for the proposed National Park Service takeover of part of the Navy Yard to provide a berthing area for USS *Constitution*, it also recognized that even once Congress had acted, it would probably not be until mid-1976 or later when the NPS would be in a position to actually take over the site. Until that time, the shipyard commander informed Washington, the Navy "will have sole respon-

[429] *New Area Study for Boston Naval Shipyard U.S.S. Constitution National Historic Site, Boston, Massachusetts* (working draft, Aug. 3, 1973), TIC 457/D6002. For records relating to this study, see Records of Cape Cod National Seashore Relating to New Area Study for Boston Naval Shipyard, Division of Cultural Resources, BNHP.

[430] "Comments on National Park Service Study for USS Constitution National Park," Aug. 28, 1973, enclosed in R.E. Rumble to Albert Benjamin, Aug. 30, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 30.

[431] Commander, Boston Naval Shipyard, to Commandant, First Naval District, "New Area Study for Boston Naval Shipyard National Historic Site, Boston, Massachusetts (Working Draft dated 3 Aug 1973)," Aug. 21, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 30.

[432] *New Area Master Plan for Boston Naval Shipyard U.S.S. Constitution National Historic Site, Boston, Massachusetts* (revised 12/73), TIC 457/D6002A, p. 1. The cover and a second title page calls this document *New Area Study* rather than *New Area Master Plan*.

[433] Senior Historian, Historic Sites Survey (Benjamin Levy), to Chief, Division of Historic & Architectural Surveys, "Disposition of the Boston Naval Shipyard," Dec. 20, 1973; Robert M. Utley, Follow-Up Slip, Jan. 8, 1974; Barry Mackintosh to Assistant Director, Park Historic Preservation, "Boston Naval Shipyard New Area Study," Jan. 14, 1974, Contract File, Charlestown Naval Shipyard NHL Boundary Study, Boston Naval Shipyard NHL Reference File, Division of Cultural Resources, BNHP.

[434] Denver Service Center, *Boundary Enlargement Report, Charlestown Navy Yard, Boston National Historical Park* (Dec. 1978), TIC 457/D1302A, p. 39.

[435] Pub. Law 96-344, Sept. 8, 1980, 94 Stat. 1134.

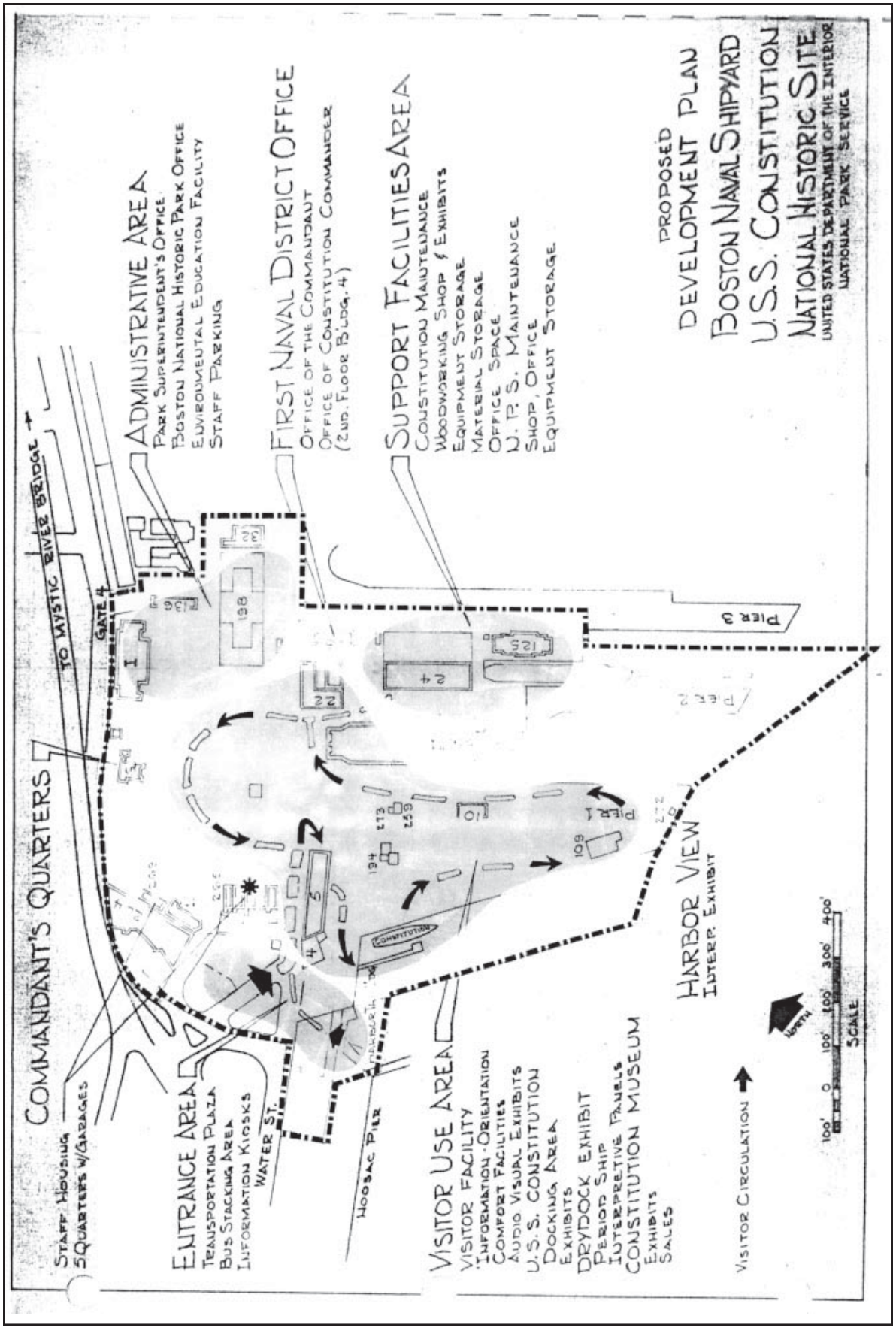


Figure 2-33 – NPS New Area Master Plan, 1973

"Proposed Development Plan, Boston Naval Shipyard/U.S.S. Constitution National Historic Site," Dec. 1973. This was the first National Park Service plan for the development of the Charlestown Navy Yard. *NPS TIC 457/D6002A*

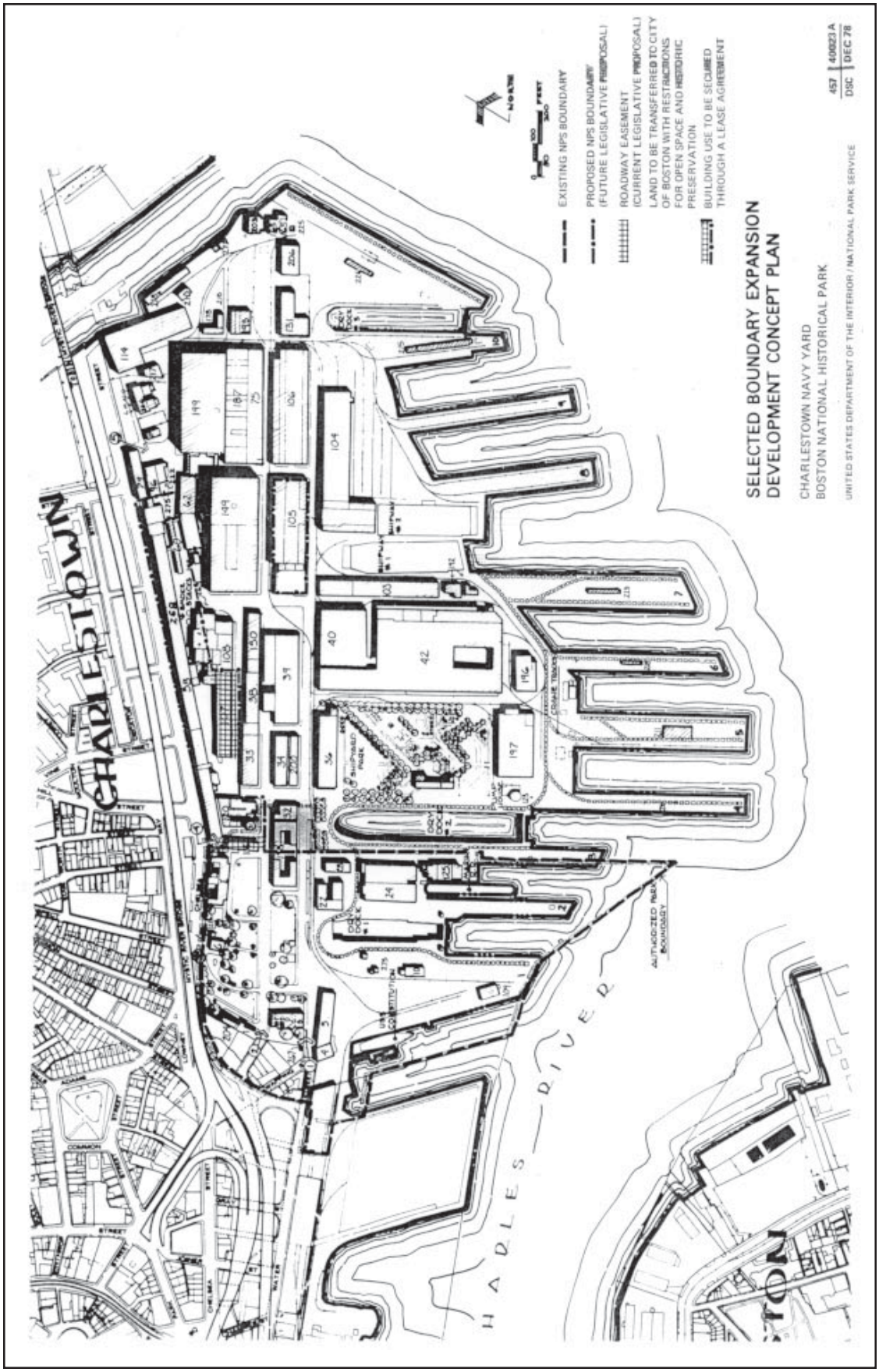


Figure 2-34 – NPS Proposed Boundary Expansion, 1978

"Selected Boundary Expansion Development Concept Plan," Dec. 1978. This plan showed the proposed expansion of the Charlestown Navy Yard unit as recommended by the 1978 NPS boundary study. *NPS TIC 457/40023A*

sibility for the site and will be required to support and display CONSTITUTION and its artifacts … with no assistance from the National Park Service."[436]

As a result, the yard in late 1973 began to formulate a plan for an "interim park" for *Constitution.* Among the actions included in this proposal, forwarded to Washington for approval in January 1974, were conversion of the Bachelor Officers Quarters and Closed Mess in Building 5 into quarters for *Constitution*'s enlisted personnel; demolition of the Gasoline Station (Building 194) to provide increased visitor parking; repaving; fencing off the area; and granting the USS Constitution Museum an occupancy license for Building 22, which the final NPS proposal designated for museum use, so that it could "be at least partially outfitted by late 1974."[437] (See Figure 2-35) This plan was separate from, but in coordination with, the proposed consolidation of ship maintenance forces and equipment in Building 24 which was accomplished during the early months of 1974.[438]

The interim park plan was approved on March 5, 1974, and implemented over the next few months.[439] Thus, the crew of USS *Constitution* moved into Building 5 in the spring of 1974, and in July 1974 the Gasoline Station was demolished.[440] On March 14, 1975, with the consent of the National Park Service, the Navy granted permission to the USS Constitution Museum Foundation to occupy and begin work on converting Building 22 into its permanent museum facility.[441] While discussions with the museum made it clear that all work had to be reviewed under the terms of Section 106 of the National Historic Preservation Act, it does not appear that the Navy made any such review of the Building 194 demolition project.

Undocked in April 1974, *Constitution* remained at Pier 1 East for further work until February 1975, when she returned to her normal berth. A month later, on March 14, 1975, she reopened to public visitation. The influx of visitors overwhelmed the ability of the Boston Caretaker Group to deal with vehicle and pedestrian flow, and on May 1, 1975, it proposed to modify the interim park plan to

[436] Commander, Boston Naval Shipyard, to Chief of Naval Operations, "USS CONSTITUTION Interim Display and Support Plan," Jan. 2, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 1.

[437] Ibid., with enclosed "Timetable of Events Related to Establishment of an Interim Park for Display of USS CONSTITUTION."

[438] Commander, Boston Naval Shipyard, to Chief of Naval Operations, "USS CONSTITUTION (IX-21); overhaul of," May 30, 1973; Code 124 (H.J. Trost) to Distribution, "CONSTITUTION Industrial Site; planning for," Aug. 2, 1973; Chief of Naval Operations to Chief of Naval Material and Commandant, First Naval District, "USS CONSTITUTION Logistic Support," Aug. 27, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 1.

[439] Chief of Naval Operations to Chief of Naval Material, "USS CONSTITUTION (IX-21) Interim Display and Support Plan, approval of," Mar. 5, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 11.

[440] Code 940 (D.B. Hathaway) to Code 910, "Final Inactivation of Structure, notification of," July 9, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 18; Director, Boston Caretaker Group, to Commanding Officer, Northern Division, Naval Facilities Engineering Command, "Disposal Report Authorization letter (DRA) for Building #194 (Exchange Service Station); request for," Oct. 9, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 11.

[441] License for Non-Federal Use of Real Property, USS Constitution Museum Foundation, NF(R)-24693, Mar. 14, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 32.

The Interim Park

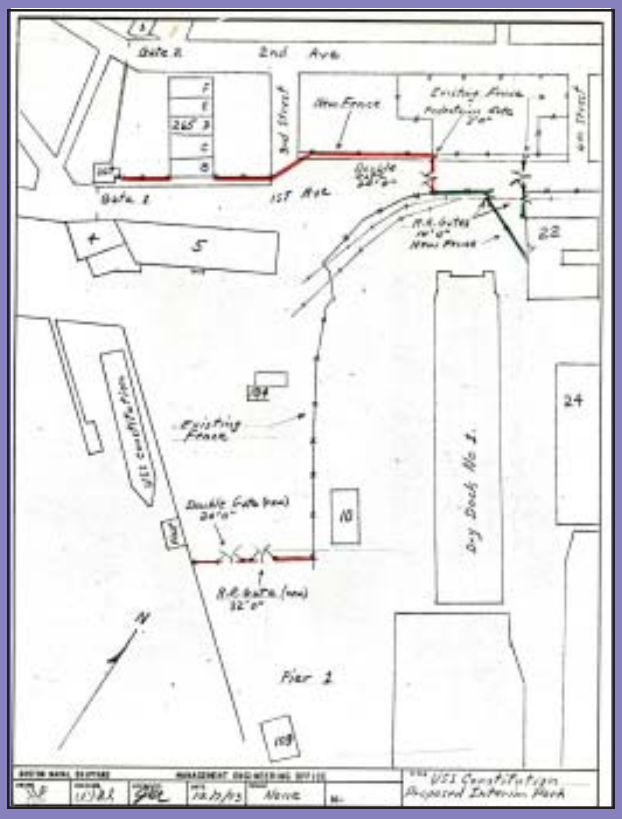


Figure 2-35 – Interim Park Plan, 1973
"U.S.S. Constitution Proposed Interim Park," Dec. 7, 1973. The initial fencing of the site is in red, while green denotes revisions to be made when the USS Constitution Museum opened in Building 22. *BOSTS-15157*

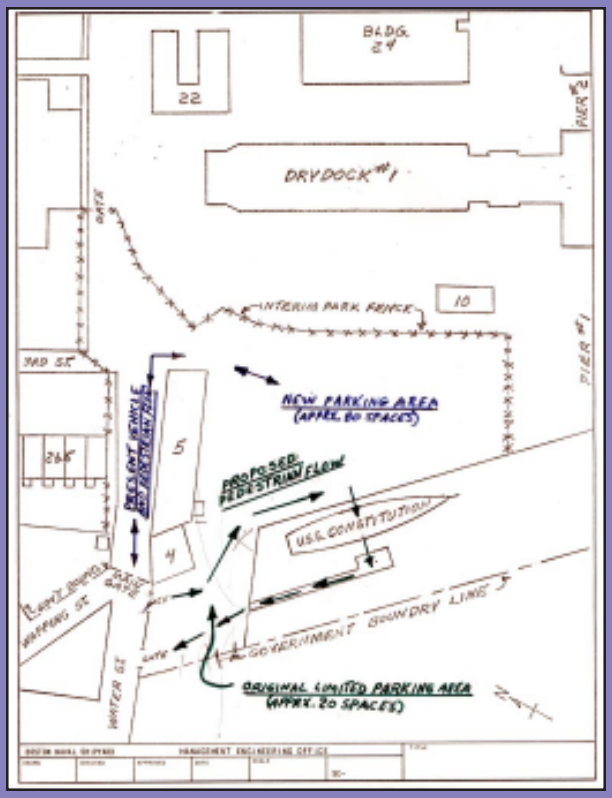


Figure 2-36 – Interim Park Plan Revision, 1975
This plan shows changes to visitor flow proposed to address the inability of the Navy to deal with visitor parking. *BOSTS-15157*

eliminate parking within the yard. Visitors would again enter through the curtain gates (see Figure 2-36).[442] The scheme was not immediately implemented since Washington did not feel "unilateral action" to eliminate parking was "prudent," and, based on experience during the summer of 1975, the proposal was rescinded by the Boston Caretaker Group on August 13, 1975.[443]

Throughout the period, the Navy was in communication with the National Park Service. As Admiral Rumble put it in a memorandum about an August 1974 meeting with the NPS, it "would be counter-productive and wasteful for both" agencies if the Navy's efforts were not "in consonance with the overall Site development plans as envisioned by the NPS."[444]

The closure of the Navy Yard meant that the park area would no longer be able to obtain utilities, especially steam for heating, from a central system. For that reason, the Navy in the spring of 1974 instituted a project to install individual gas-fired boilers in eleven buildings (Buildings 1, 4, 10, 22, 24, 28, 32, 109, 136, and 265 and the Marine Barracks).[445] While the Naval Facilities Engineering Command contracted for the design of the entire system, higher costs meant that Navy funds were sufficient to have the systems installed only in Buildings 4/5, 22, 24, and 136 (with the Commandant's House being fed from Building 136); these were completed in 1975. The new gas lines placed for the system, however, envisioned the overall scheme, and the National Park Service completed the project with installations for Buildings I, 10, 28, 125, and 265 between 1976 and 1978.[446]

In the fall of 1975 the Navy and the National Park Service worked closely to coordinate the transfer of the property to the NPS. Among the final actions the Navy was to have taken prior to the transfer involved the erection of a fence along the park's eastern boundary line from the Ropewalk at Gate 4 to Pier 3, but the project was actually done by the NPS in the spring of 1976.[447]



One of the first projects in the national park section of the Navy Yard involved the provision of individual gas-fired heating systems in the buildings to be transferred to the NPS. This 1975 view shows the installation of a gas main along 4th St. Note the large safety sign still in place next to Building 22 in the background. *Orville W. Carroll, BOSTS-13347*

Disposal Of Navy Yard Real Estate By The Navy

The designation of the yard as a National Historic Landmark meant that the disposal of the property by the Navy had to take the historical significance of the yard and its structures into consideration and, as the Advisory Council on Historic Preservation reminded the Defense Department in February 1974, follow the procedures set forth for compliance with Section 106 of the National Historic Preservation Act of 1966.[448] This fact meant that any disposition was likely to be accompanied by restrictions which bound the recipient to preserve certain elements of the yard as a part of any redevelopment process. As will be seen below, final decisions on such guidelines would be an effort to balance historic preservation with potential development.

A complex decision-making process, discussed below, resulted in the division of the yard into four parcels (see Figure 2-37). The first of these was the area designated by Congress for inclusion in Boston National Historical Park (24.72 acres), responsibility for which was assumed by the National Park Service on January 1, 1976. Included in the transfer was Portal Crane 65 as well as furnishings and equipment within the buildings.[449]

[442] Director, Boston Caretaker Group, to Chief of Naval Operations (OP-92), "USS CONSTITUTION Interim Display and Support Plan," May 1, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 2.

[443] Chief of Naval Operations to Commandant, First Naval District, "USS CONSTITUTION Interim Display and Support Plan," July 24, 1975; N.A. Bertrand, Memo for File, "Parking at Interim Park Area," Aug. 14, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 28; Commandant, First Naval District, to Chief of Naval Operations, "USS CONSTITUTION Interim Display and Support Plan," Sept. 10, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 10.

[444] Rumble, Memo for the Record, "Meeting with Mr. Jerry D. Wagers, Regional Director, National Park Service on 14 August 1974," Aug. 20, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 2.

[445] Portsmouth Naval Shipyard, Boston Caretaker Group, *Environmental Impact Assessment, Urgent Minor Construction Project P-134, "National Naval Park – Utilities Support* (Aug. 27, 1974), DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 20.

[446] Alonzo B. Reed Inc., *Specification, National Naval Park Utilities Support, Boston Naval Shipyard, Boston, Massachusetts* (June 6, 1974), TIC 457/D6289; "Chronology for an Independent Utilities System for the Charlestown Site of the Boston National Historical Park," enclosed in Director, Boston Caretaker Group, to Commander, Naval Sea Systems Command (SEA-073), "Independent Utility System for Charlestown Site of the Boston National Historical Park," Feb. 4, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 20; Hugh D. Gurney to Thomas E. Comer, Boston Gas Co., Aug. 28, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 32.

[447] Director, Boston Caretaker Group, to Director, North Atlantic Region, National Park Service, "Transfer of Boston National Historical Park Site (Park Area) to the National Park Service on 1 January 1976," Dec. 11, 1975, with enclosure, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 20; David A. Rose to Raymond T. O'Dell, "Contract No. CX-1600-6-0012 (Salem Fence Company)," May 7, 1976, Chain Link Fence, NPS Contract Files, Division of Cultural Resources, BNHP.

[448] Ann Webster Smith to Allan S. Kerr, Feb. 20, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 10.

[449] Albert A. Gammal, Jr., to Jerry D. Wagers, Jan. 29, 1976, July 1, 1976, Boston NHP Deed No. 2, Deed Files, Division of Cultural Resources, BNHP; Commander, Naval Sea Systems Command, to Distribution List, "Conditions that will exist and actions to be taken at the former Boston Naval Shipyard from 1 January to 30 June 1976," Jan. 7, 1976, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22.

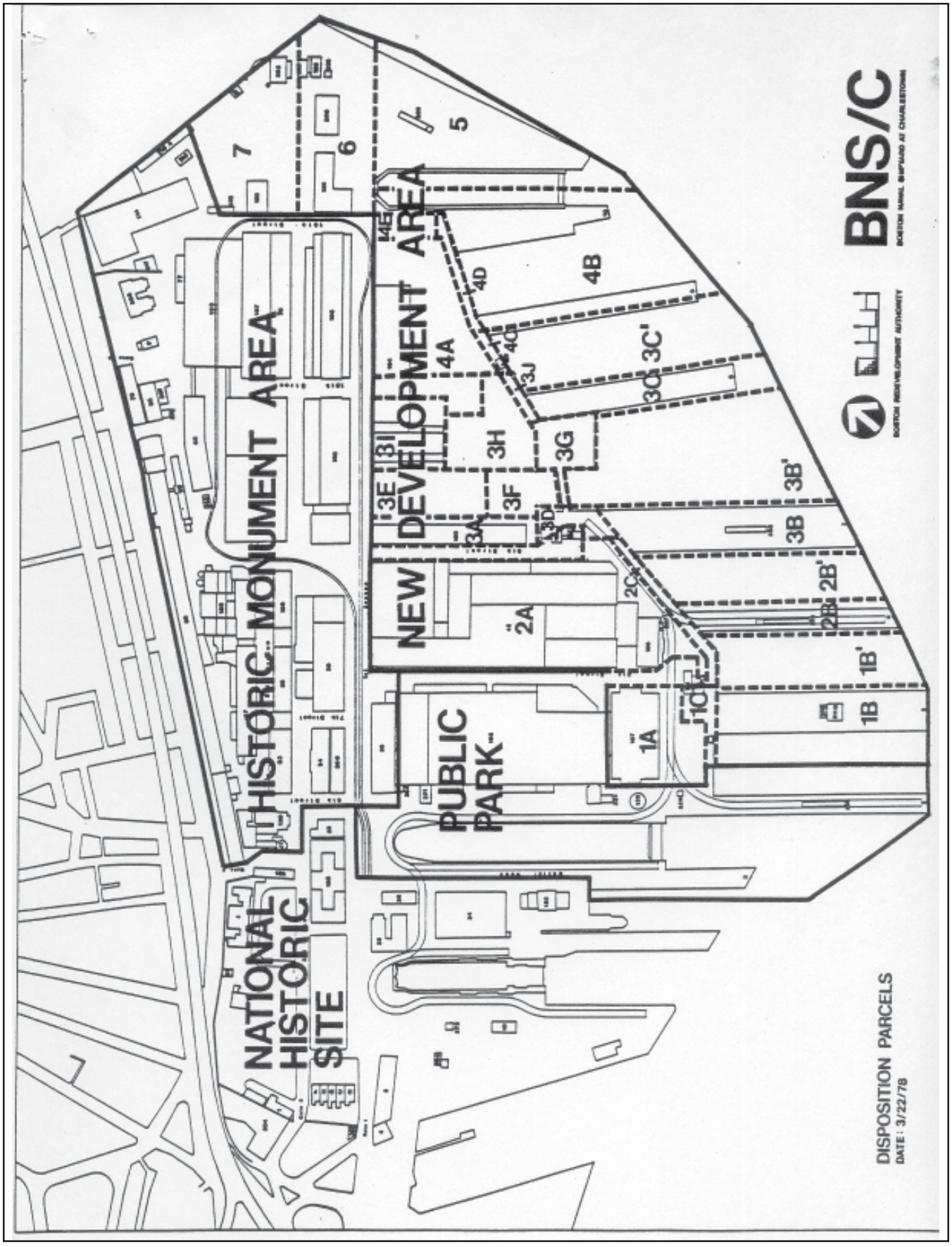


Figure 2-37 – Charlestown Navy Yard Disposition Parcels

Disposition Parcels, Mar. 22, 1978. This plan by the BRA shows the division of the Charlestown Navy Yard into four sections for disposition by the Navy, along with the subdivision of the New Development Area into individual parcels. *NPS TIC 457/D6040A*

The second parcel was an area amounting to 16.37 (later reduced to 16.22) acres including Dry Dock 2 and Building 195 to the east, together with Piers 3 and 4, which was transferred in May 1977 for use as a public park. With the exception of the Pump House (Building 123), demolition of all structures in the parcel was allowed; Dry Dock 2 was to be maintained flooded.[450]

The remaining two parcels were both intended for reuse for commercial and/or residential purposes. The area north of First Avenue was designated as the Historic Monument Area (30.85 acres), and was transferred to the Boston Redevelopment Authority in July 1978 at no cost under a deed that contained historic preservation restrictions, including a provision that the BRA could only lease property to private developers. Detailed preservation guidelines were provided for eighteen of the twenty-one buildings mandated for retention; the guidelines for the remaining buildings—the Ropewalk, Tar House, and Chain Forge—were to be developed later.[451]

The remainder of the yard (58.4 acres) was labeled the New Development Area (or "Buy Parcel") and was sold to the BRA in May 1979 for $1,740,000. While there were some preservation requirements imposed for six structures in that parcel which were to be retained in whole or in part (Buildings 40, 42, 103, 104, 197, 228), it was largely open for redevelopment, including the demolition of all other buildings along with Piers 9 and 10, and new construction over facilities such as Shipways 1 and 2.[452]

As part of these transactions, the Massachusetts Port Authority on May 24, 1979, deeded to the BRA any right, title, or interest it had in the Navy Yard under the reversionary terms contained in state legislative acts granting Navy Yard property to the federal government.[453]

Retention Of Historic Artifacts And Machinery

Related to the disposal of the yard's real estate was the question of historic materials. As a part of the closure process, the yard established a committee to review items and recommend what should be retained as historic.[454] Most of the items identified during this effort, including paintings, models, display boards, archival documents, plans, and photographs, were transferred on indefinite loan to the National Park Service in the fall of 1975.[455]

More complicated was the issue of machinery found in the yard's shops, particularly that in the Ropewalk and the Chain Forge. On-going Navy actions to dispose of machinery as excess property,[456] without regard to historic concerns, led the National Park Service to involve the Advisory Council on Historic Preservation in the matter. On August 1, 1975, Council staff member Myra Harrison visited the yard, and recommended that the furniture in the Commandant's House as well as machinery in the Ropewalk and Chain Forge be retained in place.[457]

Following up on Harrison's visit, the Council wrote to the Navy on October 24 that the removal of equipment from the two facilities "that is an essential quality of their historical character" should be "temporarily suspended" until Section 106 procedures were completed.[458] The Navy responded that the matter fell under the jurisdiction of the Defense Supply Agency (DSA) rather than the Navy,[459] leading the Council to inform the DSA on November 14 that "all of the remaining original machinery in the Ropewalk and the Forge and Chain Shop [should] be held in place" and that it should consider "returning to their original location certain pieces of machinery already removed." The Council also requested that "removal and disposal of all other machinery at the Shipyard be temporarily suspended" pending completion of the Section 106 review.[460]

Meanwhile, the NPS elevated the issue to a high level. On September 9, Departmental Consultant for Historic Architecture W. Brown Morton III visited the yard. He expressed concern that "all equipment was either removed or in process … and that clearance

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[450] Boston Redevelopment Authority, *Application for Transfer of 19.6 Acres of the Boston Naval Shipyard at Charlestown to the Boston Redevelopment Authority for Public Park and Recreation Purposes under P.L. 91-485 Submitted to U.S. Bureau of Outdoor Recreation* (Dec. 1975), TIC 457/D6123; deed, Bureau of Outdoor Recreation to Boston Redevelopment Authority, May 6, 1977, Suffolk Deeds, bk. 8955, p. 262-71; deed, United States of America to Boston Redevelopment Authority, May 15, 1979, Suffolk Deeds, bk. 9182, p. 134-48. The original 19.6 acres requested had been reduced to 16.37 by deleting Building 197. See Robert T. Kenney to Edwin L. Shellenberger, Sept. 21, 1976, Shipyard Park File, Division of Cultural Resources, BNHP.

[451] Deed, United States of America to Boston Redevelopment Authority, July 7, 1978, Suffolk Deeds, bk. 9182, p. 149-64; Boston Redevelopment Authority, *Application for Transfer of 30.9 Acres of the Boston Naval Shipyard at Charlestown to the Boston Redevelopment Authority for Historic Monument Purposes (40 U.S.C. 484(k)(3)) Submitted to General Services Administration* (July 25, 1977), TIC 457/D9B. The buildings to be retained were Buildings 31, 33, 34, 36, 38, 39, 58, 60, 62, 75, 79, 96, 105, 106, 107, 114, 120, 149, 199, and 266 as well as Quarters P. The guidelines for Building 108 allowed for either demolition or partial retention. Final guidelines for Buildings 58, 60, and 105 were not drafted until 1992 and, due to other considerations, were not approved until 2002. See Keith Everett to Cara H. Metz, Aug. 29, 2002; Alisa McCann to Jim Gribaudo, Oct. 8, 2002, BOST 92-017, Section 106 Case Files, Division of Cultural Resources, BNHP.

[452] Deed, United States of America to Boston Redevelopment Authority, May 21, 1979, Suffolk Deeds, bk. 9182, p. 165-75; Boston Redevelopment Authority, *Design Guidelines, New Development Area, Boston Naval Shipyard at Charlestown* (June 1978), TIC 457/D6040; "Amendment to Design Guidelines for the New Development Area, Charlestown Navy Yard," July 19, 1991, in Boston Redevelopment Authority, *Charlestown Navy Yard Redevelopment: Final Supplemental Environmental Impact Report*, EOEA #02383, Sept. 3, 1991, TIC 457/D6291A, vol. 2, App. A.

[453] Deed, Massachusetts Port Authority to Boston Redevelopment Authority, May 24, 1979, Suffolk Deeds, bk. 9182, p. 176-83. The state had in July 1978 enacted legislation terminating its own rights in Navy Yard property effective upon its transfer to the BRA. See Chap. 556, Acts of 1978, July 22, 1978, Suffolk Deeds, bk. 9182, p. 236-37.

[454] BOSNAVSHIPYARD Notice 5750, "Collection and disposition of Items of Historic Significance; Subcommittee for," June 25, 1973, History Committee Records, 1973-1974, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 23.

[455] Director, Boston Caretaker Group, to Curator for the Navy, "Historical Items at the Former Boston Naval Shipyard; Disposition of," Dec. 15, 1975, Mar. 15, 1976, with enclosures, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 10.

[456] For records relating to the disposition of Navy Yard property, see DPDO Closure Records, Records of the Boston Naval Shipyard, RG 1.10, BNHP, NPS Cat. No. BOSTS-16511.

[457] Denis P. Galvin to John Calarese, Aug. 20, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9.

[458] John D. McDermott to R.C. Gooding, Oct. 24, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9.

[459] Gooding to McDermott, Nov. 13, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9.

[460] McDermott to R.S. Lance, Nov. 14, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9.

should have been requested prior to any removal." With regard to the Chain Forge, he was told that the equipment "was in the disposal process … and could be removed at any time."[461] Morton's visit was apparently the impetus for a letter sent on November 13 by Secretary of the Interior Thomas S. Kleppe to Secretary of the Navy J. William Middendorf concerning this issue. The Ropewalk and Chain Forge and their machinery, he stated, "are irreplacable components of the history of naval technology in the United States." He urged delay in plans to dispose of the equipment "until a final decision has been reached concerning the future disposition of these buildings." He concluded that "the buildings and their contents represent an irreplacable historical, cultural, and technical resource which can never be recaptured once disassembled."[462]

Middendorf replied on January 8, 1976, stating that "sales actions relating to excessed property in the Ropewalk and The Forge and Chain Shop have been suspended pending further review and decision by the Advisory Council." He went on to suggest that the "most practical solution to maintaining the integrity and historical preservation of the enclosed machinery" would be to add the structures to the national park.[463]

On a working level, the DSA informed the Council on December 2 that it had "suspended all sales actions related to the Ropewalk (Building 58) and to the Forge and Chain Shop (Building 105)." It stated that "it is not possible for us to suspend utilization and donation screening, and sales, on all other machinery at the Shipyard." It did, however, state that it could "afford you the opportunity to screen" the equipment.[464]

The Council responded to both the Navy and the DSA on December 6. It bluntly stated that "if the Navy has removed any machinery from the base it has done so in violation of Section 106." The issue was complicated by "the lack of any comprehensive, professional identification and survey of the machinery located at the Shipyard." The Council therefore suggested that a survey be done by the Historic American Engineering Record (HAER), and that, "in light of the Navy's compliance responsibilities … this obligation should be assumed by your agency."[465]

The DSA agreed to fund the work, and between January 12 and 15 a HAER team led by Principal Architect Eric DeLony visited the yard. The team members were surprised to discover that the move of machinery, other than in the Ropewalk and Chain Forge, was "so complete" and thus "precludes the possibility of documenting in situ, certain industrial processes that may have been unique to the Navy Yard." The team's report pointed out that "age is not the sole criteria used when assessing the historicity of an industrial process," and thus even modern machines might be significant and should be recorded.[466]



While the Navy took care to preserve some materials for historic purposes, other items were simply dumped. National Park Service curators managed to retrieve many shipyard artifacts for posterity by field collection from what the Navy had left behind. This group of abandoned wooden patterns is seen in Building 104 on Nov. 10, 1982. *BNHP*

The survey report was completed in February 1976, and recommended retention of Ropewalk and Chain Forge machinery in situ as well as a bandsaw in Building 114 and cannon bollards around Dry Dock 2. It also emphasized the importance of preserving the yard's collection of plans and photographs.[467] Subsequently, the Ropewalk machinery, a portion of the Chain Forge equipment representing the 3/4-inch chain production line, and the cannon bollards were loaned to the NPS.[468] The remaining Forge Shop equipment was claimed by the Smithsonian Institution as a holding action in May 1976; it was formally transferred to the National Park Service in November 1978.[469]

The transfers from the Navy constitute the core of the Boston National Historical Park museum collection for the Navy Yard.[470] Other Navy Yard materials were collected by National Park Service employees from locations where they had been abandoned by the Navy or have been donated to the park by former employees and others.[471]

[461] Frank Orlando, Memo for File, "National Park Service; Shipyard visit by," Sept. 10, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9.

[462] Thomas S. Kleppe to J. William Middendorf, Nov. 13, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9.

[463] Middendorf to Kleppe, Jan. 8, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9.

[464] Richard G. Bruner to McDermott, Dec. 2, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9.

[465] McDermott to Gooding, Dec. 6, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9.

[466] "Report on the Survey of Historic Personal Property Remaining at the Boston Naval Shipyard," enclosed in Jerry L. Rogers to Francis B. Roche, Feb. 5, 1976, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 10.

[467] Ibid. In a Jan. 15, 2003, telephone conversation with the author, Eric DeLony recalled stopping Navy workers from throwing plan files into a dumpster.

[468] Director, Boston Caretaker Group, to Superintendent, Boston NNP, "Artifacts in the Industrial Area; removal of," Apr. 19, 1976, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 20.

[469] Code 900 (Calarese) to Code 100, "Artifacts in the former Boston Naval Shipyard; Status of," June 23, 1976, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 10; Transfer Order, Excess Personal Property, 6U-310, Smithsonian Institution, May 25, 1976, in Carolan, *Building 105/The Chain Forge*, App. E; Transfer Order, Excess Personal Property, 0100, Boston National Historical Park, Nov. 18, 1978; Arsen Charles to H.P. Barton, Mar. 29, 1979, Accession Files, acc. BOSTS-092, Museum Collection Records, Division of Cultural Resources, BNHP.

[470] For listings of the items transferred from the Navy, see Accession Files, acc. BOSTS-01, BOSTS-02, BOSTS-03, BOSTS-05, Museum Collection Records, Division of Cultural Resources, BNHP.

[471] For a description of the Navy Yard collections, both at Boston National Historical Park and elsewhere, see Appendix C.

Documenting A Legacy: A HAER Gallery

THE HISTORIC AMERICAN ENGINEERING RECORD (HAER) had been established in 1969 to "document nationally and regionally significant engineering and industrial sites." By the time the Navy had been forced by the Advisory Council on Historic Preservation to recognize that the Navy Yard should be documented as mitigation for the loss of its industrial integrity, most of the shops had been stripped of their equipment. As HAER architect Eric DeLony recalled, "we got the best we could." This gallery includes photographs of buildings taken by DeLony in 1973[1] and those of cranes and machinery done by HAER photographer Jack E. Boucher in April 1976. The 1973 yard plan (Figure 2-28) shows the location in the yard of each structure shown. Other HAER photographs taken on behalf of the Boston Redevelopment Authority as mitigation for the yard's redevelopment are found in Chapter 5 of this report.



Building 31, 1973
The World War II addition is clearly seen in this view. Building 120 is at right.
Eric DeLony, HAER



Building 34, 1973
Note the street signs on the corner of the building. *Eric DeLony, HAER*





Building 33, 1973
Note the wooden addition at far left spanning 7th Street and connecting the structure with Building 38. *Eric DeLony, HAER*



Building 36, 1973
Note the signage and pipes on the walls, typical of Navy Yard buildings.
Eric DeLony, HAER

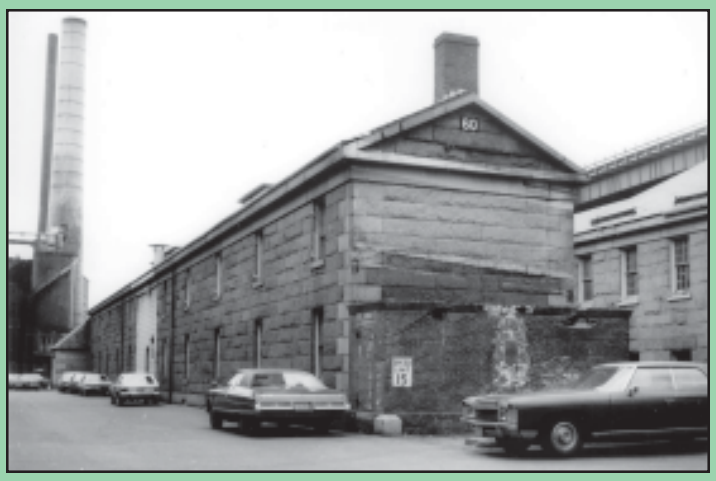
Building 38, 1973
The second floor of Building 38 adjoining Building 150 housed a movie theater for sailors stationed at the yard. Note the addition to Building 33 spanning 7th St. at left. *Eric DeLony, HAER*

[1] In 2003 DeLony recalled only one visit to the yard, in Jan. 1976, and thought that the images dated to then. The 1973 date, however, appears correct since the images were used to illustrate a 1975 National Park Service study of the yard.

Documenting A Legacy: A HAER Gallery



Building 58, 1973
This view of the headhouse of the Ropewalk shows the building's close relationship with the adjoining Tarring House (Building 60) and Hemp House (Building 62), left foreground. Note also the connections from the Ropewalk to Building 96, Substation No. 275 outside Building 96, and the corner of Building 207 at lower right. *Eric DeLony, HAER*



Building 60, 1973
Note the cleaner granite on the east end of the Tarring House where a bridge connecting the Hemp House (Building 62) to the Ropewalk had been located until February 1973. *Eric DeLony, HAER*





Building 58, Apr. 1976
This view shows the exhibit of the Ropewalk's laying ground created by the Navy following the end of ropemaking in December 1971.
Jack E. Boucher, HAER



Building 62, 1973
This view shows the original granite portion of the Hemp House. Note the bridge at left which connected the building to the Storehouse (Building 199). *Eric DeLony, HAER*



Building 104, 1973
This view shows the surviving portion of the original Shipfitters' Shop. Note the parking on the end of the Shipways adjacent to the building.
Eric DeLony, HAER

Building 75, 1973
The only survivor of the yard's four Timber Sheds is seen here. Directly behind it is the steel-clad Building 187, and beyond that is the high-rise Storehouse (Building 199). *Eric DeLony, HAER*

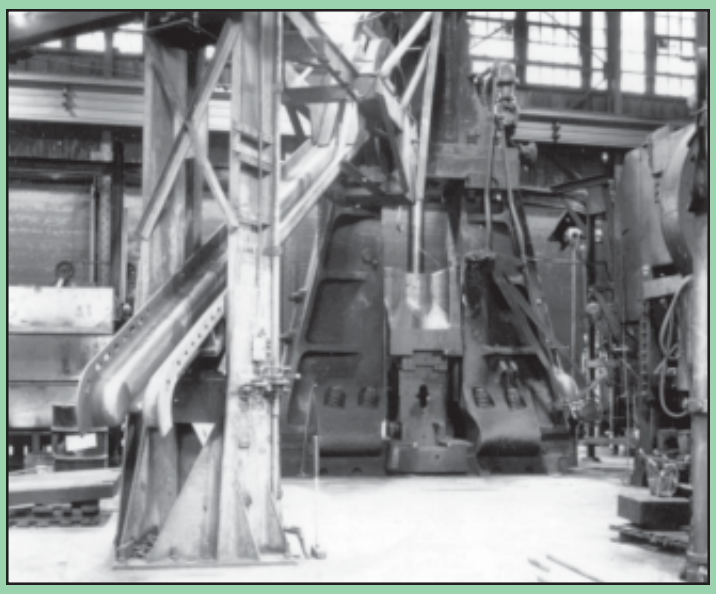
Documenting A Legacy: A HAER Gallery





Building 105, 1973
These two views of the Forge and Chain Shop show the Headhouse (above) and the main shop area (right). *Eric DeLony, HAER*

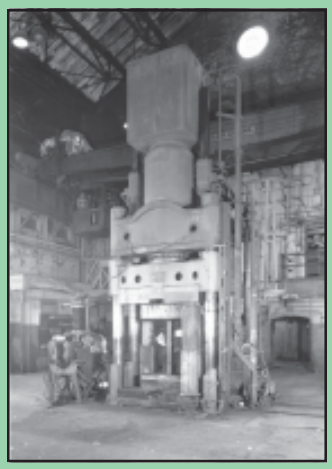




Building 105, 1973
These two views show the 4-3/4-inch chain production line. The HAER team complained that because "removable items, such as the hand tools, the pieces of Die-Lock chain, and other miscellaneous tools and equipment had been removed … much of the feeling of clutter and filth one would expect to find in a forging shop" had been destroyed. *Eric DeLony, HAER*



Building 105, Apr. 1976
HAER was concerned with recording the entire shop.This view of the southeast corner of the building shows the chain-strength Test Pit area with the Heat Treating area in the background. *Jack E. Boucher, HAER*



Building 105, Apr. 1976
In addition to overall views, HAER recorded individual pieces of equipment. Seen here is the 1,000-ton Hydraulic Press, located at the west end of the shop's central bay. To its left is a Mechanical Billet Turner.
Jack E. Boucher, HAER

Documenting A Legacy: A HAER Gallery



Building 106, 1973
Dry Dock 5 is in the foreground of this view of Building 106 looking northwest. The edge of Building 131 is at right. *Eric DeLony, HAER*



Building 123, 1973
The Pump House for Dry Docks 1 and 2 is seen here. Note the concrete light pole which was typical throughout the yard and the telephone booth. Because of the limitations on the HAER project, no recording was done of the machinery within the Pump House. *Eric DeLony, HAER*





Building 114, Apr. 1976
One of the few pieces of equipment remaining in yard buildings in 1976 was this bandsaw in Building 114. Although put on hold by the Smithsonian, it was ultimately turned over to the City of Boston. While preservation guidelines for the building had originally called for it to be preserved in place, only the mechanism itself survives as a piece of outdoor industrial sculpture in 2008. *Jack E. Boucher, HAER*



Buildings 125 and 24, 1973
This view across Dry Dock 2 shows, from left to right, the structures lining Baxter Road (Buildings 125, 110, 24, 124, and 28) as well as Light Towers 240, 239, and 238. *Eric DeLony, HAER*

Building 149, 1973
This view shows the steam line which ran from the Power Plant (Building 108) across 9th Street to Building 149, across the west face of the Storehouse, and then across to Building 105. While the 1978 preservation guidelines for the Historic Monument Area mandated the retention of the portion of this feature, which testified to the industrial character of the shipyard, spanning Second Ave., it was demolished by the BRA and its developers. *Eric DeLony, HAER*

Documenting A Legacy: A HAER Gallery

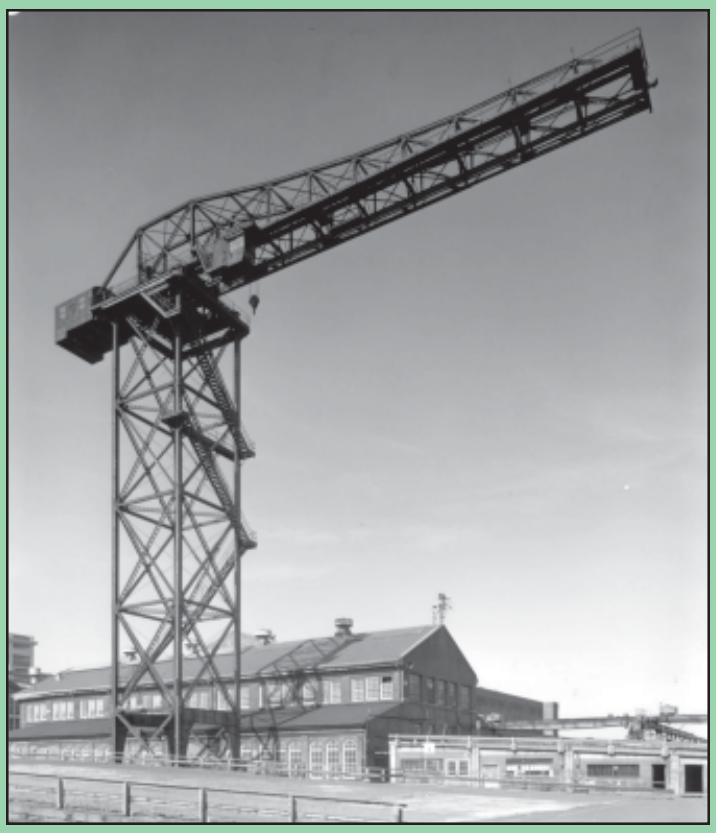
THE PRIMARY PURPOSE of Jack Boucher's visit to the Navy Yard in April 1976 was to document the yard's cranes, all of which were planned for demolition or transfer elsewhere. His views, however, also documented the surrounding buildings.



Shipways 1 and 2, Apr. 1976

By the 1970s only Hammerhead Cranes 2 and 4 survived, Cranes 1, 3, and 5 having been declared surplus in 1963 and demolished. Building 104 can be seen in the background, with the Plate Field Crane (Structure 262) in front of it. The small structure beside Shipways 2 is a Substation (Building 224). This view was taken from the end of Pier 7.

Jack E. Boucher, HAER



Hammerhead Crane 4, Apr. 1976 & Dec. 8, 1976

Building 104, seen in the background of the Apr. 1976 view above, was one of several buildings receiving considerable damage when MDG Contractors of Carola Lake, N.Y., who had purchased the crane for scrap for $100, used dynamite to topple it on the afternoon of Dec. 8, 1976. The aftermath of that event is seen at right.

Jack E. Boucher, HAER (above); Blaise Davi, BNHP (right)



Hammerhead Cranes 4 and 2, Apr. 1976

Both of the yard's surviving Hammerhead Cranes had been manufactured by the Orton Crane & Shovel Co. and erected in 1941. In the background at left is Building 105, while Building 104 appears between the cranes. Building 224 is at right. *Jack E. Boucher, HAER*



Hammerhead Crane 2, Apr. 1976

The 10th Street side of Building 103 is seen in this view taken from Hammerhead Crane 4. Between Building 103 and Pier 7 are Buildings 192A and 192, while the Foundry (Building 42) can be seen on the far side of 9th Street in the background. *Jack E. Boucher, HAER*



Documenting A Legacy: A HAER Gallery



Portal Cranes 69, 87 & 19, Apr. 1976

Three very different types of portal cranes are seen on Pier 7. All dated to World War II. At far left is Crane 69, a 20-ton unit built by American Hoist & Derrick in 1942. Next to it is another high portal unit, 45-ton Crane 87, a 1943 product of the Marion Steam Shovel Co. The final crane is low portal Crane 19, delivered by Kaltenbach Corp. in 1940. It was rated at 50 tons. To the right is Building 192A, an extension of the adjoining Substation (Building 192). While these cranes were sold for dismantling to Towercrane Rigging Corp. of Amawak, N.Y., in the summer of 1976, three of Crane 69's sisters remain in the Navy Yard in 2008. *Jack E. Boucher, HAER*



Portal Crane 20, Apr. 1976

The yard's newest portal cranes were the five units (20-24) purchased from Star Iron Works in the 1950s in conjunction with the pier reconstruction efforts. Crane 20 was one of three (20-22) rated at 56 tons; the others (23-24) had half that capacity. It is seen here on the tracks along Dock St. in front of Building 227, the Fire Pump House in front of Building 196. At left is the Pump House (Building 191) for the Power Plant, while Building 197 can be seen in the right background. *Jack E. Boucher, HAER*



Portal Crane 23, Apr. 1976

This view from Pier 5 shows the forest of crane booms which was typical of the yard's industrial waterfront in the 20th century. Star Iron Crane 23 at left had a capacity of 28 tons. Both it and Crane 20, seen in the background on the tracks between Piers 5 and 6, would be transferred to the Portsmouth Naval Shipyard in August 1976. *Jack E. Boucher, HAER*



Locomotive Cranes, Apr. 1976

The last of the yard's 30-ton Ohio Locomotive Crane Co. locomotive cranes (left to right, 84-00193, 84-00185, and 84-00182), dating to World War II, were gathered on the tracks on the west side of Dry Dock 5 as they awaited disposition. *Jack E. Boucher, HAER*

Preservation And Development Guidelines

The preservation guidelines approved for the Navy Yard reflected "the sentiment … that 19th century granite buildings are more significant than 20th century brick and concrete buildings" and that "the architecture … should be 'clarified' by removal of later additions and other restoration work and 'enhanced' by selective demolition."[472] This way of thinking is exemplified by a quotation from the Shipyard Park transfer application:

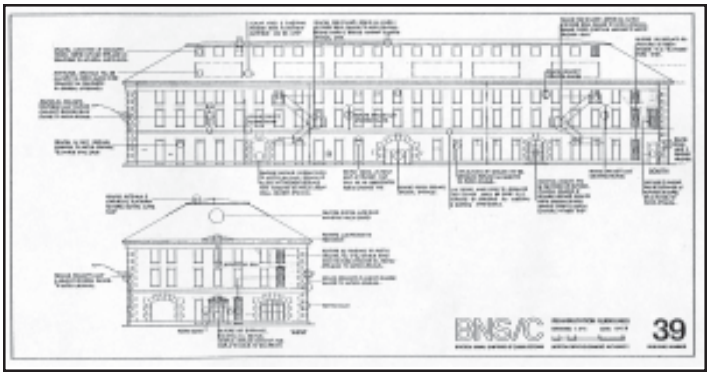
> The buildings which are scheduled for demolition as part of the utilization plan are mid-20th century industrial buildings constructed to meet the sudden demand placed on the ship yard [*sic*] by World War II. They tower over and diminish the 19th century granite buildings that best represent the historical character of the ship yard [*sic*].[473]

This approach was clearly motivated by a desire to make the site "attractive" to developers. As the memorandum of agreement for the mitigation of the adverse effects of demolition in the New Development area put it, "The structures designated for demolition … do not add significantly to the historic district and their demolition is essential to the successful redevelopment of the entire Shipyard."[474]

The proposed guidelines were criticized at the time as ignoring the fact that, as Edwin C. Bearss has pointed out, "the Navy Yard is a National Historic Landmark for its association in military-industrial history and not for its architecture."[475] Refuting the thinking represented in the Shipyard Park transfer application, the National Park Service's Interagency Historic Architectural Services Program staff argued:

> The entire application is biased toward the 19th century history of the shipyard. The historic value of this property, however, rests in its entire 170 year active history. All buildings, therefore, should be recognized for their contribution to the history of the shipyard whatever their dates of construction. The early buildings do not "best represent the historical character of the shipyard." *All* the buildings and grounds contribute this historical significance.[476]

At a December 17, 1975, meeting at which W. Brown Morton III raised his concerns about this issue, the Boston Redevelopment Authority "denied any 19th Century bias in their preservation plans and indicated that their architectural review resulted in largely 19th Century interests due to the architects involved in the building designs." In his memorandum summarizing the meeting, Richard R. Kinnier of the Department of Defense Office of Economic Adjustment noted that the BRA representatives had added that "incidentally, the buildings which tend to have the most logical adaptive reuse are those of architectural value; that is, 19th and early 20th Century."[477]



This Nov. 1976 drawing shows the preservation guidelines for Building 39 and is typical of the approach taken to all of the structures in the Historic Monument Area, emphasizing removal of attachments such as street lights and fire escapes and the restoration of original doors and windows. Note the signs at the entrance on the west facade which were specified for retention but which have not been retained. *NPS TIC 457/62816*

While the BRA agreed at the meeting to "exercise their 'best efforts' in retaining some large modern industrial buildings," its representatives were "not very enthusiastic about this possibility,"[478] and in the end the only real change was the retention of Building 197 as a part of the New Development Area rather than its demolition for the proposed Shipyard Park. One factor possibly influencing this development was that the Massachusetts State Historic Preservation Officer, one day before the December meeting, had agreed that the proposed demolition and treatment guidelines "carefully balances [*sic*] the preservation of the historic buildings in the Navy Yard with economical, feasible plans for reuse."[479]

Obviously, successful redevelopment of the Navy Yard for non-industrial uses required changes, but even in an era when the concept of cultural landscape was not well developed, the guidelines adopted did not address "the effect … on the industrial character of the site" and "the problems of having various buildings restored to different dates."[480] The unfortunate consequence of their bias towards architecture rather than function, and towards the more aesthetically-pleasing 19th and early 20th century designs, has been that many resources characteristic of the yard's most active period (World War II) were swept away without a true test of the economic viability of their retention.

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[472] National Park Service, Interagency Historic Architectural Services Program, "Review Comments on the Boston Naval Shipyard Historic Monument Transfer Application," Nov. 14, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 17.

[473] *Application for Transfer … Public Park and Recreation Purposes*, pt. B, sect. 5, subsect. D.

[474] Memorandum of Agreement, Boston Naval Shipyard, GSA, disposition of 58.4 acres, June 1978, Boston Naval Shipyard NHL Reference File, Division of Cultural Resources, BNHP.

[475] Chief Historian to Acting Chief, Preservation Planning Division, Mid-Atlantic Region, "Review of National Historic Landmark Boundary Study for Charlestown Navy Yard," Mar. 19, 1986, Contract File, Charlestown Naval Shipyard NHL Boundary Study, Boston Naval Shipyard NHL Reference File, Division of Cultural Resources, BNHP.

[476] National Park Service, Interagency Historic Architectural Services Program, "Review Comments on the Boston Naval Shipyard Park and Recreation Transfer Application," Nov. 14, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 17. The italics are in the original.

[477] Memorandum, Richard R. Kinnier to Commander Bair, "Meeting with BRA regarding Charlestown Acquisition, December 17, 1975," Dec. 29, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 17.

[478] Ibid.

[479] Elizabeth Reed Amadon to Kenney, "Boston Naval Shipyard/ Charlestown Planning & Development Program," Dec. 16, 1975, in Boston Redevelopment Authority, *Application for Federal Assistance (For Construction Program) Under Title I of the Grant and Loan for Public Works and Development Facilities Program (Catalog No. 11.300) for Boston Naval Shipyard/Charlestown Submitted to Economic Development Administration, U.S. Department of Commerce* (Feb. 1976), TIC 457/D6110.

[480] "Review Comments … Historic Monument Transfer Application."

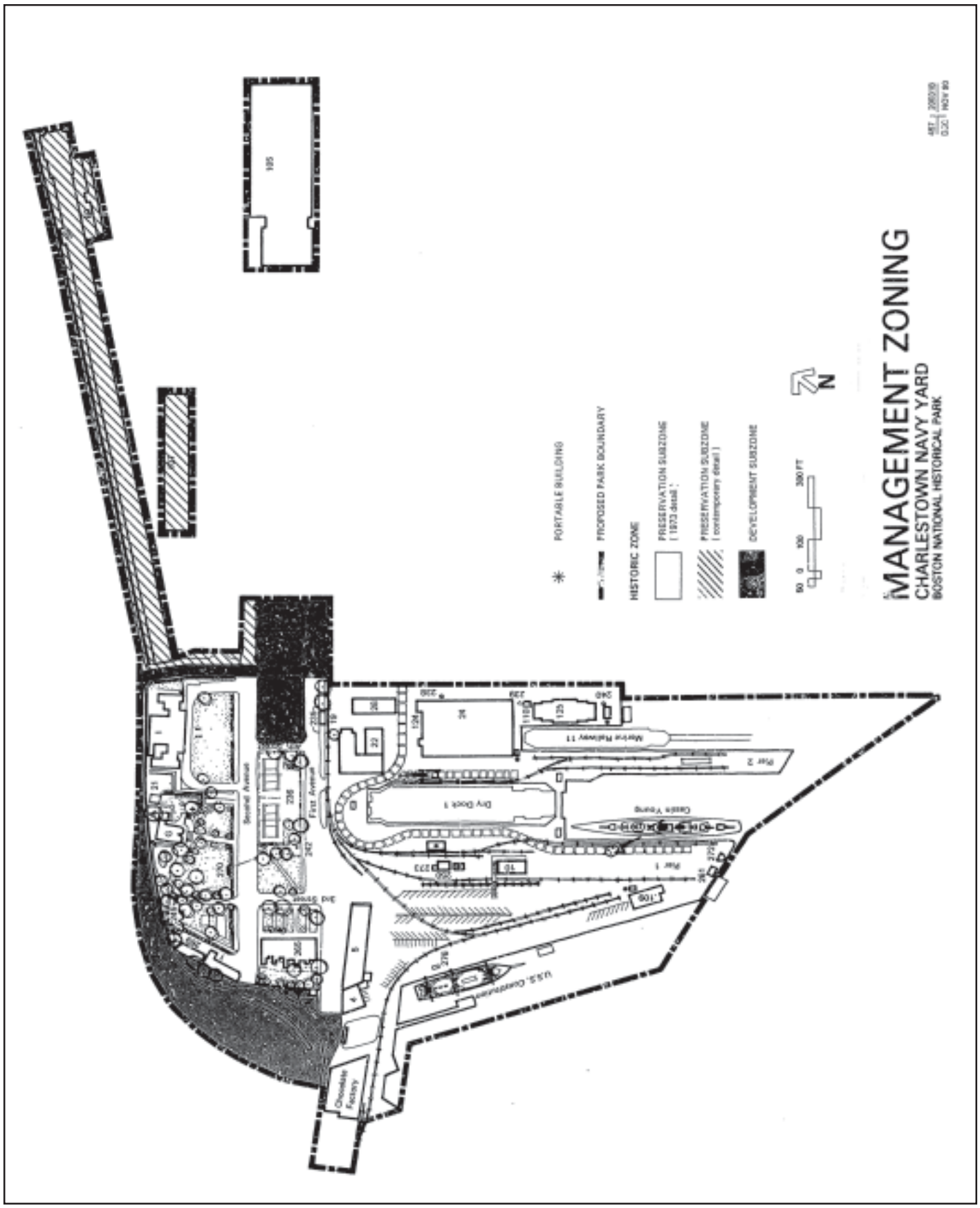


Figure 2-38 – NPS General Management Plan for Charlestown Navy Yard, 1980

"Management Zoning, Charlestown Navy Yard," Nov. 1980. The development subzone shown represented the areas where the Chelsea/Water Streets Connector and the Gate 4/Fifth Street road projects would impact the yard. *NPS TIC 457/20031B*

NPS General Management Plan

Unlike the transfer of Navy Yard property to the City of Boston, there was no Section 106 review of the transfer of the Charlestown Navy Yard unit of Boston National Historical Park from the Navy to the National Park Service. Thus, there were no specific preservation guidelines for the treatment of resources within that parcel. Rather, it fell to the NPS planning process to develop such guidelines as a part of its management planning for the yard. That process began even before the National Park Service took over the yard and involved the development and evaluation of multiple alternatives, as well as the preparation of an environmental assessment.[481]

Planning for the Navy Yard was part of a larger project encompassing the entire Boston National Historical Park. That effort resulted in the completion of a General Management Plan (GMP), which outlined how the park was to be managed and operated. The details of the GMP process, involving input from the Boston National Historical Park Advisory Commission, the park's numerous partners, and the public, are beyond the scope of this study. Because the Navy Yard was regarded as being somewhat unique among the park sites, it was made the subject of a separate GMP, which was released for comment in early 1980. The final document was approved in October.[482]

One of the most controversial ideas contained in the GMP was its classification of the majority of the NPS property as being in what it termed "Preservation Subzone (1973 Detail)," which called for "the preservation and maintenance of the 20th century industrial character of the navy yard as it existed in 1973 prior to transfer to the National Park Service"[483] (see Figure 2-38). Although the plan allowed for changes to accommodate proposed uses and programs, this statement has been widely criticized, especially by individuals whose focus is narrowly limited to USS *Constitution* or aesthetics. The rationale for this policy was a recognition that the historic significance of the yard extended across its entire history as an active facility and the practical recognition that restoration of the yard to any prior point in time would be cost prohibitive.

The GMP identified several structures for adaptive reuse to provide for visitor services. Building 32 was to be visitor orientation, Building 5 would become a visitor activity center and possible food service concession facility, Building 10 would become the main interpretive center for the yard, and theme museums would be developed in the Commandant's House, Marine Barracks, Ropewalk, and Chain Forge.

By the mid-1980s the park had come to recognize that many of the ideas put forth in the GMP were not realistic or had been made unworkable by other developments. Thus, in mid-1986 the park undertook a revision of the Navy Yard GMP. Following public review, the revised plan was approved in March 1987.[484] The revision scaled back many of the plans put forth in 1980, revised the preservation zoning to allow for the development of visitor amenities, and adjusted the locations of facilities (see Figure 2-39).

The proposed food service was shifted from Building 5 to Building 10, while the Navy Yard exhibit was to be placed in Building 125. Building 32 would remain as the offices and museum of the Boston Marine Society. Plans for developing the entire Ropewalk and Chain Forge as museums were changed to provide for major exhibit components within commercial redevelopment undertaken either through the NPS Historic Leasing Program or the Boston Redevelopment Authority. Much more reliance was to be placed on partnerships rather than Congressional appropriations to fund Navy Yard development.

While the NPS planning process reflected developments occurring in the remainder of the Navy Yard, particularly as those developments impacted the park, it remained separate from the planning efforts of the Boston Redevelopment Authority. As discussed below, the only joint planning effort occurred in the late 1970s to resolve very specific issues, namely access to the BRA portion of the yard. Thus, there has not been to date any comprehensive effort to preserve and reuse the yard which recognizes and preserves what sets it apart as a National Historic Landmark while allowing change necessary for each portion of the yard to be successful in carrying out their respective goals.

Yard Access Changes

At the time of closure, there were three vehicular access points to the Navy Yard—First and Second Avenues (Gates 1 and 2) at the west end, accessed via Water Street and Henley Street, respectively, and 13th Street (Gate 5) at the northeast corner off of Chelsea Street. Gate 4, located at the west end of the Ropewalk on Chelsea Street, was a pedestrian entrance only. Since the 1950s, Chelsea Street along the north side of the yard had dead-ended at the Mystic-Tobin Bridge, requiring a round-about route through Charlestown neighborhoods for vehicles coming to the yard from the north or from downtown to reach Gate 5. That gate served as a secondary access under Navy management, most traffic entering and exiting through Gates 1 and 2.[485] With the split of the yard between the National Park Service and the Boston Redevelopment Authority, Gate 5 would became the only access into the BRA portions of the yard without crossing the national park.

The issue of improving both local traffic and access to the Mystic River Bridge had been under consideration for many years prior to the establishment of the park. In 1965 the Massachusetts Department of Public Works had commissioned a study which proposed several schemes which would link Water Street with Chelsea Street via a right-of-way which crossed the northwest corner of the Navy Yard. In all of the proposed schemes Building 204 and parts of

[481] For documents generated during this planning process, see National Park Service, *Boston Naval Shipyard: An Alternative for Development* (Mar. 1975), TIC 457/D872; National Park Service, *Charlestown Navy Yard Special Study, Boston National Historical Park* (Final report, Sept. 1976), TIC 457/D1080; Denver Service Center, *Environmental Assessment of Management Alternatives for Boston National Historical Park* (Nov. 1976), TIC 457/D1133A; National Park Service, *Charlestown Navy Yard Planning Workbook* ([1977]), TIC 457/D1285; Denver Service Center, *Assessment of Alternatives, Charlestown Navy Yard, Boston National Historical Park* (Apr. 1979), TIC 457/D6.

[482] National Park Service, *Charlestown Navy Yard, Boston National Historical Park: General Management Plan, Volume II* ([Denver]: National Park Service, 1980), TIC 457/D1553A.

[483] Ibid., p. 9.

[484] Boston National Historical Park, *Final Revised General Management Plan/Volume II, Boston National Historical Park, Charlestown Navy Yard* (Boston: Boston National Historical Park, 1987), TIC 457/D6175A.

[485] "Comments of Headquarters First Naval District Boston on Basic Design Report for Portion of Interstate Route 95 Boston (Charlestown) 1965," enclosed in R. Berthrong to C.T. Garrett, Mar. 17, 1967, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 123.

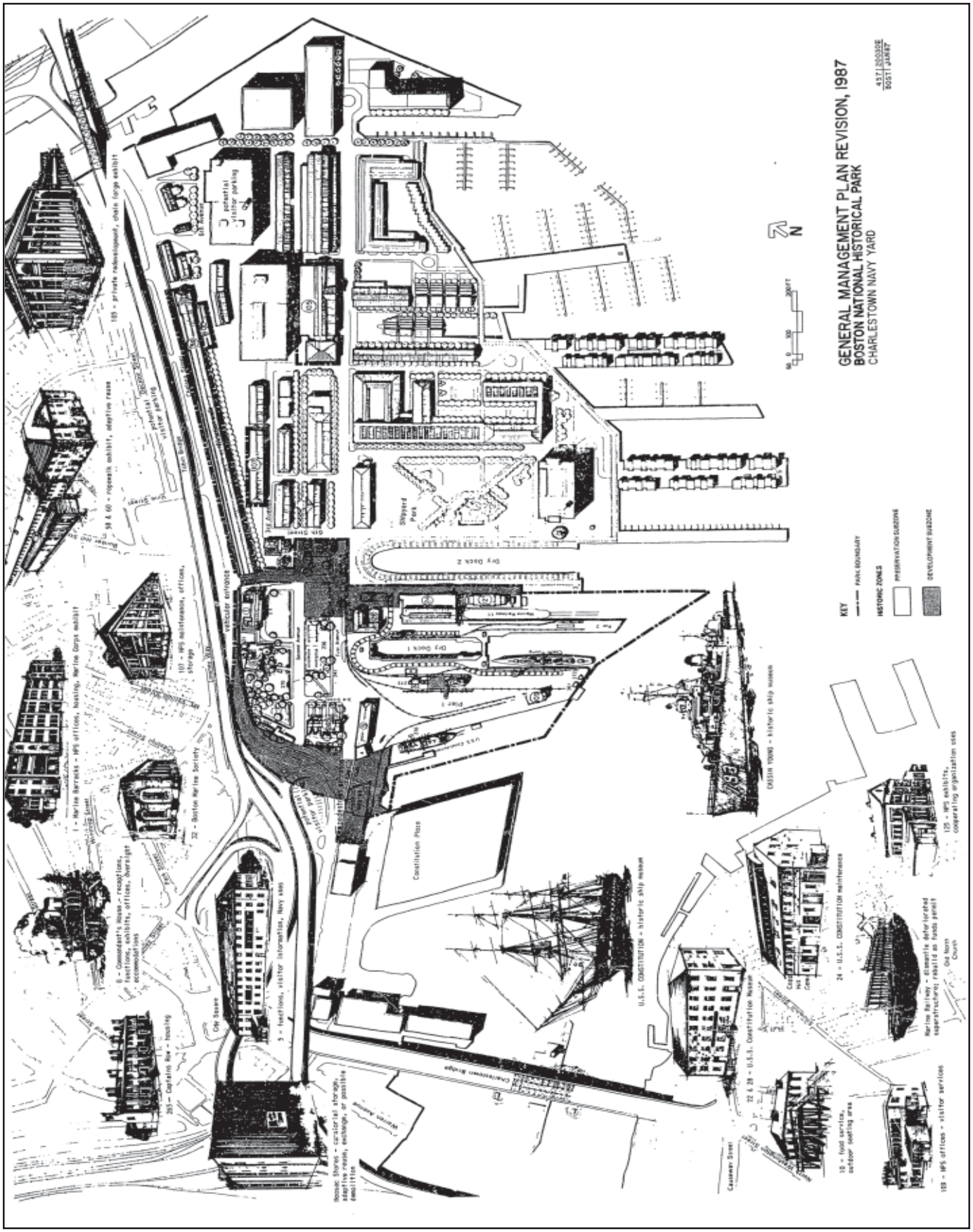


Figure 2-39 – NPS General Management Plan for Charlestown Navy Yard, 1987

"General Management Plan Revision, 1987," Jan. 1987. This plan shows the expansion of the development subzone to allow for more visitor amenities and the proposed uses for each park structure. The base map was derived from the 1980 GMP and the non-NPS area of the yard depicts the BRA's concept for that area as of 1980. *NPS TIC 457/20030E*



Figure 2-40 – Chelsea-Water Streets Connector Schemes, 1968 & 1977

"Proposed I-95 Improvements, Boston Naval Shipyard," Feb. 1968; "Alternative 4b, Water-Chelsea Streets Connector" Nov. 8, 1977. These plans show the evolution of the Chelsea-Water Sts. Connector superimposed over existing conditions maps. The 1977 scheme (above) was greatly simplified from the original design (top) since the idea of changing the Mystic River Bridge access ramps had been dropped. Alternative 4b was finally adopted with the addition of a bus drop-off at Gate 1. Access into the yard in 1968 would have involved a new gate at 9th Street, requiring bisecting the Ropewalk. The 1977 scheme involved converting pedestrian Gate 4 into a vehicular gate. *BOSTS-13347 (top); NPS TIC 457/62541 (above)*

the Navy Yard Boundary Wall would be demolished, while several of them required demolition of the Commandant's House as well.[486] As the state pointed out in its letter sending a copy of the report to the yard, "no funds are currently programmed for any of the work."[487]

By January 1967 the project had become active again. On January 10, 1967, Navy Yard personnel met with representatives of the federal Bureau of Public Roads and the Massachusetts Department of Public Works to discuss the project. At that time, Public Works Officer Capt. Harry C. Rowe bluntly stated that "none of the schemes presented … were acceptable" and "should any of the schemes … be adopted, it could mean the closing down of this military establishment." Rowe went on to state the conditions under which the project could be accepted by the Navy. These included the provision of a replacement for Building 204 at a location "contiguous to the Shipyard" and additional parking areas for both employees and visitors to USS *Constitution*. Most importantly, he continued, "it is mandatory that plans be developed … indicating replacement gate entrances that will compensate for the diminished use of the existing gates."[488]

In December 1967 the state had developed a revised scheme, a key feature of which was a new entrance to the yard at 9th Street, requiring demolition of a portion of the Ropewalk (Building 58) (see Figure 2-40). At a January 15, 1968, meeting of the Metropolitan

[486] Fay, Spofford & Thorndike et al., *Basic Design Report for a Portion of Interstate Route 95, Boston (Charlestown)* (1965), TIC 457/D6108.

[487] Daniel S. Horgan to H.C. Rowe, Nov. 4, 1965, TIC 457/D6175A.

[488] Commander, Boston Naval Shipyard, to Commandant, First Naval District, "Basic Design Report for a portion of Interstate Route 95, Boston (Charlestown) 1965; comments concerning," Jan. 31, 1967, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 123.

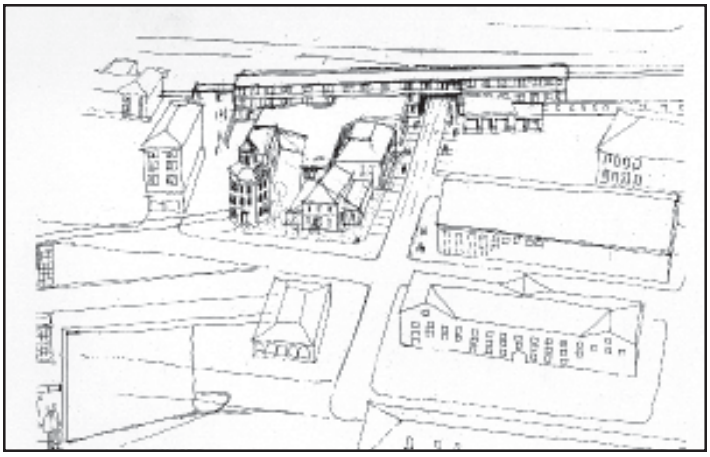
Area Planning Council, Public Works Officer Capt. H. F. Liberty stated that the yard agreed that "the best possible solution had been obtained from a practical and financial approach" and outlined the conditions under which the plan would be acceptable.[489] In a memorandum to the council the following day, Liberty listed those conditions as (1) replacement of Building 204; (2) replacement of open space lost in the Building 204 area; (3) provision of a parking area for USS *Constitution* visitors; (4) construction of a new gate at 9th Street; and (5) provision of adequate sidewalks for pedestrians at Gate 4 and between Gate 1 and City Square.[490]

After obtaining the approval of his superiors at both the Naval Facilities Engineering Command and the Naval Ship Systems Command, Shipyard Commander Capt. Stuart C. Jones formally approved the scheme on behalf of the Navy on April 22, 1968. This approval was subject to the conditions listed in the January memorandum and that all of the work was at no cost to the Navy.[491]

In 1969 Massachusetts Governor Francis W. Sargent commissioned a review of all highway projects in the Greater Boston area. In February 1970 he announced a moratorium on most highway construction work pending further studies. In December 1971 most interstate highway projects inside Route 128 were cancelled.[492] Some projects, however, survived, including what would become known as the Chelsea-Water Streets Connector.

Work resumed on the project in 1972. As a federally-funded highway project, it required compliance under both Section 106 of the National Historic Preservation Act and Section 4(f) of the Department of Transportation Act of 1966.[493] This review, part of a larger environmental impact review, proceeded over the next several years. With the creation of Boston National Historical Park, the National Park Service became a key participant in the process. While the NPS agreed in principle with the idea, it sought to minimize the impact on the historic property. Matters came to a head in 1977. In comments on the draft Section 4(f) review, the Department of the Interior in September 1977 informed the Federal Highway Administration (FHWA) that "we do not concur" that "there are no feasible and prudent alternatives" to the preferred alternative, which would have demolished Buildings 1, 204, 245, and 269 as well as a major portion of the Navy Yard Boundary Wall.[494]

Responding to these comments, FHWA in November 1977 developed a modified scheme which retained Buildings 1 and 269 (see Figure 2-40).[495] NPS Regional Director Jack E. Stark responded on December 15, 1977, that the proposal would be acceptable under several conditions. These included relocating rather than demolishing Building 245, the provision of replacement space for that lost with the demolition of Building 204, and the relocation rather than removal of the wall.[496] The FHWA accepted these conditions on February 14, 1978,[497] and a formal Memorandum of Agreement under Section 106 was signed in May.[498]



This undated sketch by Paul Kelly of the BRA is one of six studies for a potential access road into the BRA portion of the Navy Yard which involved cutting through the Ropewalk. None of these schemes went anywhere as preservation of the Ropewalk became a mandatory requirement of the area's transfer to the city. *BRA*

The Chelsea-Water Streets project was closely linked to the question of access to the BRA area of the yard. Use of Gate 1 as a through route to the east side of the yard was seen as incompatible with visitor safety. Since the 1968 proposal of cutting a new access road through the Ropewalk was unacceptable, the NPS in July 1976 informed the BRA that it had decided "to accommodate pedestrian and controlled automobile access at Gate 4." In his letter, Director Gary Everhart proposed that the NPS and the BRA cooperate to "identify the most appropriate means of introducing access at Gate 4 with minimal damage to the historic resources."[499]

The first of a series of meetings occurred in August. The initial concept was to move Building 136 to accommodate the proposed street. At that time, the NPS agreed that the projection of the road through Building 198 would be considered, but deferred a decision until an architectural and structural evaluation of the structure, considered "of some historical significance," had been completed.[500]

The BRA developed several alternative routings for the new roadway. In reaching its preferred alternative, which involved a straight roadway from Gate 4 to First Ave., it emphasized that not

[489] Code 440 (George Bradley) to File, "Basic Design Report for a portion of Interstate Route 95, Boston (Charlestown)," Jan. 15, 1968, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 123.

[490] H.F. Liberty to Chairman, Metropolitan Area Planning Council, "Basic Design Report for a portion of Interstate Route 95, Boston (Charlestown), submitted 16 January 1968," Jan. 16, 1968, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 123.

[491] S.C. Jones to Robert G. Davidson, Apr. 22, 1968, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 123.

[492] Francis W. Sargent, "Partial text on highways," *Boston Globe*, Feb. 12, 1970; *CA/T History Documents* [web page] [http://libraries.mit.edu/rotch/artery/cat_docs.htm], accessed Apr. 24, 2008.

[493] Section 4(f) prohibited highway use of public parklands unless there was no feasible and prudent alternative.

[494] Larry E. Meireretto to Norman J. Van Ness, Sept. 9, 1977, in Federal Highway Administration and Mass. Dept. of Public Works, *Chelsea-Water Streets Connector, Little Mystic Channel Crossing, Charlestown, Boston, Massachusetts: Final Negative Declaration, Section 4(f) Statement* (June 1978), TIC 457/D2A, p. 157-62.

[495] Van Ness to Jack E. Stark, Nov. 29, 1977, in *Chelsea-Water Streets Connector*, TIC 457/D2A, p. 163-65.

[496] Stark to Van Ness, Dec. 15, 1977, in *Chelsea-Water Streets Connector*, TIC 457/D2A, p. 166-68.

[497] Edward P. Holahan for Van Ness to Stark, Feb. 14, 1978, in *Chelsea-Water Streets Connector*, TIC 457/D2A, p. 169-70.

[498] Memorandum of Agreement, May 1978, enclosed in Myra F. Harrison to Van Ness, May 30, 1978, BOST 78-000, Section 106 Case Files, Division of Cultural Resources, BNHP.

[499] Gary Everhart to Kenney, July 23, 1976, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP.

[500] Galvin to Kenny, Aug. 20, 1976, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP.

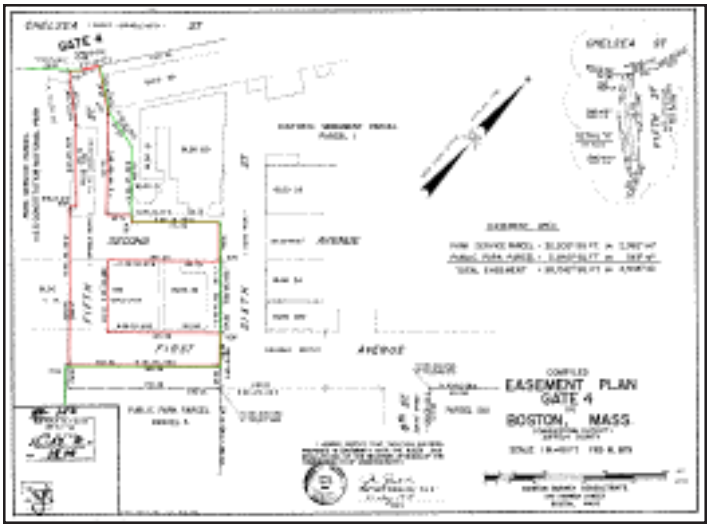


Figure 2-41 – Gate 4/5th Street Easement Area, 1979
"Compiled Easement Plan, Gate 4 in Boston, Mass.," Feb. 15, 1979. This plan has been annotated in green to show the boundary of Boston National Historical Park, with the area included in the Gate 4/5th St. easement granted to the BRA outlined in red. The plan also shows the location of Buildings 136 and 198, demolished to allow the construction of the new roadway.
Suffolk Deeds, Book 11511

only was it the safest, it best respected the "traditional clarity of the Shipyard's grid pattern."[501] On October 8, 1976, the NPS replied that it preferred the option for a roadway which curved between Buildings 31 and 32 and connected to 6th St. which would allow "the saving of Building 198." It pointed out the historic significance of the structure as "the last wooden building … left in the yard" from the World War II period and stated that its elimination would "destroy completely the ambiance of the yard" as a World War II facility.[502]

The BRA continued to argue for its preferred route, and at a meeting on November 9, 1976, the NPS caved in and agreed that the new road could "go straight down to First Avenue." At that time, the idea was to move Building 136 westward by 28 feet and to remove only a portion of Building 198.[503]

In February 1977 Boston National Historical Park Superintendent Hugh D. Gurney wrote a memorandum to Associate Regional Director F. Ross Holland, Jr. In this document, the park recommended that Building 198 "should be removed in its entirety." Gurney pointed out that there were other World War II wooden structures (Buildings 24 and 109) "to give a flavor of the time" and that "continued preservation of Building 198 will simply drain park resources." Holland, who had been the main advocate for keeping at least a portion of Building 198, noted in the margin of Gurney's memorandum that he "reluctantly" agreed.[504]

Additional discussions throughout 1977 resulted in an October 19, 1977, memorandum of understanding between the BRA and the NPS. In this document, the NPS agreed to grant an easement for the new street to the BRA, which would bear all costs of the project. It also stated that "BRA and NPS will seek to find alternative space in the BRA portion of the Navy Yard for NPS activities dislodged due to the demolition of Buildings 204, 198 and 136." Pending the completion of the new roadway, the NPS would allow access to the BRA portion of the yard through the park.[505]

By December 1977 the park had identified Building 107, the former Public Works Shop, as its preference and a "fair exchange" for the lost space from the two highway projects. Alternatively, it suggested Buildings 75 and 131, although it preferred "to keep all our operations under one roof."[506] While the BRA had some concerns about the introduction of a maintenance facility in the middle of the redevelopment area, it agreed to the exchange.[507]

The access agreement was ratified by Congress in the National Parks and Recreation Act of 1978. It authorized the grant of easements for both the Chelsea-Water Streets Connector and the Gate 4/5th Street projects.[508] Following up on this legislation, the NPS and the BRA entered into a formal agreement to exchange real property in April 1979. Under this agreement, the NPS gained immediate access to Building 107.[509] The actual deeds accomplishing the transactions were not executed until 1985, following the completion of both projects.[510]

Completion of the Section 106 process followed. That agreement also contained language committing both the NPS and the BRA to pursue transferring the Ropewalk and Chain Forge to the NPS.[511] Following detailed planning for the treatment of the area following construction, the Gate 4/5th Street project began in 1979 with the demolition of Buildings 136 and 198.[512] In the late summer

[501] Ed Dusek to Paul Kelly, "Gate Four Access," Sept. 28, 1976, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP.

[502] Galvin to Kenney, Oct. 8, 1976, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP.

[503] Ross Holland, Memorandum to Files, "NPS-BRA Cooperative Management Meeting - Boston Naval Shipyard, November 9," Nov. 17, 1976, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP.

[504] Memorandum, Superintendent, Boston NHP, to Associate Regional Director, Planning & Resource Preservation, "Interface with BRA in the Gate 4 Area," Feb. 11, 1977, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP.

[505] Memorandum of Understanding Between Boston Redevelopment Authority and National Park Service, Oct. 19, 1977, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP.

[506] Gurney to David Weiner, Dec. 14, 1977, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP.

[507] Weiner to Gurney, "Charlestown Navy Yard, Replacement for Building 204," Jan. 31, 1978, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP.

[508] National Parks and Recreation Act of 1978, Pub. Law 95-625, Nov. 10, 1978, 92 Stat. 3478.

[509] Agreement to Exchange Real Estate, CX1690-9-0064, Apr. 2, 1979, Suffolk Deeds, bk. 9182, p. 200-12.

[510] Deed, Boston Redevelopment Authority to United States of America, Feb. 7, 1985, Suffolk Deeds, bk. 11511, p. 200-201; deed of easement, United States of America to Boston Redevelopment Authority, Feb. 8, 1985, Suffolk Deeds, bk. 11511, p. 202-204; deed of easement, United States of America to Boston Redevelopment Authority, Dec. 4, 1985, Suffolk Deeds, bk. 12092, p. 300-305. In order for the BRA to transfer title of Building 107 back to the federal government, the NPS had to release the BRA from its obligation to only lease property within the Historic Monument Area. See deed of release, United States of America to Boston Redevelopment Authority, Aug. 20, 1982, Suffolk Deeds, bk. 11511, p. 195-99. These documents are also found in Boston NHP Deed No. 7, Deed Files, Division of Cultural Resources, BNHP.

[511] Memorandum of Agreement, July 1979, enclosed in Jordan E. Tannenbaum to Kelly, July 19, 1979, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP.

[512] In July 1979 the NPS requested that the Building 198 foundation wall and slab west of the new roadway, as well as the granite block wall at the intersection of First Ave. and 4th St., be retained. See Gurney to Kelly, "Demolition; Contract #3," July 16, 1979, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP.

Granite Wall Relocation: A Gallery

ONE OF THE MOST SIGNIFICANT PROJECTS undertaken by the National Park Service since acquiring a portion of the Charlestown Navy Yard was the relocation of a major segment of the Navy Yard Boundary Wall to accommodate construction of the Chelsea-Water Streets Connector.

The work was accomplished in 1981 and 1982 by the Alar Corp. under a design-build contract which maximized the preservation of the original historic fabric of the wall.. It involved cutting the wall into sections, construction of grade beams to stabilize the wall, moving each section with come-alongs on rollers on concrete pads to its new location, and then reconnecting the sections. The project also included removal of the concrete wall of Building 204 from the section of the west wall which became part of the relocated north wall.



The work involved excavation of the area between the original and new wall locations and the construction of concrete grade beams on either side of the wall's original rubble footings. In this view, workers are finishing the concrete surface to be used for the rollers. *Victor A. Jorrin, BNHP*



This view shows the wall in front of the Commandant's House ready to be moved. This section, a World War II infill, had a concrete rather than a rubble footing. *Victor A. Jorrin, BNHP*



Workers use come-alongs to move the third section of the wall. In this view, it is about halfway between its original site and its new location. Note how close the moved wall comes to the corner of the Commandant's House. *Victor A. Jorrin, BNHP*



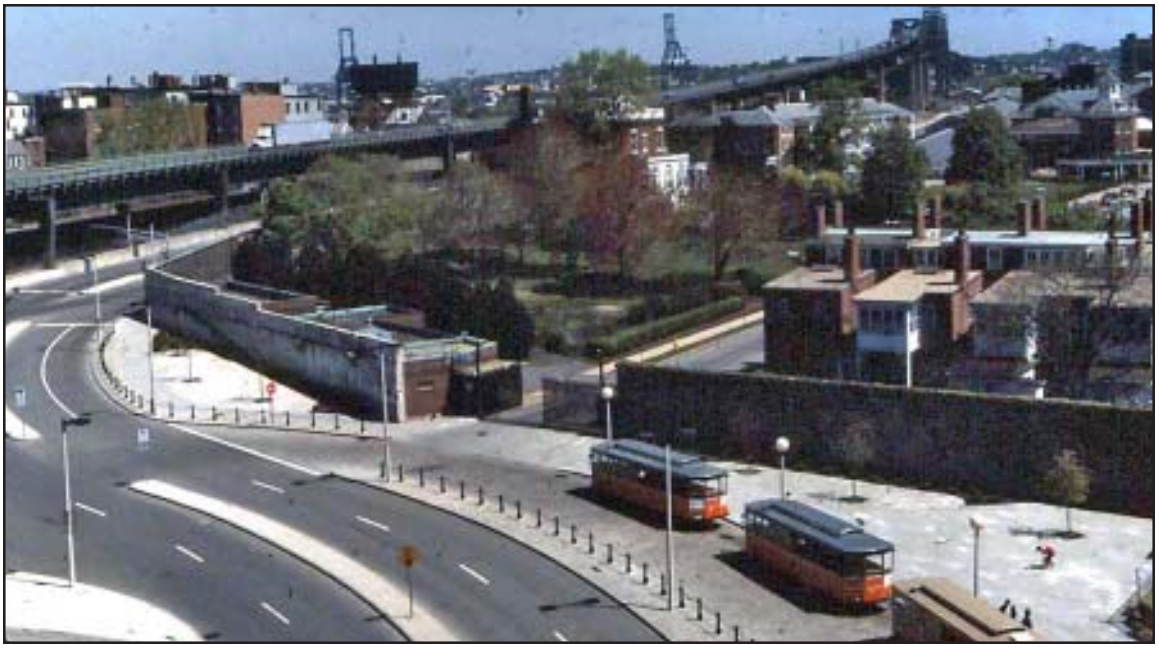
The west wall move also included the remaining wall segment of Building 204, which had been cast directly against the wall in the 1920s. This view shows the steel framing which stabilized the wall during its move. *Victor A. Jorrin, BNHP*



The concrete grade beam is the only visual evidence that the wall is not in its original position in this post-construction view. *Victor A. Jorrin, BNHP*



This July 1982 view of the relocated wall shows the area which would become Chelsea St. *Victor A. Jorrin, BNHP*



This photograph taken from the roof of Hoosac Stores No. 1 & 2 in May 1986 shows the completed Chelsea-Water Sts. Connector. Note the trolley tour vehicles using the bus drop-off lane at Gate 1. By this time, the city had renamed Water St. as Constitution Rd.
Stephen P. Carlson, BNHP

of 1980 the Massachusetts Department of Public Works demolished Building 204. In 1981 and 1982 the NPS undertook the moving of the Navy Yard Boundary Wall. In an innovative approach, the wall was split into segments, which were braced and then moved on rollers using come-alongs to their new location. This method meant that only minimal disassembly of the wall was required, preserving most of its historic materials.[513] Following this work, the state undertook the Chelsea-Water Streets Connector construction. The Gate 4 project was completed in the fall of 1984, while the Chelsea-Water Streets Connector was finished the following summer.

With the completion of the Chelsea-Water Streets Connector and the new 5th Street, Gate 1 ceased to be the vehicular entrance to the park. Rather, vehicles used Gate 4 and then turned into the park at First Avenue. The Scale House (Building 19) became the park's entrance station and law-enforcement dispatch center. Operational needs required the conversion of a window at its east end into a door; this work was completed in March 1988.[514] The use of the Scale House by the NPS Protection Division staff continued until the summer of 2006 when dispatch moved to Building 109; the entrance station function had been taken over by a Guard Booth installed in 2004 as part of improved security for the yard.

When the Navy Yard was divided into parcels for disposition, the boundary line between the National Park parcel and Shipyard Park had been drawn down the middle of Baxter Road, and a chain-link fence erected to mark that line. In the mid-1980s, both the NPS and the BRA expressed interest in undertaking developments along that line that worked towards eliminating the artificial distinction between the two areas. The BRA's plans for Phase III of Shipyard Park development included a common treatment of the entire zone between Dry Dock 2 and the line formed by Buildings 28, 24, and



In order to make the Scale House work as an entrance station, the window on its east side needed to become a door. This Mar. 1, 1988, photograph shows the sawcut concrete wall section prior to its removal.
BNHP

125. With the exception of the replacement of the chain-link fence between Second Ave. and First Ave. by a steel picket fence and gates in 1988, implementation of these plans never occurred due to funding considerations.

In the spring of 1994, however, as the NPS moved forward with the installation of public exhibits in Building 125 and the conversion of its portion of Baxter Road adjacent to Building 28 into a courtyard for use by the USS Constitution Museum, the two agencies reached an agreement whereby the BRA provided the NPS a license to utilize the part of Baxter Road within Shipyard Park and the boundary fence was removed.[515] To maintain security, chain-link fencing and gates were installed between the buildings; this was subsequently replaced with steel picket fencing matching the BRA-installed fence along 5th St.

The final change in access to the yard grew out of the BRA's master planning efforts in the late 1980s. The plan, developed when the idea of moving the New England Aquarium from Central Wharf in downtown Boston to a new site at either Dry Dock 2 or Dry Dock 5 in the Navy Yard was being considered, called for the creation of a Gate 6 at the extreme east end of the yard. It would provide a straight connection from Chelsea Street to First Avenue, eliminating

[513] Alar Corp., *Relocation of Historic Wall, Boston National Historical Park, Boston, Massachusetts: Technical Proposal*, RFP-NARO-1-0002 (Rev. Mar. 11, 1981), TIC 457/D6913A; Robert Cooke, "A Wall Not To Be Toyed With," *Boston Globe*, Feb. 20, 1982..

[514] Memorandum, Acting Associate Regional Director, Planning and Resource Preservation, North Atlantic Region, to Superintendent, Boston National Historical Park, "Section 106 Compliance, Charlestown Navy Yard, Bldg. 19," Aug. 31, 1987, with accompanying materials, BOST 87-004, Section 106 Case Files, Division of Cultural Resources, BNHP.

[515] License Agreement By and Between Boston Redevelopment Authority and National Park Service, Apr. 1, 1994, Shipyard Park File, Division of Cultural Resources, BNHP. The license, which has since been extended, primarily addressed the issue of parking for USS *Constitution* Maintenance & Repair employees.

the need for buses and trucks to negotiate the sharp turns on 13th Street. To create this access, however, one wing of Building 114, the yard's historic Boat Shop, would need to be demolished.[516] Although the formal amendment to the Program of Preservation and Use under the Historic Monument Area transfer deed covering this work was not executed until mid-2002,[517] construction of Gate 6 began in 1995 and it opened for traffic in 1997.[518]

Water Transportation Improvements

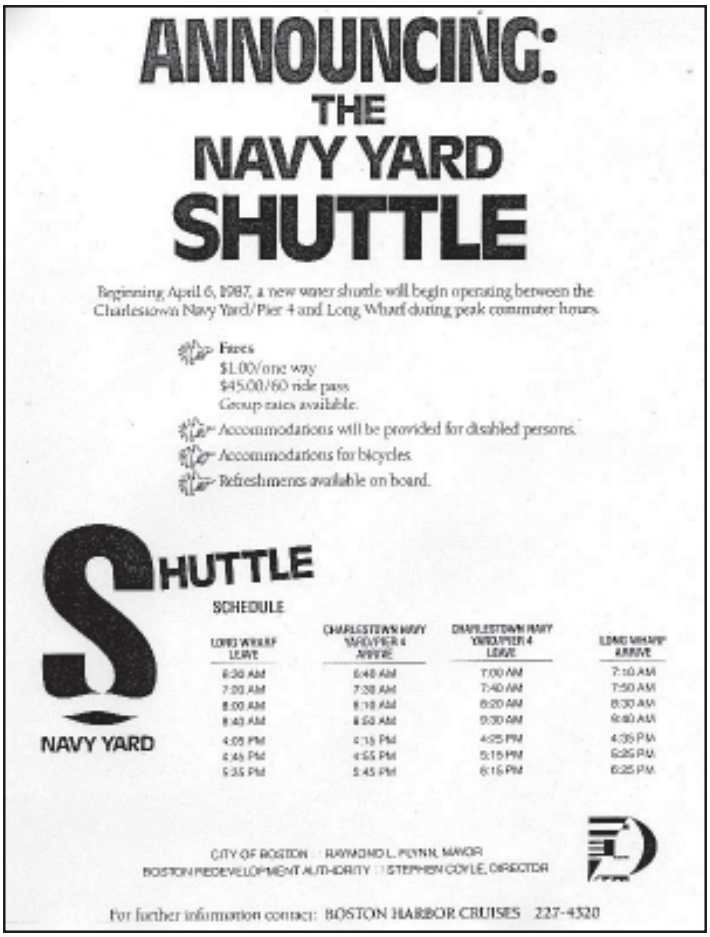
Waterside access to the Navy Yard was also an important part of Navy Yard redevelopment. In 1979, the National Park Service acquired a barge from the Environmental Protection Agency. This former Navy covered lighter was drydocked and converted into an open landing barge that was placed at the southerly end of Pier 1 to provide docking space for harbor tour boats.[519] This facility was not handicapped accessible, and in the early 2000s the park began planning for a new ferry landing at the end of Pier 1. A design-build contract for this project was awarded in August 2007.[520] Depending on permitting and a state legislative change to the harbor line, work should be completed in the summer of 2009.

One of the most important access improvements to the Navy Yard came as a result of highway construction projects outside of the yard. The first stage of the replacement of the elevated Central Artery through downtown Boston, the Central Artery North Area (CANA) project, involved building a tunnel from the end of the Mystic-Tobin Bridge under City Square and then ramps for new connections to Interstate 93 and the Central Artery. As a mitigation measure for the project's impacts on traffic in Charlestown, a commuter shuttle boat began running between Pier 4 in the Navy Yard and Long Wharf in downtown Boston in 1987.[521]

The water shuttle proved extremely popular with local residents and visitors to the national park, and the ferry has since become a permanent element of a growing water transportation network in Boston Harbor.[522] A similar shuttle service between Pier 4 and Lovejoy Wharf near North Station, begun in 1997, ended in January 2005 due to poor patronage.[523]



This 2003 view shows the extended 16th St. and Gate 6. The new roadway provides a straight route from Chelsea St. to First Ave. Building 114 is at right. *Jane Carolan, BNHP*



This flyer announced the start of the Navy Yard water shuttle. Initially funded by the BRA, the subsidy for the service would be taken over by the Mass. Highway Dept. later that year as mitigation for the impacts of the Central Artery North Area (CANA) project. At that time, mid-day and weekend service for national park visitors was added. Following the CANA project, the Massachusetts Bay Transportation Authority took it over as a permanent part of its commuter boat operations. *BNHP*

[516] Boston Redevelopment Authority, *Charlestown Navy Yard: Master Plan for Yard's End: A Framework for Discussion* (Jan. 1990), TIC 457/D6290, p. 48.

[517] Everett to Metz, Aug. 29, 2002; McCann to Gribaudo, Oct. 8, 2002, BOST 92-017, Section 106 Case Files, Division of Cultural Resources, BNHP.

[518] McGinley Hart & Associates, *Historic Monument Area, Charlestown Navy Yard, Boston, Massachusetts, III – Audit of Buildings and Sites* (July 24, 2000), TIC 457/D6295, p. 1-2. The BRA had proceeded based on 1990 correspondence which indicated that the National Park Service approved the idea. See Katherine H. Stevenson to Stephen Coyle, July 25, 1990; Stephenson to Coyle and Homer Russell, Sept. 7, 1990, BRA 1990 Master Plan File, Division of Cultural Resources, BNHP. The Massachusetts State Historic Preservation Officer had also agreed to the proposal at that time. See Valerie A. Talmadge to Boston Redevelopment Authority et al., "Charlestown Navy Yard," July 13, 1990, BRA 1990 Master Plan File, Division of Cultural Resources, BNHP. Both agencies' concurrence had been in part based on their dislike of the alternative of enlarging Gate 5.

[519] Progress photos, Conversion of Barge, Aug. 21-28, 1978, Park History Files, Division of Cultural Resources, BNHP.

[520] Denver Service Center, Solicitation, Offer and Award, Contract No. C4500070909, Thomas Construction Co., "Replace Barge With Accessible Ferry Landing," Aug. 16, 2007.

[521] Boston Redevelopment Authority, *Charlestown Navy Yard: Framework for Discussion* (draft; Apr. 1987), TIC 457/D6274, chap. 3.

[522] Teresa M. Hanafin, "Wave of the Future: Water Shuttles Start to Catch On," *Boston Globe*, Nov. 5, 1989.

[523] Thomas C. Palmer, Jr., "Company Retains T Pact for Hub Ferry," *Boston Globe*, Jan. 31, 1999; Anthony Flint, "Ferry Line Ending Due to Low Ridership," *Boston Globe*, Dec. 21, 2004.



In this heavily-backlit view taken on Aug. 25, 2004, the Long Wharf water shuttle waits to dock at Pier 4 for the Lovejoy Wharf boat to leave. The service to that terminal near North Station ended the following year. *Stephen P. Carlson, BNHP*



In addition to public transportation in the form of MBTA buses, a number of private transit operations serve the Navy Yard. Here, a Partners HealthCare shuttle bus passes an MBTA vehicle on First Ave. on Sept. 19, 2006. Building 36 is in the background. *Stephen P. Carlson, BNHP*

A major change to the ferry service came in September 2008 when the Navy Yard terminal shifted from Pier 4 to Pier 3.[524] This move, widely opposed by residents of the Navy Yard, had been a condition of a state grant under which the Boston Redevelopment Authority rebuilt the inner end of Pier 3.[525] A future phase of this project envisions a bridge across Dry Dock 2 to alleviate the need for people coming from Flagship Wharf or other locations to walk all the way around that facility.[526]

Bus And Shuttle Transportation

When it took over the subsidy for the water shuttle in October 1988, the Massachusetts Bay Transportation Authority (MBTA) contracted for the operation of a free shuttle service connecting Pier 4 with the parking garage in Building 199 and the Navy Yard Visitor Information facility in Building 5. This service, the precise route of which varied somewhat over time, lasted until August 1997.[527]

In March 1995, responding to the requests of residents in the yard, the MBTA agreed to route one trip per hour of the Route 93 bus between Sullivan Square, Charlestown, and Haymarket Square and Downtown Crossing in Boston by way of Bunker Hill Street through the Navy Yard.[528]

In addition to public transportation, shuttle vans and buses between the yard and points in Boston have been operated by the yard's three major employers, the National Park Service, the Massachusetts Water Resources Authority, and Partners HealthCare/Massachusetts General Hospital.[529] These shuttles, using vehicles ranging from vans to full-size over-the-road coaches, were generally limited to use by employees of the sponsoring organization.

Parking In The Navy Yard

Closely related to the question of access has been the issue of parking for residents, employees, and visitors to the Navy Yard. One of the earliest redevelopment decisions made for the yard was that one of the two Supply Department warehouses (Building 199) would be converted into a parking garage. By the winter of 1986, the over 1,300-car facility had been completed.[530] Supplementing the garage has been on-street parking, some of which was metered both as control and to raise revenue for the city. At various times, shuttle buses have been provided to connect the garage with the Navy Yard Water Shuttle and/or Building 5 in the national park.

Parking for visitors to the national park has varied considerably through the park's three decades of operation. In the earliest years, automobiles were accommodated within the yard, but by the mid-1980s the only parking provided for visitors in the park was for individuals attending special events in the yard. Otherwise, they were accommodated in the small lot adjacent to the Hoosac Stores warehouse or in a 72-car lot constructed for the park by the Massachusetts Highway Department as a mitigation measure for the Chelsea-Water Streets Connector project.[531] That surface lot, restored following the subsequent CANA project,[532] was permanently closed in the summer of 2000 when construction began on the Nautica apartment/condominium complex. Under its agreement with the state, the developer was required to provide a parking facility containing "not less than 72 [spaces] … reserved for National Park Service parking."[533] Accommodated as part of the complex's underground parking garage, the facility came on line in mid-2002.[534]

[524] Boston National Historical Park, Staff Meeting Notes, Sept. 8, 2008, Staff Meeting Minutes, Park History Files, Division of Cultural Resources, BNHP.

[525] Dan Murphy, "Water Shuttle Relocation Raises Concerns," *Charlestown Patriot-Bridge*, Feb. 21, 2008.

[526] Ibid.

[527] Jonathan Belcher, *Changes to Transit Service in the MBTA District, 1964-2009* (Dec. 24, 2009) [http://mysite.verizon.net/rtspcc/MBTA RouteHistory.pdf], p. 266.

[528] Ibid, p. 73; Jonathan Belcher, "1995 MBTA Vehicle Inventory as of January 31, 1996 – Bus Route Notes," *Rollsign: The Magazine of New England Transit News*, vol. 32, no. 1/2 (Jan./Feb. 1996), p. 27.

[529] Jerry Ackerman, "Private Shuttle Services Filling In Service Gaps Willingly Left by MBTA," *Boston Globe*, May 30, 1989.

[530] Boston Redevelopment Authority, *Boston Naval Shipyard/Charlestown: Planning and Development Program* (Dec. 1975), TIC 457/D6074A, p. 40, 51; Catherine Alison Hill, *The Political Economy of Military Base Redevelopment: An Evaluation of Four Converted Naval Bases* (Ph.D. dissertation, Rutgers, 1998), p. 299.

[531] John J. Burchill to Robert McDonagh, Apr. 16, 1986, Gate One Parking File, Division of Cultural Resources, BNHP; "Parking Lot Layout, Chelsea St., Const. Rd. & Gate 1" [drawing], Apr. 25, 1986, TIC 457/62566.

[532] Mass. Highway Dept., Permit No. 4-28063, Oct. 26, 1995, Gate One Parking File, Division of Cultural Resources, BNHP.

[533] Lease, Mass. Turnpike Authority to Constitution Development Associates, July 18, 2000, Suffolk Deeds, bk. 25170, p. 171.

[534] Parking Space Lease/Agreement, Constitution Development Associates and United States, 1443GA1720-03-002, June 1, 2002, Administrative Files, BNHP.



As a part of the mitigation for the Chelsea-Water Streets Connector project, the state provided the park with this parking lot on the west side of the new Constitution Rd. The wall of Building 204 and Gate 2 can be seen in the background of this May 1986 view of the newly completed lot. *BNHP*

Even more problematic than private automobiles has been the accommodation of tour buses. Particularly in the peak fall foliage period, as many as fifty or more buses may be at the yard at any given time. Until September 2001, when the yard instituted, at the request of the Navy, restricted access policies for vehicles in the wake of the terrorist attack on the World Trade Center, buses were allowed to park on First Avenue and on Pier 1 in the yard. Since then, buses have been required to drop off passengers outside Gate 1 and then seek parking elsewhere.

NPS Office Dispersal And Consolidation

With the demolition of Building 136, park offices were spread out throughout the yard. Protection moved into the Marine Barracks, while Interpretation was centered in Building 5. Administration and Maintenance occupied Building 109, the Historical Architect the second floor of Building 10, and Curatorial moved into Building 125. The Superintendent's Office moved to the third floor of the Easton Building, the 11-story structure at the corner of State and Devonshire Streets in downtown Boston acquired as both a park visitor center and office space for the North Atlantic Regional Office (now the Boston Office of the Northeast Regional Office).

As part of the agreements covering the Chelsea-Water Streets Connector and the Gate 4/5th Street projects, the NPS received title to Building 107, the former Public Works Shop, within the Historic Monument Area. The building resumed its historic function of housing the yard's maintenance operations. Although plans were drawn up in 1979 and 1980 to consolidate park offices on the second floor of Building 107,[535] they were never implemented. Only Maintenance actually moved there as originally planned, vacating its temporary office space on the first floor of Building 109 in 1987.[536]

Following the arrival of John Burchill as Superintendent in October 1984, a new office relocation plan was put into effect. The Superintendent's Office moved into the Marine Barracks, along with Administration.[537] Protection and Interpretation took over Building 109,[538] although Interpretation continued to occupy office space in Building 5 as well. Interpretation would move from Building 109 to Quarters B in the summer of 2003,[539] providing space in Building 109 for the construction of a new dispatch center for Protection.



Until September 2001, the National Park Service provided parking for buses within the Navy Yard. This view from the spring of 1998 shows a lineup of school buses bringing children on field trips to the yard and USS *Constitution*. Although convenient for bus operators and passengers, the presence of buses in the yard presented both traffic management issues and potential hazards to pedestrians. *Richard Tourangeau, BNHP*

The Division of Planning and Historic Preservation (now the Division of Cultural Resources), which included the park's Curatorial Branch, planner, historian, and preservation specialist (the sole survivor of its former historical architect's office), took over the west end of Building 107's second floor, moving out of its scattered offices in Buildings 10, 109, and 125 in 1989 and 1990.[540] Major portions of both the second and third floors became the park's curatorial storage facility as a part of this move.[541]

The initial discussions for the rehabilitation of Building 125 in the early 2000s looked at the structure as a consolidated park headquarters. The park, however, decided that its prime waterfront loca-

[535] "Proposed Partition and Room Layout for Building 107" [drawing], rev. Feb. 1, 1980, TIC 457/62001A.

[536] Memorandum, Associate Regional Director, Planning & Resource Preservation, North Atlantic Region, to Superintendent, Boston National Historical Park, "Section 106 Compliance, Charlestown Navy Yard," Jan. 14, 1987, with accompanying materials, "Create Office Area & Rest Room Facilities in Building 107," BOST 86-012, Section 106 Case Files, Division of Cultural Resources, BNHP.

[537] Memorandum, Associate Regional Director, Planning & Resource Preservation, North Atlantic Region, to Superintendent, Boston National Historical Park, "Section 106 Compliance, Charlestown Navy Yard (BOST 88-04)," July 22, 1988, with accompanying materials, BOST 88-004A, Section 106 Case Files, Division of Cultural Resources, BNHP. This and the related BOST 88-004 deal solely with the Administration offices. No Section 106 compliance was done on the conversion of space for the Superintendent's Office and Conference Room.

[538] Memorandum, Associate Regional Director, Planning & Resource Preservation, North Atlantic Region, to Superintendent, Boston National Historical Park, "Section 106 Compliance, Navy Yard," June 24, 1987, with accompanying materials, "Rehabilitation of Building 109 for Protection and Interpretive Staff," BOST 87-009, Section 106 Case Files, Division of Cultural Resources, BNHP.

[539] Terry W. Savage to Metz, Feb. 25, 2003 (concurred Mar. 24, 2003), BOST 03-001, Section 106 Case Files, Division of Cultural Resources, BNHP.

[540] Memorandum, Associate Regional Director, Planning & Resource Preservation, North Atlantic Region, to Superintendent, Boston National Historical Park, "Section 106 Compliance," Oct. 19, 1988, with accompanying materials, "Construct Offices for Cultural Resources Division, Building 107," BOST 88-013, Section 106 Case Files, Division of Cultural Resources, BNHP.

[541] Donald R.Cumberland, Jr., *Collection Storage Plan, Charlestown Navy Yard, Boston National Historical Park* (Aug. 1988), TIC 457/D6187.



NPS Curator Arsen Charles moves items in the Boston National Historical Park Museum Collection out of their temporary home in Building 125 for transfer to the new collection storage area in Building 107 in Oct. 1987. *BNHP*

tion made it a likely candidate for historic leasing. With the Administration Division staff moving from the first to the third floor of the Marine Barracks, the park converted the first floor space into offices for the division chiefs. Thus, in early 2008, for the first time since the abandonment of Building 136 in 1979, the superintendent and all of the division chiefs occupied space in the same building.

National Park Service Tenants

Under the terms of the park's enabling legislation, the U.S. Navy has become the primary tenant of the National Park Service in the Navy Yard. The relationship between the two organizations has not always been a smooth one. One cause of these difficulties has been the normal rotation of the commanding and executive officers of USS *Constitution*, requiring a transition period during which new arrivals need to be familiarized with the operations of a national park. There has also been an ignorance or deliberate disregard of the provision of the Boston National Historical Park Act of 1974 whereby the NPS and not the Navy decides what facilities and services the Navy is entitled to within the park.[542] As will be discussed below, this has been particularly problematic in the area of what is or is not required for physical security in response to potential terrorist threats.

In addition to the Navy, a variety of organizations have occupied space within the NPS portion of the Navy Yard. As discussed elsewhere, the park inherited the USS Constitution Museum as a tenant in first Building 22 and later Building 28 as well.

Another early tenant was the BRA, which occupied Building 32 until 1981, when it moved into the first floor of Building 10.[543] When that agency vacated the space in favor of the newly rehabilitated Muster House in 1982, the New England Historic Seaport took over the Building 10 space.[544] After the NPS leased Building 10 to Boston Concessions Group in 1989, the Seaport offices moved into Building 1. Later, the Seaport moved into space in Flagship Wharf (Building 197), and in 1997 merged with Schools for Children, Inc., as Seaport Campus.[545] Starting in the late 1980s, the Seaport and its successor also operated a boat-building program in the north wing of Building 125.[546]

Second in tenure only to the USS Constitution Museum is the Massachusetts Environmental Police. That organization, which enforces state laws relating to fisheries and conservation, has utilized a landing off the Pier 3 Marginal Wharf for its boats since October 1978, and more recently has been provided with office space on the second floor of Building 125.[547]

Building 1 had been made available to the Massachusetts Department of Public Works for its construction site office during the Chelsea-Water Streets Connector project. Subsequently, the former guard station housed the park's artist-in-residence and then the park's Maintenance Division grounds crew, while the chauffeur's quarters was used by the New England Historic Seaport. From August 1998 until damaged by a fire in January 2003, that space was the home for the Boston Academy of Music.[548]

In June 1998 the park agreed to allow the Hull Lifesaving Museum, which, as will be discussed below, operated a rowing and boatbuilding program on Pier 2, to utilize the Carriage House (Building 21) as office and classroom space.[549] This agreement ended when that space was needed for the Junior League of Boston's 2004 Decorators' Show House.

The first floor of the kitchen wing of the Commandant's House housed the New England Museum Association from the fall of 1985 until the sping of 2003.[550] In order to manage the house as a function space, the park entered into an agreement in March 2005 with

[542] 88 Stat. 1184-85.

[543] Kelly to Gurney, June 16, 1981, Building 32-Boston Marine Society File, Division of Cultural Resources, BNHP.

[544] Memorandum, Associate Regional Director, Planning and Resource Preservation, North Atlantic Region, to Superintendent, Boston National Historical Park, "Section 106 Compliance," Aug. 31, 1982, with accompanying materials, "Renovation of Building 10 for New England Historic Seaport," BOST 82-015, Section 106 Case Files, Division of Cultural Resources, BNHP.

[545] Boston National Historical Park, Staff Meeting Minutes, Feb. 7, 1989, Staff Meeting Minutes, Park History Files, Division of Cultural Resources, BNHP; Seaport Campus, *School History* [web site] [http://sfcinc.org/seaport/history.html], accessed Mar. 4, 2009.

[546] Memorandum, Associate Regional Director, Planning & Resource Preservation, North Atlantic Region, to Superintendent, Boston National Historical Park, "Section 106 Compliance, Charlestown Navy Yard," Mar. 14, 1988, with accompanying materials, "Rehabilitate Wings of Building 125 for New England Historic Seaport," BOST 88-001, Section 106 Case Files, Division of Cultural Resources, BNHP; Agreement, Schools for Children, 1443GA1720-00-001, Nov. 1999, Administrative Files, BNHP.

[547] Special Use Permit 1720-03-79, Executive Office of Environmental Affairs, Law Enforcement Division, Oct. 19, 1978, BOST 77-002, Section 106 Case Files, Division of Cultural Resources, BNHP; Agreement, Mass. Environmental Police, 1443AG1720-03-004, Apr. 2003, Administrative Files, BNHP. For a description of the functions of the Massachusetts Environmental Police, see Mass. Environmental Police, *Welcome to the Massachusetts Environmental Police Website* [web page] [http://www.mass.gov/dfwele/dle/welcome.htm], accessed Mar. 3, 2009.

[548] Agreement, Boston Academy of Music, 1443AG1720-98-004, Aug. 1998, Administrative Files, BNHP; "BNHP News Notes," *The Broadside/Boston National Historical Park* (No. 4, 1998), p. 11; Art Norris to Steve Carlson, "Building 1 Fire," Apr. 27, 2006, HRS Project File, Division of Cultural Resources, BNHP.

[549] Agreement, Hull Lifesaving Museum, 1443AG1720-98-002, June 17, 1998, Administrative Files, BNHP; Stephen P. Carlson, memorandum to files, "Section 106 Compliance, Rehabilitate Building 21 for Hull Lifesaving Museum," Aug. 4, 1998, BOST 98-004, Section 106 Case Files, Division of Cultural Resources, BNHP; Ed McCabe, "Navy Yard Rowing Center," *The Broadside/Boston National Historical Park* (No. 3, 1999), p. 4.

[550] Agreement, New England Museum Association, 1443AG1720-03-006, May 1, 2003, Administrative Files, BNHP; conversation with Nancy Tansino, Administrative Officer, BNHP, Mar. 3, 2009.

Eastern National under which a subcontractor, Amelia Occasions (since renamed Historic Venues, Inc.), operated the facility as well as the designated tent space on Pier 1.[551]

In 1981 the park entered into an agreement for the Boston Marine Society to occupy Building 32 for its offices and museum.[552] The society is one of the oldest maritime-related organizations in the country, having been established in 1742 by Boston sea captains to provide a way to assist the widows and children of captains lost at sea.[553] The society also is the home of the Boston Pilot Commissioners, the legislature having assigned the oversight of harbor pilots to it in 1797.[554]

In addition to outside organizations, the park has housed three major groups belonging to the NPS's North Atlantic (later Northeast) Regional Office. In 1978 and 1979, Building 28 was converted to house the North Atlantic Historic Preservation Center.[555] Comprised of a variety of specialists in archeology, historic architecture, and related disciplines, it provided guidance and hands-on work on historic preservation projects to parks within the region (and on occasion, beyond). As a part of the expansion of the USS Constitution Museum, the center moved to facilities in Boott Mill at Lowell National Historical Park in 1991.

The Northeast Museum Services Center provides similar technical assistance to parks on archival, collections management, and other museum activities.[556] Established as a result of a Congressional mandate to the National Park Service to provide accountability for the items in NPS museum collections, the first backlog cataloging teams worked in Building 125 until the center was given space on the fourth floor of the Marine Barracks in 1989.

Museum Services moved temporarily into Quarters C in 2004 to allow the rehabilitation of the third and fourth floors of the Marine Barracks.[557] Upon its return to that building two years later, the Olmsted Center for Landscape Preservation (OCLP) took over the space in Quarters C.[558] The Olmsted Center, originally housed at the Frederick Law Olmsted National Historic Site in Brookline, Mass., undertakes research and planning relating to cultural landscapes as well as conducting actual landscape preservation projects throughout not only the Northeast Region but also the entire National Park System.[559]

[551] Agreement, Eastern National, 1443G1720-05-011, Mar. 22, 2005, Administration Files, BNHP.

[552] Special Use Permit 1720-18-81, Boston Marine Society, Apr. 28, 1981, Building 32-Boston Marine Society File, Division of Cultural Resources, BNHP.

[553] William A. Baker, *A History of the Boston Marine Society, 1742-1967* (Boston: Boston Marine Society, 1968).

[554] Ibid., p. 92.

[555] Orville W. Carroll, *Completion Report: Adaptive Use and Renovations to Building 28, Charlestown Navy Yard, Charlestown, Massachusetts*, Feb. 1980, TIC 457/D6107.

[556] *Northeast Museum Services Center* [web site] [http://www.nps.gov/boso/StewardshipandPartnerships/Museum%20Services/nmsc1.htm], accessed Mar. 9, 2009.

[557] Savage to Metz, Sept. 11, 2003 (concurred Sept. 26, 2003), BOST 03-016, Section 106 Case Files, Division of Cultural Resources, BNHP.

[558] Ibid.; "BNHP News Notes," *The Broadside/Boston National Historical Park* (No. 1, 2006), p. 7.

[559] *Olmsted Center for Landscape Preservation* [web site] [http://www.nps.gov/oclp/], accessed Mar. 9, 2009. See also Dan McCarthy, "Olmsted Center Develops Tree Work Skills," *The Broadside/Boston National Historical Park* (No. 1, 1997), p. 7.



In addition to contracting larger rehabilitation projects, the NPS performed work using its own maintenance staff. Here carpenters Varnie Carter (top) and Austin Price (right) work on the replacement of the porch on the west side of the Marine Barracks in Sept. 1980. *Victor A. Jorrin, BNHP*

National Park Service Rehabilitation Projects

From its earliest days to the present, the National Park Service has undertaken a series of projects intended to preserve and rehabilitate the structures and other resources in its portion of the Navy Yard. The following is a brief summary of this work.[560] This summary does not include most interior renovation, exhibit installation, hazardous material abatement, and HVAC systems projects. Nor does it cover exterior painting, storm window installation, and other minor rehabilitation and landscaping projects, many of which were performed by the park's own maintenance staff rather than under contract.

The first redevelopment project in the Navy Yard began in 1975 as the USS Constitution Museum started to convert Building 22 for its use. As discussed above, the museum undertook a major project in the 1990s as it expanded into adjoining Building 28. This effort, which included creation of a connector between the two buildings and the reconstruction of the structurally-unstable east wall of Building 28, was a partnership with the National Park Service, which was responsible for the building construction and surrounding site work.

In its earliest years, the NPS concentrated on the upgrading of the utility infrastructure in the yard, including telephone and electrical services. Other early projects included replacement of the sidewalk on Second Avenue. In 1980 and 1981 the park rehabilitated Pier 1, the Finger Pier, and the Pier 3 Marginal Wharf.[561]

Work on the rehabilitation of Pier 2 began in 1983, using incremental funding. In 1987, during work on the third segment of the pier, creosote from new pilings was released into the water and

[560] This summary is based on Section 106 Case Files, project documents (plans and specifications), progress photographs, completion reports, and contract files in the Division of Cultural Resources, BNHP, and, for more recent work, completion reports in the on-line NPS Project Management Information System (PMIS). It is also based on the author's own recollections, since he served as the project manager and/or Contracting Officer's Technical Representative (project supervisor) for many of these projects as well as the park's representative for projects managed by the NPS Denver Service Center or park partners.

[561] Eugene G. Oranchak, *Completion Report, Rehabilitation of Bulkheads and Piers, Boston National Historical Park, Charlestown Navy Yard* (Sept. 8, 1981), TIC 457/D6105.

National Park Service Rehabilitation Projects: A Gallery

BETWEEN 1976 and 2008 has undertaken numerous large and small rehabilitation projects within the Navy Yard. This gallery presents a small sampling of construction progress images recording this work, arranged in approximate chronological order.



Among the first projects which the National Park Service undertook was the upgrading of utilities. This Apr. 1978 view shows work underway on the installation of new telephone lines on Pier 1. *Victor A. Jorrin, BNHP*



In 1991 the park rehabilitated the Scale House (Building 19). On Sept. 9, 1981, workers place shims in preparation for the laying of a new roof. Note the two ex-Boston & Maine Railroad boxcars at upper left. These were acquired in 1980 to both enhance the historic scene and to provide storage space for the USS Constitution Museum's stock of wood removed from the historic frigate. Located next to Hoosac Stores for many years, the boxcars were donated to the Massachusetts Bay Transportation Authority in July 2006. *Victor A. Jorrin, BNHP*







In 1980 and 1981 the NPS undertook major repairs to the Finger Pier and Pier 1. At top, this Apr. 1980 view shows the reconstruction of the approach section of the Finger Pier. Above, work proceeds on the repair of the fender piles in the vicinity of USS *Constitution*'s normal berth. *Victor A. Jorrin, BNHP*



In 1984 and 1985 the park replaced the windows in several buildings with thermopane windows. This Feb. 27, 1985, view shows work progressing on the southwest corner of Building 28. *Victor A. Jorrin, BNHP*

In 1984 the park replaced the deck of the Dry Dock Caisson. By June 21, 1984, the subdeck had been completed and work on laying the top decking had begun. *Jeffrey A. Twerago, BNHP*

National Park Service Rehabilitation Projects: A Gallery



The park received considerable funding for rehabilitation projects in the mid-1980s. Among the most complex efforts was the reconstruction of the Truck Scale Platform (Structure 235). The framework for the new platform is seen in place on Oct. 24, 1984. *Jeffrey A. Twerago, BNHP*



Modifications to the sidewalk and pavement at the east end of Building 5 were intended to make the Navy Yard's visitor contact station accessible to wheelchair users. This Dec. 18, 1984, image shows grading being done in preparation for final repaving. *Jeffrey A. Twerago, BNHP*



Another project in this time period involved the replacement of the slate roof of the Carriage House (Building 21). This progress photograph was taken on Jan. 3, 1985. *Jeffrey A. Twerago, BNHP*



To protect people from snow sliding off slate roofs, the park installed snowguards on several structures where there was significant pedestrian traffic. This Dec. 1985 view shows installation in progress on the First Ave. side of Building 32. *Stephen P. Carlson, BNHP*



This Oct. 1987 view shows the containment boom surrounding the area of Pier 2 where creosote had been released from new piles into the water of Boston Harbor. Because of this release, the rehabilitation work on the pier ceased, and the outer end continues to deteriorate in 2008. *Stephen P. Carlson, BNHP*



In 1989 and 1990 the park replaced the slate roof on the Commandant's House. As this June 1990 view shows, the work included repointing and repair of the house's chimneys. *Stephen P. Carlson, BNHP*

While it would not undertake a comprehensive repaving program for the Navy Yard until 1999, the park addressed limited areas as funding became available. This Nov. 1990 view shows the removal of the asphalt overlay on the original concrete paving of the loop serving the Marine Barracks. *Stephen P. Carlson, BNHP*



National Park Service Rehabilitation Projects: A Gallery



The USS Constitution Museum Expansion project was a multi-year effort. A key component of the first phase involved the creation of a connector between Buildings 22 and 28. The framework for this structure is seen being erected on Apr. 21, 1994. *Robert Gomes, DSC*







The major project during 1999 and 2000 to repave the public roads within the national park area of the Navy Yard led to the discovery of significant areas of earlier pavement materials. On Oct. 15, 1999, Kyle Zick of Carol R. Johnson Associates, the project's designer, examines plans while standing on the granite block pavers which dated back to the construction of Pier 1 in the early 1900s. Much of this historic paving was left exposed. *Stephen P. Carlson, BNHP*



The second phase involved a total rehabilitation of Building 28. Because the east wall had settled, it was removed and rebuilt. This Apr. 25, 1995, photograph shows the structure with the wall removed. *Jack Highland, DSC*

The final phase of the project was done by in-house using the services of the Olmsted Center for Landscape Preservation and the Building Conservation Branch of the regional Cultural Resources Center. This 1997 view looks east along the railroad tracks north of Building 22. *Richard Tourangeau, BNHP*



Many of the projects which the NPS undertook within the Navy Yard involved the replacement of roofs. At left, the new roof on Building 22 nears completion on Aug. 6, 1997, while the May 12, 1998, view above shows work underway on the north and east sides of Building 5. *Titan Roofing Co. (left); Stephen P. Carlson, BNHP (above)*



In 2004 and 2005 the NPS restored the original portion of Building 24. This Sept. 10, 2004, view shows work underway on the roof and windows, as well as on the underpinning of the granite walls at the center of the structure. *Steve Porter, Alpha Corp.*

sediments around the pier. As a result, the project was shut down after less than half the structure had been completed.[562] The park became engaged in a lengthy environmental analysis to determine what the best course of action to take would be. After scientific study, the park reached the conclusion that not removing the sediments was the best environmental solution.[563] As a part of a proposed settlement which would allow the pilings to remain, not finalized as this study is written, the NPS agreed to fund a wetlands remediation project at another location in Massachusetts.

As discussed elsewhere, the early 1980s saw a series of projects, some by the NPS and some by the Massachusetts Department of Public Works or the Boston Redevelopment Authority, associated with the moving of the Navy Yard Boundary Wall and the construction of both the Chelsea-Water Streets Connector and Gate 4/Fifth Street projects.

In 1981 the park rehabilitated the Scale House (Building 19). The associated Truck Scale (Structure 235) was dealt with in 1984 and 1985. At the same time, the deck of the Dry Dock Caisson was replaced. Other construction projects addressed structural issues in Building 4, accessibility into the visitor contact station and restrooms in the east end of Building 5, and window replacement in Buildings 28 and 32. The roofs of Building 21 and 269, as well as the main roof on Building 265, were replaced, and Tennis Court 236 was resurfaced. At the end of the decade, the park, as part of the conversion of Building 10 into a food service facility, replaced the structure's doors and windows.

A portion of the Marine Railway superstructure was removed in 1987. The remainder of the structure was demolished in the mid-1990s as part of U.S. Army Corps of Engineers hazardous materials remediation efforts discussed below.

In the 1990s much attention was paid to roofs, starting with that on the Commandant's House in 1990.[564] In the following year the structure's windows were rehabilitated and brick walls repointed. The slate roof of Building 107 and the metal roof of Building 125 were also dealt with between 1992 and 1994. Replacement of the roof on Building 22 took place in 1997, and in the following year those on Buildings 4 and 5 were addressed.

In 1990 and 1991, in preparation for the 1992 drydocking of USS *Constitution*, the park accomplished updating of utilities in Dry Dock 1.[565] This work was funded by the Navy, as was the rehabilitation of the Dry Dock Caisson at an East Boston shipyard. The Navy also undertook further repairs to the Finger Pier, including the addition of a Small Boat Docking Facility.



On May 12, 2008, work is underway on planting of trees in the northwest corner of the Commandant's House yard, part of a project to implement the recommendations of the 2004 Cultural Landscape Report. The work was done as an arborist training program run by the NPS Olmsted Center for Landscape Preservation. *Ruth A. Raphael, BNHP*

While small paving projects had been undertaken from time to time, the road surfaces in the yard remained in need of work. Starting in 1995, the park began plans for a major project under the Federal Lands Highways Program to repave all of the public use roads in its part of the Navy Yard.[566] This work was accomplished in 1999 and 2000.[567] Not only were the numerous tripping and other hazards inherent in a surface which had not been repaved for over a quarter century corrected, the park also took the opportunity to rearrange the traffic and parking patterns on Pier 1 to move parking away from the yard's prime attraction, USS *Constitution*.

As part of the paving project, the end of Pier 1 was stabilized and the concrete pier deck resurfaced. During the course of the work, considerable brick and granite pavements were found to have survived beneath the asphalt. The granite pavers along the west edge of Pier 1 were restored, as was an area of granite to the east of Building 109. To accommodate functions held on the pier, permanent tent anchors were installed in the parking area pavement.[568]

In anticipation of the repaving, the projecting portion of the walkway around Building 10 was demolished in 1999. The remainder of the walkway was removed and new steel egress stairs were installed in 2002. The two Grit Hoppers (Structures 259, 273) were repainted in late 1999 and early 2000.

The pace of work continued in the first decade of the 21st century. The flat roofs of the additions on Building 265, as well as those on Buildings 1 and 19, were replaced in 2001. Two years later, the park replaced the roof of Building 28. The roadway along the east side of Dry Dock 1, not included in the earlier paving project because it was considered as an administrative rather than a public road, was repaved in 2003 and 2004, and the stairways accessing the

[562] Eugene G. Oranchak, *Completion Report, Restoration of Pier 2, Phase I, Charlestown Navy Yard, Boston National Historical Park*, June 1986, TIC 457/D6166; Eugene G. Oranchak, *Completion Report, Restoration of Pier 2, Phase II, Charlestown Navy Yard, Boston National Historical Park*, June 1986, TIC 457/D6167; Peter F. Dessauer, *Completion Report, Rehabilitation of Pier II, Phase III, Charlestown Navy Yard, Boston National Historical Park*, Oct. 1987, TIC 457/D6184.

[563] See, e.g., Michael J. Wade, et al. *Summary Evaluation of the Environmental Impact Resulting from the Use of Creosoted Pilings in the Historic Restoration of Pier #2 at the Charlestown Navy Yard* (Sept. 3, 1987) (Duxbury, Mass.: Battelle Ocean Sciences, 1987), TIC 457/D71; SEA Consultants and Normandeau Associates, *Assessment of Alternatives for Remediation at Pier 2, Charlestown Navy Yard* (Mar. 1990), TIC 457/D41.

[564] Robert Fox, *Completion Report, Reroofing of the Commandant's House, Boston National Historical Park, Charlestown Navy Yard* (Jan. 1991), TIC 457/D6278.

[565] "Dry Dock Work Started," *The Broadside/Boston National Historical Park* (Winter 1991), p. 4.

[566] Archetype Architecture, *Historic Pavement Study, Charlestown Navy Yard, Charlestown, MA* (Sept. 1, 1995), TIC 457/D113; Archetype Architecture, et. al., *Notice of Intent: Repaving & Site Improvements, Charlestown Navy Yard, Boston National Historical Park, Charlestown, MA* (May 1998), TIC 457/D6374.

[567] Stephen P. Carlson, "Repaving Contract Awarded," *The Broadside/Boston National Historical Park* (No. 3, 1999), p. 12; Stephen P. Carlson, "Charlestown Navy Yard Repaving To Begin In Late Summer," *The Broadside/Boston National Historical Park* (No. 1 & 2, 1999), p. 1-2; Stephen P. Carlson, "Navy Yard Repaving Project Nears Completion," *The Broadside/Boston National Historical Park* (No. 4, 1999), p. 4.

[568] Stephen P. Carlson, *Completion Report, 1443-CX1720-99-003, Repaving of Charlestown Navy Yard, Boston National Historical Park* (Dec. 7, 2004), TIC 457/D6362.

dock were rebuilt and brought up to current code. The Truck Scale (Structure 235) was stabilized for the second time in 2004.

In 2003 the park secured the boom of Portal Crane 62. In 2004 the bulkhead behind the Pier 3 Marginal Wharf was stabilized. In 2007 the Navy funded the replacement of the deck on the outer portion of the Finger Pier.[569]

A multi-year project completed in 2006 saw major renovations to the third and fourth floors of the Marine Barracks, including the introduction of an elevator, together with the replacement of the structure's windows.[570] During the course of this work, one of the wells serving the Barracks prior to the introduction of municipal water to the yard in the 1860s was uncovered.[571]

Four major construction projects funded under the NPS line item construction program were also accomplished in this period, and a fifth started.[572] The first of these was the stabilization of Building 24 and replacement of the slate roof and windows on the original portion of the structure.[573] Separate projects saw replacement of the asbestos siding and roof on the World War II Extension. The second project saw the exterior of Building 125 rehabilitated and a new accessible entrance, elevator, and second means of egress from the second floor installed.

The third project rehabilitated the ground level of the Commandant's House to provide accessible restrooms. It also addressed serious electrical wiring and plumbing issues throughout the house. The fourth project refurbished the first floor of Building 5 in 2005 and 2006 for use as a Navy Yard Visitor Center and exhibit facility. The fifth project, scheduled to be completed in 2009, involved the replacement of the landing barge at the end of Pier 1 with an accessible ferry landing facility, including the erection of a small visitor shelter (Building 291).

These projects were in addition to those discussed elsewhere which were driven by the perceived need for greater security as a result of the September 11, 2001, terrorist attacks. The security program also provided funding for lighting improvements which partially carried out a 1997 lighting master plan for the yard.[574] A major planting project in May 2008 began the process of implementing the recommendations of the 2004 Cultural Landscape Report for the Navy Yard.[575]

[569] Childs Engineering Corp., *Notice of Intent, USS Constitution Finger Pier and Platform Repairs, Charlestown Navy Yard, Charlestown, Massachusetts* (Mar. 7, 2007), TIC 457/D6359.

[570] Savage to Brona Simon, Feb. 11, 2005 (concurred Mar. 9, 2005), with accompanying materials; Savage to Simon, Sept. 8, 2005 (concurred Oct. 6, 2005), BOST 05-001, Section 106 Case Files, Division of Cultural Resources, BNHP; Bargmann Hendrie + Archetype, *Marine Barracks Window Replacement Phase: Compliance Report* (Sept. 5, 2005), TIC 457/D6375.

[571] Stephen P. Carlson, "Historic Well Found," *The Broadside/Boston National Historical Park* (No. 2, 2005), p. 7; Jennifer Bonner Banister and Suzanne G. Chereau, *Archeological Investigations, Marine Barracks, Charlestown Navy Yard, Boston National Historical Park, Boston (Charlestown), Massachusetts,* PAL Report 1787.01 (Feb. 2006) (Pawtucket, R.I.: PAL, 2006), TIC 457/D6356.

[572] Stephen P. Carlson, "Park Development Projects Advance," *The Broadside/Boston National Historical Park* (No. 1, 2005), p. 9, 12.

[573] Jonathan Mitchell, *Completion Report, Contract No. 1443C4500-040905, Rehabilitate Building 24, Charlestown Navy Yard, Boston National Historical Park* (Feb. 2008), TIC 457/D6392.

[574] Archetype Architecture, et al., *Master Lighting Plan & Guidelines, Charlestown Navy Yard, Boston National Historical Park, Charlestown, MA* (Feb. 3, 1997), TIC 457/D6275.

[575] Ruth Raphael, "Greening the Charlestown Navy Yard," *The Broadside/Boston National Historical Park* (No. 1, 2008), p. 7.

City Plans For Redevelopment Of The Navy Yard

The National Park Service occupied only about a quarter of the historic Navy Yard. The remainder had gone to the city of Boston under a series of transfers which created a complex set of circumstances governing its redevelopment. The success of this effort has been, at best, mixed. In her 1998 study of the redevelopment of former Navy bases, Dr. Catherine Hill wrote that "the Charlestown Navy Yard is a thriving mixed-use development which has created jobs, housing, taxes and public amenities." She went on, however, to state that "the Charlestown Navy Yard, which is often held up as a model of base conversion, was not successful in terms of the pace of development" because Yard's End was still undeveloped. The reasons for this mixed record are complex, including over-optimistic plans; complexities introduced by the ways in which the Boston Redevelopment Authority acquired the property; changing economic conditions; concerns of local residents, both in Charlestown and within the Navy Yard's new residential community; and the political forces driving the administration of a large and diverse city.[576] For the most part, discussions of those factors are beyond the scope of this document.

The BRA had begun planning for the potential reuse of the Charlestown Navy Yard well before the closure announcement. This planning had been predicated on the proposed relocation of shipyard activities to South Boston. In its November 1970 reuse study, it set forth the goal that "development of the shipyard should be directed towards meeting one or both of the city's most critical needs—Jobs and Housing."[577]

It is useful to briefly outline the evolution of the proposed reuses of the yard. The options considered are best expressed in a July 1974 report which outlined three schemes for reuse, all of which included the creation of a national park at the west end of the yard (see Figure 2-42). The following excerpts from that report summarize not only the proposals but the philosophy behind them:

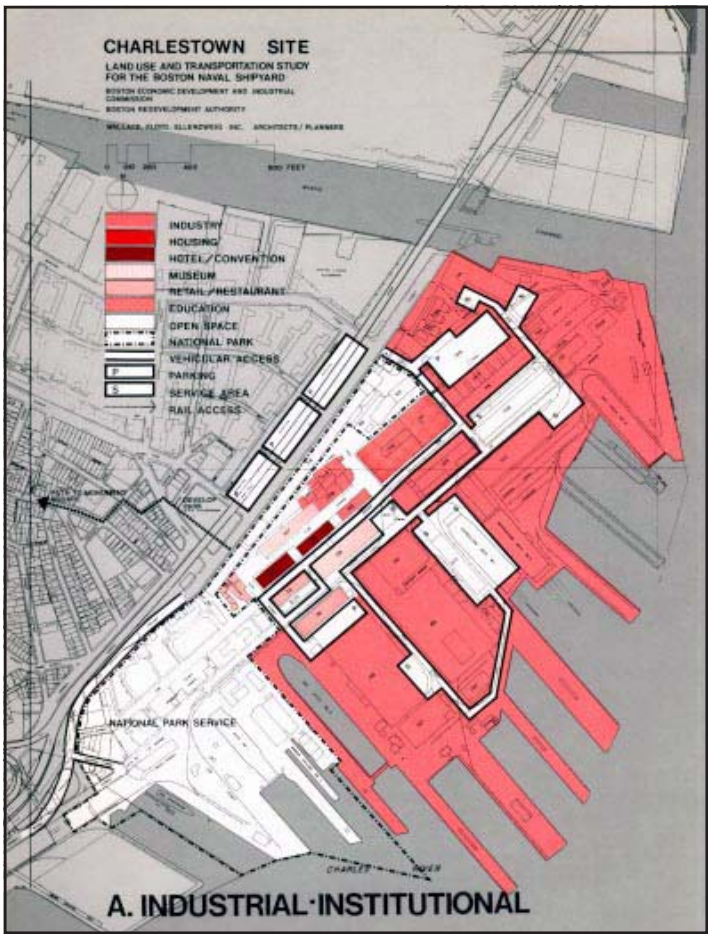
> Package A combines 50 acres of industrial reuse of the existing facilities with an institutional area which protects and reuses the historic buildings. In the historic area, extraneous structures and later additions are removed to return the buildings to their original form, creating an environment suitable for pedestrian activity. The institutional (museums, school) and retail/hotel uses and open space will provide services and areas of interest to the tourist visiting the National Park. The retail space and the 200-room hotel are in renovated historic buildings. … The industrial uses will have to be chosen to both insure compatibility with Park and institutional uses, while reusing existing structures and facilities to reduce the costs of occupying the site.[578]

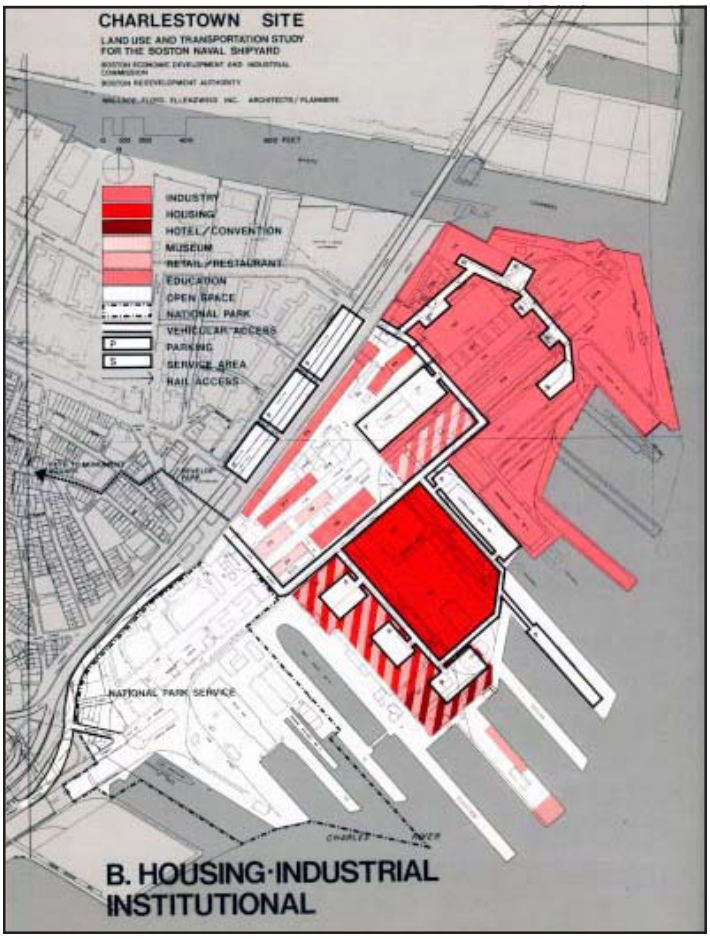
> [Package B] This alternative differs from Package A by combining a reduced amount of industrial land (28 acres) with an increased amount of retail and hotel space, and a similar treatment of the historic area. Five hundred housing units are also provided, with open space to serve the public and the residents. Dry dock [*sic*] 2 is flooded to bring the waterfront into the site. The uses

[576] Hill, *Political Economy of Military Base Redevelopment,* p. 261-293.

[577] Boston Redevelopment Authority, Planning Dept., *Charlestown Naval Shipyard Re-Use Study, Report I: Analysis of the Site and Framework for the Development of the Shipyard* (Nov. 1970), TIC 457/D6000, p. 25.

[578] Wallace, Floyd, Ellenzweig, Inc., et al., *Land Use and Transportation Study, Boston Naval Shipyard: Phase II Report* (July 19, 1974), TIC 457/D6006, p. II-5.





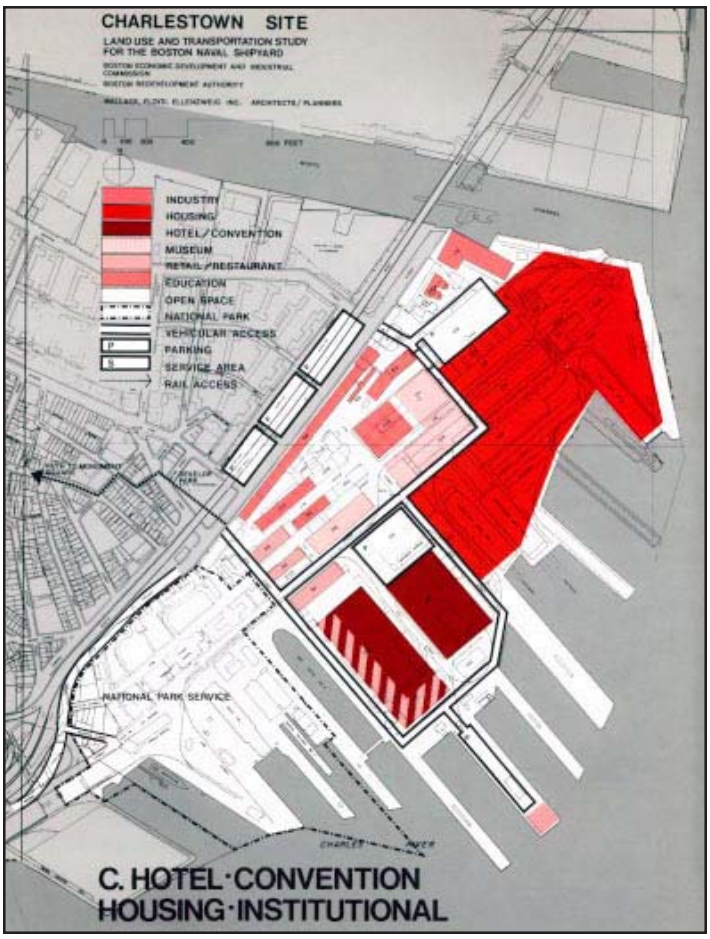


Figure 2-42 – Navy Yard Reuse Options, 1974

These drawings illustrate the three reuse options which the city of Boston was considering as of July 1974. All three schemes showed the west end of the yard as a national park and assumed construction of the Chelsea-Water Streets Connector. In all of the schemes, only Buildings 31, 33, 34, 36, 38, 39, 58, 60, 62, 75, 79, 105, 120, and 123 were considered as having historic value.

Scheme A would have seen the demolition of Buildings 77, 79, 96, 103, 106, 131, 143, 165, 165A, 178, 187, 191, 191A, 192, 193, 200, 203, 206, 207, 210, 211B, 215C, 217, 218A, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 266, and 271; Piers 9 and 10; and Shipways 1 and 2. Dry Dock 5 would be filled. There would be 260,000 sq. ft. of new construction. The Ropewalk Complex (Buildings 58, 60, and 62) would be added to the national park. Primary site access would be through Gate 5.

Scheme B would demolish Buildings 40, 42, 58 (partial), 77, 79, 96, 108, 131, 143, 165, 165A, 178, 191, 191A, 192, 193, 195, 196, 197, 200, 203, 206, 207, 210, 211B, 215C, 217, 218A, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 266, and 271; Piers 9 and 10; and Shipways 1 and 2. Dry Dock 2 would be flooded and Dry Dock 5 would be filled. There would be 1,006,000 sq. ft. of new construction. Primary site access would be through Gate 5 and a new gate on the alignment of 6th St.

Scheme C would demolish Buildings 40, 42 (partial), 58 (partial), 77, 79, 96, 104, 106, 108, 131, 143, 165, 165A, 178, 187, 191, 191A, 192, 193, 195, 196, 197, 200, 203, 206, 207, 210, 211B, 215C, 217, 218A, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, and 271; Piers 9 and 10; and Shipways 1 and 2. Dry Dock 2 would be flooded and Dry Dock 5 would be filled. There would be 2,185,000 sq. ft. of new construction. Primary site access would be through Gate 5 and a new gate on the alignment of 6th St.

NPS TIC 457/D6006

> of a college and museums in the historic area provide a continuation of activities related to the National Park, while the hotel and retail area provide other tourist facilities. The power plant is removed to create a large plaza in the historic area. … The industrial and warehousing uses are separated from the other land uses…. Careful consideration, however, should be given to the types of industries occupying the site to insure their compatibility with adjoining uses.[579]
>
> [Package C] The proposals in this package produce an intensively used site with extensive development of new uses. On the eastern end of the site there are 1000 units of high-income housing along the waterfront, and deeper in the site. Close to the National Park, but still on the waterfront is a 1000-room hotel and convention center. Specialty retail space and a marina serve the visitors to the site as well as the residents. As in Package B the dry dock is flooded permanently and the power plant is removed. Uses in the historic area continue to be a college, museums, and some retail space. An extensive open space system connects all the elements to each other and to the waterfront.[580]



The BRA constructed a large-scale model to illustrate its development concept for the Navy Yard, which it periodically updated as plans evolved. This Nov. 1975 version shows the proposed Kennedy Library in Building 36 facing a park extending to the waterfront. *NPS TIC 457/D6282A*

What became the Shipyard Park and New Development Area parcels had originally been envisioned by the City of Boston as being part of a shipbuilding initiative involving both Charlestown and South Boston. Had this proposal, discussed in more detail in Chapter 3, come to fruition, most of the structures in the New Development Area and the Shipyard Park parcel would have been retained for industrial use rather than demolished.[581] However, despite considerable effort, the proposed Boston Shipbuilding Corporation was unable to put together the necessary financing, and the city developed alternate plans for a more mixed commercial-residential use at Charlestown.[582]

In anticipation of the shipbuilding project, the Navy and the City of Boston began negotiations in the summer of 1974 intended to result in the issuance of an interim occupancy permit. This permit would have covered use of the area of the yard south of First Avenue and east of the national park by Boston Shipbuilding prior to the formal sale of the yard to the city.[583] Just as the final draft of this agreement was produced, however, the shipbuilding proposal collapsed, and the agreement was never put into place.

It was at this point that the BRA became the lead agency for the Charlestown Navy Yard and the heavy industrial reuse scheme was replaced by a mixed-use concept.[584] Starting in 1975, the BRA has produced a series of master plans outlining its vision for Navy Yard redevelopment.[585] (See Figures 2-43, 2-44).

A summary of BRA project goals at different points in time is useful. A brochure issued in 1976 listed the authority's plans for a ten-year, $100 million project: creation of a mixed-use development having over 80,000 square feet of retail/commercial space, some 430,000 square feet of institutional activities, about 60,000 square feet of office/loft incubator industry, a 700-1,000 person hotel/conference center, approximately 1,000 units of new housing, and up to 250,000 square feet of labor intensive light industry.[586] Ten years later, the BRA's goals included 1 million square feet of office space, over 100,000 square feet of retail space, and over 3,000 units of housing.[587]

In 1987 and 1988 the BRA began preparation of a new master plan, which incorporated developments to date and focused primarily on the eastern portion of the yard, now renamed Yard's End.[588]

[579] Ibid., p. II-9.

[580] Ibid., p. II-13.

[581] Boston, Mayor's Office of Commerce & Manpower, *Interim Reuse Plan for the Boston Naval Complex* (Mar. 19, 1974), TIC 457/D6352, p. III-1, 4-5.

[582] Hill, *Political Economy of Military Base Redevelopment*, p. 214.

[583] Gerald W. Bush to Jack L. Bowers, July 15, 1974; Arthur I. Mendolia to Assistant Secretary of the Navy (Installations & Logistics), "Boston Naval Shipyard," Aug. 2, 1974; Doris S. Glick to J.W. O'Connell, "Proposed P&M Agreement with City of Boston covering certain excess facilities at Former Boston Naval Shipyard located in Charlestown District of Boston," Sept. 19, 1974; Richard R. Kinnier to Bush, Sept. 24, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 18.

The negotiations with the city over the details of the arrangement were documented in a series of memorandums by Dante Cuozzo of the Boston Closure Group. See "First in a Series of Meetings with City of Boston Representatives on reuse of former Boston Naval Shipyard property at Charlestown," Sept. 23, 1974; "Third Meeting with City of Boston representatives on Reuse of Former Boston Naval Shipyard property," Sept. 23, 1974; "Fourth in a series of Meetings with City of Boston Representatives on re-use of former Boston Naval Shipyard property at Charlestown," Sept. 25, 1974; "Fifth Meeting with City of Boston Representatives on re-use of former Boston Naval Shipyard property at Charlestown," Sept. 26, 1974; "Sixth in a Series of Meetings with City of Boston Representatives on re-use of portion of Boston Naval Shipyard property at Charlestown," Sept. 27, 1974; "Seventh in a Series of Meetings with City of Boston Representatives on re-use of portion of former Boston Naval Shipyard property at Charlestown," Oct. 1, 1974; "Eighth in a Series of Meetings with City of Boston Representatives on re-use of portion of former Boston Naval Shipyard property at Charlestown," Oct. 4, 1974; "Ninth in a Series of Meetings with City of Boston Representatives on Service Support Contract on re-use of portion of Boston Naval Shipyard property at Charlestown," Oct. 9, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 18.

[584] Hill, *Political Economy of Military Base Redevelopment*, p. 218.

[585] Boston Redevelopment Authority, *Boston Naval Shipyard at Charlestown: Plan & Development Program* (Oct. 1975), TIC 457/D6074; Boston Redevelopment Authority, *Boston Naval Shipyard/Charlestown: Planning and Development Program* (Dec. 1975), TIC 457/D6074A.

[586] Boston Redevelopment Authority, *The Charlestown Navy Yard* ([Boston: Boston Redevelopment Authority, 1976]), TIC 457/D6293.

[587] Boston Redevelopment Authority, *The Navy Yard* (Boston: Boston Redevelopment Authority, 1986), TIC 457/D6293B.

[588] Boston Redevelopment Authority, *Charlestown Navy Yard: Framework for Discussion* (Draft; Apr. 1987), TIC 457/D6274; Boston Redevelopment Authority, *Charlestown Navy Yard Master Plan Executive Summary* (May 10, 1988), TIC 457/D6280.

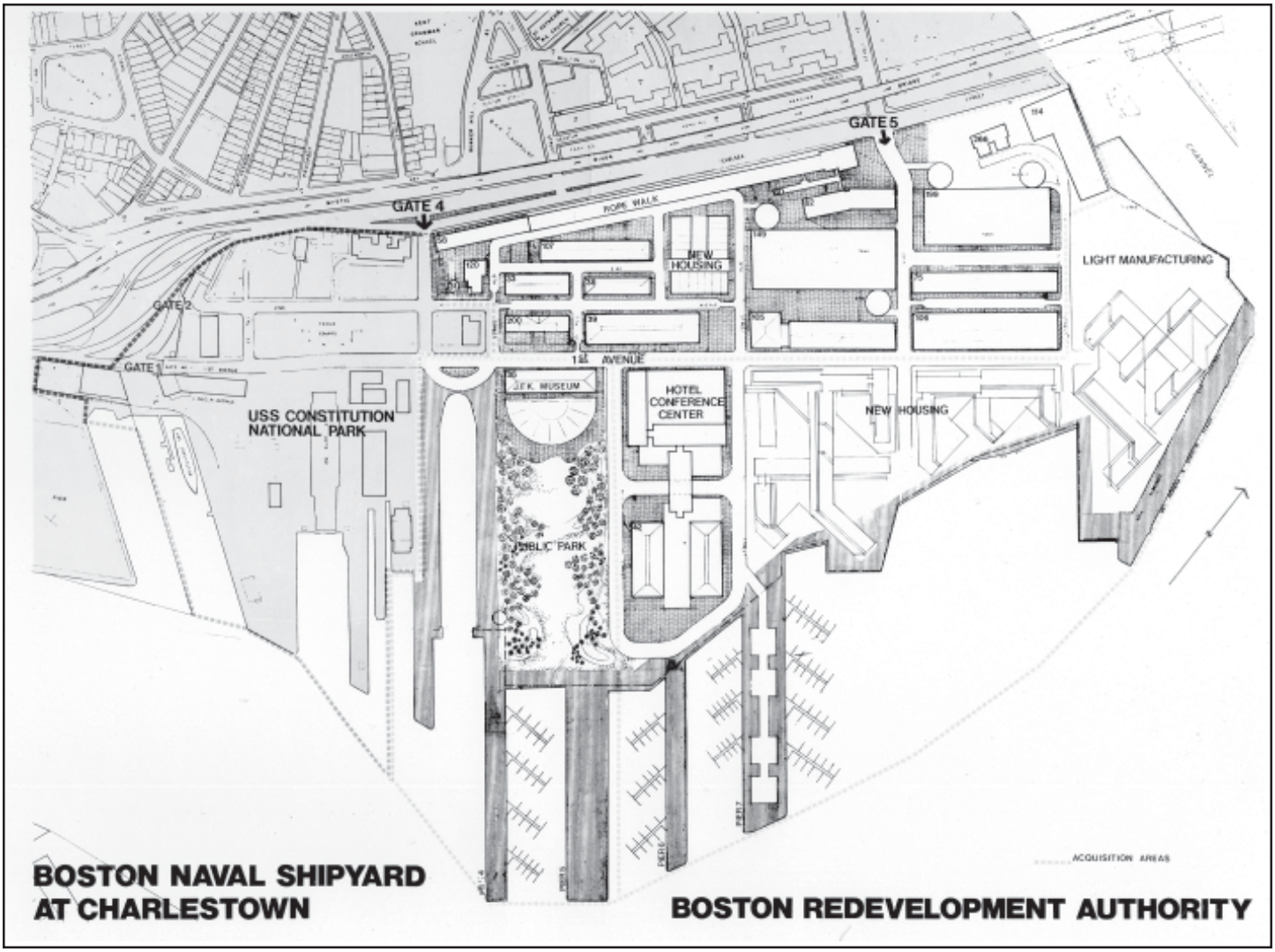


Figure 2-43 – BRA Master Plan, 1975

This plan shows an early version of the BRA's Master Plan for the Navy Yard. It shows the proposed Kennedy Library in Building 36. At this time, light manufacturing was the preferred reuse for the eastern end of the yard. *NPS TIC 457/D6284*

After two years of discussions with the Charlestown community and others, it released the draft plan in early 1990. The anchor of the plan was the New England Aquarium at Dry Dock 5. It called for construction of a medical research center totalling 1.1 million square feet, a 390-room hotel and conference center, and five acres of new public space; the opening of a new Gate 6; and the relocation of Building 75 next to the Aquarium and the construction of a 1,100-car parking garage on the site of Building 75.[589] Following public and agency review, the BRA adopted the final version of this plan in October 1990.[590] One of the major changes from the original reflected the opposition of the National Park Service to the relocation of Building 75. (See Figure 2-44) Due to a variety of factors, including, a protracted zoning review process as to allowable building heights and the decision of the Aquarium not to move to the Navy Yard, almost none of this plan has been realized as of early 2009.

BRA Redevelopment Of The Navy Yard

One of the key factors in the redevelopment of the Navy Yard was the decision by the Boston Redevelopment Authority to take advantage of recent amendments to the Federal Property and Administrative Services Act of 1949 which allowed state and local governments to acquire surplus federal property at no cost provided it was used for public purposes. These purposes included both public parks and historic preservation.[591] By so doing, it reduced the amount of property which it would have to purchase at market value, but it also meant that different approaches would be needed to accomplish redevelopment in the different parcels and that the federal government would retain a level of oversight over the project.

[589] Boston Redevelopment Authority, *Charlestown Navy Yard: Master Plan for the Yard's End* (Jan. 1990), TIC 457/D6290C; Boston Redevelopment Authority, *Charlestown Navy Yard: Master Plan for the Yard's End* (Mar. 1990), TIC 457/D6290A.

[590] Boston Redevelopment Authority, *Charlestown Navy Yard: Master Plan for the Yard's End* (Oct. 1990) [hereafter BRA, *1990 Master Plan*], TIC 457/D6290B.

[591] See Public Law 91-485, Oct. 22, 1970, 84 Stat. 1084 (parks) and Public Law 92-362, Aug. 4, 1972, 86 Stat. 503 (historic monuments). Both acts amended section 203(k) of the 1949 act which governed disposal of real property by the federal government. That law also prohibited the sale of conveyed property, gave the Secretary of the Interior oversight responsibility for the transferred lands, and provided for the repossession of the property by the federal government in case of default. The Secretary's authority with regard to Navy Yard parcels was delegated to the National Park Service Mid-Atlantic (now Northeast) Regional Director.



Figure 2-44 – BRA Master Plan, 1990

This plan shows the final version of the BRA's 1990 Master Plan for the Navy Yard. It shows the proposed New England Aquarium at Dry Dock 5, the Parcel 4 Hotel, and high-rise structures on the remaining Yard's End parcels. *NPS TIC 457/D6284*

The initial BRA project goals related to making the site attractive to private sector investors. Thus, its efforts were directed, as it stated in a January 1978 application for an Urban Development Action Grant, towards "site improvements, including the provision of new sewer and water lines and streets, the construction of a … public park, some selective demolition, [and] the marketing of leased space in the historic area and land for housing and a hotel in the New Development Area."[592]

Shortly after acquiring the property from the General Services Administration in 1978, the BRA issued the first of several demolition and site preparation contracts. These saw most buildings slated for removal in the Historic Monument Area (Buildings 77, 143, 187, 191, 191A, 192, 192A, 200, 207, 217) demolished, along with virtually all of the various additions and exterior accretions on the structures to remain.[593] The unique Muster House (Building 31) was restored under a historic preservation grant. The utilities in the BRA end of the yard were replaced or upgraded, and all of the streets were rebuilt to city standards.[594] In the process, the railroad tracks in the streets, specified for retention in the deed of transfer, disappeared. Thus, the redeveloped areas of the yard lost much of their industrial character.

Within the Historic Monument Area, the BRA entered into long-term ground leases with developers for individual buildings (see Table 2-3). The lease term was for either 65 or 80 years to allow the developer to properly recoup its investment.[595] As part of the leasing process, the NPS entered into agreements which specified that, unless the lessee was in default, the lease would continue to be valid should the property revert to the United States. These agreements were necessary for the developers to obtain financing.[596] Over the course of time, several leases changed hands, sometimes as a result of the financial default of the developer.[597]



The earliest BRA contracts for work in the Navy Yard covered demolition of structures not being retained, construction of utilities, and other site preparation work. This 1979 view looks east on First Ave. Note that Building 200 has been demolished and utility work has started. *Victor A. Jorrin, BNHP*

Between 1979 and 1989, nine buildings were renovated. Seven additional structures were completed during the next decade, and work started on Building 114, the last major building in the Historic Monument Area to undergo renovation. Also, Parcel 150 was developed as the Armed Services YMCA.[598] The development proposals gave names to various buildings (often in complete ignorance of history), but in everyday usage these names are generally ignored in favor of the traditional Navy building numbers, which, in an agreement between the various parties and the Postal Service, have become street numbers for most buildings.

Outside of the Ropewalk Complex and Forge Shop, the most difficult building to rehabilitate was Building 149, the General Storehouse. Although the Massachusetts College of Art in 1977 and 1978 had developed a plan for its use,[599] the BRA, under the urging of Mayor Kevin H. White, rejected the idea, feeling that private development would provide more tax revenues to the city.[600] In 1982 the BRA hired a real estate brokerage firm to help market the 725,000-square foot building, without success.[601] Two years later, the Congress Group began rehabilitation of the structure.[602] The success of the project was finally guaranteed in 1986 when the Raymond Group, which had acquired building from the Congress Group, convinced the Massachusetts General Hospital to relocate its research laboratories to the building.[603]

[592] Boston, Office of the Mayor, *Charlestown Naval Shipyard Urban Development Action Grant* (Jan. 1978) [hereafter *UDAG Application*], TIC 457/D6272, p. 20.

[593] Boston Redevelopment Authority, *Specifications: Demolition and Site Clearance Contract No. 2* (c. July 1978), TIC 457/D6907; Boston Redevelopment Authority, "Demolition and Site Preparation" [drawings], Mar. 1978, TIC 457/62842.

[594] Boston Redevelopment Authority, *Specifications: Site Preparation Contract No. 1, Phase I Redevelopment* (July 1980), TIC 457/D6903; Boston Redevelopment Authority, *Specifications: Sewer, Drain and Water Construction Contract No. 1* (1978), TIC 457/D6905; Boston Redevelopment Authority, "Site Preparation Contract No. 1" [drawings], June 1980, TIC 457/62837; Boston Redevelopment Authority, "Utility Construction Contract No. 2, Phase 1 Redevelopment" [drawings], Mar. 1980, TIC 457/62838.

[595] See Table 2-3 for citations to leases recorded in the Suffolk County Registry of Deeds. In some cases the full lease was submitted, while in others only a notice of the lease was filed. For a typical lease, see ground lease, Boston Redevelopment Authority to Incubator Associates, Dec. 27, 1984, Suffolk Deeds, bk. 11330, p. 132-82. For a typical notice of lease, see notice of lease, Boston Redevelopment Authority to Joinery Shop LP, Jan. 1, 1999, Suffolk Deeds, bk. 24227, p. 173-75.

For various legal and financial reasons, development in the Navy Yard was under the auspices of an entity—a limited liability corporation (LLC), limited partnership (LP), or real estate trust—created specifically for each project. Because of this practice, the developer originally designated by the BRA is usually not the one specifically named in the lease or conveyance deed, although the principals signing such agreements were the same.

[596] For a typical agreement, see nondisturbance and attornment agreement, United States of America, Boston Redevelopment Authority, and Basilica Associates I LP, Aug. 29, 1986, Suffolk Deeds, bk. 12940, p. 325-33.

[597] Transfers of leases are noted in the Chronology (Appendix A) of this report. Transfers were commonly reported in the press as foreclosure sales of the property rather than of the lease.

[598] McGinley Hart & Associates, *Historic Monument Area*, p. 1-3. See also Boston Redevelopment Authority, *The Navy Yard*, TIC 457/D6293B. This booklet provides a summary of each individual project completed or underway as of 1986, with information as to the identity of the individual developers and architects involved.

[599] Wallace, Floyd, Ellenzweig, Moore, *Master Plan & Feasibility Study, Massachusetts College of Art at the Boston Naval Shipyard, Charlestown, Part 2*, Mass. State Project E76-11 (draft; July 1968) (Boston: Mass. Executive Office of Administration & Finance, Bureau of Building Construction, 1968), TIC 457/D6114.

[600] Hill, *Political Economy of Military Base Redevelopment*, p. 227, 227 n. 22.

[601] Ibid., p. 230, 298.

[602] Anthony J. Yudis, "Charlestown Navy Yard Construction to Start," *Boston Globe*, Mar. 31, 1985.

[603] Charles A. Radin and Anthony J. Yudis, "Navy Yard Deal Involves Mass. General," *Boston Globe*, Dec. 3, 1986; Anthony J. Yudis, "Medicine By the Yard," *Boston Globe*, May 17, 1987.

Table 2-3
HISTORIC MONUMENT AREA LEASES[1]

Date	Lessee	Building	Years
12/27/1984	Incubator Associates	36	80
05/23/1985	Constitution Office Park Associates	149	80
05/23/1985	Navy Yard Parking Associates	199	80
10/31/1985	John Paul Jones LP	120	65
12/18/1985	Navy Yard Plaza Development–34	34	80
01/31/1986	Captain's Quarters	266	65
07/11/1986	Basilica Associates I	106	80
07/31/1986	Navy Yard Plaza Development–33	33	80
07/09/1987	Navy Yard Plaza Development–39	39	80
06/30/1988	Navy Yard Plaza Development–38	38	80
07/01/1988	Joinery Shop Associates	114	65
07/09/1988	Building 62 LP	62	65
09/23/1988	Boston Harbor Investment Group	79	65
05/18/1990	Building 96 Associates	96	65
08/26/1991	Parcel 150 Associates	150	65
12/01/1993	Building P Associates	P	65
04/27/1994	BioLease	75	80
04/04/1997	MJC Realty Trust	31	65

Source: Suffolk Deeds, bk. 11330, p. 132-82; bk. 11617, p. 59-81; bk. 11683, p. 1-22; bk. 12017, p. 55-58; bk. 12164, p. 181-83; bk. 12263, p. 184-86; bk. 12940, p. 138-320; bk. 12779, p. 177-79; bk. 13923, p. 71-80; bk. 14904, p. 268-69; bk. 24227, p. 173-75; bk. 14852, p. 4-204; bk. 15967, p. 8-22; bk. 16408, p. 17-25; bk. 17616, p. 311-16; bk. 18774, p. 192-95; bk. 19120, p. 317-20; bk. 21319, p. 24-26

[1] Excludes subsequent assignments and transfers.

Table 2-4
BRA LAND DISPOSITION, 1979-2005

Date	Grantee	Parcel	Note
05/24/1979	Building 42 Associates	Building 40, 42	1
03/24/1982	Shipyard Quarters Trust	Parcels 2C, 3D	
03/24/1982	Shipyard Marina Trust	Pier 6	
07/12/1984	Immobilaire New England	Shipways 1	2
02/07/1985	United States of America	Building 107	
04/12/1985	Immobilaire New England	Shipways 2	2
04/12/1985	Immobilaire New England	Pier 8	2
04/12/1985	Building 103 Associates	Building 103	
07/08/1986	Immobilaire New England	Pier 7	2
10/27/1987	Flagship Wharf Realty Trust	Building 197	
12/21/1987	Bricklayers & Laborers	Parcel 4A1	
05/16/1988	Flagship Wharf Realty Trust	Parcels V, W	
12/02/1991	Bricklayers & Carpenters	Building 104	3
05/26/2005	Navy Yard Four Associates	Parcels 4A2, C-D	

Source: Suffolk Deeds, bk. 9182, p. 225-37; bk. 9928, p. 520-29, 551-59; bk. 11062, p. 3-9; bk. 11511, p. 200-201; bk. 11573, p. 307-15; bk. 11574, p. 6-13; bk. 11577, p. 259-65; bk. 12652, p. 338-48; bk. 14192, p. 200-13; bk. 14358, p. 277-86; bk. 14774, p. 247-48; bk. 17171, p. 142-59; bk. 37165, p. 251-64

[1] Sold to Carlyle CQ Boston 03/25/2004 (bk. 34084, p. 282-84)

[2] Sold to Navy Yard Realty Trust 07/25/1986 (bk. 12703, p. 306-11)

[3] Sold to Building 104 LP 12/02/1991 (bk. 17171, p. 179-84)

Although the BRA obtained both the Historic Monument Area and Recreation Parcel at no cost, it was required to purchase the New Development Area. Since it had no authority to issue bonds, and decided not to utilize the Massachusetts Land Bank, a state agency specifically created to assist in the acquisition of former military property, it sought to interest developers in funding the purchase. "Although there has been widespread publicity concerning the availability of the Shipyard," BRA Director Robert F. Walsh informed the BRA's board in February 1977, "no major local developer has expressed any serious interest in the project."[604] The only expression of interest came from an Italian developer, Societe Immobiliare Generale. In his memorandum recommending that Immobiliare be designated as the developer for all of the New Development Area except Parcels 6 and 7, Walsh summarized its concept for the Navy Yard:

> The proposal calls for the development of a new residential community on a historic waterfront site … of approximately 1,100 units in a variety of housing types, including rental apartments and condominiums in rehabilitated older buildings, mid-rise apartment buildings and townhouses. Extensive recreational facilities are proposed, including tennis courts, swimming pools, deck tennis, and two marinas located in the Pier 6 and Pier 8-10 areas. The development is estimated to be completed in eight to ten years.[605]

The BRA accepted the proposal, and entered into negotiations with Immobiliare's new subsidiary, Immobiliare New England (INE), which resulted in a formal Land Disposition Agreement signed in December 1977. In return for development rights to all of the area except Parcel 7, INE agreed to finance the BRA's purchase of the property. The $1.7 million loan would be drawn down as each individual parcel was sold to the developer.[606]

Under the terms of the deal worked out between the BRA and Immobilaire, the agency sold parcels to the developer only as it became ready to undertake a specific project. Table 2-4 lists the various land disposition actions which have taken place to date. Included in this table is the return to federal ownership of Building 107 in the Historic Monument Area.

In the Buy Parcel, conversion of Building 42 into housing, Constitution Quarters, began in May 1979. The first tenants moved in three years later.[607] While numerous proposals for the construction of a hotel, major biomedical research facilities, and other institutions on what the BRA termed Yard's End appeared in its 1990 master plan, the only real development that has occurred to date has related to housing and marina uses, discussed below. This may change should the Spaulding Rehabilitation Hospital go forward with the plans it announced in August 2005 to build a replacement for its facility in Boston on Parcel 6.[608]

[604] Robert F. Walsh to Boston Redevelopment Authority, "Charlestown Urban Renewal Area Project No. Mass. R-55, Tentative Designation of Developer for Portion of Boston Naval Shipyard at Charlestown," Feb. 3, 1977, in *UDAG Application*, p. 45.

[605] Ibid., p. 46.

[606] Hill, *Political Economy of Military Base Redevelopment*, p. 222-23. The original land disposition agreement was not recorded in the Suffolk County Registry of Deeds.

[607] Hill, *Political Economy of Military Base Redevelopment*, p. 298; Margo Miller, "Building 42: Charlestown Navy Yard's Lease on Residential Life," *Boston Globe*, Oct. 3, 1986.

[608] Press release, Boston Redevelopment Authority, "Mayor, Spaulding Announce New Home for Rehab Hospital," Aug. 9, 2005 [http://www.bostonredevelopmentauthority.org/press/PressDisplay.asp?pressID=278], accessed

The first phase of Shipyard Park saw the demolition of Building 195 and its replacement with a landscaped area with a central fountain/water feature. Completed in 1980 but not officially opened until June 1983, it provided a significant green space for residents of Charlestown.[609] A later phase of the project, completed in 1988, saw a wooden boardwalk constructed around the permanently-flooded Dry Dock 2.[610] In the early 1990s, a portion of Shipyard Park was set aside for the erection of a Massachusetts Korean War Memorial, which was dedicated on July 27, 1993, the 40th anniversay of the Armistice ending the conflict.[611]

In October 1981 the BRA awarded a contract for the construction of Town Pier, a public landing facility on the west side of Pier 4; 20 marina slips were provided on the east side.[612] In April 1987 scheduled ferry service began from the landing, linking the Navy Yard with downtown Boston. Originally intended as public docking space, the marina slips have come to be part of the Courageous Sailing Center.

Like Pier 2 in the national park, wooden Pier 3 was in a deteriorated condition when the Navy Yard closed. In the late 1980s the BRA removed the outer portion of the pier; plans to reconstruct it and extend it to the harbor line, proposed as Phase IV of Shipyard Park, were never funded. Instead, in late 2007 and early 2008 it received final permits for the limited reconstruction of Pier 3 under a state transportation grant.[613] As discussed above, one element of that project involved the relocation of the ferry service from Pier 4 to Pier 3.

A part of the concept for the New Development Area was the creation of marinas in the area between Piers 6 and 10. Shipyard Quarters Marina consisted of 150 slips on either side of Pier 6, completed in the spring of 1982, and 187 slips around a shortened Pier 8, completed in the summer of 1985.[614] In March 2006 the state granted a license for a 47-slip expansion of the marina into the area between Pier 8 and Pier 10.[615] Construction of this facility has not begun as of late 2008.







Of the numerous developers associated with the Navy Yard, three stand out as being of principal importance. As director of the Boston Redevelopment Authority from 1971 to 1976, Robert T. Kenney (above) was responsible for the initial BRA plans for the yard. As the head of Kenney Development, he has been involved in a number of projects in the Historic Monument Area, notably Navy Yard Plaza (Buildings 33, 34, 38, 39). Neil St. John "Ted" Raymond (above right) acquired Immobiliare in the mid-1980s. Following Immobiliare's bankruptcy in the 1990s, its interests in the yard were transferred to LDA Acquisition, headed by New York lawyer and developer Martin Oliner (right).

Mass. Convention Center Authority (top); Center for Urban Development Studies (top right); Conference of Presidents.org (right)

A water shuttle dock was built in the vicinity of the demolished Pier 10 as part of the HarborView (Parcel 4) project in 2007. In early 2008, after a protracted review process, a license was finally granted by the state for the construction of a HarborWalk extension and new shuttle landing at Building 114 in the northeast corner of the yard.[616]

A large variety of commercial tenants have occupied space within rehabilitated and new structures in the Navy Yard. Many were small operations such as real estate brokers, insurance agents, attorneys, and other professionals. One day care center for children opened in Building 36 in 1989, and a second has since occupied space in Building 266.[617] As will be discussed elsewhere, there have also been a limited number of retail and food service tenants.

Mar. 10, 2009. The BRA had first proposed moving the hospital to the Navy Yard in 1992. See Matt Carroll, "New Site for Spaulding Proposed," *Boston Globe*, Sept. 22, 1992. As of early 2009, while planning is continuing, the future of the project remains uncertain. See Mark Hollmer, "Spaulding May Scrap Plans for Charlestown Hospital," *Boston Business Journal*, Feb. 15, 2008; Dan Murphy, "Spaulding Still Planning Move to Navy Yard," *Charlestown Patriot-Bridge*, Jan. 29, 2008.

[609] Anthony J. Yudis, "Rehab Pioneers At Navy Yard," *Boston Globe*, June 29, 1980; Hill, *Political Economy of Military Base Redevelopment*, p. 224, 298; Boston Redevelopment Authority, *Harborpark 1986 Update: The Charlestown Navy Yard* (1986), TIC 457/D6354, p. E9.

[610] Anthony J. Yudis, "Charlestown Navy Yard Has Its Day," *Boston Globe*, Sept. 14, 1986. This project saw the replacement of the chainlink fence along the west side of 5th Street between First and Second Avenues with a steel picket fence. See memorandum, Regional Director, North Atlantic Region, to Superintendent, Boston National Historical Park, "Section 106 Compliance, Shipyard Park, Boston NHP," Oct. 2, 1986, with accompanying materials, BOST 86-009, Section 106 Case Files, Division of Cultural Resources, BNHP. Moving of the fence on Baxter Rd. to locations between the buildings lining its west side rather than along the actual NPS boundary was deleted for cost reasons, finally being done by the park in 1994.

[611] David Arnold, "Korean War Vets Unveil Memorial in Charlestown Park," *Boston Globe*, July 28, 1993.

[612] Anthony J. Yudis, "$10m Housing Project to Begin in Madison Park," *Boston Globe*, Oct. 2, 1981; Boston Redevelopment Authority, *Harborpark 1986 Update*, p. E9.

[613] Boston Conservation Commission, order of conditions, Boston Redevelopment Authority, Nov. 19, 2007, Suffolk Deeds, bk. 42821, p. 76-88; Boston Redevelopment Authority, Minutes, Board of Directors' Meeting, May 8, 2007, Jan. 31, 2008.

[614] Hill, *Political Economy of Military Base Redevelopment*, p. 224; Boston Redevelopment Authority, *Harborpark 1986 Update*, p. M25, M27.

[615] Mass. Dept. of Environmental Protection, License No. 10873, LDA Pier 9, Mar. 13, 2006, Suffolk Deeds, bk. 39285, p. 317-25.

[616] Mass. Dept. of Environmental Protection, License No. 11993, Joinery Shop Associates, Feb. 7, 2008, Suffolk Deeds, bk. 43147, p. 69-75.

[617] Hill, *Political Economy of Military Base Redevelopment*, p. 300; BRA, *1990 Master Plan*, p. 15. The original day care center in Building 36 has been replaced by Children's Quarters, operated by Partners HealthCare. See Partners HealthCare, *Children's Quarters at the MGH Institute of Health Professions* [web site] [http://www.partners.org/childcare/Quarters_IHP/About.html], accessed Mar. 11, 2009.

Shipyard Park

A KEY ELEMENT in the Boston Redevelopment Authority's plans for Navy Yard development was the creation of Shipyard Park on the footprint of Building 195. The work was one of the first projects it undertook, and was initially completed in 1980, although not officially opened until June 1983. An additional phase of work, involving the landscaping of the area around Dry Dock 2, was completed five years later. In July 1993 the Massachusetts Korean War Veterans Memorial was dedicated within Shipyard Park.



Shipyard Park was the first BRA project in the Navy Yard. This Mar. 1978 view shows the demolition of Building 195. *Victor A. Jorrin, BNHP*



The concrete truck in the center of this Nov. 2, 1979, image indicates that the construction of the Shipyard Park fountain/performance area is underway. *Ed McManus, BNHP*



This wintertime view of Shipyard Park was taken in Feb. 1988. Note that the railings around Dry Dock 2 are still in their historic safety yellow color. *Jack Glassman/BRA*



The fountain and wading pool is a popular location on hot summer days, as this Aug. 2, 2005, image attests. *The Boston Harbor Associates*



The third phase of the Shipyard Park project, completed in 1988, saw the introduction of brick paving and a boardwalk around Dry Dock 2. The plaza at the head of the dock displays large anchors. *Charles Mayer, Brown, Richardson & Rowe*



The dedication ceremony for the Massachusetts Korean War Veterans Memorial in Shipyard Park took place on July 27, 1993, the 40th anniversary of the Korean War Armistice. Retired Army Gen. William C. Westmoreland and Marine Corps Lt. Gen. Stephen G. Olmstead (center) join with officials of the Korean War Veterans of Massachusetts in front of the nine-foot statue which is the centerpiece of the memorial. *Bill Foley, BNHP*

Redevelopment Of The Navy Yard: A Gallery

STARTING IN 1978 the area of the Navy Yard transferred to the City of Boston underwent major development which converted it from a military-industrial facility into a multi-use community of offices, research laboratories, and residences. Originally marketed by the Boston Redevelopment Authority as Boston Naval Shipyard/Charlestown, the more familiar Charlestown Navy Yard is now in general use. This gallery presents images of redevelopment work in progress as well as some of the new facilities which have been built in the yard.



As part of its site preparation work, the BRA in 1978 issued a contract for the demolition of structures which were not specified for retention in the Historic Monument Area preservation guidelines. This view shows the work on demolishing the World War II addition to the Ropewalk nearing completion. The wooden addition to Building 120 at right will soon fall victim to the wrecker's ball as well. *Blaise Davi, BNHP*



Demolition work also occurred in other parcels as well. This Feb. 1980 view shows the destruction of Building 196 in the New Development Area. Note the red, white, and blue sign signifying that the project was funded under a federal grant. The foundation of Building 196 was specified for retention as the base for the landscape in front of Building 42. *Victor A. Jorrin, BNHP*





The work also included the replacement of underground utilities and the reconstruction of the yard's streets to City of Boston standards. The view at left shows utility construction on Third Ave., while that above shows the finished roadway. The on-street parking seen on the left would later be banned due to concerns by the Boston Fire Department about parked vehicles impeding its apparatus making the turn from 6th Street onto Third Ave. *Victor A. Jorrin, BNHP (left); BNHP (above)*



The first residential complex to be developed in the Navy Yard was Constitution Quarters. This view taken around the time of its completion in 1982 shows the landscaping in the areas where the infill between the original Foundry and Machine Shops was demolished. *BNHP*

Redevelopment Of The Navy Yard: A Gallery



Rehabilitation of most buildings in the Historic Monument Area occurred in the mid-1980s. This Apr. 14, 1986, view shows work on the roof and porches of Building 120. *Jack Glassman/BRA*



In this July 1986 view, work is well underway on the conversion of Building 266 (Quarters L-M-N-O) into the Captains Quarters office complex. *Jack Glassman/BRA*



The largest rehabilitation project in the Historic Monument Area involved Building 149. This Apr. 1986 view shows the west front of what was then called the Constitution Office Park by the developer. Like many Navy Yard buildings, the developer's names are generally ignored, the building being known either as MGH (after its principal occupant) or Building 149. *Jack Glassman/BRA*



The first new construction in the Historic Monument Area involved the addition of two wings to Building 34 which replicated part of Alexander Parris' original design for the Storehouse. This progress photo dates to Aug. 1986. *Jack Glassman/BRA*

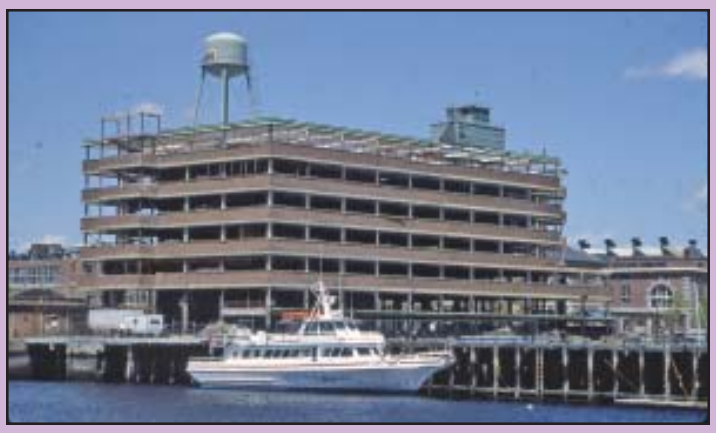


Only one entirely-new building has been erected in the Historic Monument Area as of 2008. This Feb. 1992 view shows the Armed Services YMCA under construction on Parcel 150. *NPS Northeast Regional Office*



The Shipyard Quarters Marina was developed by Immobiliare in an effort to attract interest in its proposed upscale condominium projects in the Navy Yard. This view shows the slips on the east side of Pier 6 around the time of its completion in mid-1982. *Victor A. Jorrin, BNHP*

Redevelopment Of The Navy Yard: A Gallery





Of the retained structures in the Navy Yard, none has been more altered than Building 197. In the view at left, taken in June 1986, the developer has begun work on what was then called Independence Quarters by stripping the structure down to its frame and brick walls. Three years later, in Oct. 1989, the original structure is hidden by additions allowed in exchange for commitments by the developer to build affordable housing elsewhere in the yard. As part of the "up-scaling" of the project, its name was changed to Flagship Wharf.

Jack Glassman/BRA (left); Stephen P. Carlson, Carlson Collection (right)



The Navy Yard Rowhouses were developed to provide affordable housing in the Navy Yard. They were a result of the deal between Immobiliare and the BRA which allowed the developer to expand the size of the Flagship Wharf luxury condominium project in return for giving up its rights to Building 104 and the parcel on which the Rowhouses were built.

NPS TIC 457/D6284



The Constellation Wharf condominums on Pier 7, seen here nearing completion in Feb. 1987, provided only minimal public access to the waterfront. Changes to the Massachusetts waterfront access laws have since led to requirements that private developments on piers be set back from the edges. *Jack Glassman/BRA*



The yard's Shipways were retained as the base for the Shipways Place condominium project. The outer portion of Shipways 2 is the only evidence of this key feature of the Navy Yard visible in this 1992 aerial view. The market-rate complex is surrounded by the yard's affordable housing, Building 103 along 9th St. at left, Building 104 north of Shipways II at center, and the Rowhouses on 13th St. at right. *Alex McLean, NPS TIC 457/D6284*



One of the most controversial developments in the yard was Harborview, built on Parcel 4 next to the Rowhouses. This early 2007 view shows the nearly-completed facility. *Boston Condo Guy*





The Boston Redevelopment Authority envisioned Second Ave. as a pedestrian spine through the yard. While the street was rehabilitated as such (above left, looking east from 7th St.), its concept of a "cobblestone retail mall … with much the feeling of the Faneuil Hall Marketplace" (artist's rendering above right) has never come close to reality since virtually none of the ground floor retail activity BRA planners envisioned has occurred.

Jane Carolan, BNHP (left); NPS TIC 457/D6293B (right)

Two large organizations, however, have dominated commercial space within the Navy Yard. The first of these to arrive was the Massachusetts Water Resources Authority (MWRA), which had been set up to manage the former Metropolitan District Commission (MDC) water system in Greater Boston and to oversee the development of sewage treatment facilities to further the goal of cleaning up Boston Harbor waters. Starting in the winter of 1985, it has occupied space in Buildings 34, 36, and 39, although in 2001 MWRA relinquished its original space in Building 36.[618]

That building was taken over by the yard's other major tenant, Massachusetts General Hospital (MGH) and its corporate parent, Partners HealthCare System, as the location for its educational arm, the MGH Institute of Health Professions.[619] This facility, since expanded into space in Buildings 34 and 39,[620] joined a growing number of yard buildings occupied by Partners and MGH since the hospital's Biomedical Research Center first moved into Building 149 in 1987.[621]

The hospital's satisfaction with the Navy Yard location led it in 1989 to exercise its option to purchase the lease of Building 149 from the original developers. This was done through the Massachusetts Industrial Finance Agency (MIFA), which issued revenue bonds to finance the acquisition and development of the space.[622] This acquisition, which became final in 1995, also included the Building 199 parking garage.[623] Over the next few years, MGH and its affiliates would gradually expand operations to several other buildings, including Building 62, taken over from the original developer in 1992;[624] Building 114, acquired prior to completion in 1999;[625] and Building 75, taken over from Biolease (a subsidiary of developer Neil St. John "Ted" Raymond) in 2006.[626] From 1996 to 2006 Partners also leased Building 38 to house its corporate finance offices.[627]

To date, there has been little new construction in the Historic Monument Area. Two wings were added to Building 34 on the site of Building 200 in keeping with Alexander Parris' original design for the structure.[628] The only new building to be erected as of 2008 has been the Armed Services YMCA, which arose on Parcel 150 between Second and Third Avenues. This structure replaced a facility that had been in City Square that fell victim to the CANA project and

[618] Notice of lease, Incubator Associates to Massachusetts Water Resources Authority [MWRA], Sept. 20, 1985, Suffolk Deeds, bk. 12046, p. 53-54; notice of sublease, Navy Yard Plaza Development Associates-39 to MWRA, Jan. 15, 1990, Suffolk Deeds, bk. 16079, p. 133-35, 142-44; notice of sublease, Incubator Associates to MWRA, Jan. 10, 1990, Suffolk Deeds, bk. 16079, p. 136-38; notice of sublease, Navy Yard Plaza Development Associates-34 to MWRA, Jan. 15, 1990, Suffolk Deeds, bk. 16079, p. 139-41, 145-47. The MWRA had originally intended to be in the yard only for a short time, but political pressures led its board in January 1990 to sign long-term leases for space in the yard. See Steve Marantz, "MWRA Stays Put, Signs a Lease for Navy Yard," *Boston Globe*, Jan. 4, 1990.

[619] Assignment of lease, Incubator Associates to MGH Institute of Health Professions, Sept. 15, 2000, Suffolk Deeds, bk. 25363, p. 185-91, 205-12; MGH Institute of Health Professions, *About Us* [web page] [http://www.mghihp.edu/aboutus.html], accessed Mar. 11, 2009.

[620] Notice of sublease, Navy Yard Development Associates-39 to MGH Institute of Health Professions, May 22, 2008, Suffolk Deeds, bk. 43677, p. 216-18; notice of sublease, Navy Yard Development Associates-34 to MGH Institute of Health Professions, May 22, 2008, Suffolk Deeds, bk. 43677, p. 237-40.

[621] Radin and Yudis, "Navy Yard Deal Involves Mass. General"; Yudis, "Medicine By the Yard"; notice of lease, Navy Yard-Biotechnical Research Associates to General Hospital Corp., Dec. 30, 1986, Suffolk Deeds, bk. 13305, p. 143-44.

[622] John King, "MGH Seeks More Space in Navy Yard," *Boston Globe*, Apr. 1, 1989; John King, "Mass. General Expands Charlestown Research Site," *Boston Globe*, July 5, 1989; assignment of lease, NY-Biotechnical Research Associates to Massachusetts Industrial Finance Agency [MIFA], Aug. 8, 1989, Suffolk Deeds, bk. 15740, p. 34-38; notice of leases, MIFA to General Hospital Corp., MGH Professional Services Corp., MGH Health Services Corp., Aug. 8, 1989, Suffolk Deeds, bk. 15741, p. 56-76; assignment of lease, MIFA to Massachusetts Biomedical Research Corp., Jan. 26, 1995, Suffolk Deeds, bk. 19573, p. 209-10.

[623] Assignment of lease, Navy Yard Parking Associates to MIFA, Aug. 8, 1989, Suffolk Deeds, bk. 15740, p. 39; assignment of lease, MIFA to Massachusetts Biomedical Research Corp., Jan. 26, 1995, Suffolk Deeds, bk. 19573, p. 207-8.

[624] Assignment of lease, Building 62 Corp. to MGH Professional Services Corp., July 21, 1992, Suffolk Deeds, bk. 17606, p. 133-36.

[625] Assignment of lease, Joinery Shop Associates to Massachusetts Biomedical Research Corp., Aug. 31, 1999, Suffolk Deeds, bk. 24227, p. 178-80.

[626] Assignment of lease, Biolease to Massachusetts Biomedical Research Corp., Aug. 24, 2006, Suffolk Deeds, bk. 40259, p. 77-81.

[627] Notice of sublease, Building 38 Ventures to Partners HealthCare System, May 16, 1996, Suffolk Deeds, bk. 20572, p. 336-41.

[628] The Architectural Team, *Building 34* [web page] [http://www. architecturalteam.com/#/portfolio/PropertyDetail/building34/], accessed Mar. 12, 2009.



This June 15, 1993, aerial photograph shows the undeveloped state of the eastern end of the Navy Yard after 15 years of city ownership. The abandoned structures on Parcels 5, 6, and 7 would be demolished in the mid-1990s by the U.S. Army Corps of Engineers and the BRA, along with the remnants of wooden Piers 9 and 10. *William E. Johnston*

opened in the fall of 1993.[629] As of early 2009, the development of Parcel 39A across Second Avenue from the YMCA remained on hold, the BRA repeatedly extending the developer's designation.[630]

The BRA's concept of retail activity on the ground floor of buildings along First and Second Avenues has never met its original expectations. The most successful retail operation has been a convenience store, Store 24, located in Building 34. Outside of a cleaners in Flagship Wharf and several bank automated teller machines, the only other retail operations in the Historic Monument Area have been food service related, discussed elsewhere.

Four structures in the Historic Monument Area remain vacant in 2009, three of which are also included within the boundaries of Boston National Historical Park. All four presented extreme challenges to potential developers, and two of them contained high levels of environmental contamination.

The first structure is Building 108, the Central Power Plant. The BRA's initial site preparation contracts saw the removal of many of the structure's appendages, as well as its smokestacks. The original design guidelines permitted three options for the structure: (1) maximum retention; (2) new construction "within the volume of the original massing, with a modest edition allowed in the rear"; or (3) partial retention (existing mass along Third Ave.) with a rear addition approximating the massing of the building prior to later additions.[631]

While the BRA had awarded development rights to the building in March 1986 under the name Anchor Building, no actual work on the property had begun by 1990, when the BRA's revision to the yard master plan opted for the new construction rather than the retention option.[632] Demolition of the structure became an element of the U.S. Army Corps of Engineers environmental cleanup efforts discussed below, but the project ran out of money, and the building remains standing.

In the early 2000s, with the remediation project on hold, the BRA and the National Park Service began to look at the guidelines for the building as well as those for the Ropewalk Complex and Chain Forge. The NPS successfully urged that the BRA revisit the partial retention option to preserve the historic streetscape on Third Avenue; in return, it was willing to allow a larger build-out of the addition at the rear.[633] No final decisions on the revised guidelines

[629] Jerry Ackerman, "BRA OK's 'Y' in Navy Yard," *Boston Globe*, May 23, 1991; Gloria Negri, "$11m Navy Yard Y to House People in Transition," *Boston Globe*, Aug. 19, 1991; Boston Redevelopment Authority, certificate of completion, Oct. 16, 1993, Suffolk Deeds, bk. 18738, p. 76-77. The Armed Services YMCA had initially approached the National Park Service with a plan to adaptively reuse Hoosac Stores No. 1 & 2 at the west end of the Navy Yard. See J.W. French Associates, *Armed Services YMCA of Boston: A Feasibility Study* (July 1989). The park, however, decided that it preferred other potential uses of that site.

[630] Raina, "Parcel 39A Proposal Meets With Opposition from Neighborhood Council," *Charlestown Patriot-Bridge*, June 26, 2008. For the extensions, see, e.g., Boston Redevelopment Authority, Minutes, Board of Directors' Meeting, Apr. 23, 2002, Oct. 24, 2002, May 1, 2003.

[631] Boston Redevelopment Authority, *Building P108, Boston Naval Shipyard at Charlestown* (May 20, 1977), TIC 457/D6026.

[632] "Building No. 108," in Boston Redevelopment Authority, *Biennial & Status Report, Charlestown Naval Shipyard, Boston, Massachusetts* (1990) [hereafter BRA, *1990 Status Report*], TIC 457/D6370.

[633] See "Summary of Proposed Treatment, Building #108, Charlestown Navy Yard," Mar. 21, 2003, enclosed in Gribaudo to David Carlson and Steve Carlson, "Final Update of the Proposed Amendments to the Historic Design Guidelines for the Charlestown Navy Yard," June 25, 2004, BOST 02-009, Section 106 Case Files, Division of Cultural Resources, BNHP.



Architects Childs Bertman Tseckares & Casendino prepared this sketch of the proposed Anchor Building for the designated developer of Building 108 in the mid-1980s. Because of hazardous materials and structural issues, however, the development never went forward and the BRA determined instead to demolish the building in favor of new construction on the site.
NPS TIC 457/D6354

were made, however, and demolition remains the current plan for the site.[634]

While one study of the yard's redevelopment has attributed "the failure to re-use the Ropewalk Complex and the Chain Forge" to "the result of a lack of cooperation" between the BRA and the NPS,[635] the record does not support this conclusion. Rather, as another student of the yard's redevelopment has pointed out, some "specialised [*sic*] historic buildings cannot be converted to commercially viable uses" and "should be included in a publicly funded heritage preservation program."[636] The problem has been that neither the BRA nor the NPS have had the financial resources to successfully address the restoration of the structures and their use as historic sites. Thus, both agencies have looked to private developers to finance rehabilitation work and museum development.

As BRA Director Robert T. Kenney wrote to NPS Director Gary E. Everhart in June 1976, these unique structures "cannot both retain their historic integrity and be adaptively reused."[637] However, because the authority did not want to jeopardize the transfer while working out either reuse or identifying a means of funding their preservation, it accepted them with only a generalized preservation treatment rather than specific design guidelines. It had been put in this situation because, despite its own reports citing the structures as among the most historic in the yard, the NPS had not included them within the original park boundary.[638]

While the BRA committed itself to working towards turning these structures over to the National Park Service in the 1979 Section 106 agreement on the Gate 4/Fifth Street project,[639] it took no steps to do so. For its part, the NPS did not press the BRA for title to the structures, recognizing that it did not have the resources required to deal with them.

In the mid-1980s the NPS and the BRA developed guidelines for the Chain Forge.[640] Although these were never formally adopted, they served as the basis for the BRA to include the structure in a request for proposals for redevelopment of several structures in the Historic Monument Area.[641] Several proposals were received, and the BRA tentatively designated the Immobiliare-Congress Group as the developer for the structure.[642]

Concern by the NPS Mid-Atlantic Regional Office over the deteriorating condition of the buildings led the BRA to undertake stablization work on both the Ropewalk and the Chain Forge in the early 1990s.[643] At the same time, all of the interested parties within the preservation community began a series of meetings which led to the drafting of preservation guidelines for the structures in 1992. These guidelines reserved significant space within the Ropewalk as well as the main shop area in the Chain Forge for exhibit purposes. The remainder of the space was available for redevelopment. These guidelines were not formally approved until October 2002.[644]

In the meantime, the Chain Forge was identified as containing significant amounts of hazardous wastes. In the summer of 2001, the U.S. Army Corps of Engineers completed cleaning and repainting the forge machinery and equipment that remains in place in the main portion of the structure.[645] Funding for the cleanup of the structure itself was not forthcoming, however, and that remediation remains to be done.

In May 2002 a nine-alarm arson fire caused severe damage to the Ropewalk.[646] The BRA immediately undertook an assessment of

[634] The demolition option raises questions as to the connector between Buildings 107 and 108. Managed by the Navy as a part of Building 108, it is structurally a part of 107 but was not included in the conveyance of Building 107 to the National Park Service.

[635] Hill, *Political Economy of Military Base Redevelopment*, p. 293.

[636] David L.A. Gordon, "Implementing Urban Waterfront Redevelopment in an Historic Context: A Case Study of the Boston Naval Shipyard," *Ocean & Coastal Management*, vol. 42 (1999), p. 928.

[637] Kenney to Everhart, June 4, 1976, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP. See also *Application for Transfer … Historic Monument Purposes*, p. 33: "Ideally, the Ropewalk complex should be added to the National Historic Site for management and interpretation by the National Park Service."

[638] For NPS assessments of significance, see, e.g., *New Area Master Plan*, p. 51. While there is no specific documentation as to why the final legislative boundary was drawn, it is apparent that it was influenced by both the 1971 BRA proposals and a desire to maximize the area of the Navy Yard available for transfer to the city for reuse.

[639] Memorandum of Agreement, July 1979, enclosed in Tannenbaum to Kelly, July 19, 1979, BOST 79-010, Section 106 Case Files, Division of Cultural Resources, BNHP.

[640] "Forge Shop, Guidelines for Rehabilitation," Mar. 3, 1986, enclosed in Burchill to Coyle, Mar. 4, 1986; "Joint BRA/NPS Design Requirements for Building 105, Chain Forge," July 11, 1986, enclosed in Burchill to Coyle, July 11, 1986, BOST 96-001, Section 106 Case Files, Division of Cultural Resources, BNHP.

[641] "Developers Kit, Building 105," in Boston Redevelopment Authority, *Design/Development Guidelines, Buildings 62, 96, 105 and 108* (Aug. 1985), TIC 457/D6189.

[642] Boston Redevelopment Authority, *Buildings 62, 96, 105, 108: Summary of Proposals* (Nov. 1985), TIC 457/D6174; Boston Redevelopment Authority, *Harborpark 1986 Update*, p. M10.

[643] Stevenson to Coyle, July 25, 1990, 1990 BRA Master Plan File, Division of Cultural Resources, BNHP; McGinley Hart & Associates, *Stabilization Report: Ropewalk–Building 58, Tar House–Building 60, Chain Forge–Building 105, Charlestown Navy Yard* (draft; May 1991), TIC 457/D6270.

[644] Paul Reavis to Stevenson, "Charlestown Navy Yard, Guidelines for Buildings 58, 60, and 105," Oct. 4, 1991; Everett to Metz, Aug. 29, 2002; McCann to Gribaudo, Oct. 8, 2002, BOST 92-017, Section 106 Case Files, Division of Cultural Resources, BNHP; David Carlson to McCann, June 26, 2000, with enclosures, June 26, 2000, Boston Naval Shipyard, Historic Surplus Property Program Files, Northeast Regional Office, NPS, Philadelphia, Pa. The delay in approval was due to other issues between the BRA and NPS.

[645] Stephen P. Carlson, "Chain Forge Shop Equipment Cleaned," *The Broadside/Boston National Historical Park* (No. 2 & 3, 2001), p. 13.

[646] Peter DeMarco, "Charlestown Rope Factory Hit By Fire," *Boston Globe*, May 5, 2002; Peter DeMarco and Ray Henry, "Ropewalk 9-Alarm Fire Said to be Set," *Boston Globe*, May 6, 2002.



National Park Service Museum Specialist Phil Hunt examines damage to a laying cart in the Ropewalk on May 6, 2002, two days after a nine-alarm fire swept through the structure. The heavy timber nature of the building's construction helped reduce the fire's destruction. *Louis Hutchins, BNHP*

the damage. That study concluded "while there was significant structural damage in areas where the fire was concentrated, other damage to remaining historic fabric was more generalized and moderate."[647] The authority then contracted for necessary stabilization work.[648]

By this time, both the NPS and the BRA came to agreement that the exhibit space within the Ropewalk could be reduced by two-thirds.[649] After looking into the possibility of using it to house the city's archives[650] or introducing housing into the structure, the BRA became interested in the concept of using the facility as an incubator for the arts. Like many other proposals relating to the Navy Yard, it was announced with great fanfare in December 2004 by Boston Mayor Thomas M. Menino, and then failed to materialize.[651] Other ideas which were seriously considered in the mid-2000s included transferring the Ropewalk to the NPS in exchange for Building 107, but the building could not accommodate the maintenance function housed in Building 107.

The NPS also expressed its willingness to reduce its requirements for space in the Chain Forge. However, in order to remove any of the equipment, it needed to address the idea of deaccessioning it from its museum collections.[652] While the BRA in November 2005 committed itself to fund a special study of the significance of the equipment as part of that process,[653] it has not been contracted for as of 2008, when the authority issued a request for expressions of interest in the building from developers.[654]

Housing Developments

The Navy Yard has, from its earliest days, been a residential as well as an industrial facility. Following the closure of the yard, most of the housing units within the NPS section of the yard remained as housing. While the Commandant's House became a museum and later function space following the departure of Admiral Roy D. Snyder, the last Commandant of the First Naval District, in 1976, the commanding officer of USS *Constitution* has been housed in one of the quarters in Captain's Row (Building 265) along with a variety of NPS personnel. The apartments in the two wings of the Marine Barracks have housed both park and Navy families. The third floor of Building 5 has continued as quarters for *Constitution* sailors, with the Navy undertaking a number of projects over the years to upgrade those facilities. More recently, however, two of the five units in Building 265 and one apartment in the Barracks have been converted to NPS office uses.

The largest change in residential use in the national park came about as a result of the difficulty the park had been experiencing in the recruitment of summer seasonal park rangers due to the high cost of living in the Boston area. Thus, in 1983 it converted the second floor of the Marine Barracks into a series of dormitory-type rooms with a common kitchen.[655] The ability to offer seasonal personnel, who tend to be college students with limited budgets, housing at reasonable rates has helped the park attract a far more diverse workforce.

Within the BRA parcels, the residential structures (Building 266 and Quarters P) have been developed as offices. Instead, housing has involved both conversion of existing Navy Yard buildings (42, 103, 104, 106, 197) and the construction of new townhouses on top of the yard's Shipways and on Pier 7. The first residential facility to be completed was Constitution Quarters (Building 42), where 367 apartments opened for occupancy in June 1982.[656] The first phase of the Shipways townhouse development was completed in August 1984, the second phase following a year later.[657] Of the 574 housing

[647] McGinley Hart & Associates, *Post-Fire Conditions Assessment & Treatment Options for Stabilization, Building 58–The Ropewalk, Charlestown Navy Yard* (draft; June 2002), TIC 457/D6271.

[648] Peter DeMarco, "Not So Straight and Narrow," *Boston Globe*, July 21, 2002; Savage to Mark Maloney, Nov. 19, 2002; Simon to Maloney, "Emergency Repairs at the Ropewalk, Charlestown Navy Yard; MHC# 3621," Nov. 27, 2002, BOST 02-011, Section 106 Case Files, Division of Cultural Resources, BNHP.

[649] Wondercabinet Interpretive Design, *Charlestown Navy Yard: Ropewalk Building: Educational Exhibit Assessment Report* (Dec. 6, 2002), NPS TIC 457/D6393; "Restoration Guidelines, The Ropewalk (Building 58)," Jan. 15, 2003, enclosed in Gribaudo to Carlson and Carlson, "Final Update … Proposed Amendments to the Historic Design Guidelines," June 25, 2004, BOST 02-009, Section 106 Case Files, Division of Cultural Resources, BNHP.

[650] DeMarco, "Not So Straight and Narrow"; Sam Allis, "Collective Bargaining," *Boston Globe*, Feb. 2, 2003. The city archives instead went to a building in West Roxbury. See Johnny Diaz, "This City Has Real Baggage, and Soon a Place to Put It," *Boston Globe*, Feb. 27, 2005.

[651] Boston Redevelopment Authority, "Redeveloping the Ropewalk," Ropewalk File, Division of Cultural Resources, BNHP; Karen Cord Taylor, "Ropewalk Building Designated as Creative Incubator," *Charlestown Patroit-Bridge*, Sept. 21, 2005.

[652] Maloney to Savage, May 18, 2005; Savage to Maloney, June 20, 2005, BOST 02-009, Section 106 Case Files, Division of Cultural Resources, BNHP.

[653] Boston Redevelopment Authority, Minutes, Board of Directors' Meeting, Nov. 14, 2005.

[654] Boston Redevelopment Authority, Minutes, Board of Directors' Meeting, June 3, 2008.

[655] Memorandum, Associate Regional Director, Planning and Resource Preservation, North Atlantic Region, to Superintendent, Boston National Historical Park, "Section 106 Compliance, Marine Barracks," Jan. 13, 1983, with accompanying materials, BOST 82-019, Section 106 Case Files, Division of Cultural Resources, Boston NHP.

[656] Hill, *Political Economy of Military Base Redevelopment*, p. 298; Edward O. Nilsson, "Rehabing Historic Structures With Energy Conservation: Constitution Quarters, Charlestown Navy Yard," in John H. Cable, ed., *Building Redesign and Energy Challenges* (Washington: American Institute of Architects, 1985), p. 45-50.

[657] Hill, *Political Economy of Military Base Redevelopment*, p. 299-300; Anthony J. Yudis, "Navy Yard Condos Sell Out," *Boston Globe*, Sept. 8, 1984.

Table 2-5
NAVY YARD CONDOMINIUM MASTER DEEDS

Date	Condominium	Location
08/14/1984	Shipways	Shipways 1
11/22/1985	Shipways (Phase II)	Shipways 2
03/10/1986	Shipways (Garage)	Parcel 3K
04/14/1987	Constellation Wharf	Pier 7
09/30/1987	Basilica Leasehold	Building 106
05/22/1989	Charlestown Navy Yard Rowhouses	Parcel 4A1
03/27/1990	Flagship Wharf	Building 197
10/07/2004	Parris Landing	Building 42
05/23/2007	Cooper Leasehold[1]	Building 38

Source: Suffolk Deeds, bk. 11091, p. 203-26; bk. 12070, p. 329-36; bk. 12342, p. 210-20; bk. 13602, p. 199-229; bk. 14117, p. 196-312; bk. 15601, p. 29-75; bk. 16189, p. 91-154; bk. 35662, p. 282-320; bk. 41896, p. 220-43.

[1] Office condominium

units constructed between 1984 and 1994, 332 units, or 30 percent, were affordable housing.[658] This figure included the 50 units in the award-winning Navy Yard Rowhouses constructed by the Bricklayers Union at the corner of First Avenue and 13th Street.[659]

Most of the residential units in the Navy Yard have been in the form of condominiums (see Table 2-5). These have included Flagship Wharf (Building 197), Shipways I and II (and the associated parking garage), Constellation Wharf, the Rowhouses, and The Basilica (Building 106). In 2004 the major rental property, Constitution Quarters (Building 42), was converted into condominiums under the name Parris Landing.[660] Three years later, however, with changing real estate markets, the developer of the nearly-complete HarborView condominiums on Parcel 4 announced that they would become rental units instead.[661]

That facility provides a case study of the difficulties encountered in developing the Buy Parcel. In April 1997 New York developer Martin Oliner, whose LDA Acquisition took over development rights to the New Development Area as a result of the bankruptcy of Immobiliare's parent firm,[662] announced plans for a 260-unit, 14-story apartment complex on Parcel 4.[663] Initially known as The Admiralty, the project soon developed into the HarborView Place condominiums, and drew opposition from, among others, residents of The Basilica (Building 106), located on the opposite side of First Ave. from the site.[664] Reviews under both environmental and waterfront licensing procedures dragged on for eight years, construction of a slightly scaled-back facility finally beginning in mid-2005.

By the time the project neared completion two years later, the luxury condominium market had collapsed, and in August 2007 the developer's marketing agent announced that the project would be converted to rental units instead.[665] At the same time, the construction contractor filed suit against the developer for non-payment.[666] While an auction of the property had been threatened, the mortgage holder took over the developer and settled outstanding debts in the spring of 2008. Finally, in August 2008, the developer and the BRA entered into a modification of the original land disposition agreement to allow the property to be used as rentals.[667] The first tenants moved in that fall.

In addition to HarborView, LDA Acquisition promoted a second condominium project, the Residences at Pier 5. Unlike the earlier Constellation Wharf project on Pier 7, the design incorporated extensive public access along the edges of Pier 5.[668] After a lengthy environmental review process, the developer and the BRA reached a land disposition agreement for the project in December 2004.[669] Construction has yet to start as of late 2008.

Until the mid-2000s, The Basilica was the only residential development within the Historic Monument Area. This changed in October 2007 when Conroy Development obtained permission to convert Building 33 from offices to apartments; this work was completed in the fall of 2008.[670]

The difficulties of renting office space within the Navy Yard led to a decision by Kenney Development (the principal partner in the Navy Yard Plaza group) in 2008 to change the proposed building on Parcel 39A to residential. The change, however, has not led to the long-delayed start of construction.[671]

Although BRA planning for the Navy Yard had included the concept of a hotel at what it termed Yard's End, no hotel development has occurred and none is currently contemplated. The only transient housing available in the yard has been in the Armed Services YMCA, which since 2003 has marketed itself to the public under the name Constitution Inn, and a small floating bed-and-breakfast in the Shipyard Quarters Marina.[672]

[658] Boston Redevelopment Authority, *Charlestown Navy Yard Update 1994* (Apr. 1994), TIC 457/D6284, tab 1.

[659] *Charlestown Navy Yard Rowhouses, Boston, Massachusetts* [web page] [http://www.designadvisor.org/gallery/charlestown.htm], accessed Mar. 16, 2009. See also William Rawn, *Architecture for the Public Realm* (New York: Edizioni Press, 2002).

[660] Chris Reidy, "Charlestown Condo Conversion OK'd," *Boston Globe*, Feb. 25, 2004.

[661] "HarborView Project Up for Sale as Luxury Rental Property," *Boston Business Journal*, Aug. 31, 2007.

[662] U.S. Bankruptcy Court, District of Delaware, *In re: Competrol Acquisition Partnership, L.P., et al., Debtors: Memorandum Opinion*, Case Nos. 94-622 through 94-626 (Aug. 2, 2000), p. 2-3.

[663] Richard Kindleberger, "Apartment Building Proposed for Site at Charlestown Navy Yard," *Boston Globe*, Apr. 22, 1997.

[664] See, e.g., David Arnold, "Raising Fears," *Boston Globe*, Feb. 28, 2002.

[665] Dan Murphy, "Developer Eyes New Use for Harborview Condos," *Charlestown Patriot-Bridge*, Aug. 30, 2007.

[666] Complaint, Turner Construction Co. v. Navy Yard Four Limited Partnership et al., Civil Action No. 07-3854, Suffolk Superior Court, Aug. 31, 2007, Suffolk Deeds, bk. 42446, p. 16-30.

[667] Fourth amendment to land disposition agreement, Boston Redevelopment Authority and Navy Yard Four Associates, Aug. 30, 2008, Suffolk Deeds, bk. 44064, p. 48-79.

[668] Fort Point Associates, *The Residences at Pier 5, Charlestown Navy Yard: Project Update* (May 25, 2006) (Boston: Fort Point Associates, 2006), TIC 457/D6351A.

[669] Land disposition agreement, Boston Redevelopment Authority and LDA Pier 5, Dec. 22, 1984 [http://www.friendscny.org/images/lda_agreement.pdf].

[670] Dan Murphy, "Developer Eyes Building 33 for Apartments," *Charlestown Patriot-Bridge*, Sept. 27, 2007; Boston Redevelopment Authority, Minutes, Board of Directors' Meeting, Oct. 23, 2007; Michelle Hillman, "Leasing Begins at Navy Yard Complex," *Boston Business Journal*, Sept. 26, 2008.

[671] Dan Murphy, "New Project Proposed for Lot 39A in the Navy Yard," *Charlestown Patriot-Bridge*, May 15, 2008; Raina, "Parcel 39A Proposal Meets With Opposition."

[672] David Abel, "There's Room at This Inn for All, From Tourists to the Needy," *Boston Globe*, Jan. 4, 2004; *Green Turtle Floating Bed + Breakfast* [web site] [http://www.greenturtlebb.com/], accessed Aug. 3, 2009.

Oversight Of BRA Activities

The BRA's redevelopment of the Navy Yard was subject to oversight by a number of entities. Most of the oversight came under the requirements of state laws governing environmental review (MEPA) and waterfront development (Chapter 91). In addition, the agency had certain obligations to the federal government under the terms of the deeds of transfer for the Historic Monument Area and the Recreation Parcel. The BRA's compliance with these requirements was sporadic, usually coming after the Mid-Atlantic Regional Office (now the Northeast Regional Office) of the National Park Service, which administered the terms of the transfer agreements, pointedly reminded it of its obligations and of the default reversionary terms of the deeds.[673] In particular, the BRA consistently failed to provide the biennial reports required by the deeds.[674] Matters reached such a state in 2000 that the NPS drafted (but did not send) a letter to the General Services Administration requesting that it repossess the Historic Monument Area.[675]

While it generally adhered to the established preservation guidelines, the BRA did not want detailed oversight of individual projects by NPS officials. Robert T. Kenney, BRA director at the time of the initial planning, has stated that while the NPS wanted "to review and approve all future plans," he "only wanted to get their approval *once*, so I insisted on the design guideline approach."[676] Ironically, because of the subsequent passage of the federal preservation tax credit program, specific plans by developers were reviewed by the NPS.[677]

This study is not the place to catalog the deviations which have occurred between the development guidelines and actual work. The most significant of these was the failure to live up to the groundplane guidelines requiring preservation of railroad tracks in the Historic Monument Area's streets. The evidence here is that the agency always intended to rebuild the streets to City of Boston standards.[678] In other instances, deviations (or failure of lessees to maintain elements such as historic signage) have occurred largely because the BRA itself has not provided close oversight of individual developers.

Individual projects, especially those in the New Development Area, have come under close scrutiny from both private individuals and activist groups, as well as from the Charlestown Neighborhood Council, a quasi-official arm of the city government. Among the most vocal advocates of limiting non-water-dependent usage of waterfront property and promoting public access has been the Boston Harbor Associates. As the residential community within the Navy Yard grew, it became increasingly concerned with future development. Various ad hoc coalitions came into being to deal with specific issues, and in September 2004 those interests came together to form the Friends of the Charlestown Navy Yard. This group's goal was the "promotion of responsible development in the Charlestown Navy Yard consistent with its historical designation and waterfront location."[679]

Hazardous Material Remediation

At the time of the closure of the Navy Yard there were no special programs for the remediation of hazardous materials found on military installations prior to their disposal by the federal government. Not until October 1986 would Congress formally authorize the Defense Environmental Restoration Program-Formerly Used Defense Sites (DERP-FUDS).[680] Responsibility for the program was assigned to the U.S. Army Corps of Engineers. The initial task of the program was simply to identify all such sites, many of which had been out of federal ownership for decades. The Corps identified six sites associated with the Boston Naval Shipyard. These included both the Charlestown Navy Yard and what it termed the Boston Naval Annex, as well as the two Boston Army Base parcels and the "E" Street and "K" Street Annexes at South Boston.[681] Only at Charlestown and the main South Boston Annex did it find sites which met program criteria for remediation activities.[682]

In October 1991 the Corps provided both the National Park Service and the Boston Redevelopment Authority with its findings and determination of eligibility for DERP-FUDS projects in the Navy Yard. Two types of projects were included: demolition of facilities which were in dilapidated condition at the time of original disposal and remediation of contamination by hazardous materials (other than asbestos and lead paint).[683] After negotiations with both land-

[673] See, e.g., James W. Coleman, Jr., to Coyle, May 1, 1990; Wm. Scott Hall for Robert F. Gift to John O'Brien, July 19, 1990, BRA Master Plan File, Division of Cultural Resources, BNHP.

[674] McCann to Brian Delorey, Nov. 8, 1994; David Hollenberg to Marisa Lago, Aug. 8, 1995; McCann to Kevin Morrison, Sept. 16, 1997; Everett to Thomas M. Menino, Mar. 10, 2000; McCann to Maloney, Jan. 31, 2001, Boston Naval Shipyard, Historic Surplus Property Program Files, Northeast Regional Office, NPS, Philadelphia, Pa. The only two reports submitted covered 1977-1989 and 1989-2000, respectively. See BRA, *1990 Status Report*; McGinley Hart & Associates, *Historic Monument Area*.

[675] Draft, Marie Rust to Robert Dunfey, June 2000, Boston Naval Shipyard, Historic Surplus Property Program Files, Northeast Regional Office, NPS, Philadelphia, Pa.

[676] Interview of Robert T. Kenney by David L.A. Gordon, May 18, 1992, quoted in Gordon, "Implementing Urban Waterfront Redevelopment," p. 920. The italics are in the original.

[677] See Tax Act Certifications, Boston Naval Shipyard, Historic Surplus Property Program Files, Northeast Regional Office, NPS, Philadelphia, Pa.

[678] Even before the guidelines were promulgated, the BRA had informed NPS planners that, outside of Second Ave., the roads in the Historic Monument Area "will be fully serviceable, City of Boston, streets." See Peter J. Snell to Assistant Manager, Mid-Atlantic/North Atlantic Team, Denver Service Center, "Informal Meeting with Boston Redevelopment Authority Architects Concerning Current Plans for Charlestown Naval Shipyard Redevelopment," Feb. 15, 1978, General Management Plan Files, Division of Cultural Resources, BNHP.

[679] Press release, "Formation of 'Friends of the Charlestown Navy Yard' Organization Announced," Sept. 28, 2004 [http://www.friendscny.org/images/friends_pr_final2_.doc], accessed Mar. 17, 2009.

[680] Superfund Amendments and Reauthorization Act of 1986, Pub. Law 99-499, Oct. 17, 1986, 100 Stat. 1719. This act made permanent a program initially authorized under the FY 1984 Defense Appropriations Act. On the DERP-FUDS program, see U.S. General Accounting Office, *Environmental Contamination: Cleanup Actions at Formerly Used Defense Sites* (GAO-01-557, July 2001).

[681] U.S. General Accounting Office, "Massachusetts: Properties Identified for Potential Inclusion in FUDS Cleanup Program" [web page] [htpp://www.gao.gov/gao-01-1012sp/MA.html], accessed June 10, 2008.

[682] Ibid.; U.S. Army Corps of Engineers, "Formerly Used Defense Sites (FUDS) Inventory: Massachusetts," Sept. 30, 2006 [web page] [htpps://ekopowered.usace.army.mil/ecop/dowloaddbfile.cfm?file_id=0344476D-188B-313F-1B977B594F96DE04], accessed June 10, 2008.

[683] Frederick W. Colman to Dave Rose, "Defense Environmental Restoration Program-Formerly Used Defense Sites (DERP-FUDS), Former Charlestown Naval Shipyard, Site No. D01MA000100, Boston, Massachusetts (Proj. Nos. D01MA000101 & D01MA000102)," Oct. 18, 1991, with



One of the underground storage tanks removed from the Navy Yard by the U.S. Army Corps of Engineers is loaded onto a truck at Pier 11 in early 1994. In the background is Building 131. *U.S. Army Corps of Engineers*



As part of the DERP-FUDS project, the Army Corps removed contaminated soil from the floor of the Forge Shop (Building 105) and cleaned and repainted the equipment in the building. *Stephen P. Carlson, BNHP*

owners,[684] the Corps issued a public notice in July 1992 describing its proposed work in the yard.[685]

Following conclusion of Section 106 compliance procedures,[686] including the preparation of Historic American Engineering Record (HAER) documentation of structures being demolished,[687] the Corps completed several projects in the Navy Yard. Within the national park, it removed the remaining portions of the Marine Railway superstructure.[688] In 1993 and 1994 it cleaned and filled the Fuel Oil Tank (Structure 220) under the lawn of the Commandant's House, and abated the site of the former Gasoline Station (Building 194) on Pier 1.[689]

On the BRA parcels, it removed fuel oil tanks outside of Building 108, on Parcel 39A, and at Buildings 203 and 277. It also demolished several structures at Yard's End, including Buildings 203, 206, and 277; Piers 9 and 10; and the three light towers on Pier 11 (Structures 250, 251, 252).[690] It also began work on the demolition of the Power Plant (Building 108), but the project came to a halt because of the need to first abate the hazardous materials within the structure and the exhaustion of available funding. After several years of inactivity, the Corps in late 2008 began planning to resume activities there in 2009.[691]

The most significant Corps project, however, has been the cleanup of the Forge Shop. Following a series of studies identifying the level and type of contaminants and cleanup alternatives,[692] the Corps, the BRA, and the NPS entered into a programmatic agreement under Section 106 of the National Historic Preservation Act for the cleaning of both the NPS-owned machinery and the structure itself.[693] The equipment cleaning was completed in the summer of

enclosures; Colman to Coyle, "Defense Environmental Restoration Program-Formerly Used Defense Sites (DERP-FUDS), Former Charlestown Naval Shipyard, Site No. D01MA000100, Boston, Massachusetts (Proj. Nos. D01MA000101 & D01MA000102)," Oct. 18, 1991, with enclosures, BOST 92-000, Section 106 Case Files, Division of Cultural Resources, BNHP.

[684] See, e.g., Burchill to Colman, Nov. 13, 1991, BOST 92-000, Section 106 Case Files, Division of Cultural Resources, BNHP.

[685] U.S. Army Corps of Engineers, New England Division, Public Notice, "Defense Environmental Restoration Program Environmental Remediation Projects, Fort Standish, Boston Harbor, Massachusetts, Fort Warren, Boston Harbor, Massachusetts, Charlestown Navy Yard, Boston, Massachusetts," July 7, 1992, BOST 92-000, Section 106 Case Files, Division of Cultural Resources, BNHP.

[686] Joseph L. Ignazio to Judith McDonough, "Defense Environmental Restoration Program Project, Former Boston Naval Shipyard, Charlestown, Massachusetts," Aug. 26, 1993 (concurred Oct. 6, 1993), BOST 92-000, Section 106 Case Files, Division of Cultural Resources, BNHP.

[687] Tina C. LeCoff to Ignazio, Apr. 30, 1992, with enclosure; LeCoff to Ignazio, Sept. 21, 1983; Ignazio to Burchill, "Defense Environmental Restoration Program Project, Former Boston Naval Shipyard, Charlestown, Massachusetts," Oct. 26, 1993, BOST 92-000, Section 106 Case Files, Division of Cultural Resources, BNHP. For the documentation, see McGinley Hart & Associates, *Historic American Engineering Record*.

[688] Stephen J. Umbrell, "Army Corps of Engineers Demolition Contract at Charlestown Navy Yard," Aug. 22, 2003, HRS Project File, Division of Cultural Resources, BNHP. The Marine Railway had been idle for several years prior to the NPS assuming ownership. The superstructure had been weakened by the lack of maintenance and the ravages of weather, and by 1985 had reached a condition where parts of it were in imminent danger of collapse. See Kenneth M. Childs, Jr., to John Debo, May 16, 1986, BOST 86-004, Section 106 Case Files, Division of Cultural Resources, BNHP. Because of the prohibitive cost of reconstruction, the park entered into a Memorandum of Agreement with the Massachusetts State Historic Preservation Officer and the Advisory Council on Historic Preservation authorizing demolition subject to the completion of documentation and with the stipulation that "following removal of the … cradle and deck, remaining components of the structure will be retained in place … in order to facilitate later interpretation of the space." See Memorandum of Agreement, Nov. 4, 1986, enclosed in Don L. Klima to Herbert S. Cables, Jr., "Dismantling of the Marine Railway, Charlestown Navy Yard, Boston National Historical Park," Nov. 10, 1986, BOST 86-004, Section 106 Case Files, Division of Cultural Resources, BNHP. Approximately half of the superstructure was removed initially, with the remainder being dismantled by the Corps in 1994 and 1995.

[689] James A. Morocco to Rose, Jan. 10, 1995, enclosing Environmental Waste Technology, Inc., *Tank Closure Reports, Charlestown Navy Yard, Charlestown, Massachusetts*, DACA33-93-0070, TIC 457/D6311; Stephen J. Umbrell, "Army Corps of Engineers Fuel Tank Removal Project at Charlestown Navy Yard," Aug. 22, 1993, HRS Project File, Division of Cultural Resources, BNHP.

[690] Umbrell, "Army Corps of Engineers Fuel Tank Removal Project"; Umbrell, "Army Corps of Engineers Demolition Contract."

[691] U.S. Army Corps of Engineers, New England District, *Update Report for Massachusetts*, Jan. 31, 2008, p. 11.

[692] See, e.g., Metcalf & Eddy, *Phase III Remedial Action Plan, Former Charlestown Navy Yard, Building No. 105, Boston, Massachusetts* (May 1997), TIC 457/D6268C.

[693] "Programmatic Agreement Among the U.S. Army Corps of Engineers, New England District, the Advisory Council on Historic Preservation, the Massachusetts State Historic Preservation Officer, the Boston Landmarks Commission, the National Park Service, Boston National Historical Park,

2001.[694] As with Building 108, the Corps has since been unable to fund remediation of the hazardous wastes that are deposited on the floor and walls of the building. As of 2008 it appears that the cost of completing the cleanup will fall on the ultimate developer of the structure.

USS *Cassin Young* Arrives

In June 1978 the NPS and the U.S. Navy signed an agreement placing the stricken destroyer *Cassin Young* (DD-793) on indefinite loan to the National Park Service for display in Dry Dock 1 of the Navy Yard. In return for this loan, the NPS agreed to make the dock available for use by USS *Constitution*.[695] The addition of a second museum ship to the yard came about as the park sought to develop an interpretive program that focused on World War II and later yard operations. While *Cassin Young* had not been built in Charlestown, several of her sister ships had been. More importantly, during the 1950s the Navy Yard had performed considerable work on the ship.[696]

Arriving in June 1978 from Philadelphia under tow by a U.S. Army Reserve tug unit, *Cassin Young* entered Dry Dock 1 in October 1979 for restoration of her hull.[697] Emerging in the spring of 1981, she was opened to the public in June of that year. Much of the restoration of the ship's interior spaces has been performed by a group of dedicated volunteers, including some individuals who had served aboard her during World War II.[698] According to surveys compiled by the Historic Naval Ships Association, she ranks among the top ten historic ships in the United States in terms of visitation,[699] and has consistently gotten excellent evaluations from Navy inspectors.

In January 1986, *Cassin Young* was designated as a National Historic Landmark as part of an NPS theme study of ships associated with World War II in the Pacific.[700] Since the ship is in her configuration from service during the Cold War in the 1950s, following her last major modernization at the Navy Yard in 1958,[701] her significance to that historic theme should be evaluated and, if appropriate, her NHL and National Register documentation should be amended to extend the period of significance to 1960.



The U.S. Army tug *LT-1970* tows USS *Cassin Young* (DD-793) during the destroyer's transfer from the Philadelphia Naval Shipyard to the Charlestown Navy Yard in June 1978. The tow was performed by an Army Reserve transportation unit as its annual training exercise. *BOSTC-1662*

In October 1986, the park instituted an annual Commemorative Sea Trials program. This involved having the ship towed from her berth on Pier 1 East to a point in Boston Harbor off Castle Island in South Boston and return.[702] It was a way that the park could honor the hard work of the volunteers, and the event became very popular. She also participated in several special movements to commemorate the end of World War II, the bicentennial of USS *Constitution* and of the Navy Yard, and the Korean War Armistice.[703] The Sea Trials were suspended in 2005 due to concerns over the condition of the ship's hull.[704] Drydocking of *Cassin Young* to accomplish repairs to the hull is scheduled to occur in 2009.[705]

Public Use Of The Yard

Until the increasing security as a result of rearmament efforts prior to World War II, the Navy Yard, despite being separated from

and the Boston Redevelopment Authority, Regarding the Implementation of the Remedial Action Plan for Building 105, Charlestown Navy Yard, Boston, Massachusetts," signed between Dec. 16, 1997, and Jan. 5, 1997 [i.e., 1998], BOST 96-001, Section 106 Case Files, Division of Cultural Resources, BNHP.

[694] Carlson, "Chain Forge Shop Equipment Cleaned."

[695] Loan agreement, Dept. of the Navy and Dept. of the Interior, Contract N00024-78-C-0205, June 8, 1978. For a history of the ship, see J. Scott Harmon, *U.S.S. Cassin Young (DD-793): A Fletcher Class Destroyer* (Missoula, Mont.: Pictorial Histories Publishing Co., 1985). See also Charles W. Snell, comp., *Odyssey of USS Cassin Young* (June 1979), TIC 457/D6095; *USS Cassin Young: A Video Tour* [DVD] (Boston: Boston National Historical Park, 2006).

[696] Peter Steele, "To Rehabilitate a Warship," *CRM Bulletin*, vol. 7, no. 2 (July 1984), p. 8-11. See also Ivan R. Samuels to Stephen Carlson, Nov. 25, 2008, HRS Project File, Division of Cultural Resources, BNHP.

[697] Steele, "To Rehabilitate a Warship"; Peter Steele, "The National Park Service Destroyer U.S.S. Cassin Young," *The Broadside/Boston National Historical Park* (Winter 1980), p. [7].

[698] "Volunteers Enhance USS *Cassin Young* Programs," *The Broadside/Boston National Historical Park* (Winter 1991), p. 5.

[699] Stephen P. Carlson, "USS Cassin Young Popular," *The Broadside/Boston National Historical Park* (No. 2, 1988), p. 10.

[700] Harry A. Butowsky, *Warships Associated With World War II in the Pacific: National Historic Landmark Theme Study* (Washington: National Park Service, 1985), TIC 457/D6201, p. 4. See National Register File 86000084.

[701] Sarah H. Heald, *Historic Furnishings Report, USS* Cassin Young, *Boston National Historical Park, Boston, Massachusetts* ([Harpers Ferry, W.Va.]: Media Services, Harpers Ferry Center, National Park Service, 2005), TIC 457/D152.

[702] See, e.g., "Fifth Annual USS *Cassin Young* 'Sea Trials' A Success," *The Broadside/Boston National Historical Park* (Autumn 1990), p. 3; Bill Foley, "Tenth Annual Sea Trials Held," *The Broadside/Boston National Historical Park* (No. 4, 1995), p. 1-2; Stephen P. Carlson, "Sea Trials Honor Those Who Made Supreme Sacrifice," *The Broadside/Boston National Historical Park* (No. 3 & 4, 1996), p. 7; Richard Tourangeau, "USS *Cassin Young* Sea Trials," *The Broadside/Boston National Historical Park* (No. 5, 1997), p. 5; "USS *Cassin Young* 14th Annual Commemorative Sea Trials," *The Broadside/Boston National Historical Park* (No. 4, 1999), p. 7; Sean Hennessey and Anthony Tornetta, "USS *Cassin Young* (DD-793) Eighteenth Annual 'Commemorative Sea Trials'," *The Broadside/Boston National Historical Park* (Spring 2004), p. 5.

[703] Julia Mize, "Three Historic Ships Salute World War II Veterans," *The Broadside/Boston National Historical Park* (No. 3 & 4, 1996), p. 6; Richard Tourangeau and Stephen P. Carlson, "USS *Cassin Young* Escorts USS *Constitution* On Bicentennial Turnaround Cruise," *The Broadside/Boston National Historical Park* (No. 4, 1997), p. 5; Emily G. Prigot, "Charlestown Navy Yard Celebrates Bicentennial," *The Broadside/Boston National Historical Park* (No. 3, 2000), p. 1-2.

[704] Terry Savage, "USS *Cassin Young* (DD-793): State of the Ship," *The Broadside/Boston National Historical Park* (No. 1, 2006), p. 6.

[705] Dave Brouillette, "Plans to Dry Dock USS *Cassin Young* Move Forward," *The Broadside/Boston National Historical Park* (No. 2, 2007), p. 6; Stephen P. Carlson, "USS *Cassin Young* (DD-793): Celebrating Thirty Years," *The Broadside/Boston National Historical Park* (No. 1, 2008), p. 8.

USS *Cassin Young* (DD-793): A Navy Yard Customer

NOW BERTHED AT THE CHARLESTOWN NAVY YARD as a museum ship, USS *Cassin Young* (DD-793) exemplifies the numerous destroyers built and serviced by the yard. While not constructed by the yard, her present physical appearance is the result of modifications made by the yard during several overhaul periods during the 1950s.

USS *Cassin Young* was ordered by the Navy on June 14, 1942, from the Bethlehem Steel Corp.'s Shipbuilding Division yard at San Pedro, California. She was one of 175 vessels built to the *Fletcher* class design. Laid down on March 18, 1943, she was launched on September 12, 1943. Her sponsor was Mrs. Eleanor Young, the widow of the man for whom the ship was named, Capt. Cassin Young (1894-1942). The ship was placed in commission at San Pedro on Dec. 31, 1943.

The ship served in the Pacific during the remainder of World War II. Twice off Okinawa, on April 12 and July 28, 1945, she was struck by Japanese kamikazes. She lost one man killed in the first attack and 22 in the latter action. *Cassin Young* was decommissioned at San Pedro on May 28, 1946.



Newly-completed USS *Cassin Young* is seen off San Pedro, Calif., on Jan. 14, 1944. Note that the vessel is painted in a camouflage scheme. *NARA 19-N-58992*



This view shows the damage inflicted on USS *Cassin Young* by a Japanese kamikaze on July 30, 1945. This photograph was taken by the ship's doctor, Lt. Eugene S. Sevensma. *BOST acc.C86*

Capt. Cassin Young, USN (1894-1942)



The Navy has followed a tradition of naming destroyers for individuals who have distinguished themselves in naval service or had close connections to the Navy or Marine Corps. Thus, on Dec. 4, 1942, Secretary of the Navy Frank Knox approved the assignment of the names of several senior officers killed in action during the naval Battle of Guadalcanal in Nov. 1942 to a group of destroyers then under construction. The name *Cassin Young* was given to DD-793 to honor Capt. Cassin Young, the commanding officer of USS *San Francisco* (CA-38). Young had received a posthumous Navy Cross for his gallantry during the battle in which he was killed, but had earlier won the Congressional Medal of Honor for his actions as commanding officer of the repair ship USS *Vestal* (AR-4) during the Pearl Harbor attack of Dec. 7, 1941. At that time, he managed to get the vessel underway and thus save her when the ship she had been berthed next to, USS *Arizona* (BB-39), was destroyed. In this view, Capt. Young (right) receives his medal from Adm. Chester Nimitz on Apr. 18, 1942. *acc. BOSTC-198*

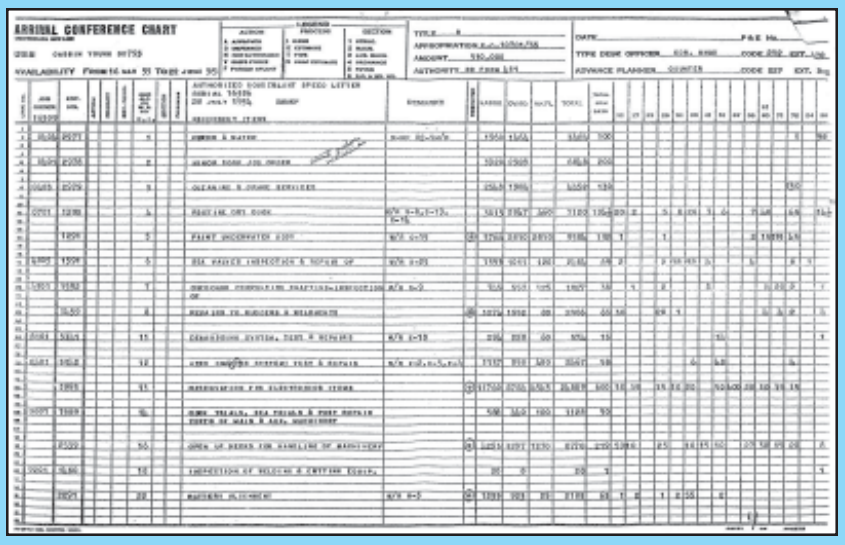
Nearly five years later, on September 8, 1951, as the Navy began to expand in response to the Korean War and the on-going Cold War with the Soviet Union, USS *Cassin Young* was recommissioned. The destroyer was assigned to Newport, R.I., and, with the exception of an around-the-world cruise in 1954, spent the remainder of her active career in the Atlantic and Mediterranean.

It was during this period that the vessel, like others homeported at Newport, visited the Charlestown Navy Yard for both major modifications and routine overhauls. The first, and most extensive, occurred between September 5, 1952, and January 6, 1953. The last took place between August 8 and October 4, 1958. She ended her active career on April 29, 1960.

Cassin Young remained in reserve until formally stricken from the Naval Vessel Register on December 4, 1974. Even then, the Navy took no immediate steps to dispose of the vessel. Thus, she was available when representatives of Boston National Historical Park examined possible destroyers for use as an exhibit at the Navy Yard. She was placed on indefinite loan to the National Park Service in June 1978. After drydocking and initial restoration, the ship was formally opened as a museum ship on June 27, 1981.

In January 1986 the vessel was designated as a National Historic Landmark. The following October, the National Park Service held the first of an annual series of "Commemorative Sea Trials" where the ship was towed through Boston Harbor to honor her veterans and the volunteers who help maintain the ship.

USS *Cassin Young* (DD-793): A Navy Yard Customer


ARRIVAL CONFERENCE CHART

Shipyard work was carefully planned and tracked. This Arrival Conference Chart was part of the documentation for the overhaul of USS *Cassin Young* undertaken by the Navy Yard between March and June 1955. Among the many tasks to be performed included a drydocking and repainting of the ship's hull. Near the end of this period, on June 9, 1955, the yard photographer captured the vessel, identifiable by her bold hull number, tied up at Pier 4 West in the view below as he documented the commissioning of the minesweeper USS *Vital* (MSO-474) at Pier 1 East.

(Left) BOSTC-1678; (below) BOSTS-14561





This view of USS *Cassin Young* coming alongside USS *Aldebaran* (AF-10) in the Mediterranean in July or Aug. 1959 was taken by *Aldebaran*'s Executive Officer, Robert Norville, who had served as a fire control officer on board *Cassin Young* from 1943 to 1945. *Robert Norville*

In June 1978 the National Park Service acquired *Cassin Young* on loan from the Navy. This view shows the vessel at Pier 2 shortly after arrival showing the effects of eighteen years of storage in the "mothball" fleet.

Richard Frear, BNHP





In the fall of 1979 the ship went into Dry Dock 1 for restoration. This view was taken on Aug. 23, 1980, during a reunion of former crewmembers. Both the formal USS Cassin Young Association and other volunteers have performed thousands of hours restoring, maintaining, and interpreting the ship to the public. *BNHP*



Since 1986 the park has honored these volunteers during an annual "Commemorative Sea Trials" in Boston Harbor. A tug guides USS *Cassin Young* during the third annual celebration in Oct. 1998.

Laurence M. Blanke, Jr., BNHP

the Charlestown community, was not a totally closed facility. The first known guidebook for visitors to the yard was published in 1852,[706] and the yard was generally open to visitors until the declaration of a national emergency in September 1939. Even after stringent security measures were put in place, except during the actual war years, USS *Constitution* was open to the public. Her berthing at Pier 1 West following World War II enabled her to be accessed without having to enter the industrial yard.

Starting in the mid-1950s, the yard also held public open houses on Armed Forces Day in May. On those occasions, the yard's various shops would be open to visitors and often would present special exhibits and demonstrations of their activities.[707]

For several years after the yard closed, only the national park portion was accessible to the public. The opening of Shipyard Park and the completion of the first redevelopment efforts brought people into the entire yard. To promote visitation to the site (and to other waterfront parks in the city), the BRA in September 1985 instituted the first of what would be an annual Harborpark Day celebration.[708] These events continued into the mid-1990s, with an increasing emphasis on food with activities such as "'Chowda' Fest."[709]

The yard also became one of the focal points of various larger maritime festivals. The first of these was Sail Boston 1980, which commemorated the 350th anniversary of the settlement of the city. Both Pier 1 in the park and Dry Dock 2 and Pier 4 in the Shipyard Park parcel hosted sail training ships ranging from Class A Tall Ships to the smallest vessels at subsequent events including Sail Boston 1992, the USS *Constitution* Bicentennial Salute in 1998, and Sail Boston 2000.[710] Following the success of the 1992 event, a series of standalone Seaport Festivals have been held as well.[711]

[706] *Stranger's Guide and Conductor to the U.S. Navy Yard at Charlestown.*

[707] See, e.g., "'Open House' In Yard Tomorrow," *Boston Naval Shipyard News*, vol. 20, no. 45 (May 18, 1956), p. 3; "Pictorial Review of Shipyard 'Open House'," *Boston Naval Shipyard News*, vol. 21, no. 46 (May 24, 1957), p. 3-4; "Shipyard's Activities Viewed By Old And Young America at 'Open House'," *Boston Naval Shipyard News*, vol. 22, no. 47 (May 28, 1958), p. 2-3; "Pictorial Review of Armed Forces Day Activities," *Boston Naval Shipyard News*, vol. 24, no. 48 (June 3, 1960), p. 8; "A Pictorial View of the Shipyard on Armed Forces Day," *Boston Naval Shipyard News*, vol. 28, no. 45 (May 29, 1964), p. 4-5; "Highlights of the Shipyard's 'Open House,' Armed Forces Day 1968," *Boston Naval Shipyard News*, vol. 32, no. 24 (May 31, 1968), p. 4-5.

[708] "A Sunny Harborpark Day Crowd Was Small But It Was Happy," *Boston Globe*, Sept. 16, 1985.

[709] See, e.g., Yudis, "Charlestown Navy Yard Has Its Day"; Doreen Iudica, "It Was Waterfront Appreciation Day," *Boston Globe*, Sept. 28, 1987; Gail Perrin, "Chicken: Roast, Fry, Bake, Broil Or Poach It," *Boston Globe*, Sept. 13, 1989; Robert Levey, "New Ingredient In Michela's Kitchen," *Boston Globe*, Sept. 18, 1990; "'Chowda' Fest Highlights Harborpark Day," *The Broadside/Boston National Historical Park* (Autumn 1990), p. 1; Bruce McCabe, "Days of Art and 'Chowda'," *Boston Globe*, Sept. 18, 1993.

[710] Julia Mize, "Sail Boston Success Due To Early Planning and Teamwork," *The Broadside/Boston National Historical Park* (Autumn 1992), p. 1, 4; "Sail Boston 1992," *The Broadside/Boston National Historical Park* (Autumn 1992)), p. 5-8; Richard Tourangeau, "'Boston Welcomes the World': USS *Constitution* Bicentennial Salute," *The Broadside/Boston National Historical Park* (No. 3, 1998), p. 3; "USS *Constitution* Bicentennial Salute: A Photographic Recollection," *The Broadside/Boston National Historical Park* (No. 3, 1998), p. 8-9; Julia Mize, "Sail Boston 2000," *The Broadside/Boston National Historical Park* (No. 3, 2000), p. 3.

[711] Julia Mize, "First Annual Boston Seaport Festival," *The Broadside/Boston National Historical Park* (Autumn 1993), p. 2; Julia Mize, "Ships and Boats and Food … And More!," *The Broadside/Boston National Historical Park* (Summer 1994), p. 12; Julia Mize, "Boston Seaport Festival," *The Broadside/Boston National Historical Park* (No. 3, 1999), p. 8.

Special Events At The Navy Yard



Events such as Sail Boston and Seaport Festivals drew tall ships to the Navy Yard, along with thousands of visitors anxious to see them up close. This view shows the Second Seaport Festival, held in Aug. 1994, with the replica HMS *Bounty* tied up at Pier 1 West. *Julia Mize, BNHP*



Along with Pier 1, Pier 4 has been the site of public events in the Navy Yard. This Aug. 25, 1987, view shows vessels participating in the Boston Harbor Tugboat Muster. *Russell F. Munroe, Carlson Collection*



On Oct. 11, 1980, the guided missile frigate USS *Samuel Eliot Morison* (FFG-13) became the first naval vessel to be commissioned at the Navy Yard since its closure. This view shows the crew practicing for the ceremony during the previous week.
Stephen P. Carlson, Carlson Collection



The 1812 Marines are a volunteer group of reenactors associated with the USS Constitution Museum which conducts educational programs interpreting the early Marine Corps and provides honor guards for ceremonies on USS *Constitution*. Here the unit parades down the Marine Barracks driveway on May 18, 2006. *William W. MacFeeley, 1812 Marine Guard*



The Commandant's House is a popular venue for weddings and other special events. Many of the events utilize in tents placed on the house's lawn. In March 2005 the National Park Service turned over the management of the house to an events management firm.

commandantshouse.com

On two different occasions the Commandant's House has provided the venue for the annual Junior League of Boston Decorators' Show House.[712] Other events drawing local residents into the yard have been performances by American and foreign military bands and drill teams and encampments and drills by military reenactor groups.[713] One such group, the 1812 Marines (originally known as the 1797 Marines), is based in the Navy Yard and provides both educational programs in association with the USS Constitution Museum and honor guards for ceremonies taking place on USS *Constitution*.[714]

Musical and other performances have also taken place on Pier 1. In 1997 the 1926 silent film *Old Ironsides* was shown on a large screen set up next to the ship. In June 2000, the Boston Academy of Music staged a production of the Gilbert and Sullivan operetta *H.M.S. Pinafore* using USS *Constitution* as a backdrop; three years later, USS *Cassin Young* (DD-793) formed part of the stage for a production of the Rogers and Hammerstein musical *South Pacific*.[715]

Another activity which has brought the public into the yard has been the Visting Ships Program sponsored by Boston National Historical Park in conjunction with the U.S. Navy and other organizations. Starting with the royal yacht HMY *Britannia* in July 1976, numerous United States and foreign vessels, ranging from warships and sail training ships to replica Viking longships and high-speed catamaran ferries, have been provided with berthing at Pier 1, generally with the condition that they be open to the public for some portion of their visit.[716] More recently, the Navy and other groups have utilized Pier 4 for port visits as well.[717] In a continuation of long-standing practices, two naval vessels with special area ties, the guided-missile frigate USS *Samuel Eliot Morison* (FFG-13) and the guided-missile cruiser USS *Bunker Hill* (CG-52), had their ceremonial commissionings at the Navy Yard in 1980 and 1986, respectively.[718]

The Navy Yard, especially in the national park, has proven to be an attractive site for event planners. In addition to large public events such as those mentioned above, numerous organizations have utilized space within the yard for corporate events.[719] Smaller functions were also accommodated in both the Hull and Preble Rooms in Building 5 and the Commandant's House, and functions have provided an important revenue stream for the USS Constitu-

[712] Gay Vietzke, "Commandant's House is a Great Success as Decorators' Show House," *The Broadside/Boston National Historical Park* (No. 2, 1998), p. 3; Lauren Gilligan and Lex Macbeth, "Commandant's House Selected As The Junior League of Boston's 32nd Annual Decorator's Show House," *The Broadside/Boston National Historical Park* (Spring 2004), p. 2; Junior League of Boston, *2004 Decorators' Show House: The Commandant's House* (Annapolis, Md.: Cyphers Agency, 2004).

[713] See, e.g., Julia Mize, "King's Rangers Hold Encampment," *The Broadside/Boston National Historical Park* (No. 3 & 4, 1996), p. 6; "USS *Constitution* Hosts Sunset Parades," *The Broadside/Boston National Historical Park* (No. 2 & 3, 2001), p. 14.

[714] 1812 Marines, *1812 Marines* [web site] [http://www.1812marines.org/index.htm], accessed Mar. 8, 2009.

[715] See, e.g., "Silent Film Shown on Pier 1," *The Broadside/Boston National Historical Park* (No. 4, 1997), p. 6.; Julia Mize and Sean Hennessey, "Dazzling Fireworks Display Accompanies Concert on Pier 1," *The Broadside/Boston National Historical Park* (No. 3, 1999), p. 5; Sean Hennessey, "Seventeen Thousand Enjoy *HMS Pinafore* at USS Constitution," *The Broadside/Boston National Historical Park* (No. 2, 2000), p. 5; Catherine Foster, "On Deck," *Boston Globe*, Aug. 8, 2003.

[716] See, e.g., Julia J. Mize, "The Vikings—Up Close and Personal," *The Broadside/Boston National Historical Park* (Autumn 1991), p. 4; Julia J. Mize and Stephen P. Carlson, "NATO Standing Naval Force Visits Charlestown Navy Yard," *The Broadside/Boston National Historical Park* (Winter 1992), p. 1; Project Liberty Ship, "Liberty Ship to Visit Navy Yard," *The Broadside/Boston National Historical Park* (Summer 1994), p. 3; Dan McCarthy and Marc Vagos, "HMY *Britannia* Visits Navy Yard," *The Broadside/Boston National Historical Park* (No. 2, 1996), p. 4; Stephen P. Carlson, "*Lütgens* Returns to Navy Yard," *The Broadside/Boston National Historical Park* (No. 3, 1997), p. 2; Stephen P. Carlson, "NATO Standing Fleet Visits Boston," *The Broadside/Boston National Historical Park* (No. 3, 1998), p. 7; Julia Mize, "Nova Scotia 'Cat' Visits Navy Yard," *The Broadside/Boston National Historical Park* (No. 3, 1999), p. 3; Stephen P. Carlson, "HMS *Chatham* (F-87) Visits Charlestown Navy Yard," *The Broadside/Boston National Historical Park* (No. 2, 2006), p. 7.

[717] See, e.g., Boston Redevelopment Authority, Minutes, Board of Directors' Meeting, Apr. 1, 2004, June 24, 2004, July 15, 2004, Aug. 19, 2004, Apr. 28, 2005, Apr. 25, 2006, Sept. 21, 2006, Apr. 24, 2007, June 21, 2007, Sept. 11, 2007, Nov. 13, 2008.

[718] Paul Langner, "[No Headline]," *Boston Globe*, Oct. 12, 1980; Jerry Ackerman, "USS Bunker Hill 'Brought to Life'," *Boston Globe*, Sept. 21, 1986.

[719] See, e.g., Richard Tourangeau, "Pier 1 Hosts Microsoft Conventioneers," *The Broadside/Boston National Historical Park* (No. 4, 1998), p. 10.

Navy Yard Exhibits And Visitor Centers



In 1994 the NPS installed the permanent exhibit *Serving the Fleet* in Building 125. It featured a variety of artifacts and photographs from the park's collections to show the history of the yard. This view shows the area highlighting the 19th century and Ropewalk. *Stephen P. Carlson, BNHP*



In April 1997 the NPS moved its Navy Yard visitor information function from a crowded space at the east end of Building 5 to the nearby Bunker Hill Pavilion. That facility had been constructed by the Raytheon Historical Foundation in 1975 to house a sound-and-light show on the Battle of Bunker Hill developed as part of the American Revolution Bicentennial celebrations. *Richard Tourangeau, BNHP*





On July 3, 2008, the National Park Service opened a new visitor center in Building 5 (above). A major element of the project was the exhibit *Serving the Naval Fleet*, which replaced the earlier Navy Yard exhibit in Building 125. Compare the more spacious layout of the exhibit (right) with that of its predecessor above.

Stephen P. Carlson, BNHP (above); Ruth A. Raphael, BNHP (right)

tion Museum. Because of the growing volume of such activities, as well as reduced park staffing levels, the park in 2005 entered into an agreement with Eastern National whereby a firm specializing in managing events, Amelia Occasions (now Historic Venues, Inc.), took over operation of both the Commandant's House and the tent area of Pier 1.[720] As of early 2009, the park was in the process of undertaking a more formalized procurement of such management services.[721]

Visitor Services Improvements

When the National Park Service assumed control of the Navy Yard, there were few amenities for visitors. The USS Constitution Museum opened in 1976 in Building 22. A small NPS visitor contact desk was set up in the entrance lobby of Building 5, but it was crowded and inefficient. After many years of discussions, the NPS in 1997 took over the Bunker Hill Pavilion immediately to the west of the yard. The pavilion had been constructed by the Raytheon Historical Foundation in the mid-1970s to house a multi-media presentation on the Battle of Bunker Hill, *Whites of Their Eyes*. The structure stood on the site of the Boston & Maine Railroad Grain Elevator that had been a prominent landmark on the Charlestown waterfront for most of the century. The NPS moved its visitor contact operation into the pavilion, and Eastern National, a non-profit organization that supports parks throughout the eastern portion of the United States, took over operation of the show and established a bookstore in the facility.[722]

The park took a major step towards providing improved interpretation of the Navy Yard in November 1994, when it opened the permanent exhibit *Serving the Fleet* in Building 125. The exhibit featured photographs and artifacts from the park's extensive museum collection covering the entire history of the yard.[723] Unfortunately, the location was remote from the main concentration of visitors on Pier 1. Due to this low visitation, the park decided to relocate

[720] Agreement, Eastern National, 1443G1720-05-011, Mar. 22, 2005, Administration Files, BNHP.

[721] Conversation with Nancy Tansino, Administrative Officer, BNHP, Mar. 3, 2009.

[722] Bill Foley, "New Visitor Center Opens at Charlestown Navy Yard," *The Broadside/Boston National Historical Park* (No. 2, 1997), p. 1-2.

[723] Louis Hutchins, "Serving the Fleet, 1800-1974: An Exhibition," *The Broadside/Boston National Historical Park* (Spring 1994), p. 3.

Visting Ships Program: A Gallery

ONE OF THE MOST POPULAR PUBLIC PROGRAMS sponsored by the National Park Service at the Charlestown Navy Yard has been the Visiting Ships Program. Since 1976, over 500 vessels ranging from replica Viking longboats to Tall Ships to the most modern naval vessels from around the world have berthed at Pier 1 and Pier 4. With a few exceptions, visiting ships have been open to the public while in the yard. This gallery presents a selection of images from such visits, excluding those which occurred as a part of the various larger events such as Sail Boston and Seaport Festivals which also utilized the Navy Yard's berthing spaces.



The first visiting ship was HMY *Britannia*, which brought Queen Elizabeth II to Boston on July 11, 1976, as part of the celebrations of the bicentennial of the American Revolution. With the Royal Standard flying from the main mast, the royal yacht is seen berthed astern of USS *Constitution*. *BNHP*



Tall ships attract the most visitors to the Navy Yard. This view of the Portuguese training ship NRP *Sagres* (A-520) dates to July 1986. She is a sister to USCG *Eagle.* *Stephen P. Carlson, Carlson Collection*



Cadets man yards and rigging of the Venezuelan training ship ARBV *Simon Bolivar* (BE-11) as the vessel departs the Navy Yard following a June 1988 port visit. *Stephen P. Carlson, Carlson Collection*



The majority of the visiting ships have been sponsored by the U.S. Navy and have included both American and foreign vessels of all kinds. Here, NPS personnel help tie up the Greek training ship HS *Aris* (A-74) in Aug. 1984. *Stephen P. Carlson, Carlson Collection*



USS *Austin* (LPD-4) visited Boston from Dec. 4 to 6, 1989. The 589-ft. amphibious transport dock, completed in 1965, combines the ability of operating helicopters with a well deck for launching landing craft. *Stephen P. Carlson, Carlson Collection*



While the program has included vessels from many nations, the most frequent foreign visitors have been from Canada. HMCS *Montreal* (FFH-336) is seen on May 15, 1998. *Stephen P. Carlson, BNHP*

Visting Ships Program: A Gallery



Three vessels of the NATO Standing Fleet from Canada, the Netherlands, and the United States—HMCS *Charlottestown* (FFH-339), HNLMS *Jakob Van Heemskerk* (F-812), and USS *Robert Bradley* (FFG-49)—are berthed abreast of each other at Pier 1 West outboard of USS *Constitution* during the fleet's June 25-29, 1998, visit. *Stephen P. Carlson, BNHP*



Not all visiting ships had military connections. On Sept. 11, 1991, three replicas of Viking vessels arrived at the yard as part of *Vinland Revisited*, a program commemorating the Viking discovery of America in the 10th century. *Stephen P. Carlson, Carlson Collection*



The Canadian province of Nova Scotia has an active tourism promotion program. In May 1999 the high-speed ferry *THE CAT* made a highly-publicized visit to Boston to announce its entrance into service on the route between Portland, Maine, and Nova Scoita. *Julia Mize, BNHP*



The U.S. Army operates a substantial number of "watercraft." Among the largest in its fleet, USAV *LTG William B. Bunker* (LSV-4) visited the Navy Yard in Oct. 1989. *Stephen P. Carlson, Carlson Collection*



The British frigate HMS *Chatham* (F-87) is seen at Pier 1 West on Nov. 3, 2006. *Stephen P. Carlson, BNHP*

the exhibit into the first floor of Building 5 as part of a new Navy Yard Visitor Center. Funded in Fiscal Year 2005, the construction phase of the project was completed in October 2006; installation of the *Serving the Naval Fleet* exhibit followed, and the visitor center opened in July 2008.[724]

Three other exhibit facilities exist in the Navy Yard. Although not generally known to visitors, the Boston Marine Society maintains a display of ship models, paintings, and other artifacts collected over more than two and a half centuries in Building 32. Several interpretive panels covering the history of the yard were installed in Building 10 in 1989 under the terms of the food service concession contract for Shipyard Galley. Finally, a small exhibit, including the blade from the building's massive bandsaw (itself displayed as an outdoor sculpture next to the building), was developed in Building 114 under the terms of the Chapter 91 license for its redevelopment.[725] Other buildings throughout the yard display historic images, but these are more decorative than interpretive.

There has also been interest over the years for use of the Ropewalk for non-maritime-related exhibits, although the high costs of renovating the quarter-mile-long narrow building ultimately led to the abandonment of the schemes. The first of these was announced in late 1988 by the Society for the Preservation of New England Antiquities (SPNEA) (now Historic New England). It proposed to both move its conservation laboratory to the building and open a Museum of New England Life there.[726] While the society submitted the project to the BRA in February 1990, it never officially sought formal developer designation.[727]

The second group to express interest in the Ropewalk as a museum site in the mid-1990s was the Friends of the Museum of Printing. This organization, which had been provided with courtesy storage by the park for its large collection of printing presses and other artifacts in Hoosac Stores starting in the mid-1980s, ultimately abandoned the location in favor of the former American Textile History Museum site in North Andover, Mass.[728]

From its earliest days through the late 1990s, Boston National Historical Park mounted temporary exhibits in the Preble Room in Building 5. These ranged from simple displays of artwork[729] to full-scale temporary exhibitions such as 1995's *Siege at Louisbourg*, commemorating the 250th anniversary of the English conquest of the French Fortress of Louisbourg during King George's War.[730] More recently, a collaborative effort between the park and the Institute of Contemporary Art in Boston has seen two outdoor exhibitions erected in the park.[731]



As a condition of its Chapter 91 license, the developer of Building 114 was required to develop and install an exhibit focusing on the history of the site. More than just photographs, the exhibit featured the blade from the building's massive bandsaw. *The Boston Harbor Associates*

At various times, NPS park rangers have conducted guided tours through the yard, including, on a limited basis, tours into Dry Dock 1 while USS *Cassin Young* occupied that facility. Although the BRA and the NPS have expressed interest in the development of an interpretive trail (the so-called "double interpretive loop") that covers the entire yard, this plan is yet to be implemented.[732] In 2007 the BRA finalized a Waterfront Activation Network Plan for the yard which suggested ways of promoting public activities in the yard, although its recommendations were directed more towards generic maritime-related themes rather than specific interpretation of the yard's history and resources.[733]

Food service for park visitors was always a top priority. After making do with a small vendor trailer, first outside Gate 1 and then inside the yard, the park in 1989 awarded a concession contract to Boston Concessions Group for the conversion of Building 10, which sits in the middle of Pier 1 halfway between *Constitution* and *Cassin Young*, into a food service facility. Shipyard Galley opened in June 1989.[734] The facility included a covered deck (Structure 284) north of the building to provide outdoor seating.

[724] Stephen P. Carlson, "Navy Yard Visitor Center Opens," *The Broadside/Boston National Historical Park* (No. 1, 2008), p. 2.

[725] Mass. Dept. of Environmental Protection, License No. 8529, Joinery Shop Associates, Jan. 5, 2001, Suffolk Deeds, bk. 25779, p. 106-7. Although the exhibit designers made extensive use of the resources in the Boston National Historical Park Museum Collection, they never sought or obtained NPS approval of the exhibit as required under the Chapter 91 license. See ibid., p. 111; conversation with Phil Hunt, Museum Specialist, BNHP, Mar. 6, 2009.

[726] Teresa M. Hanafin, "New England Museum Proposed," *Boston* Globe, Feb. 18, 1989; Society for the Preservation of New England Antiquities, *The New England Museum at the Ropewalk* (Apr. 1988), TIC 457/D6377; Childs Bertman Tseckares & Casendino, *Conceptual Study, Museum of New England Life at the Ropewalk* (rev. Apr. 1989), TIC 457/D6376. The idea of placing SPNEA's laboratories in the Ropewalk had first been proposed by the BRA in 1975. See Boston Redevelopment Authority, *Charlestown Naval Shipyard Planning Data Package* (Aug. 1975), TIC 457/D6378.

[727] Nancy R. Coolidge to Coyle, Feb. 28, 1990; Lynne M. Spencer to Paul McGinley, July 25, 1990, Ropewalk File, Division of Cultural Resources, BNHP.

[728] Friends of the Museum of Printing, *The Friends of the Museum of Printing, Inc., Invite You to Join the Founders Club to Create a New Museum, The National Museum of Printing, Boston* ([ca. 1993]); Caroline Louise Cole, "When Type Was Movable, and Words Moving," *Boston Globe* (Northwest Weekly), Nov. 29, 1998.

[729] See, e.g., "Benton Exhibit Ends," *The Broadside/Boston National Historical Park* (Autumn 1990), p. 2; Gay Vietzke, "Arts for the Park Exhibit is Great Success," *The Broadside/Boston National Historical Park* (No. 4, 1997), p. 2.

[730] Louis Hutchins, "'Siege at Louisbourg' Exhibit Opens," *The Broadside/Boston National Historical Park* (Summer 1995), p. 1-2.

[731] Dianne Donnelly, "Conspire," *The Broadside/Boston National Historical Park* (No. 2 & 3, 2001), p. 10; Stephen P. Carlson, "The Secret Ark of Icon Park," *The Broadside/Boston National Historical Park* (No. 2, 2005), p. 6.

[732] Boston Redevelopment Authority, *Double Interpretive Loop Plan, Charlestown Naval Shipyard, Boston, Massachusetts* (draft; 1991), TIC 457/D6292.

[733] Boston Redevelopment Authority, *Waterfront Activation Network Plan for the Charlestown Navy Yard* (2007), TIC 457/D6350A.

[734] Stephen P. Carlson, "Shipyard Galley Celebrates 10th Anniversary," *The Broadside/Boston National Historical Park* (No. 3, 1999), p. 8.



The former Officers Club space in Building 5, the Preble Room, was used by Boston National Historical Park for temporary exhibits. The most complex temporary exhibit was *The Siege at Louisbourg*. This 1995 show commemorated the 250th anniversary of the conquest of the French Fortress of Louisbourg during King George's War by predominantly Massachusetts forces. The exhibition also involved an exchange of park rangers between the National Park Service and Parks Canada. *BNHP*





Food service for national park visitors has evolved from the trailer and picnic tables seen outside the Curtain Gates in May 1977 (top) to a facility occupying Building 10 and an Outside Seating Structure (above), opened in June 1989. Visitors now had shelter from the weather as they ate.
Victor A. Jorrin, BNHP (top); BNHP (above)

Outside of the national park, food service has been somewhat limited. Tavern on the Water (originally the Quarterdeck and then the Above Deck restaurant), constructed around the Industrial Service Building (Building 228) on Pier 6, for many years was the only "destination" restaurant in the Navy Yard. More recently, the Navy Yard Bistro in Building 34 (the successor to a series of restaurants in that location) has begun to achieve success in drawing patrons other than office workers to it.[735] The remaining food service facilities are the cafeteria in Building 149 and small cafe-type operations in Buildings 36 and 39 as well as Flagship Wharf.

Proposals to bring in institutions that would attract large numbers of visitors to the yard, and thus stimulate the growth of retail activities within the yard, often announced with great fanfare and anticipation, have come to naught. For example, in June 1975 the BRA sought to bring the still-homeless John F. Kennedy Presidential Library and Museum to the yard. Under this scheme, the library would have occupied the granite portion of Building 24 while the Navy moved its maintenance shops to Building 36. Dry Dock 2 and Buildings 195 and 197 would have been added to the NPS boundary; Buildings 195 and 197 would have been demolished to create open vistas for library and museum visitors.[736] Opposition of the Navy to surrendering Building 24 led the BRA in August 1975 to propose Building 36 for the Kennedy Library instead.[737] The library trustees, however, rejected the Navy Yard proposal in favor of new construction at Columbia Point in Dorchester.

One of the most serious proposals to bring a visitor attraction to the Navy Yard came in September 1988, when the New England Aquarium announced a desire to move from its existing facility on Central Wharf in Downtown Boston to Dry Dock 2.[738] Opposition to the idea, along with the fact that the use of that dry dock was precluded by the conditions of the Shipyard Park parcel transfer deed, shifted thinking to Dry Dock 5 at the east end of the yard.[739] The BRA's 1990 master plan was to a considerable extent predicated on the realization of the Aquarium's move, but delays in the planning process, continued opposition from some portions of the public, and changing economics led the Aquarium in the fall of 1991 to abandon its scheme and instead expand at its existing location.[740]

A second proposed use of Dry Dock 5, for a museum centered on the recovered artifacts of the 18th-century pirate ship *Whydah*, was brought forth in the wake of the Aquarium pull-out.[741] This scheme drew considerable opposition from a variety of groups, including the National Park Service, largely due to the ship's involvement with the slave trade, and the developer ultimately decided to pursue opportunities in another part of the country.[742]

[735] Dan Murphy, "Navy Yard Bistro Owner Finds Unlikely Road to Success," *Charlestown Patriot-Bridge*, Feb. 26, 2009.

[736] Boston Redevelopment Authority, *The John F. Kennedy Museum, Charlestown Naval Shipyard/A Proposal* ([1975]), TIC 457/D6292; Kenney to Trustees, John F. Kennedy Library Corp., June 20, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 19.

[737] J.B. Calarese, memorandum for file, "Use of Building 24 for the John F. Kennedy Museum," June 30, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-11517, Box 19; Boston Redevelopment Authority, *Charlestown Naval Shipyard Planning Data Package*.

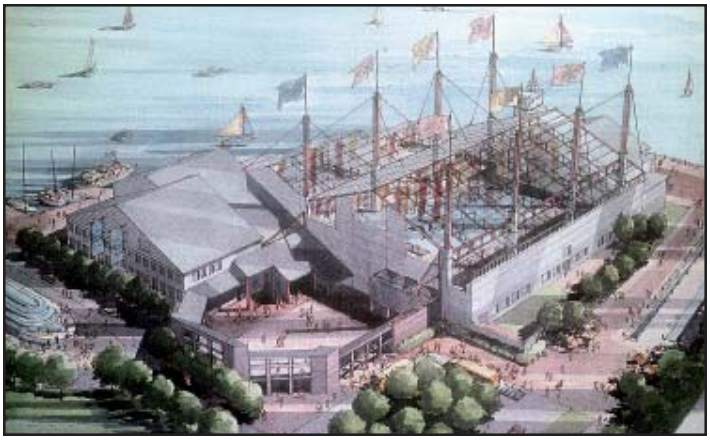
[738] Peggy Hernandez, "Aquarium Plans Move to Charlestown," *Boston Globe*, Sept. 23, 1988; New England Aquarium, *The New England Aquarium: A Report to the Charlestown Community* (June 1989), TIC 457/D6380.

[739] Teresa M. Hanafin, "Aquarium's Move Hits a Snag," *Boston Globe*, Apr. 1, 1989; Teresa M. Hanafin, "New Plan Offered for Aquarium Move," *Boston Globe*, Nov. 16, 1989; Hill, *Political Economy of Military Base Redevelopment*, p. 235-36

[740] Efrain Hernandez, Jr., "Aquarium Officials Reconsider Move to Charlestown," *Boston Globe*, Sept. 6, 1991; Peggy Hernandez, "Aquarium Halts Plan to Move to Charlestown," *Boston Globe*, Nov. 7, 1991. The official withdrawl of the Aquarium proposal did not occur until Sept. 1992. See *Charlestown Navy Yard Update 1994*, tab 6.

[741] Jerry Ackerman, "Pirate Display Eyed for Charlestown," *Boston Globe*, June 3, 1992.

[742] Katherine Yung, "A Slave-Trader Attraction Concerns Black Community," *Boston Globe*, June 4, 1992; Jerry Ackerman, "Pirate Ship Theme Park Sails South to Tampa," *Boston Globe*, Oct. 20, 1992; Joan Vennochi, "Dead In the Water: How Race, Politics, and Business in Boston Converged to Sink the Whydah Project," *Boston Globe Magazine*, Jan. 10, 1993.





The artist's rendering above shows the proposed New England Aquarium facility at Dry Dock 5, while that at right shows the Whydah Pirate Museum. *NPS TIC 457/D6284*

Public access to the waterfront in Boston Harbor became increasingly important as commercial and industrial activities declined. In 1983 the state amended its waterways laws, commonly known as Chapter 91, to promote such access and discourage non-water-dependent uses. In response to this legislation, the BRA produced a plan for what was called Harborpark.[743] A key element of this plan involved the creation, in association with the advocacy group, the Boston Harbor Associates, of HarborWalk, a pedestrian walkway along the waterfront.[744] BRA conveyances within the New Development Area since that time have included pedestrian easements along what had been the historic Dock Street.[745]

The original proposal for the Constellation Wharf condominiums on Pier 7 did not include any public walkways along the edges of the pier. Assuming that the permits it had obtained prior to the passage of the revised Chapter 91 were valid, Immobiliare began construction, only to be sued by the Massachusetts Department of Environmental Quality Engineering. The BRA brokered a settlement in 1986 which allowed the structure to be built as planned, but with a public easement to the end of the pier.[746] In practice, the signage on the pier discourages public usage.[747] One result of the controversy was that the still unrealized plans for development on Pier 5 have public walkway easements along the edges of the pier.

Educational Programs

An on-going effort of Boston National Historical Park and its various partner sites, the *Boston: People and Places* program has brought thousands of school children to the yard to experience educational programs developed by both the park and the USS Constitution Museum. Among the more popular offerings was "Rosie the Riveter," which took place on USS *Cassin Young* and celebrated the women shipyard workers of World War II.[748]

One of the earliest tenants in the Navy Yard was the Historical and Urban Environmental Studies Program (HUES). This was a collaborative effort between Boston University and the National Park Service to provide opportunities for students, youth organizations, and adults to study the urban environment using the city of Boston as a classroom. In the fall of 1977 the HUES staff moved into space on the first floor of the Marine Barracks.[749] The program continued into the early 1980s.

The park has also provided space for educational programs run by both the New England Historic Seaport (now the Seaport Campus of Schools for Children) and the Hull Lifesaving Museum. The former organization utilized space in Building 10 (and later Building 1) as well as Building 125, while the later operated from facilities on Pier 2 and in the Carriage House (Building 21). Key elements of their programs, discussed elsewhere, involved hands-on education in maritime skills. In September 1994, the Seaport instituted the Lightship Campus (later renamed Seaport Campus) educational program, initially based on the lightship *Nantucket II* (WLV-613), moored in the flooded Dry Dock 2.[750]

In late 1986 South Boston sailing enthusiast Harry McDonough approached the City of Boston with the idea of developing a free youth sailing program centered at Pier 4 and focused on the 12-meter America's Cup contender yacht *Courageous*. The Courageous Sailing Center opened in June 1987, using the Pier 4 Industrial Service Building (Building 230) and the marina slips on the east side of the pier. Until the mid-1990s, it also occupied office space in the Muster House (Building 31). While *Courageous* herself later went

[743] Gordon, "Implementing Urban Waterfront Development," p. 921; Boston Redevelopment Authority, *Harborpark Plan: City of Boston Municipal Harbor Plan* (Oct. 1990), TIC 457/D6276.

[744] On HarborWalk, see *Boston HarborWalk* [web site] [http://www.bostonharborwalk.com/index.php], accessed Mar. 17, 2009.

[745] See, e.g., deed, Boston Redevelopment Authority to Navy Yard Four Associates, May 26, 2005, Suffolk Deeds, bk. 37165, p. 253-54.

[746] Hill, *Political Economy of Military Base Redevelopment*, p. 233-34, 299; Mass. Dept. of Environmental Quality Engineering, License No. 1585, Immobiliare New England and Navy Yard Realty Trust, Feb. 17, 1987, Suffolk Deeds, bk. 13428, p. 93-98. BRA Director Stephen Coyle, questioned about the situation, stated that access to Pier 7 "will not be missed at all by the public." See Yudis, "Charlestown Navy Yard Has Its Day."

[747] Vivien Li to Ian Bowles, "Charlestown Navy Yard Waterfront Activation Network Plan," Aug. 15, 2007 [http://www.tbha.org/policystatements/CNY%20Waterfront%20Activation%20Plan.pdf], p. 5.

[748] "Rosie: Riveting Again," *The Broadside/Boston National Historical Park* (Winter 1991), p. 4.

[749] Ellen Fineberg, "HUES Program Now Underway," *The Broadside/Boston National Historical Park*, vol. 3, no. 3 (Winter 1978), p. [7].

[750] Michael Chin, "Lightship Campus: A Floating High School in the Navy Yard," *The Broadside/Boston National Historical Park* (Spring 1995), p. 4. The lightship, acquired in 1984, was subsequently sold and is now in Wareham, Mass. See Lighthousefriends.com, *Lightship Nantucket II WLV 613, MA* [web page] [http://www.lighthousefriends.com/light.asp?ID=613], accessed Mar. 18, 2009.



Fourth-grade students watch as NPS Ranger Lynne Dubiel demonstrates welding techniques during the "Rosie the Riveter" program, part of the *Boston: People and Places* educational program. *BNHP*

to a Newport, R.I., museum, the center remains in 2008 an active educational and recreational facility.[751]

Continued Industrial Activities

The Navy Yard has never been totally devoid of maritime industrial activities. Dry Dock 1 was used between 1979 and 1981 to service USS *Cassin Young*. As a result of leaks detected during the destroyer's Commemorative Sea Trials in 2004, the park began plans to drydock the vessel for major hull repairs in Fiscal Year 2009. Much of the early planning for this project was undertaken on contract by the Portsmouth Naval Shipyard.

Maintenance work on USS *Constitution* has continued, with the ship undergoing a major drydocking in Dry Dock 1 between 1992 and 1995.[752] In October 2007 the Navy began a two-year maintenance availability at her normal berth. This project was intended to ready the ship for the bicentennial of the War of 1812 in 2012.[753]

Until the yard closed, there had been no separate organization to oversee the maintenance of USS *Constitution*; work was done by personnel of the appropriate shop within the shipyard. With the yard's closure, a specialized group of shipwrights and riggers, along with planners and other trades, was brought together to form a

[751] Mike Barnicle, "Amid Condos, Oasis for Kids," *Boston Globe*, Nov. 24, 1986; "America's Cup Winner to Move to Charlestown," *Boston Globe*, Feb. 1, 1987; Tony Chamberlain, "Warm Welcome for Courageous," *Boston Globe*, June 18, 1987; Dan Murphy, "Courageous Sailing Center Turns 20," *Charlestown Patriot-Bridge*, Mar. 8, 2007; Courageous Sailing Center, *About Courageous* [web page] [http://courageoussailing.org/home/about-courageous/overview], accessed Mar. 18, 2009. The center's presence on Pier 4 is under a license from the BRA to the Boston Parks & Recreation Dept. See Boston Redevelopment Authority, Minutes, Board of Directors' Meeting, May 22, 2003.

[752] "USS *Constitution* Enters Dry Dock 1," *The Broadside/Boston National Historical Park* (Autumn 1992), p. 3; "USS *Constitution* Undocked," *The Broadside/Boston National Historical Park* (No. 4, 1995), p. 3; Patrick Otton, *USS* Constitution *Rehabilitation and Restoration* (Naval Historical Center Detachment Boston, Mar. 1997) [http://www.history.navy. mil/constitution/restore.htm], accessed Mar. 11, 2009.

[753] Naval Historical Center Public Affairs, "'Old Ironsides' To Undergo Repair Availability," Aug. 7, 2007 [http://www.news.navy.mil/search/print.asp?story_id=31024&VIRIN=48008&imagetype=1&page=1], accessed Mar. 17, 2009.

Maritime Youth Programs



The Courageous Sailing Center opened on Pier 4 in 1987, offering sailing programs for both youths and adults. This view shows some of the center's boats tied up along the east side of Pier 4. The center is based in the former Industrial Service Building (Building 230) on the pier. *The Boston Harbor Associates*



In 1990 the Hull Lifesaving Museum established a Boathouse for the rowing program it operated at Pier 2. Note the solar power panels on the structure, which burned in 2002. The program has since moved to the Boston Marine Industrial Park (the former South Boston Annex). *BNHP*



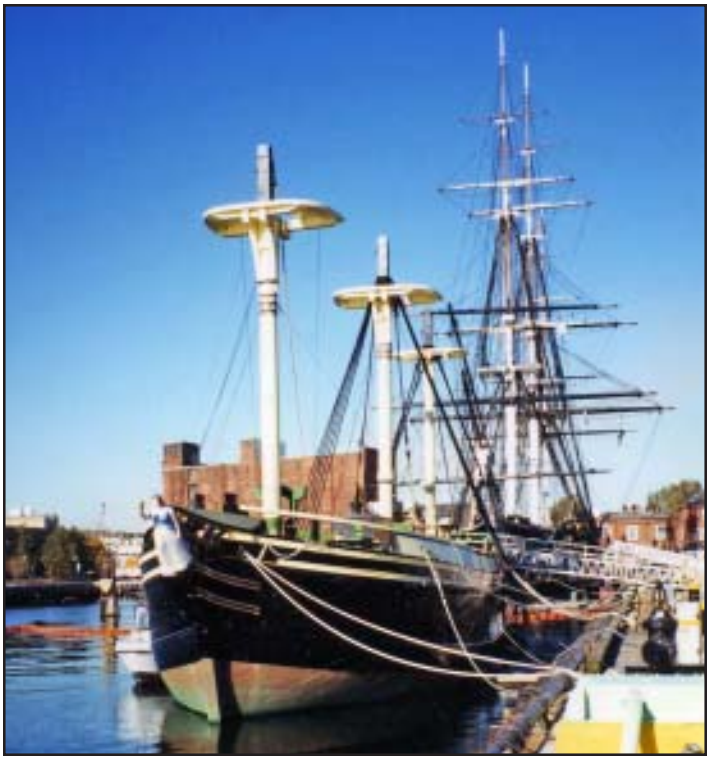
For a decade, the New England Historic Seaport and its successors used the retired U.S. Coast Guard lightship *Nantucket II* (WLV-613) as an integral part of their educational programs. This Dec. 12, 1995, view shows the red-hulled vessel at her mooring in Dry Dock 2. *BNHP*

Maintenance & Repair organization for the ship. It has been housed in Building 24. Over the years, the group underwent a number of organizational changes, both internally and in its relationship to the larger naval shipbuilding and repair community. Since October 1991, it has been known as the Naval Historical Center Detachment Boston and has reported to the Director of the Naval Historical Center.[754] In 2000-2001, the detachment provided support to the National Park Service replica merchant ship, *Friendship of Salem*.[755]

The sail training vessel *Spirit of Massachusetts*, a replica of a 19th century Gloucester fishing schooner, was built on BRA land adjacent to Dry Dock 2, being launched in 1984.[756] Until the BRA was forced to close the pier because of structural failures, *Spirit* made Pier 3 in the Navy Yard her summer home. The NPS provided office space for the New England Historic Seaport, the organization that built and operated *Spirit of Massachusetts*, first in Building 10 and then in Building 1. The offices ultimately moved into space in Flagship Wharf (Building 197).

The park also entered into agreements which saw the Seaport open a small boat shop in a wing of Building 125 in 1988,[757] while the Hull Lifesaving Museum established a similar facility in a new shed at the head of Pier 2.[758] Both programs were aimed at teaching troubled and at-risk youths the skills necessary to build and sail small craft and complemented those offered by the Courageous Sailing Center. The Museum shop burned in August 2002. It left the Navy Yard the following year, and has since moved its program into Building 49 at the Boston Marine Industrial Park.[759]

In 1996, the park agreed to allow the New England Steamship Foundation to work on the coastal steamship SS *Nobska* in Dry Dock 1.[760] Unfortunately, funding for that work was sporadic, and concerns about the dock's availability for *Constitution* and *Cassin Young* led the park in 2001 to request removal of the still-incomplete vessel from the dock at the expiration of the five-year agreement. Efforts of the foundation to raise money to make the hull watertight failed, and in November 2005 the NPS took title to her. She was cut up for scrap the following summer.[761]



The Naval Historical Center Detachment Boston provided rigging services for Salem Maritime National Historic Site's replica vessel *Friendship*. The ship is seen at Pier 1 West on Oct. 23, 2000. *BNHP*

Response To International Terrorism

The National Park Service provided special security precautions for activities within the yard ever since it took over responsibility for its portion of the yard. These measures were largely invisible other than those associated with the management of vehicle traffic coming through Gate 1 and later, the First Ave. entrance off Fifth St. (commonly, although inaccurately, referred to as Gate 4).

The first major security operation in the yard occurred in March and April 1996 in conjunction with the visit by HMY *Britannia*. Because of the presence of a member of the British royal family, the Duke of York, and a recent break in the cease-fire in Northern Ireland, a special high security plan was developed and implemented. It involved vehicle control points and searches, augmentation of the park Protection staff with individuals detailed from other parks, and intensive coordination with other federal, state, and local law enforcement agencies.[762]

[754] Martin, *Most Fortunate Ship*, p. 365, 371; "Woodworking Facility Dedicated," *Boston Naval Shipyard News*, vo. 38, no. 18 (Mar. 1, 1974), p. 1; Naval Historical Center Detachment Boston Home Page [http://www.history.navy.mil/constitution/index.html], accessed Mar. 17, 2009.

[755] Stephen P. Carlson and Salem Maritime NHS Website, "*Friendship* Arrives At Navy Yard To Receive Masts," *The Broadside/Boston National Historical Park* (No. 3, 2000), p. 10.

[756] License agreement, Boston Redevelopment Authority and New England Historic Seaport (draft), Apr. 11, 1983, Shipyard Park File, Division of Cultural Resources, BNHP; Marcus Halevi and George Putz, *The Spirit of Massachusetts: Building a Tall Ship, 1983-1984* (Thorndike, Me.: Thorndike Press, 1984).

[757] Robin Travers, "Seaport's Boat Shop," *Seaport News* (New England Historic Seaport) (Jan. 1988), p. 1.

[758] Edward P. McCabe, "The Chelsea Creek Icebreaker: The National Park Service and Youth Rowing," *The Broadside/Boston National Historical Park* (Winter 1994), p. 5; McCabe, "Navy Yard Rowing Center"; Burchill to Edward P. McCabe, Feb. 13, 1990, BOST 90-000, Section 106 Case Files, Division of Cultural Resources, BNHP.

[759] Economic Development & Industrial Corp., Minutes, Board of Directors' Meeting, June 3, 2004.

[760] Stephen P. Carlson, "Steamship *Nobska* Enters Dry Dock 1," *The Broadside/Boston National Historical Park* (No. 2, 1996), p. 5; David G. Pritchard to Burchill, "Dry Docking, Restoration and Return to Service – S.S. NOBSKA," Feb. 1, 1996, BOST 03-003, Section 106 Case Files, Division of Cultural Resources, BNHP; agreement, New England Steamship Foundation, 1443AG1720-96-005, June 17, 1996, Administrative Files, BNHP. For a history of *Nobska*, see New England Steamship Foundation, *NOBSKA's History* [web page] [http://www.nobska.org/hist/a1.htm], accessed Mar. 18, 2009.

[761] Savage to Arthur E. Flathers, May 22, 2001, Reading File, Park History Files, Division of Cultural Resources, BNHP; Savage to Metz, Jan. 21, 2004, July 9, 2004, Jan. 5, 2006; Memorandum of Agreement, Jan. 2006, enclosed in Simon to Savage, "SS NOBSKA, Dry Dock 1, Charlestown Navy Yard, Boston (Charlestown), MA. MHC# RC.34406," Jan. 25, 2006, BOST 03-003, Section 106 Case Files, Division of Cultural Resources, BNHP; New England Steamship Foundation, *Nobska Scrapped* [web page] [http://www.nobska.org/news/f1.htm], accessed Mar. 18, 2009. Actual work was performed only between Sept. 1996 and Aug. 1997 and again from Feb. to Dec. 2000. See Steve Carlson to David Brouillette, "NOBSKA," Dec. 4, 2003, BOST 03-003, Section 106 Case Files, Division of Cultural Resources, BNHP.

[762] McCarthy & Vagos, "HMY *Britannia* Visits Navy Yard."

Ship Repair: An On-Going Mission

THE CHARLESTOWN NAVY YARD has never ceased its role in maintaining naval and civilian vessels. Since 1978, Dry Dock 1 has been utilized four times, and its continued use is a central element of National Park Service plans. In addition, routine maintenance work is undertaken daily on both historic vessels permanently berthed at the yard. While work on USS *Constitution* is performed by civilian employees of the Navy, that on USS *Cassin Young* (DD-793) is done largely by a dedicated group of volunteers.



In Aug. 1978 the NPS docked a former Navy covered lighter acquired from the Environmental Protection Agency to convert it into a landing stage for tour boats at the end of Pier 1. *BNHP*



From Oct. 1979 to May 1981 USS *Cassin Young* underwent a major restoration in Dry Dock 1. One of the most significant tasks was the sandblasting and painting of the hull. This July 1980 view shows the hull still partly in primer. *BNHP*



USS *Constitution* spent three years in Dry Dock 1 from 1992 to 1995, during which time major structural work took place enabling her to sail under her own power for the first time in over a century. To serve visitors while the ship was in the dock, a temporary viewing walkway was erected along the west side of the dock, and an over-engineered temporary shelter and seating was placed at the head of the dock. Note the flagpoles erected by the USS Constitution Museum in 1990.
Eve Geller, Archetype Architecture



From 1996 to 2006 the coastal steamship SS *Nobska* occupied Dry Dock 1. This 2000 view shows workers from AK Services of Everett, Mass., unloading new steel hull plates. The historic restoration project, however, ultimately failed due to the inability of the vessel's owner to raise the funds required to complete the work. *AK Services*



Work on USS *Constitution* is on-going. In Oct. 2007 the Navy began a major pierside maintenance availability period. This Nov. 29, 2007, image shows a crane lowering one of the yards from the ship's foremast.
U.S. Navy 071129-N-9793B-001



Volunteers provide thousands of hours of work on USS *Cassin Young* annually. Here Bob Amarosa uses the lathe in the ship's machine shop to fabricate a part for the vessel. *USS Cassin Young Volunteers*



The first major security operation came in conjunction with the 1996 visit of Prince Andrew on HMY *Britannia*. This view shows the vehicle checkpoint set up to control access onto Pier 1. *Dan McCarthy, BNHP*



In the aftermath of the Sept. 11, 2001, terrorist attacks, the NPS closed the Charlestown Navy Yard. Here Park Ranger John A. Heath explains the situation to a visitor. The yard reopened on Sept. 29, 2001.
Richard Tourangeau, BNHP

In response to the terrorist attacks on American embassies in East Africa in August 1998, the Navy created a vehicle exclusion zone on Pier 1 around USS *Constitution*. Initially, excess keel blocks were utilized, but in the fall of 1999 these were replaced by new concrete jersey barriers. Repeatedly rearranged as the repaving of Pier 1 proceeded in 1999 and 2000, the barriers were finally removed in mid-2000.

On September 11, 2001, terrorists crashed hijacked aircraft into the World Trade Center and the Pentagon. Immediately, Boston National Historical Park closed to the public, and even before the second of the World Trade Center towers had collapsed, park and Navy employees were securing all entrances to the NPS area of the Navy Yard with keel blocks. While other park sites in downtown Boston and at Bunker Hill reopened later that week, the Navy Yard remained closed to the public until September 29. When it did reopen, access to Pier 1 was restricted to official business only.[763]

The reopened Navy Yard saw the elimination of tour buses from the park, and limiting of other vehicles to employees, deliveries, and selected special event participants only. All vehicles entering the park were searched, although during security level "Yellow" that search was not performed on employee or government vehicles assigned to the park or the Navy. To assist with this increased security, the park contracted in the summer of 2002 for security guard services to supplement the park's law enforcement ranger staff. This contract has since been taken over by the Navy.

Even as the park reopened in late September 2001, USS *Constitution* remained closed. The ship finally reopened four days a week on November 8, 2001. The delay in reopening was due to the decision to use airport-style metal detectors to screen all visitors to the ship. Variations in hours and the number of open days have occurred seasonally ever since.[764]

Initially, security screening took place in a temporary tent on Pier 1. In September 2003, this was replaced by a metal shed, which was anchored into Pier 1 in violation of the NPS approval of the structure on the basis of no ground penetration to secure it in place. Construction of the shed was performed by Naval "Seabees."[765]

Because USS *Constitution* was considered an important national symbol, the National Park Service designated the park as one of its "icon" parks. These parks were seen as potential terrorist targets, and thus the NPS took steps to improve and increase security measures for them.[766] Several major security-related projects were begun at the Navy Yard.

The first of these involved the construction of a retractable hydraulic vehicle barrier (Structure 285) on First Avenue near the park entrance station at the Scale House. The chosen barricade, which protected potential archeological resources because it only required a shallow pit, was installed in the spring of 2003.[767] In conjunction with the barricades, which were placed just west of the Truck Scale Platform, the park also installed parking lot-style barriers just east of the driveway that provides access to the north end of Building 28. This created a confinement zone whereby vehicles could be searched. Repeatedly damaged by vehicles, they were removed in 2007.

After several incidents when the barricades were accidentally deployed while vehicles were still over them, the park decided to leave the barricades down during normal ("Yellow") security status on weekdays. It also decided to move the control panel from the Scale House window to a separate guard booth adjacent to the barricades. This Guard Booth (Building 288) was delivered in January 2004 and placed in operation six months later. The park has since resumed using the barricades for access control, although mechanical problems placed them out of service in late 2008. Repairs are scheduled for the spring of 2009.

[763] "September 11 Events Impact Boston National Historical Park," *The Broadside/Boston National Historical Park* (No. 2 & 3, 2001), p. 5; Janet A. McDonnell, *The National Park Service: Responding to the September 11 Terrorist Attacks* (Washington: National Park Service, 2004), p. 6, 10.

[764] Press release, "USS Constitution To Resume Tours," Nov. 5, 2001, USS *Constitution* Press Releases & Advisories [web site] [http://www.ussconstitution.navy.mil/pressrel21-01.html]; press release, "USS Constitution To Change Tour Hours," Jan. 15, 2002 [http://www.ussconstitution.navy.mil/pressrel02-02.html]; press release, "USS Constitution Changes Over to Winter Hours," Oct. 9, 2002 [http://www.ussconstitution.navy.mil/pressrel16-02.html]; "USS Constitution Summer Hours Schedule" [http://www.ussconstitution.navy.mil/SummerHoursPressrel.htm], all accessed Aug. 23, 2004.

[765] Savage, memorandum to files, "Section 106 Compliance – BOST 02-003, Pier 1 Watch Guard Shack & Inspection Structure, Charlestown Navy Yard," Apr. 23, 2002; Steve Carlson to Brouillette, "Navy Screening Shelter," Sept. 30, 2003, BOST 02-003, Section 106 Case Files, Division of Cultural Resources, BNHP.

[766] McConnell, *Responding to the September 11 Terrorist Attacks*, p. 10. For a definition of icon parks, see U.S. Dept. of the Interior, Office of Inspector General, *Review of National Icon Park Security* (Report 2003-I-0063; Aug. 2003), p. 9-11.

[767] Savage to Metz, July 2, 2002 (concurred July 22, 2002), BOST 02-006, Section 106 Case Files, Division of Cultural Resources, BNHP.

The Contemporary Navy Yard: A Gallery

THE NAVY YARD IN 2008 is very different from the Navy Yard of 1974. Much of the industrial character of the facility has been removed, even in the National Park Service area of the yard. Yet, as this gallery illustrates, the yard still retains considerable integrity to its historic period. The 2006 existing conditions plan (Appendix F) shows the location in the yard of each structure shown.



Quarters B-F (Building 265), Oct. 31, 2006
Three of the five units (D-E-F) in this rowhouse remain in use as family housing in 2008. *Stephen P. Carlson, BNHP*



Marine Barracks (Building I), Apr. 28, 2008
This view shows the rear of the structure. Note how the walls of the original stable wing were incorporated into the Navy Yard Boundary Wall and the World War II wooden addition. *Stephen P. Carlson, BNHP*



Quarters P & Tennis Court 237, Oct. 19, 2006
The Tennis Court is built over the World War II Underground Water Storage Tank (Structure 223). The edge of Building 266 is at right.
Stephen P. Carlson, BNHP



Building 4, May 5, 2008
The walls of Building 4 exhibit evidence of numerous changes in door and window openings through the years.
Stephen P. Carlson, BNHP



Quarters G, Sept. 19, 2006
The vents for the Underground Fuel Oil Tank (Structure 220) can be seen just behind the hedge lining Second Ave. *Stephen P. Carlson, BNHP*



Quarters L-O (Building 266), Oct. 31, 2006
Tennis Court 237 can be seen next to the Lower Officers Quarters, redeveloped as office space. *Stephen P. Carlson, BNHP*



Building 1, Aug. 25, 2004
The Gate 2 Gate House also contained the garages and quarters for the Commandant's chauffeur. *Stephen P. Carlson, BNHP*



Building 5, Apr. 25, 2008
This view shows the south side of Building 5 following the relocation of the chillers for the air-conditioning system from in front of the center of the structure to in front of Building 4. *Ruth A. Raphael, BNHP*

The Contemporary Navy Yard: A Gallery



Building 10, Sept. 12, 2007
This view shows the steel stairway which replaced the heavy timber wrap-around viewing platform. The Outside Seating Structure (Structure 284) is at left. The paint on the wall is a reminder of an addition which had been removed in 1964. *Ruth A. Raphael, BNHP*



Buildings 19 & 288, Apr. 14, 2005
The Scale House served as the national park's entrance station for two decades until the dispatch operation moved to Building 109 in July 2006. The NPS Guard Booth serves the entrance function in 2008, controlling the Security Barricades (Structure 285), both of which are here seen in the up position. *OCLP*



Building 22, Sept. 12, 2007
The USS Constitution Museum was the first structure to be adapted to a new use following the Navy Yard's closure. At left is the head capstan (Capstan 2) for Dry Dock 1, while the flagpoles at right were installed in Mar. 1990 to help attract visitors to the museum. *Ruth A. Raphael, BNHP*



Building 24, Oct. 8, 2006
This view shows the East Extension of Building 24 following the completion of the replacement of the asbestos siding. Also seen in this view are Light Towers 239 (left) and 238 (right), as well as Portal Crane 62.
Stephen P. Carlson, BNHP



Building 28, Oct. 8, 2006
The 1918 addition at the north end of Building 28 can be clearly distinguished by the different color brick and slate. *Stephen P. Carlson, BNHP*



Building 31, June/July 2003
The Muster House was the only yard structure specifically restored to an earlier appearance, although the restoration failed to paint the structure as it had been during the entire time that it had been historically surrounded by the canopy. Building 32 can be seen at right. *Jane Carolan, BNHP*

The Contemporary Navy Yard: A Gallery



Building 32, May 5, 2008
This view shows the Safety Shoe Store addition at the rear of the building. This area was later used by the Federal Emplyees Credit Union, and is now part of the meeting room and library of the Boston Marine Society.
Stephen P. Carlson, BNHP



Building 33, Apr. 30, 2008
This view shows the north and west sides of the former Sail Loft and Frazier Barracks. At the time this view was taken, work was underway to convert it from offices to apartments. *Stephen P. Carlson, BNHP*



Building 34, May 5, 2008
With minor exceptions such as doorways, the north side of Building 34 looks almost identical to the structure as completed in the 1830s.
Stephen P. Carlson, BNHP



Building 36, May 5, 2008
Other than the central doorway on the west side, introduced in the 1890s and enlarged in the 1930s, and the absence of a chimney in the center of the west roof, Building 36 appears much as it did when completed in 1866.
Stephen P. Carlson, BNHP



Building 38, May 5, 2008
Although originally designed before he arrived at the Navy Yard, Joseph Billings refined the plans to incorporate the corner quoins, belt rail, and curved doorways which would be signature details of buildings he designed for the Navy Yard. *Stephen P. Carlson, BNHP*



Building 39, Nov. 21, 2006
This view shows the Second Ave. side of Building 39. The typical Billings architectural details are clearly evident. *Stephen P. Carlson, BNHP*

The Contemporary Navy Yard: A Gallery



Building 40, Oct. 19, 2006
The large garage door on the 9th St. side of Building 40 betrays its reuse as a parking garage for residents of the Parris Landing condominiums in adjoining Building 42. *Stephen P. Carlson, BNHP*



Building 42, Dec. 10, 2005
This view of the Parris Landing condominiums shows the original Machine Shop and Foundry wings connected by a portion of the 1904 Machine Shop infill wall. *boston.condocompany.com*



Building 58, May 5, 2008
This view of the Ropewalk from its west end illustrates some of the problems attracting an appropriate reuse for the long, low structure.
Stephen P. Carlson, BNHP



Building 60, Aug. 28, 2006
Like the Ropewalk, the Tarring House remains undeveloped as of mid-2008. *Stephen P. Carlson, BNHP*



Building 62, Oct. 19, 2006
The Hemp House is a unique structure in that it incorporates the mid-19th century granite building style with the early 20th century brick style. Note the angle of the brick wing which kept it from blocking Fifth Ave. next to the Tarring House (Building 60). *Stephen P. Carlson, BNHP*



Building 75, May 3, 2008
Glass and metal panels provide infill for the numerous doorways of the yard's only surviving Timber Shed. *Stephen P. Carlson, BNHP*



Building 79, Oct. 31, 2006
Building 79 is the only structure in the Historic Monument Area to retain an exterior fire escape. Building 96 is at left. *Stephen P. Carlson, BNHP*

The Contemporary Navy Yard: A Gallery



Building 96, Oct. 31, 2006
At the time this photograph was taken, the lessee of Building 96 was advertising for a tenant. *Stephen P. Carlson, BNHP*



Building 103, May 5, 2008
Although not part of the Historic Monument Area, Building 103 has undergone a similar rehabilitation to structures in that part of the Navy Yard.
Stephen P. Carlson, BNHP



Building 104 & Shipways Garage, July 22, 2004
The surviving portion of the original Building 104 was rehabilitated, while the World War II Extension was demolished. Part of that site was used for a two-level parking garage for the Shipways Place condominiums.
Stephen P. Carlson, BNHP



Building 105, May 5, 2008
The boarded-up windows show that the Forge Shop has yet to be developed. *Stephen P. Carlson, BNHP*



Building 106, May 3, 2008
Building 106 has been redeveloped as the Basilica Leasehold Condominiums. The 16th St. entrance seen here provides access to the structure's interior parking garage. *Stephen P. Carlson, BNHP*



Building 107, Apr. 30, 2008
The painted area on the west wall denotes where an addition was removed by the BRA prior to the return of the Public Works Shop to federal ownership. It serves as the maintenance shops and museum collection storage space for Boston National Historical Park.
Stephen P. Carlson, BNHP

The Contemporary Navy Yard: A Gallery



Building 108, Aug. 28, 2006
This view shows the rear of the former Power Plant following partial demolition. Further work on the removal of this portion of the structure has stalled as of 2008 due to the lack of funding to complete the required hazardous material clean-up. *Stephen P. Carlson, BNHP*



Building 110, Aug. 25, 2004
Used as a blacksmith shop by the Navy, Building 110 is one of only a few smaller Navy Yard structures to survive in 2008.
Stephen P. Carlson, BNHP



Building 120, Apr. 30, 2008
This view shows the west side of Building 120. The Muster House (Building 31) is at right. *Stephen P. Carlson, BNHP*



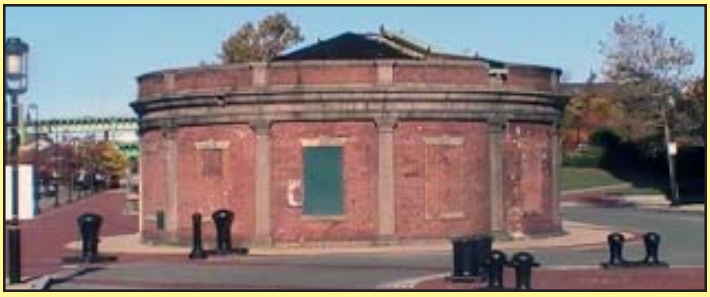
Building 124, May 6, 2003
Color variations in the brick testify to changes through the years in door and window locations on the east wall of the former Latrine. *OCLP*



Building 109, Apr. 25, 2008
Although built around an earlier brick substation, Building 109 is largely a World War II structure. It was actually built in several stages.
Ruth A. Raphael, BNHP



Building 114, Oct. 19, 2006
This view shows how the Navy had used the yard's seawall as the foundation for its Saw Mill. *Stephen P. Carlson, BNHP*



Building 123, Oct. 26, 2009
The Pump House for Dry Docks 1 and 2 has yet to be restored by the BRA.
Stephen P. Carlson, BNHP



Building 125, May 5, 2008
This view shows the north and west sides of the former Paint Shop. The overhead compressed air line is the sole overhead utility line remaining in the Navy Yard in 2008. *Stephen P. Carlson, BNHP*

The Contemporary Navy Yard: A Gallery



Building 149, Oct. 8, 2006
This view shows the 10-story portion of the former General Storehouse, completed in 1919. Note the bridges to Building 199 crossing 13th St. and Building 62 in the right foreground. *Stephen P. Carlson, BNHP*



Building 195, Oct. 5, 2006
When Building 195 was demolished for the construction of Shipyard Park, this former Locker Room addition was retained. The park's fountain can be seen through the central openings in the wall. *Stephen P. Carlson, BNHP*



Building 199, Oct. 19, 2006
The second of the yard's two General Storehouses, Building 199 has been adapted as a parking garage for yard tenants and visitors.
Stephen P. Carlson, BNHP



Building 150, May 5, 2008
The Constitution Inn, operated by the YMCA of Greater Boston, is the only new structure built in the Historic Monument Area as of 2008. Its form and materials reflect its historic surroundings. Building 149 can be seen in the distance. *Stephen P. Carlson, BNHP*



Building 197, Oct. 9, 2004
Of all the existing buildings at the Navy Yard, Building 197 has undergone the most radical reconstruction. The completed Flagship Wharf bears little resemblence to the original structure. Pier 4 is at left while Pier 5 is at right.
Stephen P. Carlson, BNHP



Underground Fuel Oil Tank 220 & Historical Plaque 270, May 5, 2008
The pumps and vents for the Underground Oil Tank can be seen behind the plaque listing residents of the Commandant's House.
Stephen P. Carlson, BNHP

The Contemporary Navy Yard: A Gallery



Building 224 & Navy Yard Rowhouses, Apr. 14, 2004
Originally an Electrical Substation, Building 224 was adapted as offices for the Shipyard Quarters Marina. The Navy Yard Rowhouses were built to provide affordable housing in the Navy Yard. *Stephen P. Carlson, BNHP*



Band Stand 260 & Monument 279, Oct. 23, 2006
The Band Stand also serves as the base for the yard's Flag Pole (Structure 242). The Monument was moved here from across First Ave. as part of the Band Stand construction in 1959. *Stephen P. Carlson, BNHP*





Building 245, May 5, 2008
This Garage was returned to its original location by the National Park Service in 1980. *Stephen P. Carlson, BNHP*



Tennis Court 236, Oct. 25, 2006
The Tennis Court occupies a major portion of the Shipyard Mall, which had replaced the Gun Park in the early 20th century.
Stephen P. Carlson, BNHP

Grit Hoppers 259 & 273, May 5, 2008
Set in the still-active laydown area north of Building 10, the two Grit Hoppers are the only utilitarian industrial structures remaining in the Navy Yard. The Safety Shoe sign had originally been on Building 36.
Stephen P. Carlson, BNHP



Building 267, May 5, 2008
The modern brick, glass, and aluminum Gate House for Gate 1 was erected in 1959. The brick wall rising above the structure is a remnant of Quarters A, retained as part of the Navy Yard Boundary Wall following the 1955 demolition of the building itself. *Stephen P. Carlson, BNHP*

The Contemporary Navy Yard: A Gallery



Building 269, May 5, 2008
Tucked against the Navy Yard Boundary Wall behind Building 1, Building 269 contains garages for Quarters B-F. *Stephen P. Carlson, BNHP*



Building M-39, May 5, 2008
This Steam Box Shed is the last survivor of the once numerous portable steel buildings found throughout the Navy Yard during its active years.
Stephen P. Carlson, BNHP



Shipways 2, Oct. 8, 2006
Although the Shipway Place II condominiums obscure the inshore end of Shipways 2, the outer end is still visible under the bridge across the facility.
Stephen P. Carlson, BNHP



Parcels 6 & 7, June 2006
This view from the incomplete HarborView structure shows two of the three parcels which remain vacant in 2008. *HarborView*



Ammunition Bunker 272 & Saluting Battery Platform 261, Apr. 14, 2005
The presence of these facilities at the end of Pier 1 reinforce the pier's role as the yard's ceremonial pier in the post-World War II era. *OCLP*



HarborView, May 3, 2008
The First Ave. side of the HarborView complex, completed in 2007 but tied up in bankruptcy in 2008, is out of scale with its neighboring buildings.
Stephen P. Carlson, BNHP



Shipyard Park, Aug. 23, 2004
The largest open space in the Navy Yard is Shipyard Park, which encompasses the site of Building 195 and Dry Dock 2. A centerpiece of the park is the Massachusetts Korean War Veterans Memorial.
Stephen P. Carlson, BNHP

The Contemporary Navy Yard: A Gallery



Dry Dock 1, June 2007
This view from floor level looks towards the Caisson. Note Portal Crane 30 at left. *McGinley Kalsow Associates*



Dry Dock 2, May 4, 2007
In this view of the flooded Dry Dock 2, HMCS *Iroquois* (DDH-280) is being guided into Pier 4 for a port visit. The circular Dry Dock Pump House (Building 123) can be seen at left. *Stephen P. Carlson, BNHP*



Dry Dock 5, May 3, 2008
The flooded Dry Dock 5 is located in Parcel 5, one of three remaining undeveloped parcels in the Yard's End area. *Stephen P. Carlson, BNHP*



Marine Railway 11 & Pier 2, Oct. 25, 2004
The remains of the Marine Railway await stabilization. Note the temporary storage shed for USS *Constitution* materials on the reconstructed portion of Pier 2 at right. *Stephen P. Carlson, BNHP*



Finger Pier, May 5, 2008
This view shows the Finger Pier following the completion of the 2007 project to replace the decking on the outer portion.
Stephen P. Carlson, BNHP



Pier 3 Marginal Wharf, Apr. 14, 2005
This view shows the Pier 3 Marginal Wharf shortly after the completion of the stabilization of the adjoining seawall. *OCLP*



Pier 4, Oct. 5, 2006
The water shuttle dock is seen at the left of this view. The former Industrial Services Building (Building 230) houses the Courageous Sailing Center. Note Light Tower 246 at the outer end. *Stephen P. Carlson, BNHP*



Pier 6 & Shipyard Quarters Marina, July 6, 2006
The area surrounding Pier 6 has been converted into marina slips. The Tavern on the Water restaurant in the center of Pier 6 is constructed around the pier's Industrial Service Building (Building 228). *BNHP*

The Contemporary Navy Yard: A Gallery



Pier 7, Oct. 9, 2004
The Constellation Wharf condominium development completely covers Pier 7. Lessons learned from this development have led to setback requirements for the proposed redevelopment of Pier 5 to maintain public access along the pier's edge. Note Light Tower 247 on the end of Pier 6 at left.
Stephen P. Carlson, BNHP



Dolphins 289, July 1997
This night view of USS *Constitution* shows the four Protection Dolphins which mark the western water boundary of the Navy Yard. *U.S. Navy*



Water Taxi Pier, May 3, 2008
The latest addition to the water transportation access points in the Navy Yard is this Water Taxi Pier built on the approximate site of Pier 10 as part of the HarborView project. *Stephen P. Carlson, BNHP*



Building 114 Bandsaw, Aug. 2, 2005
The massive Bandsaw which had been located in Building 114 is now preserved as a sculptural monument outside the rehabilitated structure.
The Boston Harbor Associates





Security screening of visitors to USS *Constitution* saw the erection of a prefabricated steel structure (Building 287) in Sept. 2003 (left). The Screening Facility's location, however, was unworkable to screen visitors to the new Navy Yard Visitor Center in Building 5. Thus, a new facility (Building 292) (right) was constructed adjacent to Building 5 in 2009. *BNHP (left); Stephen P. Carlson, BNHP (right)*

Initially, the vehicle exclusion zone beside USS *Constitution* was again created using jersey barriers. To improve the appearance of the Navy Yard, the park in the spring of 2004 replaced these with new steel bollards and chain that resembled typical dock bollards. Additional barriers of this general design replaced keel blocks and jersey barriers in the vicinity of the pedestrian walkway along the railroad tracks parallel to First Ave. The park has also completed the missing fence section between First Ave. and Building 28, and has requested funding to replace the chainlink gates at Gate 1 with steel gates modeled after those at Gate 2.[768]

Although the U.S. Coast Guard had established a permanent safety (exclusion) zone around USS *Constitution* in 1992 which ran "from the imaginary line connecting the outer easternmost point protruding into Boston Harbor from Hoosac Pier to the outer westernmost point protruding into Boston Harbor from Pier 1, Charlestown Navy Yard, extending inbound along the face of both piers to the landside points where both piers end,"[769] not until after September 11 did the Navy install a physical barrier across the Fitchburg Slip. The original temporary barrier was replaced by a floating Port Security Barricade (Structure 290) in October 2006. This barrier was adjustable to allow the continued berthing of visiting ships at the outer end of the pier.[770]

In the summer of 2007 the Navy installed a permanent fence around the exclusion zone behind the bollard-and-chain barrier. This project included an enlarged guard station and an improved vehicle gate. The chainlink fence and gates between Hoosac Stores and the waterfront were replaced by a ten-foot steel fence.

The final major security improvement funded involved the installation of closed-circuit television cameras at strategic locations around the yard. These locations were chosen on the basis of several security surveys undertaken since September 11.[771] They



In 2003 the park expanded its security capabilities when it obtained an explosives detection dog. Bila, a Labrador Retriever, is seen here proudly wearing her badge alongside her handler, Park Ranger Kevin Mulligan. In addition to working at the Navy Yard, Bila has provided bomb sweeping services to other federal, state, and local law enforcement agencies in the Boston area. *BNHP*

are monitored from the new park dispatch center which opened in Building 109 in the summer of 2006.[772]

A related project involved improvements to night lighting in the Navy Yard. This effort built on a lighting master plan that had been created in 1998 during the planning for the Navy Yard repaving project.[773] A review of the earlier plan in 2003 revealed that, with the exception of lighting of the water along the edges of Pier 1 West, most of the security lighting was already in the plan. The NPS installed the first phase of this lighting during 2008.

Because Building 5 houses naval personnel, the Navy has insisted that visitors accessing the new Charlestown Navy Yard Visitor Center in Building 5 pass through security screening. Since the current Screening Facility (Building 287) was not well-sited with regard to access to Building 5, the NPS and the Navy began a planning process to construct a new Screening Facility (Building 292) adjacent to Building 5. This facility, funded by the Navy but designed and built under NPS contracts, is scheduled to be completed by mid-2009.[774]

[768] Savage, memorandum to files, "Section 106 Compliance – BOST 03-012, Improve Physical Security, Charlestown Navy Yard," June 12, 2003, BOST 03-012, Section 106 Case Files, Division of Cultural Resources, BNHP.

[769] 57 *Federal Register* 30407 (July 9, 1992), 33 CFR 165.111. In addition, this regulation provided a safety zone surrounding the ship when she is underway. The Coast Guard has also instituted a safety zone around USS *Cassin Young* when she is underway. See 58 *Federal Register* 47991 (Sept. 14, 1993), 33 CFR 165.112.

[770] Savage to Simon, Feb. 22, 2006 (concurred Mar. 21, 2006), with attached materials, BOST 06-001, Section 106 Case Files, Division of Cultural Resources, BNHP; Naval Facilities Engineering Command, Engineering Services Center, *USS Constitution Barrier* (Nov. 3, 2006), TIC 457/D6379.

[771] Bargmann Hendrie + Archetype and Techmark Security Integration, *Design Recommendations for Charlestown Navy Yard CCTV* (rev. May 2003), TIC 457/D6371.

[772] Steven Connor to Steve Carlson, "Dispatch Move," Aug. 31, 2006, HRS Project File, Division of Cultural Resources, BNHP.

[773] Archetype Architecture, et al., *Master Lighting Plan & Guidelines*.

[774] Savage to Simon, June 20, 2008 (concurred July 2, 2008), BOST 08-004, Section 106 Case Files, Division of Cultural Resources, BNHP.



Visting naval vessels give the western end of the Navy Yard a sense of its historic past in this June 20, 2004, aerial photograph. The marinas surrounding Piers 6 and 8 at right and the Constellation Wharf condominiums on Pier 7, as well as those on the Shipways, show how the remainder of the yard's waterfront has been transformed into a largely up-scale residential community . *Steve Dunwell*

Conclusion

The Charlestown Navy Yard in late 2008 is very different from the facility first established in 1800, and from the shipyard which closed in 1974. Yet, it continues its historic function in support of two naval vessels permanently berthed at the yard even as it adapts to its new uses. While redevelopment has eliminated many of the lesser industrial features, the yard still maintains its essential character-defining features. This condition is strongest in the national park, but can be found throughout the yard.

Today, the yard is no longer a closed military-industrial complex but a thriving mixed-use facility attracting visitors from around the world. Outside of the national park, it has become a residential community, as well as a center for biomedical research. However, this success must be tempered by the fact that it never became the vibrant retail center envisioned by city planners. As one study has pointed out, "retail wanted to locate near other retail" and the yard "did not have this, or any base on which to build an agglomeration."[775] And large parcels of land at the east end of the yard remain vacant.

Development of the Navy Yard by the City of Boston did not proceed rapidly. Students of the process have attributed this slowness to several factors. First, Immobiliare, upon whom the BRA relied to finance new development, was "not commercially aggressive," building "one project at a time, using the proceeds from one building to fund the next."[776] More importantly, because "the cyclical nature of the real-estate market meant that the window of opportunity was only open for a year or two near the peak of each cycle," the "slow decision-making processes" both within the BRA and the larger regulatory community "too often ensured that when action was possible the window had closed."[777]

Furthermore, "reliance on the market to supply the anchor tenants … was a weakness of the Navy Yard plan." Had such an anchor been identified and developed early on, the yard "may not have suffered so greatly from the market ups and downs, and a delayed development timeline."[778]

As another observer has noted, the artificial division of the yard into several distinct areas "each with its own redevelopment plan … has resulted in a rather disjointed redevelopment effort."[779] This has had the unintended consequence of diminishing the sense of the yard as a unified nationally significant historic site. As will be discussed in Chapter 4, the entities which are responsible for the yard, both public and private, need to be brought together to not only coordinate future growth and development but also to work at retaining and enhancing the historic sense of the Charlestown Navy Yard.

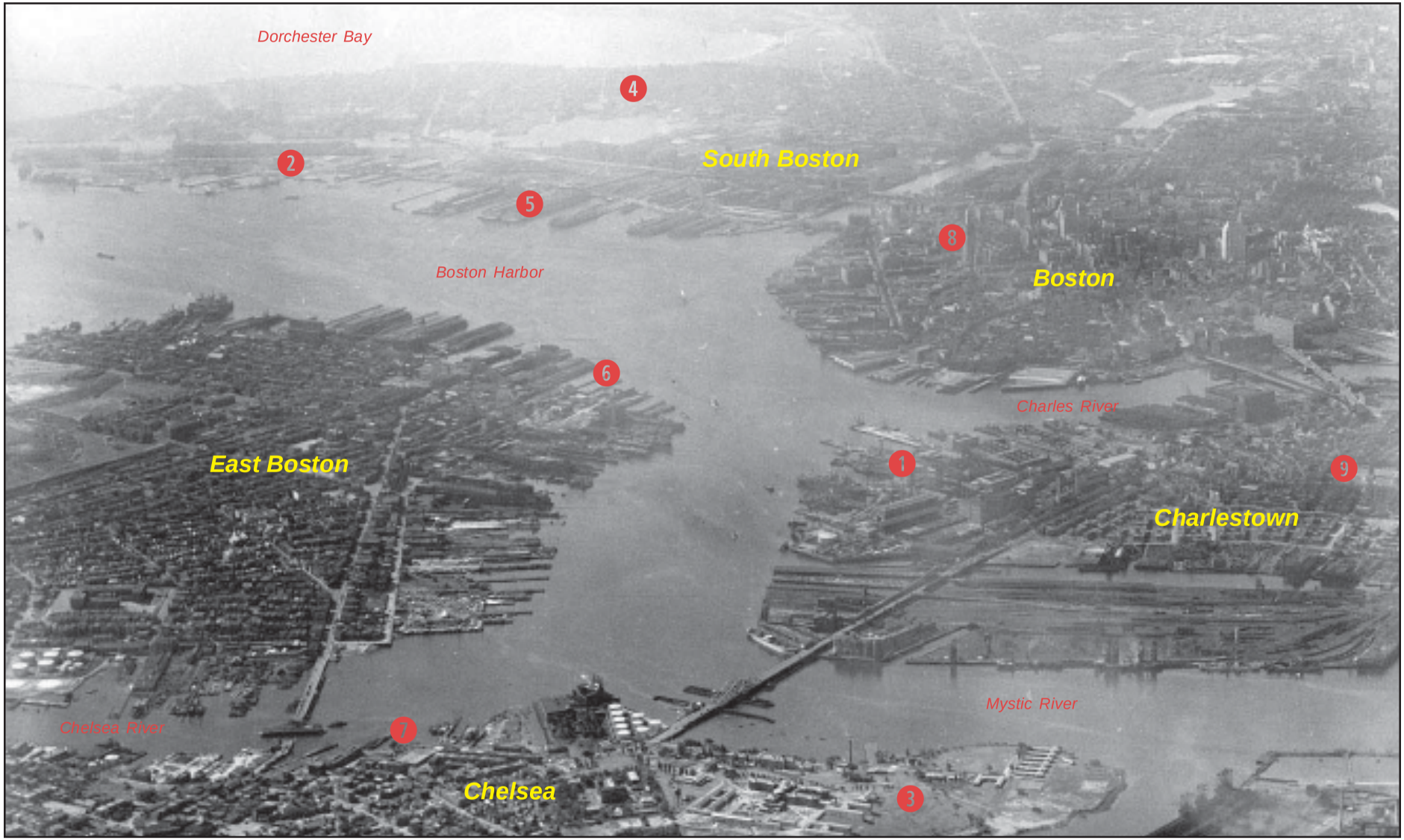
[775] Julie Therese Donofrio, *Preservation as a Tool for Waterfront Revitalization: Design, Management, and Financing Solutions from Vancouver, Boston, and London* (M.S. thesis, University of Pennsylvania, 2007), p. 87.

[776] Gordon, "Implementing Urban Waterfront Development," p. 920.

[777] Ibid., p. 924.

[778] Donofrio, *Preservation as a Tool for Waterfront Revitalization*, p. 90.

[779] Megan Laurel Sorenson, *A Comparative Analysis of Two Urban Historic Military Base Redevelopment Projects: The Presidio of San Francisco and Boston's Charlestown Navy Yard* (M.S. thesis, University of Pennsylvania, 2002), p. 172.



This 1941 aerial photograph shows the relationship of the Charlestown Navy Yard (1) with the South Boston Annex (2) as well as the Chelsea Naval Hospital (3). Other landmarks seen in this view, which looks south from 5000 feet, include the Dorchester Heights Monument (4); Commonwealth Pier No. 5 (5); the Naval Local Defense Force Base (Lockwoods Basin), East Boston (6); the Munro and Green Shipyards (the future Chelsea Annex), Chelsea (7); the Customs House Tower (8); and the Bunker Hill Monument (9). *BOSTS-8626*

Chapter 3

South Boston Annex

LOCATED ABOUT TWO MILES down Boston Harbor from the Charlestown Navy Yard, the South Boston Annex of the Boston Naval Shipyard[1] provided a significant expansion of the yard's capabilities, especially as they related to first larger battleships and later aircraft carriers. Begun by the Commonwealth of Massachusetts, Dry Dock 3 was taken over by the Navy in 1920 shortly after completion. Major development of the property, however, did not occur until World War II. More than any other Navy Yard facility, the South Boston Annex exemplifies the massive naval expansion program of that era. Because many of its facilities were not extensively modified following the war, the South Boston Annex, even after thirty years of City of Boston ownership, has a greater integrity to that era than any other portion of the Boston Naval Shipyard.

At various points in time, additional areas in South Boston also formed a part of the Annex. These included the Fargo Buildings, "E" Street Annex, "K" Street Annex, and the Boston Army Base. While these areas are discussed in this chapter, they are not a part of the Annex as it is recommended in Chapter 4 for inclusion within the boundaries of the Boston Naval Shipyard National Historic Landmark. Two of these sites—the Fargo Building (now known as the Barnes Building) and the Boston Army Base—meet National Register criteria in their own right, and this study recommends that the U.S. Army (as owner of the Barnes Building) and the Boston Landmarks Commission pursue such listings.



This Feb. 1963 map shows the relative locations of the Charlestown Navy Yard and the South Boston Annex. *BOSTS-16052*

The South Boston Waterfront

In the early 1800s various groups began to look at the creation of land for new development on the flats which extended from the north shore of the South Boston peninsula (roughly the line of today's First St.). The initial landfill was in the vicinity of the Fort Point Channel, closest to Boston proper. The ultimate goal of this landmaking program was defined in the mid-1860s, when a federal commission proposed the construction of a new seawall containing a series of docks extending from that channel to Castle Island, save for a Reserved Channel which would be maintained to provide access to the harbor for landowners on the original north shore of the peninsula.[2]

Starting in the 1890s, the Commonwealth of Massachusetts undertook a program to modernize the facilities of the port of Boston. This effort focused on the under-utilized South Boston waterfront. The main feature of this project was the construction of Commonwealth Pier No. 5 and a bulkhead along the line of the newly laid-out Northern Ave. from there to the Reserved Channel. Three small piers were built along this bulkhead in conjunction with the leasing of portions of the new land to several firms, including the Boston Molasses Co.[3]

Development of the waterfront accelerated between 1910 and 1913, when a large structure was built on Commonwealth Pier so it could be used as a passenger ship terminal. At the same time, the Boston Fish Pier (Pier 6) was built to its east.[4]

The Commonwealth Dry Dock

Among other proposed improvements, announced in December 1912, was the construction of what would be the largest dry dock in the world. This facility was to be located on new land along the north side of the Reserved Channel. (See Figure 3-1) Filling of the area began in June 1914. Actual work on the dock itself, however, did not commence until October 1915.[5]

The Navy, which had recognized that Dry Dock 2 was not large enough to handle the most modern battleships and that there was

[1] Although the term South Boston Annex was used from the facility's earliest days, the site was officially known as the U.S. Naval Dry Dock, South Boston, until Nov. 1945, when it was redesignated as the South Boston Annex of the Boston Naval Shipyard.

[2] Nancy S. Seasholes, *Gaining Ground: A History of Landmaking in Boston* (Cambridge, Mass.: MIT Press, 2003), p. 288-314.

[3] Ibid., p. 314, 316.

[4] Ibid., p. 318-19.

[5] Ibid., p. 319, 322; "Bay State's Harbor Development Aided Navy To Acquire South Boston Annex," *Boston Naval Shipyard News*, vol. 20, no. 37 (Mar. 23, 1956), p. 3.

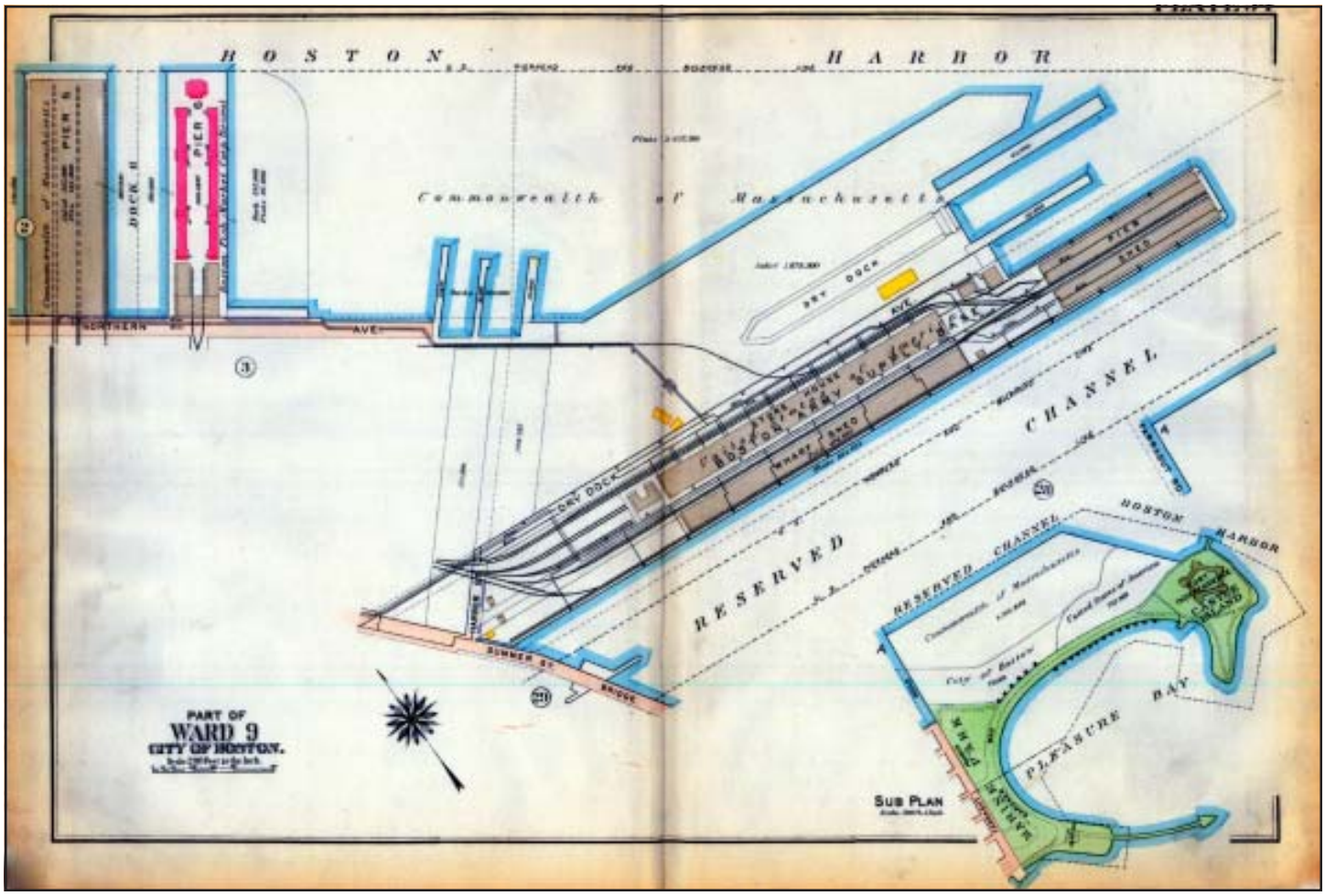


Figure 3-1 – Plan of Dry Dock and Boston Army Supply Base, 1919

This map from a 1919 atlas of South Boston published by G.W. Bromley & Co. shows the Dry Dock and Boston Army Supply Base as originally completed. Note the three small piers along the north shore between the Dry Dock and the Fish Pier. These were leased to the Metropolitan Coal Co. and the Boston Molasses Co. The latter lease was transferred to the Navy when the state sold the Dry Dock to the federal government in 1920. *Ward Maps*

not the space at Charlestown for a larger dock, kept its eye on the state plans.[6] In March 1917 Congress authorized the Navy to lease the dock for a six-year period, provided that it was completed by the middle of 1919.[7] Eighteen months later, in October 1918, it provided for the purchase of the dock upon completion.[8]

By June 1919 the 1,176-foot-long concrete-and-granite Commonwealth Dry Dock was substantially complete. It would not be until December 22, 1919, however, that the battleship USS *Virginia* (BB-13) became the first vessel to use the facility. Formal completion of the dock came on January 20, 1920.[9] Three months later, on April 28, 1920, the federal government formally purchased the 101-acre property from the state for just under $4.3 million.[10]

[6] Frederick R. Black, *Charlestown Navy Yard, 1890-1973*, Cultural Resources Management Study No. 20, 2 vols. (Boston: Boston National Historical Park, 1988), TIC 457/D6162A, 1:379.

[7] Naval Appropriations Act, FY 1918, Pub. Law 391, Mar. 4, 1917, 39 Stat. 1180.

[8] Pub. Law 223, Oct. 17, 1918, 40 Stat. 1013.

[9] Black, *Charlestown Navy Yard, 1890-1973*, 1:380; *United States Naval Administration, World War II: Commandant, First Naval District*, 11 vols. (typescript; 1946), vol. 8, *Wartime History of Major Naval Industrial Establishments*, part 1, *The Navy Yard Boston (The Naval Shipyard)* [hereafter *Navy Yard Boston in World War II*], App. A, p. 4.

[10] Deed, Commonwealth of Massachusetts to United States of America, Apr. 28, 1920, Suffolk Deeds, bk. 4214, p. 595-97.

The Annex In The 1920s And 1930s

The Navy designated its new dry dock as Dry Dock 3. Outside of the dock and associated Pump House (Building 1), the property was in an incomplete state. Thus, the Fiscal Year 1920 Naval Appro-



USS *Tennessee* (BB-43) is seen in Dry Dock 3 in Apr. 1921. The newly-completed battleship has been docked in preparation for full-power trials on the Navy's trials course in the Gulf of Maine. This view, taken from the Army Base, shows that other than the Pump House (Building 1), the only structures on the site are former temporary buildings transferred from Charlestown. Construction of portal crane tracks around the dock has just begun. *Benjamin Morse, Historic New England*

Dry Dock 3

THE COMMONWEALTH OF MASSACHUSETTS undertook the construction of the world's largest dry dock on the South Boston waterfront. Even before the structure was complete, the U.S. Navy had been authorized by Congress to acquire the dock as an annex to its Charlestown facilities.

This gallery presents images of the dock's construction taken from a corporate history by the firm Holbrook, Cabot & Rollins, which built the dock as well as many other major public works projects around Boston Harbor in the early decades of the 20th century.



The construction of the dry dock involved the creation of new filled land area. This view shows the cofferdam/sheet piling walls under construction.



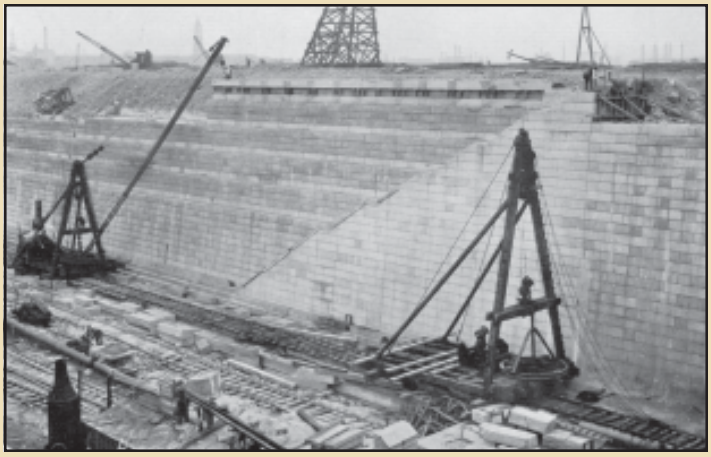
Even before the excavation of the dock has been finished, the concrete work for the dock's walls had been started.



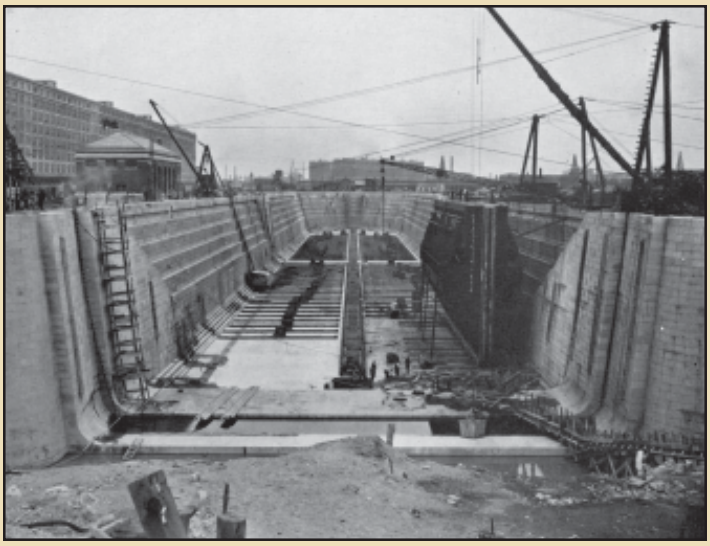
This view looks seaward from the head of the dock. The structure consisted of concrete walls faced with granite.



To facilitate construction work, railroad tracks were laid on the dock's floor. Note the gap in the wall at right to provide access to the surface.



Cranes assisted in the placement of the dock's masonry facing.



The nearly complete dock is seen from the cofferdam. Note the dual seat for the caisson in the foreground and the intermediate caisson seat just beyond the Pump House (Building 1), seen at left.



The Navy's initial work at Dry Dock 3 was to construct crane and railroad tracks around the facility. This Dec. 15, 1920, view shows the footings for the crane tracks on the north side of the dock. USS *Brazos* (AO-4) is in the dock. *BOSTS-8536*



priations Act provided the yard with $500,000 for "shore facilities for [the] Commonwealth Dry Dock."[11] Between 1920 and 1922 it issued a series of contracts for the installation of railroad and portal crane tracks and purchased a 50-ton capacity steam portal crane.[12] It also constructed an addition to the Pump House to house an electrical substation.[13]

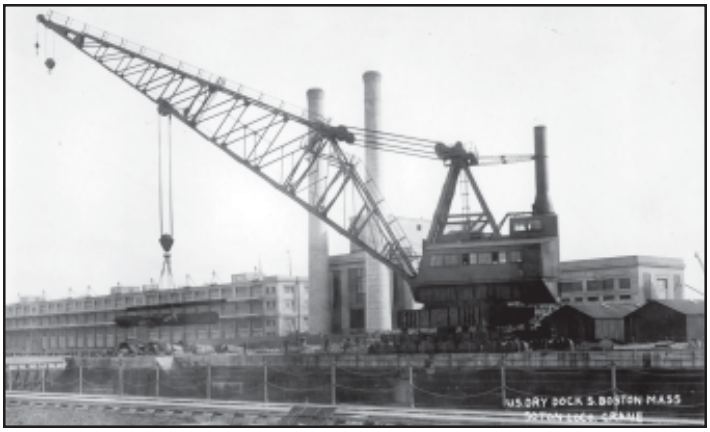
Otherwise, South Boston remained relatively undeveloped. The western edge of the property was leased to the Boston Molasses Co. for use as a coal and later fuel oil handling facility.[14] A number of steel temporary buildings which had been used at Charlestown during World War I were transferred to the Annex in 1920 and 1921 to provide shop space for men assigned to work on ships in the dry

[11] Naval Appropriations Act, FY 1920, Pub. Law 8, July 11, 1919, 41 Stat. 143.

[12] Progress Photos, Nov. 1920-Sept. 1922, Crane & R.R. Track, So. Boston, Contract 4196, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8536, Box 1-22; Progress Photos, Aug. 1921-Sept. 1922, So. Boston Dry Dock Macadam Roadway, Contract 8537, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8537, Box 1-22; Progress Photos, June-Nov. 1922, So. Boston, 50 Ton Crane, Contract 4478-A, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8538, Box 1-22.

[13] Progress Photos, June-Dec. 1922, Addition to Power Plant, Contract 4550, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-7871, BOSTS-7872, BOSTS-8535, Boxes 1-11, 1-21.

[14] Frank H. Lewis, Attorney's Report on Title, Report No. 7-74, South Boston Annex, Boston Naval Shipyard, Boston, MA, May 8, 1974, p. 3, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22. The Navy had inherited this lease, which originally dated to 1902, from the state when it purchased the property. On Mar. 21, 1925, the Navy granted a new two-year lease, subsequently renewed for two additional five-year periods, expiring on Mar. 31, 1937. See ibid.; Seasholes, *Gaining Ground*, p. 316.



To serve the dock the Navy acquired a 50-ton capacity low portal crane from McMyler-Interstate. This Oct. 23, 1922, view shows it performing a load test shortly after its erection. Compare the primitive facilities of the Annex, exemplified by the temporary metal buildings to the right of the crane, with the concrete structures of the Army Supply Base in the background. *BOSTS-8538*

The improvements at South Boston included the construction of a paved roadway alongside the dock. This Aug. 3, 1922, image looks west along the north side of the dock. Note the pyramidal tarps which protected the electric capstans serving the dock. *BOSTS-8537*



Many of the earliest buildings at South Boston were steel sheds which had originally been erected at Charlestown during World War I. In this ca. July 1930 view are, clockwise from upper left, the Lavatories (Building 3), Wash Room (Building 4), and Locker Room (Building 5). The enlarged Pump House (Building 1) is seen in the background. The ship in Dry Dock 3 is SS *Leviathan*, a passenger liner which was a regular visitor to the facility in the 1920s and 1930s. *BOSTS-11770*

dock. The only major structure added to the property was the Utility Building (Building 13, renumbered 14 in 1939), which was erected in 1927 using components from a World War I-era Navy boiler shop located at Providence, R.I., which had been dismantled and stored at South Boston following the war.[15]

Through the 1920s, the dock was utilized more for work on passenger liners under arrangements between the Navy, the United States Shipping Board, and various private companies than for na-

[15] Black, *Charlestown Navy Yard, 1890-1973*, 1:405; Progress Photos, July-Sept. 1921, Providence, R.I. Boiler Shop: Removal to So. Boston, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8596, Box 1-23.





In the summer of 1921 the Navy dismantled a boiler shop which it had constructed at Providence, R.I., during World War I and transported the materials to South Boston for re-erection. The salvaged materials can be seen at left on Oct. 5, 1921. Erection of the glass-walled structure was not accomplished until 1927, however. The completed structure, originally numbered Building 13 but later redesignated Building 14, is seen in the view at right from Oct. 1939. *BOSTS-8596 (left); BOSTS-8526 (right)*

val vessels. Most naval work involved ships too large for Dry Dock 2 at Charlestown, such as the battleships USS *Florida* (BB-30) and USS *Utah* (BB-31), modernized by the yard between 1925 and 1927, or the aircraft carrier USS *Lexington* (CV-2), docked for post-trials modifications in 1928.[16]

The 1930s saw a decline in usage of the dry dock; indeed, it docked only three vessels in 1931 and none over the next two years.[17] Still, there was some interest in improving the facility, and on April 15, 1935, Congress included a Marine Barracks (Building 15) in a naval public works authorization act.[18] This project, scaled back to eliminate the apartment wings for officers, was constructed by the Works Progress Administration (WPA) in 1936 and 1937.[19]

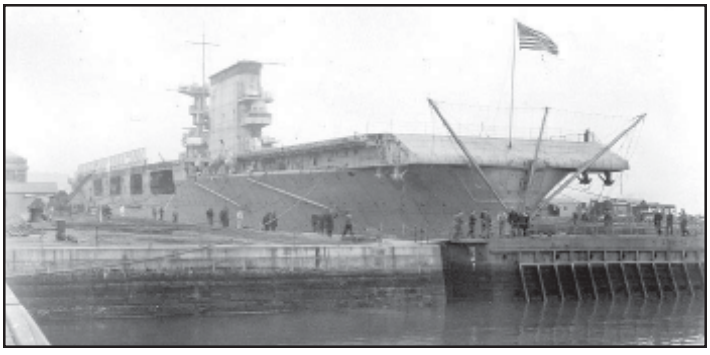
The Decision To Build A Shipyard

By the late 1930s, with the threat of war in Europe, the United States began to improve its Navy, both in terms of ships and the shore establishment to support them. In the spring of 1939 the Massachusetts Congressional delegation was successful in getting a provision inserted into a Navy public works authorization act directing the Secretary of the Navy "to proceed with the construction of such public works and utilities including buildings and accessories to equip the South Boston Dry Dock for use as an annex of the Boston Navy Yard."[20] This act, signed on June 2, 1939, and the appropriations which followed, marked the start of the development of the dry dock into a full-scale shipyard.

Immediately following this act's passage, Commandant Rear Admiral William T. Tarrant appointed a board of senior yard officers—Supply Officer Captain E.G. Morsell, Manager Captain Charles L. Brand, Planning Officer Captain R.W.P. Paine, and Public Works Officer Commander Paul J. Searles—to investigate the development of the site. With the Charlestown Navy Yard heavily involved in



The White Star liner RMS *Majestic* is seen in Dry Dock 3 on Nov. 16, 1922. She was one of several large passenger liners to utilize the dock during the 1920s and early 1930s. *BOSTS-11897*



The newly-completed aircraft carrier USS *Lexington* (CV-2) entered Dry Dock 3 for post-trials work on Jan. 12, 1928. *BOSTS-11787*

[16] Black, *Charlestown Navy Yard, 1890-1973*, 1:381, 426-431; "Ready to Dry Dock Liner Majestic," *New York Times*, Nov. 12, 1922; Norman R. Friedman, *U.S. Battleships: An Illustrated Design History* (Annapolis: Naval Institute Press, 1985), p. 419.

[17] Black, *Charlestown Navy Yard, 1890-1973*, 1:423.

[18] Pub. Law 36, Apr. 15, 1935, 49 Stat. 155.

[19] Black, *Charlestown Navy Yard, 1890-1973*, 2:486; Progress Photos, Apr. 1936-Mar. 1937, WPA Project 09-222, Marine Barracks, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-14998, Box 1-123

[20] Pub. Law 196, June 2, 1939, 53 Stat. 501; "Boston Progresses," *Boston Navy Yard News*, vol. 4, no. 6 (June 8, 1939), p. 1.



This view taken on Apr. 7, 1936, just prior to the start of construction of the Marine Barracks (Building 15), shows the undeveloped state of the Annex property. The Latrine is to the right of center, while the Utility Building (Building 13) can be seen behind the telephone pole. *BOSTS-14998*



The only new structure added to the South Boston Annex prior to the decision to develop the site as a fully-equipped shipyard was the Marine Barracks (Building 15). Although designed to the standard Marine pattern of a central barracks for enlisted personnel flanked by wings containing apartments for officers, the WPA project only encompassed the central block. This Oct. 7, 1936, progress photograph shows how front half of the side walls were built of wood rather than brick to allow the later addition of the wings. *BOSTS-14998*

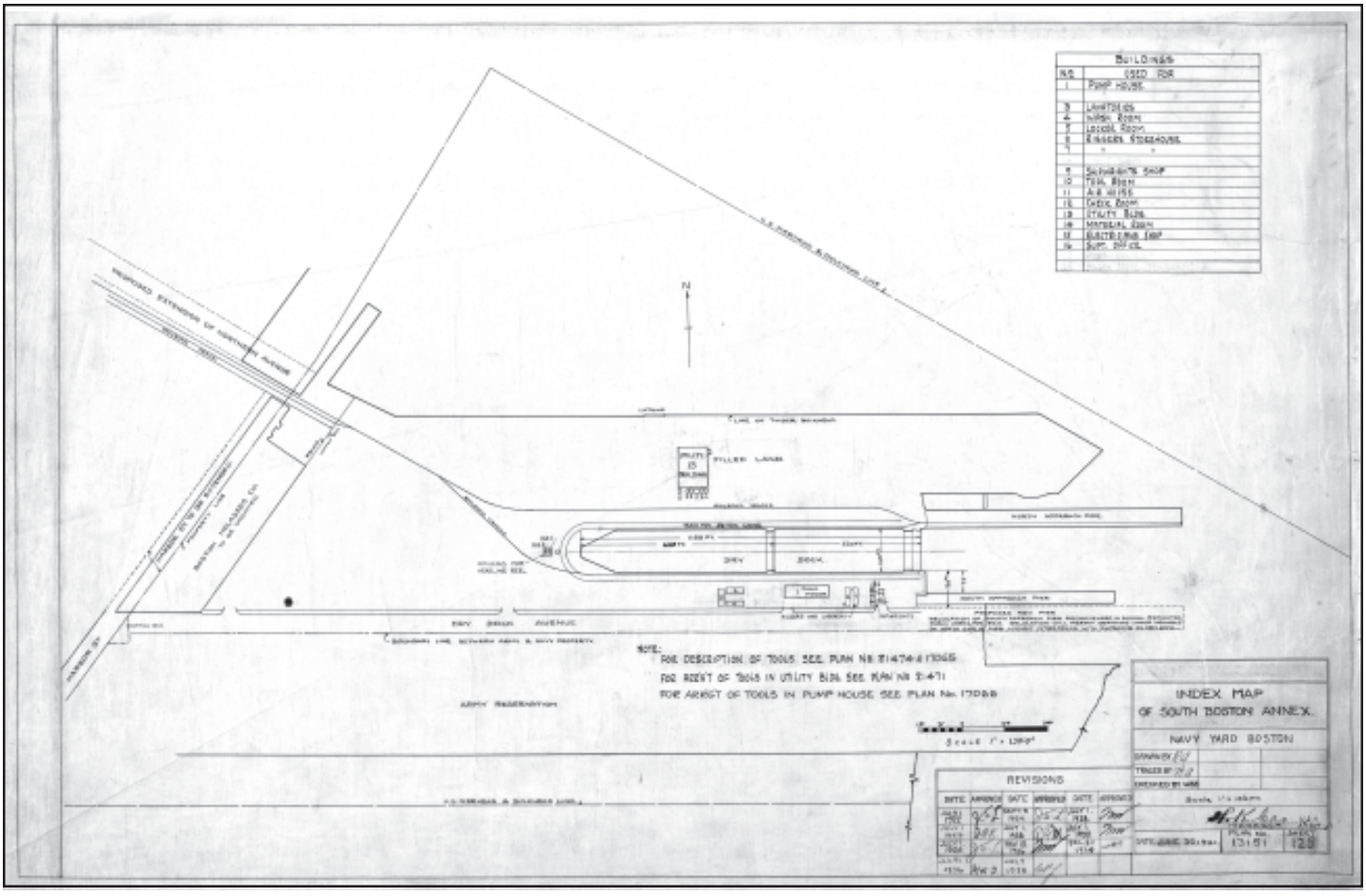


Figure 3-2 – Plan of South Boston Annex, 1938

This July 1938 map shows what little development had occurred at South Boston since its acquisition by the Navy in 1920. Note that the plan does not label the Marine Barracks built in 1936. *BOSTS-13539*

The 1941 Development Plan For South Boston



In 1939 the Navy Yard began planning for the utilization of the nearly-vacant South Boston Annex site. This Oct. 1939 aerial photograph of South Boston was annotated to show the proposed expansion of the facility. The large structures at the right are the buildings of the Boston Army Base.
BOSTS-7879

new ship construction, it recommended that South Boston be developed for ship outfitting and repair of large ships. The final plan was announced in January 1941.[21]

Expanding The South Boston Annex

One of the first conclusions reached in conjunction with the development of the Annex was that the existing 50 acres of solid land were insufficient. Two types of expansion were envisioned. The first involved the filling of the harbor within the existing site boundary to create a series of quay walls. These plans were submitted to the state Department of Public Works, which approved them on March 27, 1940.[22] They extended the new filled land beyond the original harbor line to a new line which had been established by the state legislature in 1939.

Work on this project began immediately and was completed by December 1941. Under a $3.8 million contract, Merritt-Chapman & Scott removed two existing wood piers and constructed a pier 300 feet long along with a 2,350 foot quay. The pier and quay had reinforced concrete decks supported by steel piles extending out from a new steel bulkhead enclosing solid fill. These features became the South, East, North, and West Jetties.[23]

To allow further expansion of the Annex, the Navy acquired additional property from the state in July 1941. This included a 48.76-acre parcel to the west of the existing dry dock property as well as the area between the old and new pierhead lines (14.3 acres) and the Dry Dock Ave. right-of-way (5.136 acres) between the An-



In order to carry out its plans to build a series of quay walls to expand the land area of the Annex, the Navy required a permit from the state to dredge and fill the area. These drawings indicate that the permit was issued on Mar. 27, 1940. What is indicated as the proposed pierhead and bulkhead line had in fact been approved by the state legislature in 1939.
BOSTS-13347

[21] *Navy Yard Boston in World War II*, chap. 1, p. 4, 8; chap. 4, p. 1, 6.

[22] "Plans to Accompany Petition of the United States Navy," License No. 2170, Mar. 27, 1940, File 618, Public Works Dept., Design Division (Code 440), Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 109.

[23] *Navy Yard Boston in World War II*, chap. 1, p. 5-6; chap. 4, p. 2-3; app. B, p. 1-2; Progress Photos, May 1940-Apr. 1941, Contract NOy-3940, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-7810, BOSTS-7819, Box 1-10.

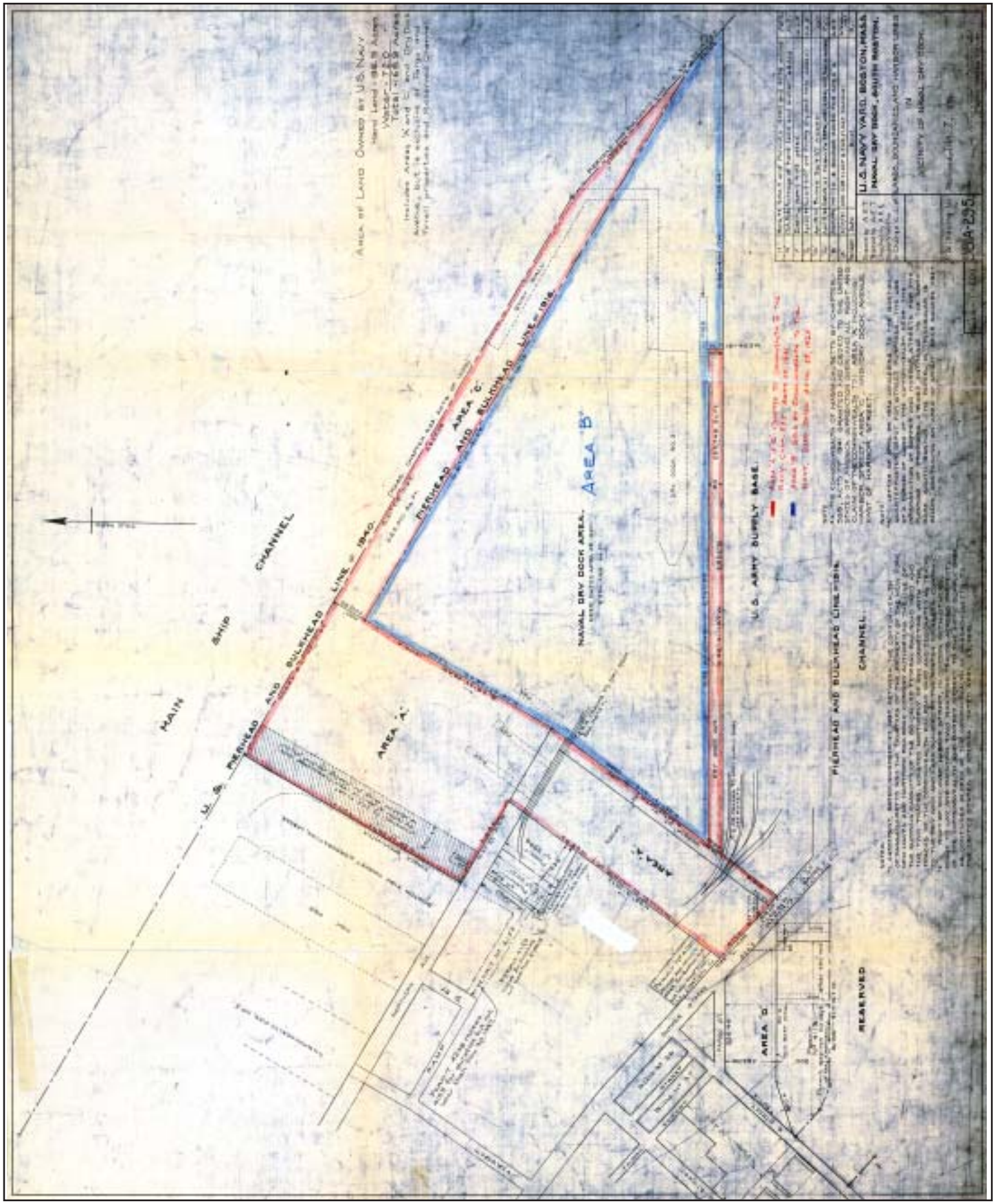
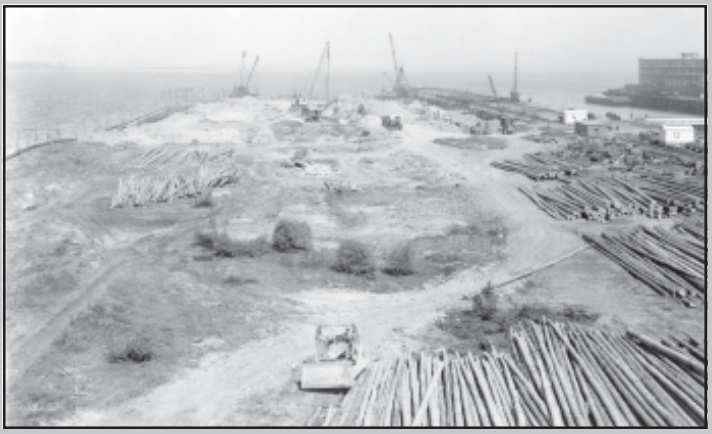


Figure 3-3 – South Boston Real Estate Summary Map, 1943

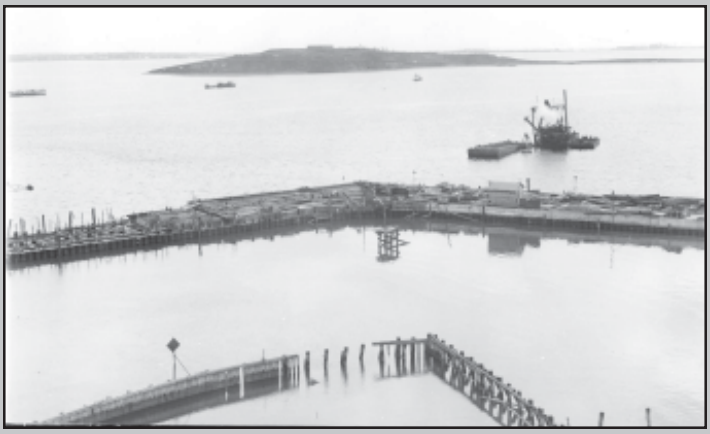
This Jan. 8, 1941, map, updated to Mar. 6, 1943, shows the original 1920 Navy land purchase (100.929 acres) surrounded by the additional property ceded to the federal government by the Commonwealth of Massachusetts in 1941 (68.196 acres). It also shows the property adjoining the Annex which was acquired under licenses for the duration of the war such as those along Northern Ave. used for the barracks complex. *BOSTS-15406*

Building The Jetties

THE FIRST MAJOR PROJECT at the South Boston Annex was the construction of new filled land to accommodate a series of jetties or quay wharves. This sequence shows construction progress images of this work.



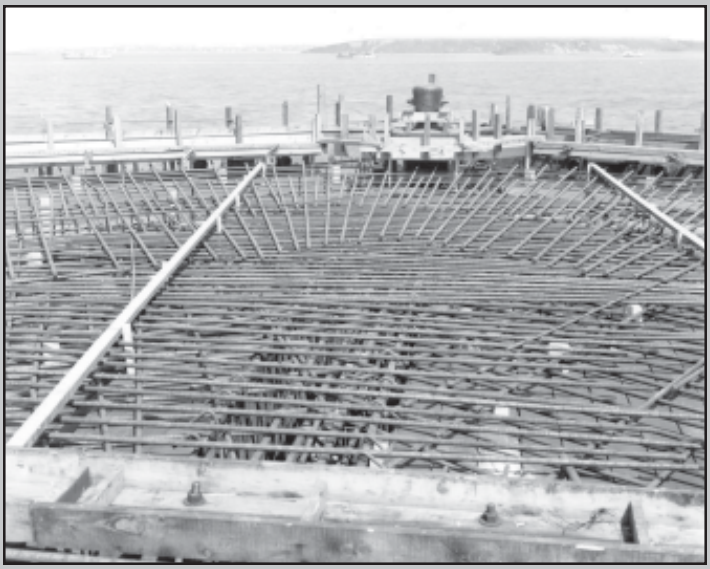
This May 20, 1940, image shows the hundreds of pilings which would be used in the construction of both Building 16 within the existing land area and the retaining walls of the new jetties. *BOSTS-7810*



This Mar. 29, 1941, view shows what was termed Corner B of the quay, the juncture of what would become the North Jetty (left) and East Jetty (right). *BOSTS-7810*



This view taken on Apr. 16, 1941, looking towards the same corner gives a good indication of the amount of water which would be displaced by the jetty construction project. *BOSTS-7810*



On the same date, laying of reinforcement rods was well underway at the juncture of the East and South Jetties. *BOSTS-7810*



This June 21, 1941, view looks west showing construction at the intersection of the new West Jetty and the new pier bulkhead. Building 14 can be seen in the background. *BOSTS-7819*



This Oct. 1941 aerial view shows the completed jetties as well as Piers 1 and 2 along the new waterfront to the west of the jetties. The initial short piers would later be extended to the line of the North Jetty. *BOSTS-7789*



This May 20, 1940, progress photo shows the existing North Approach Pier and the original bulkhead which defined the land area of the dry dock property. The new concrete South Jetty would replace the pier, while the area between it and the old bulkhead would be filled. *BOSTS-7819*

nex and the Boston Army Base. (See Figure 3-3) After the completion of filling along the waterfront, the land area of the Annex had grown from the original 50 acres to 97.1 acres.[24]

The state legislation granting the additional property to the Navy gave it permission to perform additional filling and construction within the new boundary line without the need for further state permits. It also provided that the property "shall revert to and revest in the commonwealth whenever said areas shall cease to be used for naval purposes."[25] As will be discussed below, this reversionary provision would feature prominently in the ultimate disposition of the Annex following the shipyard's closure in 1974.

Building A New Shipyard

Between April 1940 and July 1943, the Navy completed the construction of the North, South, East, and West Jetties; Piers 1 to 7; Dry Dock 4; storehouses; and numerous industrial and service buildings.[26] (See Figure 3-4) The layout of the facility concentrated industrial shops along the waterfront, while structures assigned to the Supply Department and Net Depot were located on the newly-acquired state land west of the former Boston Molasses Co. building. While the associated storage tanks were removed, that structure itself was retained as a Temporary Storehouse (Building 19A).

Many of the new structures were of standard designs. The permanent General Storehouse (Building 32) followed the Bureau of Yards & Docks' storehouse design originally developed during World War I.[27] The Machine Shop (Building 16) was also to a design which had first appeared at the Philadelphia Navy Yard in 1938 and would also be used at Norfolk, Bayonne, Hunters Point, and Terminal Island, among other locations.[28]

Commonality Of Design: Machine Shops





Many of the structures built at the South Boston Annex were based on common designs used by the Bureau of Yards & Docks. Compare the 1995 HAER view of Building 592 (Material Assembly Shop) at the Philadelphia Navy Yard at top with the Mar. 1, 1965, image of Building 16 at the South Boston Annex above. Similar Machine Shops were also built at the Norfolk Navy Yard and the Bayonne, Hunters Point, and Terminal Island Dry Docks. *Jet Lowe, HAER (top); BOSTS-7831 (above)*

The systematic approach to the Annex's layout is explained in the official history of shipyard's development during World War II:

> Every effort had been made to plan the work so that subsequent developments would be facilitated. For instance, in the construction of the first building at the Naval Dry Dock …, Building 16, the building was so designed that while it could be used as a general utilities building to handle all trades and shops, it would … be perfectly suited for a single activity.… Similarly,

[24] "An Act granting all right and claim and ceding jurisdiction to the United States of America over certain areas of the Commonwealth at South Boston," chap. 535, July 28, 1941, Massachusetts, *Acts and Resolves, 1941*, p. 642-44; Black, *Charlestown Navy Yard, 1890-1973*, 2:535, 537. Including water, the Annex's area was 169.125 acres.

[25] Chap. 535, July 28, 1941, Massachusetts, *Acts and Resolves, 1941*, p. 644. The state also reserved the right to construct a railroad car float terminal at the western edge of the site.

[26] George O.Q. Mansfield, *Boston Naval Shipyard (formerly Boston Navy Yard) Historical Review, 1938-1957* ([Boston: Boston Naval Shipyard, 1957]), TIC 457/D6087, p. 26, 69. For recollections of this program by one of the construction inspectors involved, see Michael Spero, *Boston Navy Yard and South Boston Annex, July 1940-September 1942: A Narrative Describing the Activities of the Small Group of Construction Inspectors Who Watched Over the Navy Yard Construction at South Boston and Charlestown, Massachusetts* (typescript; Dec. 1986), TIC 457/D6305.

[27] U.S. Navy, Bureau of Yards & Docks, *Activities of the Bureau of Yards and Docks, Navy Department, World War, 1917-1918* (Washington: Govt. Printing Office, 1921), p. 317, 322-328.

[28] See, e.g., U.S. Navy, Bureau of Yards & Docks, *Building the Navy's Bases in World War II: History of the Bureau of Yards and Docks and the Civil Engineer Corps, 1940-1946*, 2 vols. (Washington: U.S. Govt. Printing Office, 1947), 1:89, 181, 186, 199, 202. It should be noted that the yard's Manager, Capt. Charles L. Brand, had been assigned to Philadelphia prior to coming to Boston. See "Our New Manager," *Boston Navy Yard News*, vol. 3, no. 8 (Aug. 11, 1938), p. 1.

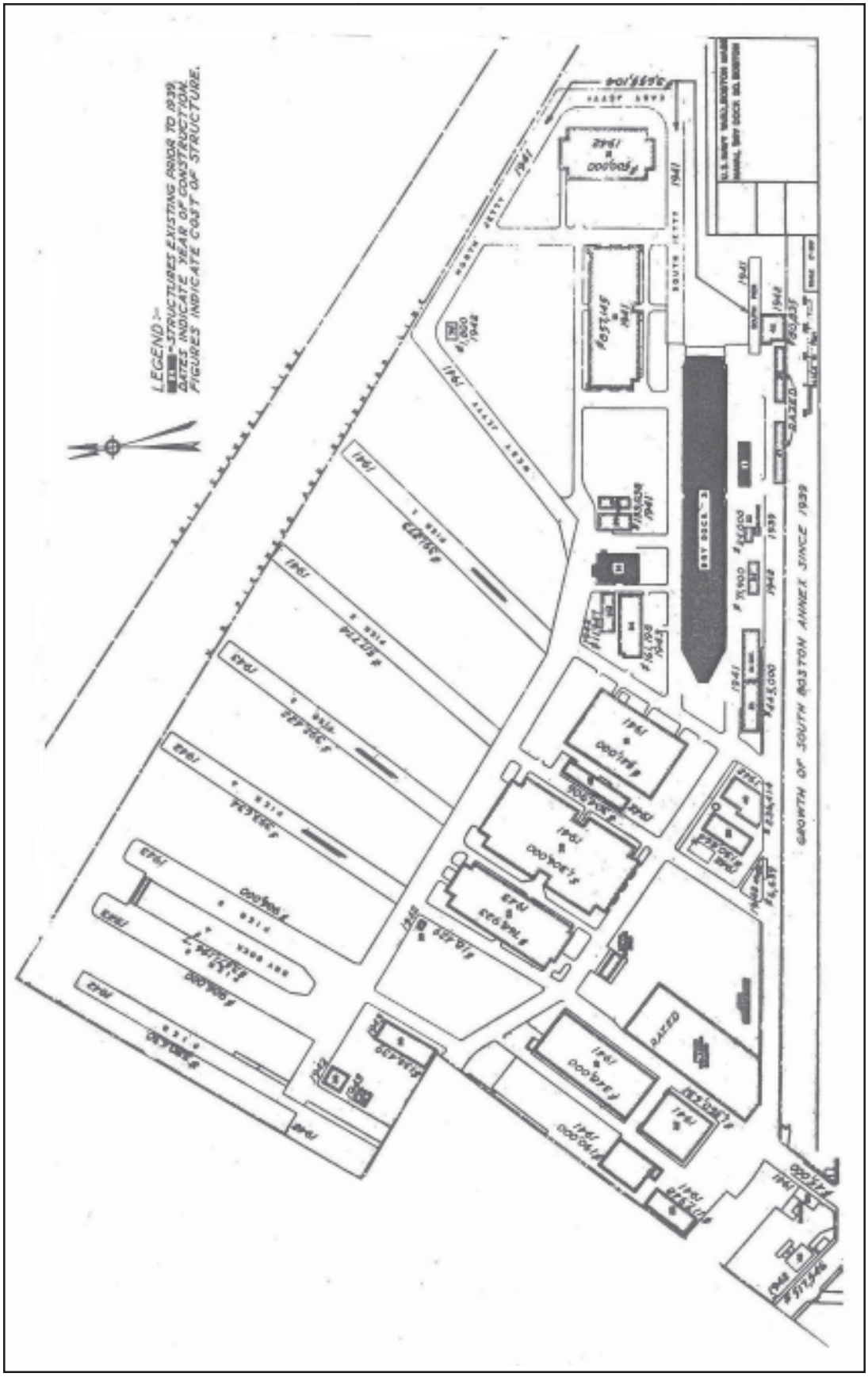


Figure 3-4 – Construction of Facilities at South Boston During World War II

This undated drawing shows the growth of the South Boston Annex and the year completed and the total cost for improvements made at the South Boston Annex during World War II. *Mansfield*, Boston Naval Shipyard Historical Review, 1938-1957

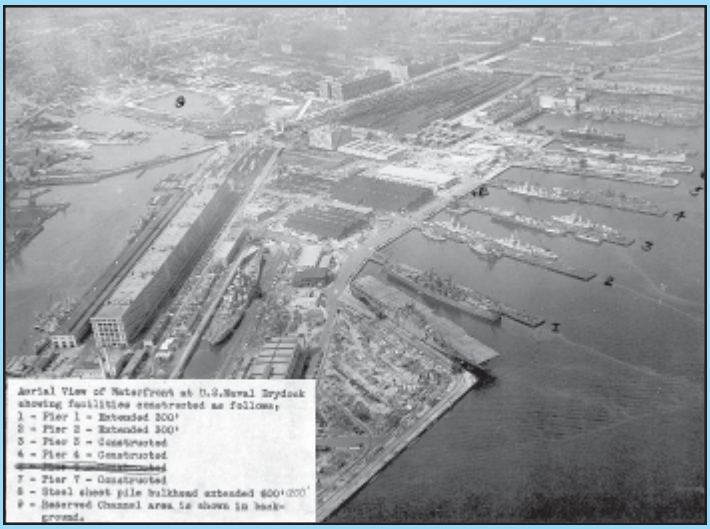
Building A New Shipyard: An Overview

THE CONSTRUCTION OF A NEW SHIPYARD was a major public works project, involving a large number of different contracts, and close coordination so that facilities vitally needed for the war effort could be brought into use as soon as possible. To document the various projects the Navy annotated these Aug. 17, 1943, aerial views of the Annex.





BOSTS-7782 (above); BOSTS-7791 (all others)









Building A New Shipyard: A Gallery

THIS GALLERY features photographs of structures at the South Boston Annex except for those associated with the Barracks, Receiving Station, and Training Complexes. They include construction progress photographs and details from contemporary aerial photographs. Figure 3-4 shows the location in the Annex of each structure shown.



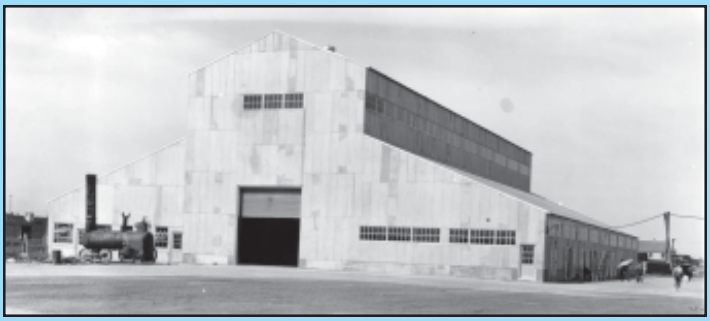
Building 16, Mar. 29, 1941
The Machine Shop was built between Mar. 1940 and Jan. 1941 at a cost of $857,145. It was designed to accommodate all trades until further development allowed it to be devoted to a single shop. *BOSTS-7819*



Building 18, Sept. 15, 1941
The Structural Shop nears completion in this view taken from the roof of the Army Base Storehouse. Note *Crane Ship No. 1* (AB-1), the former battleship *Kearsarge* (BB-5), at newly-completed Pier 2 in the background.
NARA RG 181



Building 19A, Oct. 1939
When the Navy began development of the Annex, the western edge property contained facilities which had been occupied under lease by the Boston Molasses Co. These included a large building, storage tanks, and a pier. When the Navy reclaimed the property, it demolished the storage tanks and pier, but retained the existing building, which it designated Building 19A. Used as a Storehouse, it would be razed following World War II. *BOSTS-8526*



Building 17, Apr. 16, 1941
Completed in February 1942, the Naval Net Depot was used for a variety of purposes after the war. Note the temporary boiler which provided steam prior to the Annex's central power system coming on line. *BOSTS-7865*





Building 19, May 3, 1941 & ca. Feb. 1942
Like many of the Annex's structures, the Temporary Storehouse was built quickly. At top, it is under construction. To the right are the Net Depot (Building 17) and the Fargo Building (Building 36). Below, the structure is seen at the time of its completion nine months later.
BOSTS-7838 (top); NARA RG 181 (bottom)



Building 20, Sept. 15, 1941
To serve the growing complex at South Boston, this Power Plant was built by Stone & Webster under a contract to construct or improve the power plants at the Navy Yard and its several annexes. The South Boston facility became operational in Nov. 1942. *BOSTS-15572*

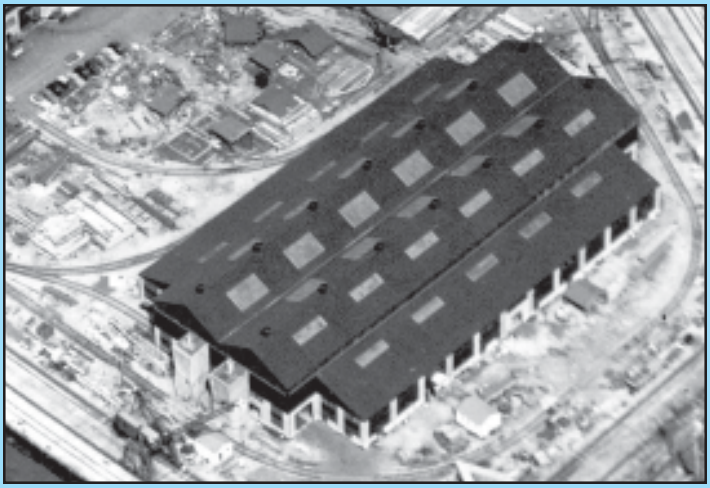
Building A New Shipyard: A Gallery



Building 21, Nov. 17, 1941
The south side of the Administration Building for the Annex is seen in this view. The design of this building was similar to that of the Public Works Administration Building (Building 200) at Charlestown. *NARA RG 181*



Building 29, 1941
This view looking west shows the brick Dispensary & Fire Station built in 1941 on the north side of Dry Dock 3. The Utility Building (Building 14) is visible behind the single-story portion of the structure. *NARA RG 181*



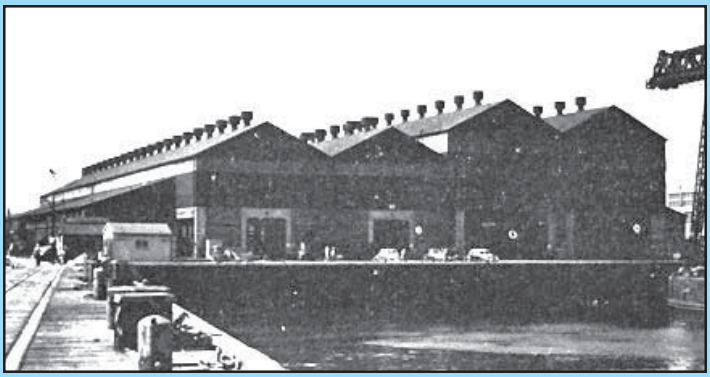
Building 31,Aug. 17, 1943
The Ordnance Work Shop, completed in 1942 by the Morton C. Tuttle Co. at a cost of $500,000, stood at the east end of the area filled to create the South, East, and North Jetties. *BOSTS-7782*

Building 32, ca. 1943
The nine-story Storehouse was built to the standard Navy storehouse design developed in World War I and represented in Charlestown by Buildings 149 and 199. Constructed by Matthew Cummings Co. starting in Nov. 1941, it reached usable completion in Sept. 1942 and full completion in Mar. 1943. *NARA RG 181*





Building 24, Apr. 8, 1943 & June 7, 1943
The Security Building, constructed in 1941, is seen (top) just prior to the start of work on an addition to provide quarters for Marine guards. In the photo of the completed addition (above), note the changes made to the trim at the entry doors of the original building. The Boiler House (Building 46) is in the background. *BOSTS-15573*



Building 30, ca. 1942
Work on the Structural Sub-Assembly Shop began in Sept. 1941. Costing $1.3 million, it was the largest of three major industrial buildings (18, 30, 31) having the same general design. *Bureau of Yards & Docks*



Building A New Shipyard: A Gallery



Building 39, Dec. 15, 1942
Installation of a utility distribution system was a major element of the development of the Annex as a shipyard. This view shows construction of Substation No. 6 (Building 39). *BOSTS-13347*



Building 48, Aug. 17, 1943
The Cafeteria was erected between Buildings 18 (left) and 30 (right) to serve the Annex workforce. *BOSTS-7791*



Building 53, Sept. 20, 1944
The last of the five major shop buildings to be constructed, Building 53 was completed in July 1943. It originally housed the Machinist, Outside Boiler, & Shipfitters Shops. In the 1950s it became the Sonar Transducer & Antenna Repair Shop. *BOSTS-7855*





Buildings 41 & 34, 1942
The Boat Repair Shed was located adjacent to the South Approach Pier to Dry Dock 3 near the Army Base Boiler House (Building 6 [116]). The wooden structure is nearing completion in this view. To its right is Boat Storage Building 34. *BOSTS-7789*



Building 49, Aug. 17, 1943
The Public Works Administration Building cost $236,414. It was designed to fit in the intersection of Dry Dock Ave., 5th St., and A St. To the rear is the Scale House (Building 40), while the Power Plant (Building 20) is at right. *BOSTS-7791*



Buildings 54, 14, & 142, Aug. 17, 1943
The Riggers Shop (Building 54) was located on the north side of Dry Dock 3 next to the Utility Building (Building 14). Tucked behind those structures is Building 142, the Paint Locker, which had been moved from Charlestown in 1942. *BOSTS-7782*

Building 56, Aug. 17, 1943
The Service Building was similar in design to the Riggers Shop. It was located opposite Dry Dock 4. *BOSTS-7791*



This aerial view from the first half of 1942 shows a variety of construction projects underway at the Annex. The cofferdam for Dry Dock 4 is seen at left, while at right the Storehouse (Building 32) has reached the seventh floor level. The Barracks complex is just to the right of center. Note that while Piers 3, 4, and 7 are complete, Piers 1 and 2 have yet to be lengthened. *BOSTS-7786*

> Building 18 was designed so that it would with Building 16, present a balanced facility for all trades, but also designed so that following appropriations would allow its fullest efficient utilization by a single or pair of shops. Carrying out this policy, resulted in a balanced and complete plant making further development possible in an orderly and efficient manner at a minimum of expense.[29]

The improvements at South Boston were built by a number of different contractors, some of whom were also working on projects at Charlestown and other Navy installations in the Boston area. One of the most significant contracts was that awarded to Stone & Webster Engineering Co. in the summer of 1940. It involved the construction of various utilities throughout the Annex, including electric, compressed air, water, and gas distribution systems. The construction of the oil-fired Power Plant (Building 20) and several electrical substations (Buildings 38, 39) was included under this project. These facilities reached a stage of usable completion in November 1942.[30] Subsequently, a new coal-fired Boiler House (Building 46) and steam distribution system was constructed by a second contractor.[31]

Waterfront facilities were an important element of the Annex development. In August 1940 the New England Foundation Co. began construction of the first two wooden finger piers (Piers 1 and 2).[32] A year later, the Roy B. Rendle Co. began work constructing both sheet piling bulkheads along the new shoreline and 1000-foot-long wooden Piers 3, 4, and 7. This contract also included extension of Piers 1 and 2 to the same length as the other piers.[33]

Seven major shop buildings were erected. These were the Machine Shop (Building 16); Structural Shop (Building 18); Structural Sub-Assembly Shop (Building 30); Ordnance Work Shop (Building 31); Machinist, Outside Boiler, & Shipfitters Shop (Building 53); Riggers Shop (Building 54); and Service Building (Building 56).[34]

A number of administrative buildings were built, including the Administration Building (Building 21); Crews and Officers Washrooms (Buildings 22, 23); Security Building (Building 24); Garage & Locomotive House (Building 28); Dispensary & Fire Station (Building 29); Cafeteria (Building 48); and Public Works Shop (Building 49).[35] An Incinerator (Building 43) was built on the "K" Street Annex property.[36] Wooden extensions were subsequently added to Buildings 21, 24, and 29.[37]

The Supply Department was an important component of the Annex. In addition to retaining the old Boston Molasses Co. building (Building 19A), it completed a wooden Temporary Storehouse (Building 19) in early 1942.[38] In November 1941 the Matthew Cummings Co. began work on a nine-story permanent Storehouse (Building 32), which reached usable completion in September 1942.[39] An additional Temporary Storehouse (Building 61) was erected at the "E" Street Annex in 1943.[40]

Not all of the work at the Annex was accomplished by contract. A number of projects were constructed by employees of the yard's Public Works Shop, including the laying of water mains; installation of street lighting, sewerage and drainage systems; and paving of roads. Yard forces also erected minor structures such as the Utility Building (Building 78) on Pier 6.[41]

Dry Dock 4

One of the most important improvements at South Boston was Dry Dock 4. Construction of the facility, capable of handling all but the largest battleships and carriers in the fleet, began in December 1941. This project included the construction of the surrounding Piers 5 and 6, which incorporated portions of the cofferdam erected around the site. The dock was inaugurated on April 24, 1943, when USS *Wakefield* (AP-21) entered the unfinished facility for reconstruction.[42]

The transport, the former passenger liner SS *Manhattan*, had been severely damaged by fire in September 1942, and her extensive reconstruction was one of the most significant repair jobs com-

[29] *Navy Yard Boston in World War II*, chap. 1, p. 9.

[30] Ibid., chap. 4, p. 4; app. B, p. 3-4.

[31] Ibid., chap. 4, p. 8; app. B, p. 8.

[32] Ibid., chap. 4, p. 4; app. B, p. 4-5.

[33] Ibid., chap. 1, p. 13; chap. 4, p. 8; app. B, p. 8.

[34] Ibid., chap. 1, p. 6, 8, 12, 14; chap. 4, p. 3, 5, 7-9; app. B, p. 2, 5-9.

[35] Ibid., chap. 1, p. 8, 12-14; chap. 4, p. 5, 7-8; app. B, p. 5-7.

[36] Ibid., chap. 1, p. 12; chap. 4, p. 7; app. B, p. 7. The numbering system for buildings at South Boston incorporated the Fargo, "E" Street Annex, and "K" Street Annex properties.

[37] Ibid., chap. 1, p. 12; chap. 4, p. 7; app. B, p. 7.

[38] Ibid., chap. 1, p. 8; chap. 4, p. 5; app. B, p. 5.

[39] Ibid., chap. 1, p. 14; chap. 4, p. 10; app. B, p. 9.

[40] Ibid., app. B, p. 11.

[41] Ibid., chap. 1, p. 20-21.

[42] *Navy Yard Boston in World War II*, chap. 1, p. 15; chap. 4, p. 10; App. B, p. 2-3; U.S. Navy, Bureau of Yards & Docks, *Building the Navy's Bases in World War II*, 1:178.

Dry Dock 4

THE MOST SIGNIFICANT SHIP REPAIR FACILITY added to the South Boston Annex during World War II was Dry Dock 4. Begun in late 1941, the dock was first used for USS *Wakefield* (AP-21) on April 24, 1943. Constructed of concrete rather than granite, Dry Dock 4 was rated as a cruiser dock, its 693.5-ft. length capable of accommodating all classes of cruisers up to the *Baltimore* class.



The first stage of the construction of Dry Dock 4 and the surrounding Piers 5 and 6 was the erection of a cofferdam to allow the site to be drained. That work is well underway in this Apr. 22, 1942, view. *BOSTS-7807*



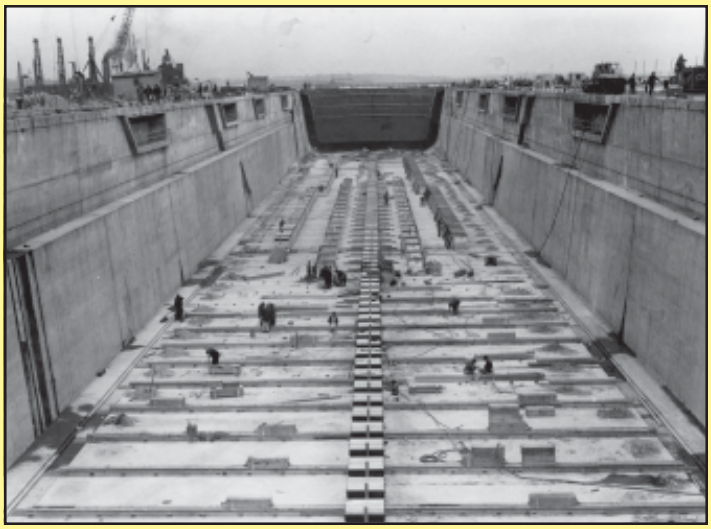
By May 15, 1942, the cofferdam had been completed and dewatering begun. *BOSTS-7807*



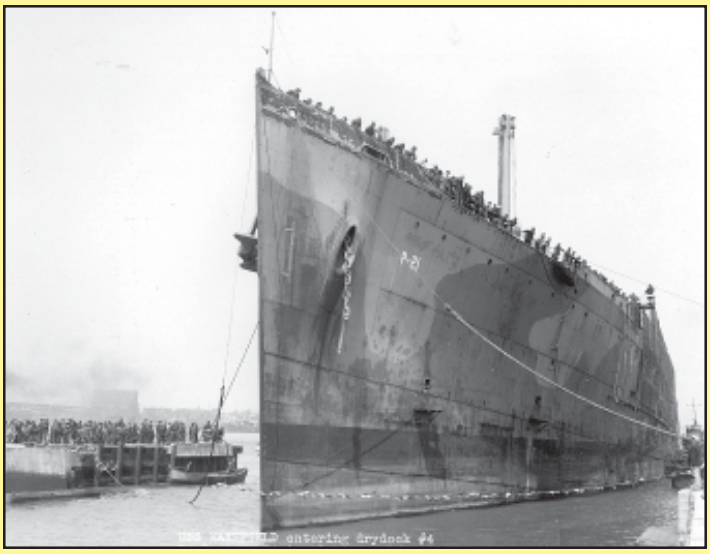
This July 1942 photograph shows the construction of the chambers under the dock floor for the drainage culverts well underway. *BOSTS-7807*



By Sept. 14, 1942, the lower portions of the concrete side walls of the dock had been poured. *BOSTS-7807*



This Apr. 10, 1943, view shows keel blocks being set in the nearly-completed dock in preparation for its inauguration two weeks later. *BOSTS-7807*



USS *Wakefield* (AP-21) crosses the sill of Dry Dock 4 on Apr. 24, 1943. *BOSTS-14604*

Reconstruction Of USS *Wakefield* (AP-21)

ONE OF THE MOST SIGNIFICANT PROJECTS accomplished at the South Boston Annex during World War II was the reconstruction of USS *Wakefield* (AP-21). Originally the passenger liner SS *Manhattan*, she had been gutted by a fire in September 1942. The vessel was towed to Boston, where she was stripped to the main deck and completely rebuilt as a military transport. This project was well documented by yard photographers, as this sequence shows.



The burned-out *Wakefield* is seen arriving at Boston for reconstruction on Sept. 29, 1942. *BOSTS-14601*



On Apr. 24, 1943, the stripped hull was taken from the North Jetty to Dry Dock 4 for repairs to her lower hull. *BOSTS-14604*





By the time this composite panorama was taken on Nov. 28, 1942, yard workers had cut away most of the vessel's superstructure. The location is the North Jetty. *BOSTS-14601*



Following her drydocking, *Wakefield* was placed at Pier 6, where her new superstructure slowly began to rise. This progress photo dates to Sept. 28, 1943. *BOSTS-14603*

The completed *Wakefield* is seen in Boston Harbor on Feb. 16, 1944, six days after her recommissioning. The vessel would go on to transport a total of 217,237 passengers during 23 trans-Atlantic round trips between Apr. 1944 and Feb. 1946. *BOSTS-14601*

pleted by the Navy Yard during World War II. The achievement was considered so important that, despite wartime security, the Navy issued a press release on the reconstruction on May 17, 1944:

> The ship which Japanese bombs and a raging fire at sea could not knock out of the war, is back at her old job of transporting thousands of American troops to war zones the world over. … The fact that the WAKEFIELD is in fulltime combat service again is a tribute to the engineering and construction skill of the Navy. When the crippled giant was towed into Boston Navy Yard only the most optimistic believed she could be rebuilt. Little but a flame-seared hulk remained, but a corps of officers and civilian workmen took over. Cutting away the mangled superstructure, they began rebuilding the WAKEFIELD from the waterline up. Burned out sections were removed with blow torches. Welders, riveters, plumbers, carpenters, and electricians started to remake the giant liner into virtually a new ship.[43]

Supplementing Dry Docks 3 and 4 were two wooden floating dry docks. These craft were *YFD-24*, capable of handling destroyers, and the smaller *YFD-29*, for use by patrol craft.[44]

The Receiving Station

Since the mid-1930s the Receiving Station for the Boston Navy Yard had been located in the Frazier Barracks (Building 33) at Charlestown. With the institution of around-the-clock work in the shipyard, it became impossible for many ship crews to remain on board their vessels.[45] Furthermore, space was needed to house

[43] Navy Dept. Press Release, "Wakefield Back At Sea," May 17, 1944, Public Affairs Files, USS *Wakefield*, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-15404, Box 37. USS *Wakefield* was also the subject of a Coast Guard publicity film, *United States Coast Guard Report No. 5: Story of a Transport*, released in 1944. For this program, see *The Story of a Transport: The Wartime Career of the USS* Wakefield [DVD video] (Chicago: International Historic Films, 2005). The scenes of the vessel in dry dock in this film do not appear to have been shot at the Annex.

[44] U.S. Navy, Bureau of Ships, *Ships' Data, U.S. Naval Vessels, April 15, 1945*, 3 vols. (Washington: U.S. Govt. Printing Office, 1945-1946), 3:609.

[45] *Navy Yard Boston in World War II*, chap. 1, p. 10.



The wooden construction of the Barracks complex buildings (Buildings 25, 26, 27) clearly denoted them as temporary facilities. *NARA RG 181*

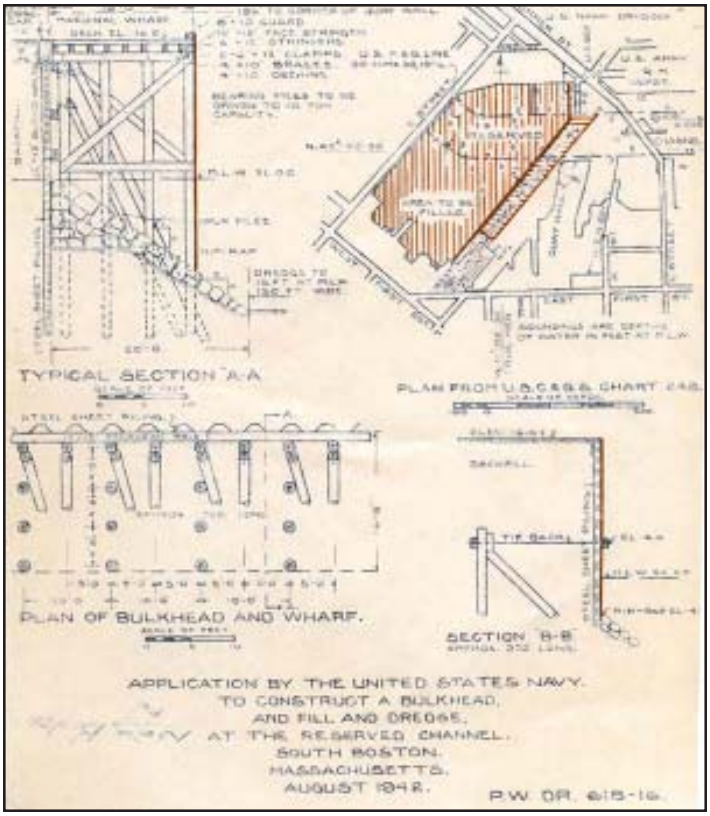
crews being assembled for assignment to ships being constructed by the yard. Thus, in March 1941 Congress authorized additional housing and messing facilities for ship crews at Boston.[46]

Because there was no space at Charlestown for such facilities, the Navy looked at South Boston. In May 1941 the William M. Bailey Co. began the construction of a Barracks complex (Buildings 25, 26, 27) for some 1,400 men on a parcel of land south of Northern Ave. loaned to the Navy by the state for the duration of the war. A Barracks Administration Building (Building 33) and an additional Barracks (Building 35) were subsequently added to the complex.[47]

While the Barracks complex was clearly temporary in nature, the Navy also sought permanent facilities for the Receiving Station. It focused on the property of the Fargo Real Estate Trust, consisting of two parallel buildings on Summer St. and Fargo St. across from the Annex. In December 1941, using the authority granted in the March 1941 legislation, the Navy took the property by eminent domain. Following a nearly $3 million rehabilitation, these structures (Buildings 36 and 37), which could accommodate 8,000 sailors and 200 officers, became home to the Receiving Station as well as the offices of the First Naval District.[48]

Adjoining the Fargo property was the "E" Street Annex. When the Navy acquired the site in 1942 it was largely water. In August 1942 it requested the permission of the Army Corps of Engineers to fill most of the area behind a new quay wall along the north side of the Reserved Channel. The area closest to the Fargo Building became a recreation and training area for the Receiving Station; the remainder became a materiél storage area.[49]

The largest of the structures built at the "E" Street Annex was the Recreation Hall (Building 42).[50] A Trainer Building (Building 55) and Gun Shed (Building 58) were among the others built on the site.[51] The area to the southwest was used primarily for lumber storage, largely outdoors, but there was a Temporary Storehouse



This plan shows the landfill to create the "E" Street Annex. Part of the new land would be employed as a recreation area for the Receiving Station while the remainder would be used for storage. This version of the plan reflects minor changes made by the U.S. Army Corps of Engineers when it approved it in Oct. 1942. *BOSTS-13347*

(Building 61) and several smaller structures (Buildings 62, 69, 70) on that portion of the property.[52]

The Fire Fighters School

The "K" Street Annex, the former Tirrell Estate located on the south side of the Reserved Channel, housed a Fire Fighters School. This facility, which was commissioned on June 24, 1942, was staffed by instructors who had been members of large municipal fire departments prior to their naval service. It had the goal of both familiarizing fleet personnel with firefighting gear found on ships and instructing them "in the correct methods and technique in handling a ship fire." Classroom instruction was supplemented by hands-on experience in extinguishing fires.[53] To that end, the facility contained a variety of specialized structures, which were described in the official wartime history of the school as follows:

> Simulated Ship Structures consisting of three separate buildin[g]s: engine room, fire room and forecastle section. It is all typical of a modern destroyer. The structures are made of reinforced concrete and lined with firebrick. They are equipped with all the normal fittings including watertight doors, hatches,

[46] Fourth Supplemental National Defense Appropriations Act 1941, Pub. Law 13, Mar. 17, 1941, 55 Stat. 36.

[47] *Navy Yard Boston in World War II*, chap. 1, p. 10-11; chap. 4, p. 7; app. B, p. 6-7.

[48] Ibid., chap. 1, p. 10-12; app. B, p. 8; Black, *Charlestown Navy Yard, 1890-1973*, 2:537.

[49] Black, *Charlestown Navy Yard, 1890-1973*., 2:536; *Navy Yard Boston in World War II*, App. B, p. 11; "Application by the United States Navy," Aug. 1942, File 618-16, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 110. Following the landfill completion, the "E" Street Annex contained 38.59 acres, all but 5.68 acres of which was solid land.

[50] *Navy Yard Boston in World War II*, chap. 4, p. 7; app. B, p. 6.

[51] Ibid., chap. 4, p. 7; app. B, p. 7.

[52] Ibid., app. B, p. 11.

[53] Black, *Charlestown Navy Yard, 1890-1973*, 2:536; "History of The Navy Fire Fighters' School, Boston, Mass.," in *United States Naval Administration, World War II: Commandant, First Naval District*, 11 vols. (typescript; 1946), vol. 11, *Distinctive Naval Training Schools, First Naval District*, chap. 9 [hereafter "History of The Navy Fire Fighters' School"].

The Barracks, Receiving Station, And Training Complex



The need to house the thousands of sailors coming to Boston to join new ships being built in the area or arriving on vessels scheduled for major overhauls led to the construction of a Barracks complex at the Annex, located on the south side of Northern Ave. Construction began in May 1941 and the facility became usable in July. It is seen above on Aug. 17, 1943, following the completion of the final additions to the complex. The last two structures to be built were a final Barracks Building (Building 35) (above right) and the Barracks Administration Building (Building 33) (right). Note the wooden fire escapes on the ends of the Barracks wings. Of temporary wood construction, all of the structures were demolished shortly after the end of the war, and the area where they stood returned to the state.

BOSTS-7783 (above); NARA RG 181 (above right, right)







In 1941 the Navy purchased two buildings across Summer St. from the Annex from the Fargo Real Estate Trust for use by the Receiving Station. Seen here on Oct. 23, 1941, they were designated as Buildings 37 (left) and 36 (right). Renovations of the structures, built as wool warehouses in 1910, began in Dec. 1941, with the first building being ready for occupancy in Apr. 1942 and the second in Oct. 1942. Following World War II, the Fargo Buildings housed the offices of the First Naval District as well as the Receiving Station. Building 37 was sold in July 1961. Following the closure of the yard and the First Naval District headquarters, the Summer St. structure was transferred to the Army, which it renamed the Barnes Building.

BOSTS-8579



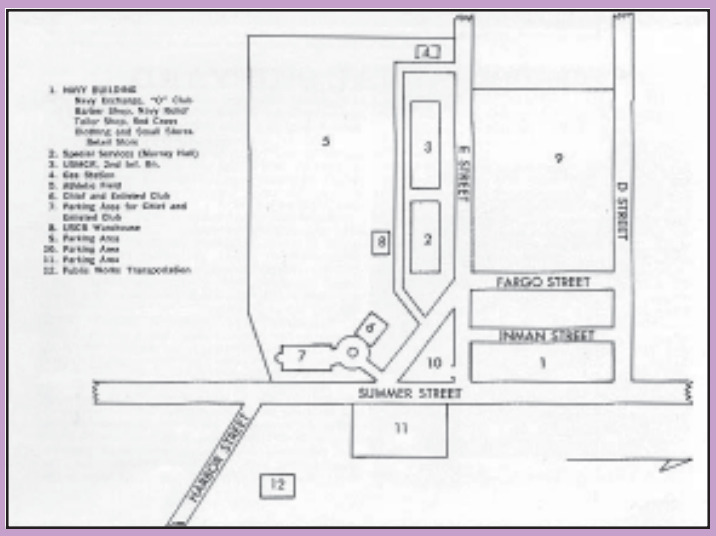
The "E" Street Annex to the Annex was used for training and recreational purposes for sailors assigned to the Receiving Station. Much of this facility was constructed on new land created by the filling of the Reserved Channel. This aerial view taken on Sept. 12, 1943, shows the filling of the "E" Street Annex well underway. The image has been annotated to denote construction projects associated with the facility. *BOSTS-7916*



To provide recreation for sailors, the "E" Street Annex included both outdoor playing fields and a Recreation Building (Building 42) containing basketball and other playing courts. It was later named Murray Hall.

BOSTS-8577

The Barracks, Receiving Station, And Training Complex



Around 1961 the Naval Station's real estate was separated from that of the Annex. This plan of the Naval Station dates to ca. 1964 and appeared in a handbook provided to sailors newly assigned to the Boston area.
BOSTS-13344



This aerial view shows the Fargo Building (495 Summer St.) in the foreground and the Naval Station ("E" Street Annex) in the background. By the time this photograph was taken ca. 1964, the second Fargo Building had been sold to private owners. *BOSTS-13344*



The "K" Street Annex was on the opposite side of the Reserved Channel from the "E" Street Annex. It was used primarily as a Fire Fighters School for sailors. The school included an Administrative Building (Building 44) and a Model Ship (Building 45), which consisted on several structures used to provide hands-on experience in dealing with shipboard fire conditions. The site also included an Incinerator (Building 43) and a scrap and salvage yard. This Sept. 12, 1943, aerial view has been annotated to identify these facilities. *BOSTS-7916*





Although the Fire Fighters School was leased to the City of Boston in the post-World War II period, Navy Yard personnel continued to receive training there. This June 1953 view shows yard workers practicing under the supervision of Boston Fire Department personnel. Note the Fargo Buildings in the background. *BOSTS-13352*

This Oct. 1952 image, taken to promote Fire Prevention Week, shows yard employees Evelyn Albion and Helen Bernacky dressed as firefighters fighting a fire at the Model Ship (Building 45). The facility replicated the superstructure of a ship and could be filled with smoke to allow sailors to experience conditions they would encounter in case of shipboard fires.
BOSTS-14958



The anti-submarine nets placed at the entrances to Boston Harbor were serviced by the Naval Net Depot at the South Boston Annex. Deer Island Light is in the center of this view of the nets extending between Long Island and its namesake. The Coast Guard's floating Boston Lifeboat Station is seen in the background. *U.S. Naval Administration in World War II*

ladders, gratings, installed fire mains and plugs. They are also fitted with watch ports for reviewing interior machinery.

A structure simulating a section of a hanger deck. This has an installed fixed system of fog heads.

Two open shallow tanks (15 foot diameter) installed on the grounds. Oil fires are lighted in these tanks for instruction purposes.

Christmas Tree and Shack structures installed on grounds. There are two of these structures. They consist of a concrete base and tinclad shack open on one side and provided with openings on side and top. It contains a system of piping in the form of a tree. Gasoline flowing under pressure from numerous openings in the branches is kindled and extinguished.

Shallow water pool. This small concrete pool is used for instruction in shallow water diving.[54]

There was also an Administrative Building, a Pump House, various equipment and hose storage buildings, and quarters for students.[55] Most of these structures were built by the William M. Bailey Co. as part of a larger contract covering a variety of buildings at both the Annex and the Receiving Station.[56]

The Net Depot

The South Boston Annex was also the home of a Naval Net Depot. This facility was intended to support the laying of harbor defense nets. On June 15, 1940, the Chief of Naval Operations requested recommendations from naval district commandants as to the location of net depots within their areas. Commandant Tarrant responded that depots should be set up at Portland, Me., Portsmouth, N.H., Boston, Mass., and Newport, R.I. With regard to Boston, he recommended that it be placed at the Annex.[57]

Almost a year later, on May 15, 1941, the Secretary of the Navy approved the establishment of eighteen Naval Net Depots, including one at the South Boston Annex. The purpose of these shore facilities was "the fabrication, assembly, upkeep, and repair of the net and boom defenses" and to "assist in the operations of laying and recovering of nets and booms" by the gate vessels and net tenders which were assigned to the local defense forces.[58]

Even before the formal establishment of the Net Depot the Navy had contracted for the construction of a building to house its operations. The Net Depot (Building 17) was located at the western edge of the expanded Annex, away from the piers and industrial shops. The building was constructed by the Sawyer Construction Co. under the same contract which included the adjacent Temporary Storehouse (Building 19).[59] Following World War II, the western portion of the Annex itself would be used for the storage of anti-submarine nets and floats. The last of this harbor defense material would not be disposed of until after the yard's closure in the 1970s.[60]

The Annex In World War II

Even as its physical plant was being expanded, the South Boston Annex carried on ship repair and conversion activities. It also supported the shipbuilding efforts at Charlestown through the fabrication of hull sections, which were then transported across the harbor to the yard's shipways.[61]

Conversions began in 1942 as a number of fishing vessels were transformed into patrol craft (YP) for both the Navy and the Coast Guard. To help support the Navy's abilities in the area of amphibious warfare, the Annex modified two cargo ships (AK) into attack transports (AKA), seven escort vessels (DE) into high-speed transports (APD), and a variety of ships for service as amphibious force flagships (AGC). As newly-constructed destroyers released them for other duties, five World War I-era destroyers were altered for use as training ships (AG).[62]

Most of the repair work took place in the dry docks, although the jetties and Piers 5, 6, and 7 were used as well. From 1941 through

[54] "History of The Navy Fire Fighters' School."

[55] Ibid. Only two of these facilities—the Administration Building (Building 44) and the Locker & Wash Room (Building 72)—received formal building numbers. Building 45 was assigned collectively to the Model Ship structures. The two quarters for students were identified on yard maps only as "Quonset huts."

[56] *Navy Yard Boston in World War II*, chap. 1, p. 12; chap. 4, p. 7; App. B, p. 6.

[57] *United States Naval Administration, World War II: Commandant, First Naval District*, 11 vols. (typescript; 1946), vol. 3, *History of the Headquarters Divisions, First Naval District: Combatant Forces*, chap. 2, pt. 3, p. 6-7 [hereafter *First Naval District Combatant Forces*].

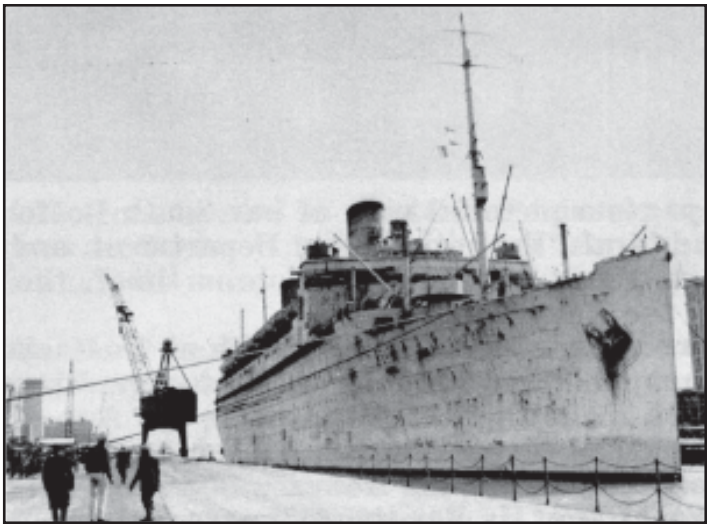
[58] Ibid., chap. 2, pt. 3, p. 11-12; Black, *Charlestown Navy Yard, 1890-1973*, 2:516-17, 537.

[59] *Navy Yard Boston in World War II*, chap. 1, p. 8; chap. 4, p. 5; App. B, p. 5; Progress Photos, Buildings 17 & 19, Contract 4410, Mar.-Apr. 1941, Boston Naval Shipyard Photo Collection, NPS Cat. No. BOSTS-8536, Box 1-11.

[60] See, e.g., J.H. Kenney, memorandum for file, "Submarine nets at South Boston Annex," Jan. 20, 1976; Code 960 (E. Lamprey) to Code 620, "COAR 78368/closing of," Mar. 5, 1976, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 31.

[61] Black, *Charlestown Navy Yard, 1890-1973*, 2:536.

[62] Ibid., 2:629-30; "List of Vessels Converted at the U.S. Naval Dry Dock, South Boston," Aug. 14, 1945, Histories of BNS, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 16.



In addition to American vessels, the Navy Yard undertook work on those of Britain and France. Here, HMS *Queen Mary* is seen in Dry Dock 3 during one of her two 1942 dockings (Jan. 27 to Feb. 8 and Oct. 14 to Nov. 2). Portal Crane 39 is in the background. *BOSTS-13352*



Following World War II the Navy decided to store surplus escort aircraft carriers (CVEs) at the South Boston Annex. Among the vessels seen in this 1946 view are USS *Hoggatt Bay* (CVE-75) and USS *Rudyerd Bay* (CVE-81) at Pier 4, USS *Tripoli* (CVE-64) and USS *Kalinin Bay* (CVE-68) at Pier 3, and USS *Saginaw Bay* (CVE-82) at Pier 2. Substation No. 5 (Building 38) is in the foreground. *Lesley Jones, Boston Public Library*

1945 over 350 vessels were serviced in the two graving docks, plus another 267 in the two floating docks.[63] In addition to United States ships, vessels from the United Kingdom, Poland, and France were repaired at South Boston.[64]

The "Mothball Fleet"

Following World War II, the Navy found itself with a large fleet of vessels which were surplus to its requirements. While it scrapped older ships or those which had suffered serious damage during the war, it decided to retain many of the newer warships for mobilization in case of future conflicts. To simplify the processing of vessels being "mothballed" and their subsequent reactivation, the Navy decided to group its reserve fleets by type. Since the South Boston Annex had 1000-ft. piers, the site was ideal for berthing escort aircraft carriers (CVEs). By late 1946 the waterfront was filled with the vessels of the Boston Group of the Atlantic Reserve Fleet. In addition to pier space, the yard furnished office and work space for the naval personnel assigned to this activity. The fleet, in turn, provided work for the yard, which drydocked its vessels and otherwise provided maintenance support.[65]

With the outbreak of the Korean War the Navy increased the size of the active fleet. Several of the Boston-based vessels were reactivated,[66] although the majority of the carriers, which were too small to operate newer naval aircraft, remained inactive.

The reserve fleet function gradually decreased starting in the late 1950s, when the Navy began a wholesale scrapping program for ships that had been "mothballed" immediately after World War II that it realized could not be effectively used or modernized to meet the requirements of a Navy entering the era of jet aircraft and guided missiles; the Boston Group of the Atlantic Reserve Fleet was formally disestablished in September 1961.[67]

The possibility of again using the Annex for berthing of inactive ships arose in the mid-1960s. As a result of base closings in the New York area, the Navy looked to the Annex to provide berthing for carriers formerly assigned to Bayonne, N.J. In February 1966 the shipyard submitted proposals for construction projects needed to allow berthing of USS *Antietam* (CVS-36) and USS *Leyte* (AVT-10, ex-CVS-32) at Pier 6. These included upgrading Pier 1 to accommodate the Naval Reserve training ships then at Pier 6, demolishing Pier 7, and dredging the berth.[68] In the end, the Navy decided to berth the ships at other locations. Furthermore, as the yard informed Washington in April 1968, under the modernization plans for the Annex, discussed below, "space is not available … to berth 'Cold Iron' reserve ships."[69]

Despite this, the Navy in February 1969 assigned USS *Randolph* (CVS-15) to the Annex for berthing. Concurrent with this assignment, the yard entered into an agreement for a Boston Detachment of the Naval Inactive Ship Maintenance Facility, Philadelphia, to occupy Pier 6 and Building 56. While *Randolph* was transferred away from the Annex in July, the Inactive Ship Detachment remained, using the pier "for ships being deactivated."[70] This use continued until the yard's closure.

[63] Mansfield, *Boston Naval Shipyard Historical Review*, p. 100. The total number of dockings is unknown since there is no data for dockings in Dry Dock 4 during 1943.

[64] *Navy Yard Boston in World War II*, chap. 4, p. 8, 11, 14, 16, 19, 28; Black, *Charlestown Navy Yard, 1890-1973*, 2:628.

[65] Daniel Madsen, *Forgotten Fleet: The Mothball Navy* (Annapolis: Naval Institute Press, 1999), p. 11-18; Black, *Charlestown Navy Yard, 1890-1973*, 2:662-64, 710-13. On the complex process of "mothballing" ships in this period, see Kit and Carolyn Bonner, *Warship Boneyards* (Osceola, Wisc.: MBI Publishing, 2001), p. 79-83.

[66] Black, *Charlestown Navy Yard, 1890-1973*, 2:723-24.

[67] "Boston Naval Shipyard for Calendar Year Ending 31 December 1961," OPNAV Report 5750.5, Command Histories, 1961-1974, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 12.

[68] F.C. Jones, "Informal Turnover Memorandum for Captain S.C. Jones," June 1966, p. 6-7, 124-25, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 3.

[69] S.C. Jones, "Informal Turnover Memorandum for Captain R.C. Gooding, USN," Aug. 1968, p. 175-76, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 3.

[70] R.C. Gooding, "Informal Turnover Memorandum for Captain R.W. Burk, USN," Oct. 1969, p. 6, 153-55, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 3.

The "Mothball Fleet": A Gallery

Following World War II the Navy found itself with a large fleet of relatively new warships for which it had no immediate need. Although it scrapped those which had sustained combat or other damage, it retained many of them for future mobilization. Because the South Boston Annex possessed 1,000-ft. piers, it decided to concentrate its reserve escort aircraft carriers (CVEs) in the Boston Group of the 16th (Atlantic Reserve) Fleet. At least eighteen "baby flattops" can be seen in this 1950 aerial view. While a few carriers were reactivated for Korean War service, most sat at South Boston until their ranks were thinned out by sales for scrapping between 1958 and 1960.

New York Daily News, *Feb. 19, 1950*





This May 1958 view shows the outer row of carriers. From left to right, the ships which are identifiable by their hull numbers are USS *Salerno Bay* (CVE-110), USS *Gilbert Islands* (CVE-107), USS *Marcus Island* (CVHE-77), USS *Manila Bay* (CVU-61), USS *Kasaan Bay* (CVHE-69), and USS *Sargent Bay* (CVU-83). The Custom House Tower can be seen in the background. *Richard Leonhardt*



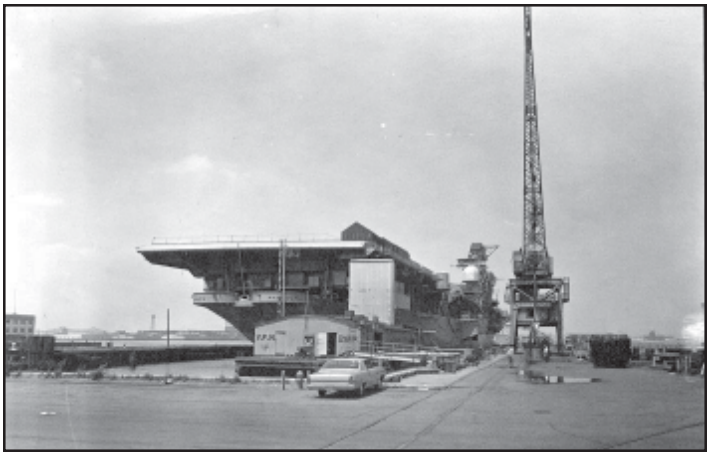
USS *Shamrock Bay* (CVU-84) and USS *White Plains* (CVU-66) are seen at either side of the inner end of one of the Annex's piers in May 1958. *Richard Leonhardt*



Between 1958 and 1960 most of the escort carriers were sold for scrapping. Here, on June 18, 1960, ex-USS *Mindoro* (AKV-20), still wearing her original CVE-120 hull number, is eased away from Pier 3 on her final journey to a Hong Kong breakers yard. The two submarines at Pier 2 are USS *Greenling* (SS-213) and USS *Shad* (SS-235) while the stern of USS *Skowhegan* (PCE-843) is visible on the opposite side. *Richard Leonhardt*



Not all of the ships mothballed at South Boston were carriers. This Aug. 1960 view shows the minelayer USS *Monadnock* (MMA-14), cruiser USS *Dayton* (CL-105), and destroyers USS *Monssen* (DD-798) and USS *Baldwin* (DD-624) berthed at Pier 6. *Richard Leonhardt*



The "mothball fleet" returned briefly to the Annex in 1969 when Pier 6 was assigned as the berthing location for USS *Randolph* (CVS-15). The carrier is seen here on June 30, 1969, with *YFN-288*. Although *Randolph* was transferred elsewhere that July, the Boston Detachment of the Naval Inactive Ship Maintenance Facility, Philadelphia, remained to use the pier for the deactivation of other *Essex*-class aircraft carriers. *BOSTS-14045*



Even after the Reserve Fleet was disbanded, the South Boston Annex continued to house Naval Reserve units and their ships. This July 4, 1962, view shows the training ships USS *Siskin* (MSCO-58) and USS *Billfish* (SS-286) at Pier 1. *Richard Leonhardt*

The Postwar Annex

By the end of World War II the South Boston Annex had grown from a single dry dock with minimal support facilities into a major shipyard. Unlike Charlestown, where new facilities had been shoehorned into an already congested site, the buildings at South Boston were spacious and there was space for future growth. However, that potential would never be realized.

Initially, the pace of activities continued into the postwar period. The Annex was heavily involved in the process of demobilizing the large wartime Navy. During 1946 drydockings approached wartime numbers—82 ships using the graving docks and 34 in the floating docks—but would soon drop off dramatically.[71] The two floating dry docks were taken out of service and disposed of by the Navy.[72] While the Annex's piers were filled with ships, these were not vessels undergoing active repair but ones belonging to the Atlantic Reserve Fleet.

Not all of the ships berthed at the Annex were inactive. Several Naval Reserve units were based at the facility. Over the years, a number of different vessels were assigned to them for training purposes. These included the submarine USS *Greenling* (SS-213), which was replaced by USS *Billfish* (SS-286, later AGSS-286) in 1960. In turn, USS *Carp* (AGSS-338, later IXSS-338) succeeded *Billfish* in 1968. *Carp* was removed from service in 1971.[73] The minesweeper USS *Siskin* (AMS-56, later MSCO-56) served at the Annex from September 1947 until March 1950, and then again from the late 1950s until stricken for disposal in late 1968.[74] Other Naval Reserve units assigned to the Annex included the destroyers USS *Miller* (DD-535) from March 1959 to March 1964 and USS *Compton* (DD-705) in the late 1960s.[75]

As discussed in detail in Chapter 2, a 1948 Shore Station Development Plan (master plan) for the Navy Yard envisioned the transfer of the Foundry, Forge Shop, and Boat Shop to South Boston.[76] This was one of the first plans which, as will be discussed below, envisioned that South Boston would be a replacement in whole or in part for the Charlestown Navy Yard. A proposal to utilize the Annex for submarine overhaul led to the preparation in late 1951 of plans for a series of new structures to accommodate such work, but in April 1953 the Navy decided to locate the facility elsewhere.[77]

One function which was transferred from Charlestown in the mid-1950s, however, was sonar testing, largely because it had outgrown the Charlestown facility.[78]

The shipyard functioned as a single entity. To help employees move between the two facilities, the yard provided bus service and in March 1953 instituted ferry service using a converted yacht (YFB-81).[79] While the majority of shipwork was performed in Charlestown, the Annex provided it with additional capacity at the busiest times. For example, in August and September 1958 the fairly routine modernization of USS *Cassin Young* (DD-793) took place in Dry Dock 3 and at the South and East Jetties.[80] But this interworking was about to suffer a major blow from which the Annex would never recover.

In late 1958 the Navy directed that the Annex be "inactivated on a most austere basis" effective in January 1960 as an economy measure.[81] Following protests by Shipyard Commander Rear Admiral William E. Howard, Jr., the order was modified to delay the shutdown first to June 30, 1960, and then to September 30, 1960, and to specify that Dry Docks 3 and 4 would continue in use, although Dry

[71] Mansfield, *Boston Naval Shipyard Historical Review*, p. 100.

[72] Both docks were disposed of in early 1947. See U.S. Navy, Bureau of Ships, *Naval Vessel Register, 1 January 1949*, NAVSHIPS 18-1-11 (Washington: Dept. of the Navy, 1949), p. 207.

[73] *Reserve Training Boats of the US Submarine Service* [web page] [http://www.submarinesailor.com/Boats/Reserve/Reserve.asp], accessed May 22, 2008.

[74] U.S. Naval Historical Center, *Dictionary of American Naval Fighting Ships* [hereafter *DANFS*] (8 vols.) (Washington, 1959-1981), 6:520-21.

[75] Ibid., 4:360; *USS Compton (DD-705)* [web page] [http://www.destroyers.org/Histories/h-DD-705.htm], accessed May 23, 2008.

[76] Black, *Charlestown Navy Yard, 1890-1973*, 2:708.

[77] Ibid., 2:665-66. The plans, listed as drawings 111, 115-124, and 126 in the Master Shore Station Development category (File 610) in the Public Works Dept. drawing index card file, are not in the park collection.

[78] Black, *Charlestown Navy Yard, 1890-1973*, 2:707.

[79] "Shipyard and SB Annex Ferry Service Started," *Boston Naval Shipyard News*, vol. 17, no. 18 (Mar. 19, 1953), p. 8.

[80] "Extracts of the Deck Logs of the USS Cassin Young (DD 793)," p. 139-42, in Charles W. Snell, comp., *Odyssey of USS Cassin Young, 1951-1960* (June 1979), TIC 457/D6095.

[81] Bureau of Ships to Commander, Boston Naval Shipyard, Dec. 18, 1958, quoted in Black, *Charlestown Navy Yard, 1890-1973*, 2:747-48.



The ferry *YFB-81*, the former yacht *Amada*, entered service between Charlestown and South Boston on Mar. 2, 1953. *BOSTS-14793*

Dock 3, once the largest the Navy possessed, could not accommodate the "supercarriers" of the *Forrestal* and later classes. In conjunction with that order, all operations were to be consolidated in Building 16, while Reserve Fleet operations were to be in Buildings 18 and 21.[82]

A March 1962 study of the Annex outlined its future: "The principal use … will be in the area of the existing dry docks, as well as providing berthing … for home porting ships."[83] Thus, both Dry Docks 3 and 4 would continue to be utilized by the yard until their final deactivation in conjunction with the shipyard's closure in 1974.

No sooner had the Navy announced that industrial operations were to end, the Massachusetts Port Authority (Massport) cast a covetous eye on the site. On April 11, 1961, it requested transfer of not only 51.2 acres from the 1941 state donation but also the remaining Annex property. The Navy responded that "none of the facilities" at the Annex "could be made available for other than Navy use in the foreseeable future."[84]

Massport immediately scaled back its request, asking in September 1961 for five acres at the west end of the Annex for a fish processing center. Over a year later, on October 26, 1962, the Shipyard Commander met with Massport representatives and raised the possibility that Pier 7 and the Marginal Wharf (Wharf 8), along with open storage areas north of Building 17 might be available for transfer.[85] This was repeated in a further meeting held on February 26, 1964. At that time, Massport asked about the availability of the area including Buildings 17 and 28.[86]



Throughout its history, Dry Dock 3 was made available for use by commercial ship repair firms in the Boston area. Indeed, in the 1920s and early 1930s, more commercial than naval vessels were docked. The use of the dock by civilian ships resumed in the 1950s and continued until the Annex closed in 1974. Here the tanker SS *World Glory* enters the dock in May 1954. *BOSTS-14769*



The Navy prepared this photograph on Jan. 29, 1962, to show the five-acre parcel that Massport had requested. The parcel involved was a rectangle extending from the Marginal Wharf to 9th St., the road just to the right of Building 56. Three years later, Massport made a formal request for transfer of the 1.72 acres seen in the foreground. *BOSTS-7880*

Following this meeting, the yard determined that neither building could be released. Although Building 17 was largely vacant, it was needed to allow the First Naval District Transshipment Pool to vacate space in Building 53. Building 28 was in active use by the Naval Station and District as a motor pool and by the shipyard for crane maintenance.[87] This information was communicated to Massport at a meeting in mid-August. At that time, Massport indicated that its needs for the areas that the yard was willing to give up were not immediate enough that it was willing to pick up the costs for moving stored material or rehabilitating the deteriorated Pier 7.[88]

On December 28, 1964, at a further meeting with the Navy, Massport indicated that it was no longer interested in the area north of Northern Ave. or Building 28. The authority, however, requested Building 19 and/or the open area north of it. The shipyard, however, concluded that neither option was possible.[89]

[82] "Annex Status Modified By Bureau Of Ships, States Admiral Howard," *Boston Naval Shipyard News*, vol. 23, no. 28 (Jan. 16, 1959), p. 1; "Boiler Replacement At South Boston Underway," *Boston Naval Shipyard News*, vol. 24, no. 39 (Apr. 1, 1960), p. 1, 4. Following the disestablishment of the Reserve Fleet, shipyard operations moved to Building 18. See "Facilities and Space at South Boston Annex, Boston Naval Shipyard, January 1964," p. 8, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 27.

[83] W.A. Brockett, "Informal Turnover Memorandum for Captain F.C. Jones," June 1962, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 3.

[84] Director of Management Engineering (J.B. Calarese) to Shipyard Commander, "Feasibility of making land at South Boston Annex available to the Massachusetts Port Authority," July 13, 1964, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[85] Ibid.

[86] Ibid.; F.C. Jones, memorandum for file, "Meeting with representatives of the Massachusetts Port Authority and Massachusetts Maritime Division on 26 February 1964 at 1400 in the Shipyard Commander's Office, Boston Naval Shipyard," Feb. 27, 1964, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[87] Director of Management Engineering (J.B. Calarese) to Shipyard Commander, "Feasibility of making land at South Boston Annex available to the Massachusetts Port Authority," July 13, 1964, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[88] Harry C. Rowe, memorandum for file, "Request of Massachusetts Port Authority for return of certain properties at South Boston Annex," Sept. 9, 1964, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[89] A.F. Meeks, record of meeting, "South Boston Annex, Boston Naval Shipyard; request of Massachusetts Port Authority for return of certain



Although the Navy had officially decided to cease industrial operations at South Boston in 1960, the dry docks and jetties continued to be used. The panoramic view above from Jan. 22, 1965, shows USS *Wasp* (CVS-18) at Wharf 106 (North Jetty) and the guided missile cruiser USS *Boston* (CAG-1) at Wharf 108 (South Jetty). Just visible behind Building 16 is USS *Shangri-La* (CVS-38), in Dry Dock 3. The view at right shows USS *Charles P. Cecil* (DD-835) in Dry Dock 4 on July 28, 1966.

BOSTS-7792 (above); BOSTS-10664 (right)





Following the loss of the nuclear submarine USS *Thresher* (SSN-593) in Apr. 1963, the Navy brought the bathyscape *Trieste* to South Boston to assist in the investigation. Here she makes a test dive off the West Jetty on Apr. 29, 1963, prior to being taken to the loss site. *BOSTS-14468*

On January 5, 1965, Massport made its formal request for the reversion of the 1.72 acres north of Building 17 and west of 8th Street.[90] This request initiated a review process which exemplifies the uncertainty of the Navy's planning with regard to the Annex's future. For example, on March 10, 1965, Shipyard Commander Captain Frank C. Jones reported to the Bureau of Ships that "the area in question is required for naval use and … cannot therefore be considered excess to the Navy's requirements and returned to the Massachusetts Port Authority." In the next paragraph, however, he wrote that because alternate locations for the material stored there were available and Massport was willing to pay for its relocation, "in the interest of maintenance of good relationships between the Navy and the community, the reversion of this small portion of the South Boston Annex would be of material importance" and recommended favorable consideration of the Massport request.[91]

On June 4, 1965, the Bureau of Ships agreed to Jones' proposal and directed that a formal excess property report be prepared.[92] This was done on June 16.[93] Not quite a month later, the shipyard forwarded the approved excess property declaration to the Bureau of Yards & Docks for final action.[94] It seemed as if the property transfer would finally occur.

However, on August 26, 1965, the yard's Supply Officer, Captain B.L. Rainey, approached Director of Management Engineering John B. Calarese with a request "to defer disposal" of the parcel, citing the increased workload which would be placed on his operation in conjunction with with the pending closures of the Boston Army Base and the Watertown Arsenal.[95]

properties," Jan. 8, 1965; Rowe to Meeks, "Request from the Massachusetts Port Authority for Availability of Facilities at South Boston Annex, Boston Naval Shipyard, on 28 December 1964," Jan. 12, 1965, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[90] Edward J. King to William B. Sieglaff, Jan. 5, 1965, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[91] Commander, Boston Naval Shipyard, to Chief, Bureau of Ships, "Acquisition of Portions of South Boston Annex, Boston Naval Shipyard; request from Massachusetts Port Authority for," Mar. 10, 1965, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[92] Chief, Bureau of Ships, to Commander, Boston Naval Shipyard, "Acquisition of Portions of South Boston Annex, Boston Naval Shipyard; request from Massachusetts Port Authority for," June 4, 1965, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[93] Commander, Boston Naval Shipyard, to Chief, Bureau of Ships, "South Boston Annex; declaration of excess of portion of land at," June 16, 1965, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[94] Commander, Boston Naval Shipyard, to Director, Northeast Division, Bureau of Yards & Docks, "South Boston Annex; declaration of excess of portion of land at," July 13, 1965, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[95] J.B. Calarese, memorandum for MPA file, Aug. 26, 1965, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33. See also Code 500 (B.L. Rainey) to Code 140, "Statement of requirements for parcel of land located in the South Boston Annex of the Boston Naval Shipyard bounded by Building 17, 8th Street, A Street and the northwest Government boundary line," Sept. 13, 1965, with enclosure, DOD/BCG Closure Records, 1951-1976,

As a result of Rainey's intervention, the yard immediately requested that the disposal be put on hold, and on September 24 formally cancelled the request.[96] Thus, on October 11, 1965, Massport Executive Director Edward J. King was informed that "it is impossible at this time to transfer this land" because of "a major increase in the repair and maintenance workload of the Shipyard and the Annex, an expansion of surplus disposal activities and a prospective consolidation of activities at the Annex."[97]

This last statement was one of the first public acknowledgments of a planning process, discussed below, which had been spurred by the negative comments about the shipyard in Department of Defense's November 1964 announcement regarding the closure of the New York Naval Shipyard.

Storage Areas And Tenant Activities

The Annex provided considerable real estate for outdoor storage of material. The orderly piles of floats for anti-submarine nets in the area at the northwest corner of the site were one of the most familiar sights for customers going to Jimmy's Harborside Restaurant on Northern Ave. just outside the Annex. Other open areas on both the North Jetty and in the location of former Building 19A were used for lumber and boat storage, especially after the major portion of the "E" Street Annex was declared surplus in March 1958.

Throughout the postwar period, the Annex also provided space for other Navy organizations and government agencies. The largest tenant was the Reserve Fleet, which, in addition to the piers, occupied several buildings. For most of the period, these included all or parts of Buildings 18, 21, 89, and 142, as well as the quarters in Building 15.[98] Other tenants included the U.S. Weather Bureau, which used Building 41 from 1950 to 1960,[99] and the New England Division of the Army Corps of Engineers, which occupied Building 21 from 1947 to 1951.[100] The use of space within the Annex by others increased in the 1960s. While the Annex had only one tenant in June 1962—the Naval Base Band—a May 1971 list identified a dozen tenant activities having space there (see Table 3-1), including the U.S. Coast Guard and the Atomic Energy Commission.[101]



Reminescent of the Shot Parks of the 19th century, the piles of floats for anti-submarine nets were familiar sights at the western end of the South Boston Annex. This photograph was taken in the late 1960s or early 1970s. *Paul R. Carlson, Carlson Collection*

Postwar Annex Modernization

In the post-World War II period, no major new structures were added to the Annex. Instead, many smaller facilities and additions were demolished.[102] The most significant projects related to the site's infrastructure. In 1947 a salt water Pump House (Building 79) was constructed on the West Jetty to serve a new salt water distribution system along the waterfront.[103] In 1954 a new overhead steam distribution system was constructed from the Boiler House (Building 46) to Building 20 and then to the Ship Repair Shop (Building 16).[104]

The Annex continually suffered from inadequate maintenance. For example, in September 1960 the yard estimated that this backlog amounted to $4,494,000 compared to only $556,000 at Charlestown.[105] The only structure added to the Annex in the 1960s was a Public Toilet (Building 103) which replaced the former Utility Building (Building 78) on Pier 6 in 1962.[106] Three years later, the yard placed a

Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[96] Commander, Boston Naval Shipyard, to Commandant, First Naval District, "Proposed Transfer of Land at South Boston Annex, Boston Naval Shipyard to the Massachusetts Port Authority; Cancellation of," Sept. 24, 1965, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[97] A.K. Tyree to Edward J. King, Oct. 11, 1965, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[98] See, e.g., Annual Site Plan, June 30, 1959, File 981-399-22, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347.

[99] "Brief Background Information for Prospective Shipyard Commander," June 1959, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 123.

[100] Aubrey Parkman, *Army Engineers in New England: The Military and Civil Work of the Corps of Engineers in New England, 1775-1975* (Waltham, Mass.: New England Division, U.S. Army Corps of Engineers, 1978), p. 57.

[101] F.C. Jones, "Informal Turnover Memorandum," p. 5; "Boston Naval Shipyard, List of Tenant Activities," May 25, 1971; Memorandum of Intra-Government Host-Tenant Agreement, Coast Guard Supply Depot, Oct. 5, 1965; Memorandum of Intra-Government Host-Tenant Agreement, Harvard University, Cambridge Electron Accelerator (AEC Contract), Dec. 11, 1964, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box. 124. See also "List of Tenant Activities at South Boston Annex Site, Boston Naval Shipyard," Dec. 1, 1973, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box. 124.

[102] Mansfield, *Boston Naval Shipyard Historical Review*, p. 69; Brockett, "Informal Turnover Memorandum," p. 12.

[103] Progress Photos, Contract NOy 13158, Spec. 17602, Salt Water System, Mar. 1947-May 1948, Boston Naval Shipyard Photograph Collection, NPS Cat. No. BOSTS-8601, Box 1-23.

[104] Progress Photos, Steam & Condensate Line, Dry Dock Ave., July-Dec. 1954; Completion Photos, Steam Line, Jan. 4, 1955, Boston Naval Shipyard Photograph Collection, NPS Cat. No. BOSTS-15580, Box 1-123.

[105] F.L. Ruhlman, "Informal Turnover Memorandum for Capt. W.A. Brockett, USN," [Sept. 1960], Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 3.

[106] Commander, Boston Naval Shipyard to District Public Works Officer, First Naval District, "Permanent identification number for new Head Facility Structure on Pier No. 6, South Boston Annex; assignment of," Mar. 7, 1962, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 123.

Table 3-1
TENANT ACTIVITIES, SOUTH BOSTON ANNEX, 1971

Tenant	Building
Atomic Energy Commission	53
Armed Forces Courier Center	21
Coast Guard Supply Depot	56
Inactive Ship Maintenance Facility, Philadelphia–Boston Detachment	56, 30[1]
J.F. Fiore Co.	32
U.S. Naval Base Auto Hobby Shop	17
U.S. Naval Base Band	29
U.S. Naval Station Boston Motor Pool	28
U.S. Navy Publications & Printing Service Office	49
USS *Carp* (AGSS-338)	53
USS *Compton* (DD-705)	24
USS *Harlan R. Dickson* (DD-708)	24

Source: "Boston Naval Shipyard, List of Tenant Activities," May 1971, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 124.

[1] Also included Pier 6.



The major construction projects at the Annex in the post-World War II period involved the site's infrastructure. This May 10, 1948, view looking east from Pier 7 shows the new salt water distribution line installed along the waterfront. *BOSTS-8601*

Collimation Tower (Structure 110), used to calibrate ship radars, on the end of Pier 2. In conjunction with that installation, the yard made repairs to allow vehicle access to it.[107] The other wooden piers were deteriorated to the point of being unusable, and in August 1967 the yard received approval to dispose of Piers 3, 4, and 7 as well as the outer 370 feet of Pier 1.[108]

As had occurred at Charlestown, a number of smaller features in the Annex received structure numbers in the late 1950s and early 1960s. The jetties underwent a change in nomenclature when in May 1963 they were designated as Wharfs 105 (West), 106 (North), 107 (East), and 108 (South).[109] In March 1970, in anticipation of the acquisition of the Boston Army Base, that installation's structures were assigned new numbers (112-140) to eliminate duplication with the Annex's numbering scheme.[110] (See Figure 3-8)

Disposal Of "E" And "K" Street Annexes

In the mid-1950s and early 1960s the Navy Yard disposed of the "K" Street Annex and the largest portion of the "E" Street Annex. The former facility, part of which had been leased to the City of Boston as a fire training school for many years, was declared surplus in 1955. Because war mobilization plans called for the Navy to use the fire school in time of war, "higher echelons" held up the actual disposal.[110] Ultimately, the property was separated into two parcels. The larger parcel was sold to the Boston Edison Co. in December 1958.[111] The retained parcel, which included the fire school, was finally sold in July 1960.[112]

The "E" Street Annex consisted of two sections, one used as a part of the Receiving Station, later termed the Naval Station, and the other as storage. That storage area was a problem for the yard. As outgoing Shipyard Commander Capt. Philip W. Snyder informed his successor, Capt. William E. Howard, Jr., in June 1955, "we have had two guards on duty here around the clock, but still have been stolen blind."[113] The storage areas were declared surplus in several stages. (See Figure 3-5) In July 1960 Congress authorized the transfer of a portion of the "E" Street Annex to the Massachusetts Port Authority in exchange for two Massport parcels used as parking for the Naval Station.[114] This exchange, as well as the sale to Massport of other surplus parcels at the "E" Street Annex, occurred in 1965.[115] These parcels formed the basis for what is known in 2008 as the Massport Fargo Street Terminal.

In July 1961, one of the two Fargo Buildings (Building 37) was sold to private interests. This sale include half of Inman St., the private right-of-way between the two buildings, and an easement to

[107] Code 445 to file, "Assignment of number to Collimation Facility on Pier No. 2, South Boston Annex," Dec. 21, 1965, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 123; F.C. Jones, "Informal Turnover Memorandum," p. 3.

[108] Commanding Officer, Northeast Division, Naval Facilities Engineering Command to Commander, Boston Naval Shipyard, "Berthing Piers Nos. 3, 4, 7 and 370 feet of the outboard end of Pier No. 1; disposal of," Aug. 10, 1967, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 124.

[109] Code 445 to file, "105 West Wharf …; Formerly identified as Jetties," May 18, 1963, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 123.

[110] Code 440 to file, "Assignment of Bldg. numbers at Boston Army Base, re acquisition of property by Navy Dept. on 1 July 1970," Mar. 26, 1970; Commanding Officer, Northeast Division, Naval Facilities Engineering Command to Commander, Boston Naval Shipyard, "Permanent Identification Numbers; approval of," Mar. 31, 1970, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 123; "Boston Army Base" [drawing], Mar. 6, 1970, File 981-399-33, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13442.

[110] P.W. Snyder, "Informal Turnover Memorandum for Capt. W.E. Howard, Jr., USN," [June 1955], p. 14, Records of the Boston Naval Shipyard, RG 1.1, BNHP, NPS Cat. No. BOSTS-13344, Box 3.

[111] Deed, United States of America to Boston Edison Co., Dec. 30, 1958, Suffolk Deeds, bk. 7365, p. 298-301.

[112] Deed, United States of America to Gil Wyner Co., July –, 1960, Suffolk Deeds, bk. ——, p. ——.

[113] Snyder, "Informal Turnover Memorandum," p. 15.

[114] Pub. Law 86-602, July 7, 1960, 74 Stat. 355.

[115] Deed, Massachusetts Port Authority to United States of America, Feb. 6, 1965; deed, United States of America to Massachusetts Port Authority, July 12, 1965, Suffolk Deeds, bk. 8000, p. 556-59, 543-55; deed, United States of America to Massachusetts Port Authority, Nov. 30, 1965, Suffolk Deeds, bk. 8000, p. 573-83.

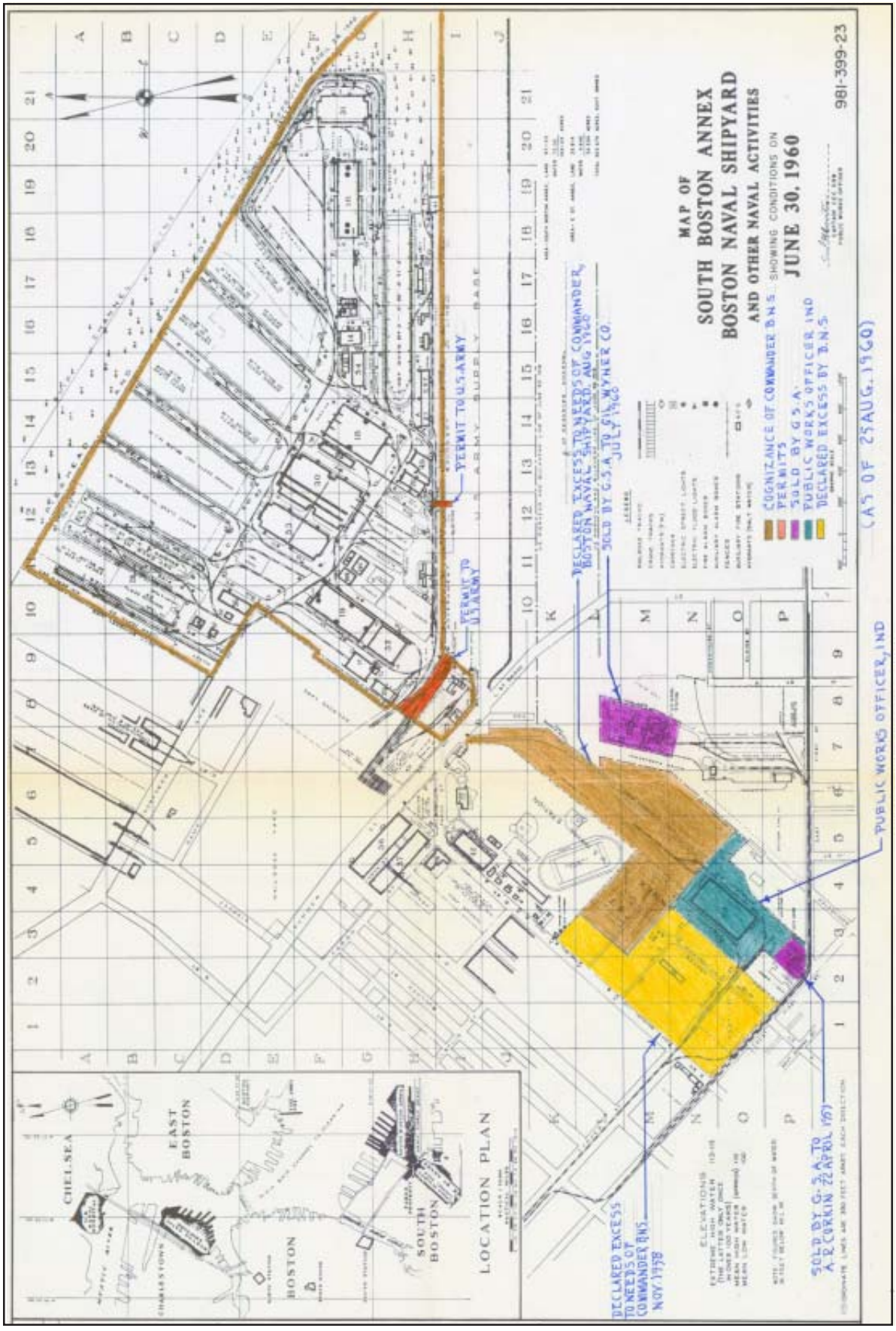


Figure 3-5 – Plan of South Boston Annex, 1960

This June 30, 1960, plan has been annotated to show the disposition by the Navy of the various portions of the "E" Street and "K" Street Annexes.

BOSTS-13347

Post World War II Annex Modernization: A Gallery

MOST OF THE CHANGES to the South Boston Annex in the post-World War II period involved the removal of surplus buildings and the disposition of most of the property at the "E" Street and "K" Street Annexes. The 1960 yard plan (Figure 3-5) shows the location in the Annex of each structure shown.



One of the largest public works projects in the Annex in the 1950s involved the construction of above-ground steam lines to replace those installed during World War II which were subject to water infiltration. The line extended from the Boiler House (Building 46) to the Ship Repair Shop (Building 16). This Oct. 28, 1954, progress view shows the line extending from the Boiler House past the Security Building (Building 24) to the point where it would go under Dry Dock Ave. *BOSTS-15580*



This Aug. 27, 1954, construction view above shows the excavation where the line would be placed underground to cross Dry Dock Ave. to reach the Power Plant (Building 20). The Jan. 4, 1955, view at right shows the line rising to the roof of Building 20 before extending on to Building 18, seen in the distance. *BOSTS-15580*







The line paralleled Dry Dock Ave. along the boundary between the Annex and the Boston Army Base. At top, the Boiler House (Building 46) can be seen in the distance, while above the Army Base Storehouse (Building 4 [114]) dominates the background. These views show the completed project on Jan. 4, 1955. *BOSTS-15580*



The trestle connecting Buildings 18 (right) and 53 (left) is seen on Jan. 28, 1974. In the foreground is the the surviving portion of Building 14. *BOSTS-8566*

Post World War II Annex Modernization: A Gallery



Building 14, Sept. 18, 1961
This view shows the Annex's oldest industrial structure shortly before it was demolished except for a small electrical substation. *BOSTS-14997*



Building 15A, Mar. 1964
In 1946 the Navy constructed a four-bay Detached Garage for the Quarters (Building 15) in the former Marine Barracks, then assigned to officers of the Boston Group, Atlantic Reserve Fleet. *BOSTS-16160*



Building 16, Mar. 1964
Much of the work on Annex structures in the 1960s involved the removal of wooden additions. This view shows the South Lean-to just prior to its demolition. *BOSTS-16143*



Building 17, Mar. 1964
The brown-painted concrete block tank building addition constructed in 1952 in conjunction with the conversion of the former Net Depot into a Battery Charging Building is barely visible between the edge of Building 29 at left and the World War II barracks addition. *BOSTS-16149*



Building 18 Lean-to, Nov. 1961
Removal of additions required a formal process under which they were determined to be excess to shipyard needs and not suitable for other purposes. Part of the process involved taking of photographs so that reviewers could see what was proposed for removal. *BOSTS-15570*

Building 19, Sept. 1, 1954
On the day after Hurricane Carol had swept through the Boston area, yard photographers made a record of damage to structures at both Charlestown and South Boston. This views show the Temporary Storehouse. *BOSTS-9006*



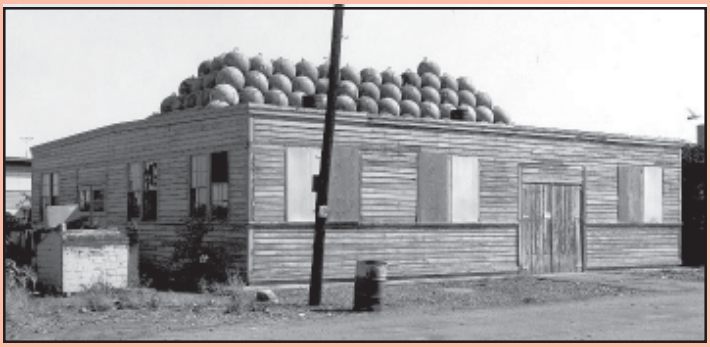


Buildings 19B, 19C, & 30, Mar. 1964
The two Temporary Storehouses (Buildings 19B, 19C) were demolished in 1965. Building 30, built as a Sub-Assembly Shop but used for most of the postwar period as a Storehouse, can be seen in the background.
BOSTS-16147

Post World War II Annex Modernization: A Gallery



Building 32, May 29, 1968
Following the decision in the late 1950s to curtail industrial activities at the Annex the Supply Department remained an active user of the site. This view shows the Storehouse, with the Temporary Storehouse (Building 19) to its right. The anchor from USS *Kearsarge* (BB-5) is in the foreground. *BOSTS-7849*



Building 57, ca. 1971
This photograph of the Storehouse was taken in support of the yard's request to demolish it. That work would be accomplished in 1973. Seen behind the building is one of the large stockpiles of floats for anti-submarine nets which were kept at the Annex. *BOSTS-13347*



Building 74, May 20, 1961
The Waterfront Office stood at the corner of the North and West Jetties. The wooden structure, built in 1942 for $1,800, was the last survivor of several such structures which were erected along the waterfront of the Annex. It was demolished in 1963.
Earle M. Chase, Richard Chase Collection

Building 79, Mar. 11, 1947
In 1947 the Navy installed a salt water distribution system along the Annex's waterfront. To provide salt water, it constructed a Salt Water Pump House at the intersection of the West Jetty and the seawall. *BOSTS-8601*



Building 41, Aug. 30, 1961
The Boat Repair Shed sat adjacent to the South Pier near the entrance to Dry Dock 3. In 1950 the facility was leased to the U.S. Weather Bureau, but on Mar. 13, 1959, the Navy had notified that agency that it had to vacate it by June 30, 1960. Note temporary building M-52 at right. *BOSTS-7852*



Building 62, Aug. 24, 1962
This view was taken a day after a fire destroyed the abandoned Lumber Storage Shed in the area of the "E" Street Annex declared excess in Nov. 1958. *BOSTS-15587*



Building 63, Oct. 11, 1961
This wooden Storehouse stood on A Street, the extension of Northern Ave. within the Annex, across from Building 53. In the background are two metal Storage Sheds (Buildings 19C, 19B) and the edge of the Storehouse (Building 32). The building was demolished in 1963. *BOSTS-7861*



Post World War II Annex Modernization: A Gallery



Building 82, Oct. 18, 1961
This Quonset hut, originally used for paint storage, was used in the late 1950s for a "Special Project" in conjunction with MIT. *BOSTS-7862*



Building 96, Nov. 13, 1961
This Bus Waiting Shelter stood on the corner of A St. and 5th St. A St. ran between here and the Northern Ave. gate. The Public Works Shop (Building 49) can be seen in the background. *BOSTS-7863*



Building 99, Nov. 1961
To shelter the thousands of workers who took streetcars or buses to work, the Navy erected a Waiting Shelter & Head at the entrance to the yard. It was not identified as Building 99 until the late 1950s, when all of the previously-unnumbered minor features at both Charlestown and South Boston were given numbers. While a portion of this facility would be demolished in 1962, the remainder lasted until 1973. The Boiler House (Building 46) for the Annex is at left. *BOSTS-7864*



Collimation Tower 110, Nov. 18, 1965
In 1965 the Navy erected a Collimation Tower on the outer end of Pier 2. Along with a Radar Tower (Structure 241) on Building 104 across the harbor at Charlestown, it was utilized in the calibration of radar antennas of ships being worked on by the yard. USS *Wasp* (CVS-18) is seen in the background of this view. *BOSTS-10095*



Building M-52, Nov. 15, 1960
Numerous temporary buildings could be found at the Annex. Most were given numbers with a letter prefix, and seldom appeared on the annual site plans. Building M-52 was located next to Building 41 (left). *BOSTS-7852*



Building S-44, Oct. 21, 1960
These sheds stood on the southeast part of the "E" Street Annex, opposite Building 61. This was the last area of that property, outside of the Recreation Area, to be utilized by the shipyard. *BOSTS-15586*



Naval Station Building 1, Mar. 5, 1956
The only new structure built at the "E" Street Annex in the post-World War II period was an Enlisted Men & Chief Petty Officers Clubs. Completed in the spring of 1956, it was not assigned a building number until after the removal of the Naval Station structures from the South Boston Annex yard plans and the establishment of a separate numbering scheme for the Naval Station in Fiscal Year 1962. *BOSTS-7868*



This view of the "K" Street Annex is annotated to indicate that the Navy Fire Fighting School was being used by the Boston Fire Dept. *BOSTS-8578*

use the other half, although the government reserved its rights to close that area for security purposes.[116] During Fiscal Year 1962 the Recreation Area portion of the site was removed from the Annex's property inventory, and its facilities no longer appeared on the annual site plans for the facility.[117]

The Consolidation Plan

In March 1966 the Navy awarded a contract to Kaiser Engineers to undertake a study of the modernization of its naval shipyards. Kaiser submitted its report on the Boston Naval Shipyard two years later. It presented two options: (1) modernization of both Charlestown and South Boston or (2) relocation of the shipyard to South Boston.[118] The scheme for a consolidated shipyard at South Boston was seen as the superior plan (see Figure 3-6), and it was officially endorsed by the Secretary of Defense in November 1968.[119]

The plan, envisioned as being carried out over a decade at a cost of almost $200 million, would see Piers 1 to 4 demolished and three new dry docks (Dry Docks 6, 7, 8) constructed in their place. Pier 7 would also be demolished and the area between it and Pier 6 filled to create a new wharf. Key to the plan was the incorporation of the Boston Army Base into the Annex, along with an additional 11 acres at the west side of the property.[120]

The majority of the existing buildings and structures (14, 15, 15A, 17, 18, 19, 22, 23, 24, 29, 30, 38, 39, 40, 46, 48, 53, 54, 56, 57, 79, 88, 89, 90, 91, 92, 93, 94, 98, 99, 102, 103, 104, and 111) would be swept away to provide space for new construction. Similarly, ten structures on the Army Base (115, 116, 121, 122, 127, 129, 131, 132, 133, 135) were on the demolition list.[121] These would be replaced by a

[116] Deed, United States of America to Eleanor Rodin, Trustee, July 21, 1961, Suffolk Deeds, bk. 7573, p. 16-19.

[117] Annotations on "Map of South Boston Annex, Boston Naval Shipyard and Other Naval Activities Showing Conditions on June 30, 1961" [drawing], File 981-399-24, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347.

[118] Gooding, "Informal Turnover Memorandum," p. 15-22.

[119] U.S. Congress, House of Representatives, Committee on Armed Services, *Status of Shipyards: Hearings by the Seapower Subcommittee of the Committee on Armed Services, House of Representatives, Ninety-first Congress, Second Session*, H.A.S.C. No. 91-71 (Washington: U.S. Govt. Printing Office, 1970), p. 10535.

[120] Gooding, "Informal Turnover Memorandum," p. 15-22.

[121] "South Boston Annex, Index of Structures" [drawing], rev. July 29, 1971, File 610-223, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13441.



By the mid-1950s the Recreation Area of the "E" Street Annex was considered to be a separate entity forming a part of the Receiving Station, later the Naval Station. The buildings forming that complex are seen in the foreground of this Mar. 1955 view. The low building in the upper left of the area is a Storehouse (Building 61). *BOSTS-8576*



Figure 3-6, Proposed Consolidated Shipyard
This drawing shows the proposed consolidated Boston Naval Shipyard at South Boston. The color coding denoted how the space in the new yard was to be allocated between industrial (yellow) and other uses.
BOSTS-16071

massive new construction program of both industrial shops and support facilities. These included the following, arranged in the order of their construction project number:

- P-204 Waterfront Service Buildings (3)
- P-205 Consolidated Machine Shop
- P-206 Consolidated Metal Working Shop
- P-207 EWP/Electrical Shop
- P-208 Consolidated Waterfront Service Shop
- P-209 Consolidated Foundry, Forge & Pattern Shop
- P-210 Engineering/Management & Support Facility
- P-214 Supply Administrative & Storage Facilities
- P-217 Public Works Complex (Central Heating Plant & Incinerator, Fire Station, Vehicle Maintenance Shops, Storage Facilities)[122]

Employee parking would be accommodated in a converted Building 32 and a new Parking Structure (P-225).[123] There would also be Enlisted Men's Barracks, Bachelor Officer Quarters, and

[122] Ibid.; Gooding, "Informal Turnover Memorandum," p, 18-19.

[123] "South Boston Annex, Index of Structures" [drawing], rev. July 29, 1971, File 610-223, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13441.

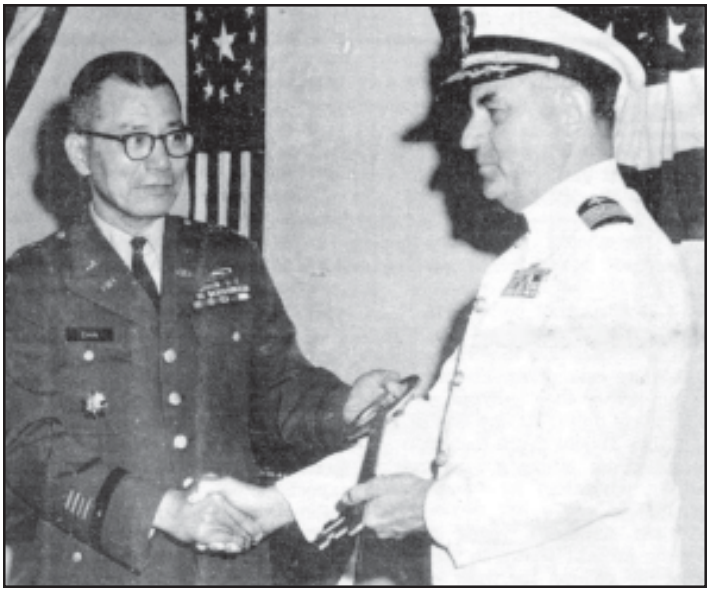
Family Housing (P-213, P-214).[124] The remaining structures at both the Annex and the Boston Army Base would be rehabilitated to accommodate the following uses:

1	Substation & Pump House, Dry Dock 3
16	Substation & Public Works Storage Shops
20	Substation & Public Works Storage
21	Transfer Station & Offices
28	Garage & Repair Shop
31	Storage & Machine Shop
49	Public Works Administrative Offices
112	Guard House
113	Administration Building
114	All Purpose Warehouse
117	All Purpose Warehouse
118	All Purpose Warehouse
119	All Purpose Warehouse
120	Locker Club
126	Filling Station
128	Treasury Scale
134	Administration
137	Locker Club[125]

While the yard submitted projects for inclusion in the military construction budget,[126] these did not fare well in the decision-making process in Washington. By 1972, with the exception of the acquisition of the Boston Army Base, little work to implement the consolidation plan had been authorized. Thus, as discussed in detail in Chapter 2, the yard revisited the idea of modernizing Charlestown instead. It is somewhat ironic that one of the few projects to be funded, the demolition of Piers 1 to 4 and 7, would be cancelled following the announcement that the shipyard was to close.[127]

The Boston Army Base

The final expansion of the South Boston Annex came in July 1970 when the Navy officially took over the Boston Army Base.[128] The 57.6-acre Boston Army Base, sometimes called the Army Supply Base or 666 Summer Street, had been established in 1918 immediately south of the Commonwealth Dock. The massive complex consisted of four main buildings (Buildings 4 [114], 7 [117], 8 [118], 10 [119]) containing approximately 2.5 million square feet of floor space and had 5,450 feet of berthing space.[129] Much of the facility was leased for commercial use, and in January 1972, over a year before the closure of the yard was announced, the Navy decided that it was excess to its needs and began the process to return it to the Army.[130]



U.S. Army Col. Wah G. Chin, last commanding officer of the Boston Army Base, presents a symbolic gold key to Shipyard Commander Capt. Raymond W. Burk during the formal ceremonies which marked the July 1, 1970, transfer of the Army facility to the Navy. *BOSTS-13352*

For most of the nineteenth century the U.S. Army was both stationed and employed within the limits of the continental United States or across its land borders. The sole exception had been the deployment of a force under Major General Winfield Scott to Mexico during the Mexican War in 1847. But with the outbreak of the Spanish-American War in 1898, the Army found itself being dispatched to Cuba, Puerto Rico, the Philippines, and other overseas locations. In the first decade of the twentieth century the Army Transport Service had been established under the Quartermaster General's Department to operate a permanent fleet of troop transports.[131] The Army also sought to develop port facilities to serve as embarkation points for its forces. This effort was focused on the Caribbean and the Far East. For example, starting in 1906 the Army began to de-

[124] Ibid.; Gooding, "Informal Turnover Memorandum," p. 19.

[125] "South Boston Annex, Index of Structures" [drawing], rev. July 29, 1971, File 610-223, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13441.

[126] Gooding, "Informal Turnover Memorandum," p. 19-21.

[127] Commander, Boston Naval Shipyard to Commander, Naval Ship Systems Command, "Special Projects; termination of," May 23, 1973, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 119. Also cancelled were projects for structural repairs to the jetties and Pier 6, replacement of crane tracks at those locations, replacement of the roof of Building 16, and repairs to the roof of Building 31.

[128] Code 620 (R.J. Stanton) to Code 101, "Plan of Action for Transfer of Boston Army Base to the Navy (Boston Naval Shipyard)," Oct. 31, 1969, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22; Transfer and Acceptance of Military Real Property, FY-70-4, Commanding Officer, Boston Army Base, to Commander, Boston Naval Shipyard, July 1, 1970, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 123; "Shipyard Takes Over Army Base Tuesday," *Boston Naval Shipyard News*, vol. 34, no. 26 (June 26, 1970), p. 1-2.

[129] *Navy Yard Boston in World War II*, App. A, p. 13-14; "Big Boston Terminal Will Promote Port Development," *Marine Review*, vol. 50 (Mar. 1920), p. 133-136. The Navy renumbered the Army Base's buildings so as not to conflict with the numbers of structures in the South Boston Annex (see Figure 3-8). Those numbers are shown in brackets after the Army building numbers. See "Boston Army Base" [drawing], Mar. 6, 1970, Architectural Drawings, File 981-399-33, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13442.

[130] Commander, Boston Naval Shipyard to Commanding Officer, Northern Division, Naval Facilities Engineering Command, "Former Army Base Property at South Boston, Massachusetts; declaration of excess to Boston Naval Shipyard needs," Jan. 25, 1972, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22. For a list of tenants, see "List of Tenant Activities, Boston Naval Shipyard," May 1971, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 124.

[131] Charles Dana Gibson, *Ships and Men of the Army Transport Service (ATS)* (1999) [web page] [http://www.usmm.org/atshistory.html], accessed Jan. 25, 2007.

The Boston Army Supply Base



The Boston Army Base complex was designed by Frederic H. Fay, founder of the noted Boston engineering firm Fay, Spofford & Thorndike, and was completed in June 1919. The view, taken several months earlier from the Summer St. bridge across the Reserved Channel, shows, from left to right, the Administration Building (Building 3 [113]), Storehouse (Building 4 [114]), and Wharf Shed (Building 10 [119]). *Holbrook, Cabot & Rollins*

This ca. 1930s aerial view shows, from left to right, the Storehouse (Building 4 [114]) with the Wharf Shed (Building 10 [119]) in front of it, the Substation (Building 5 [115]), Power House (Building 6 [116]), and the North and South Pier Sheds (Buildings 7 [117], 8 [118]). Note the lack of piers at the Naval Dry Dock behind the Army Base and the Custom House Tower in the distance. *BOSTS-7782*



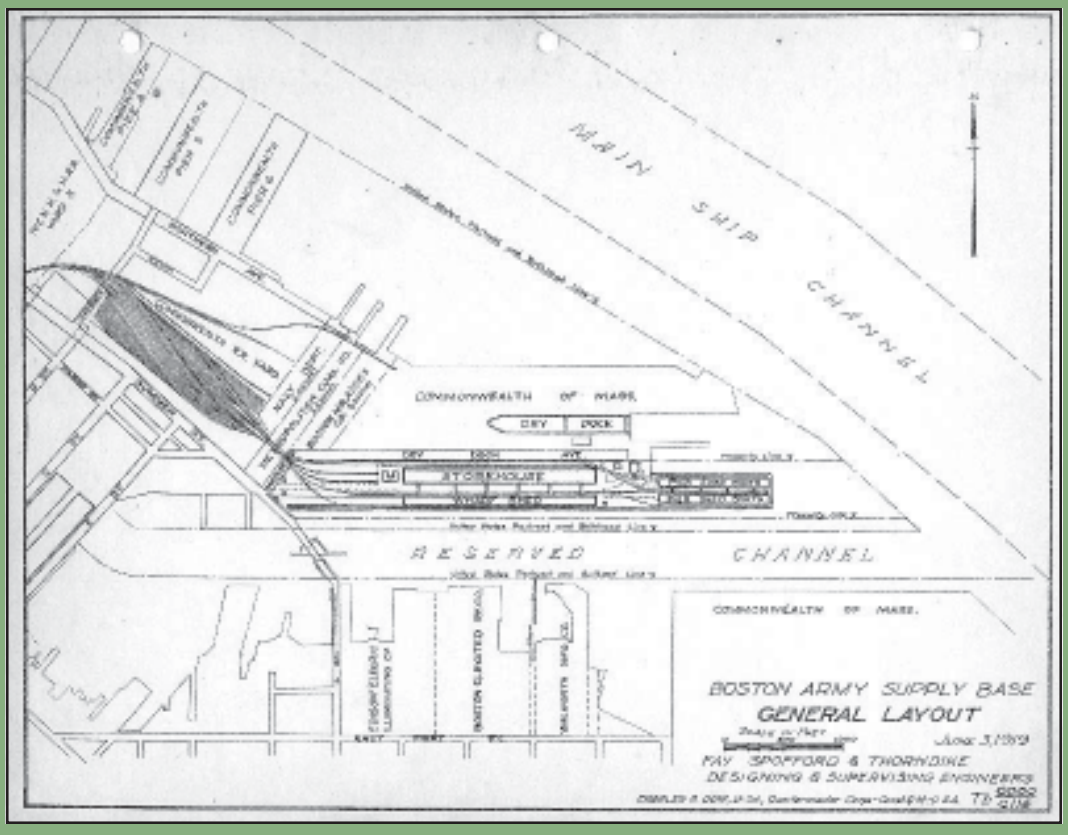


Figure 3-7, Plan of Boston Army Supply Base, 1919
This June 3, 1919, plan shows not only the layout of the structures within the Boston Army Supply Base but also its relationship to other facilities in South Boston. The most important of those facilities was the massive freight yard built by the state for the New York, New Haven & Hartford Railroad to service the base. Note that the Dry Dock is still shown as property of the state; it would not be sold to the Navy for another ten months. *BOSTS-13347*



Frederic H. Fay, seen here at left with his partners Charles M. Spofford and Sturgis H. Thorndike, played a major role in both the origin and construction of the Boston Army Supply Base. The company these men founded in 1914 has become one of the major engineering firms in the United States.

Fay, Spofford & Thorndike



The hand-colored postcard from the 1920s presents an aerial view of the Boston Army Base. It is labeled as showing the largest dry dock and longest loading dock in America.

Tichnor Bros. 118995, Carlson Collection

velop Fort Mason in San Francisco as a Quartermaster Depot and Port of Embarkation.[132]

The declaration of war against Germany in April 1917 shifted the Army's focus to the Atlantic coast as it began to plan for the creation and employment of an American Expeditionary Force on the Western Front in France. At first the federal Council of National Defense was reluctant to utilize Boston as a port of embarkation because of perceived difficulties in railroad access to the city. To convince the council to change its opinion, the Boston Chamber of Commerce hired the engineering firm of Fay, Spofford & Thorndike to prepare a report on Boston's port facilities, which it submitted to the council's Committee on Terminal Port Facilities in mid-October 1917. This report convinced the committee, which unanimously voted to endorse the proposal, which involved constructing temporary storehouses adjacent to Commonwealth Pier No. 5, which would be leased to the Army.[133]

In January 1918 Acting Quartermaster General Major General George W. Goethals summoned Frederic H. Fay to a meeting in Washington. At that time, Goethals, who had come out of retirement to take over the Army's logistics operations, expressed a conviction that not only did the Army need port facilities in Boston for the current war effort but also that they should be "of permanent character and suitable for commercial use after the war."[134]

Events moved rapidly after that meeting. Fay, Spofford & Thorndike submitted preliminary plans for construction of the new facility in February. Two options were presented. The first involved a 1,200-ft. long, 300-ft. wide pier between the Fish Pier and where the state was constructing the Commonwealth Dry Dock; the second was on the Reserved Channel south of the Dry Dock site. The latter was selected by the Army. Formal approval came on April 6, 1918, with groundbreaking taking place on April 12, 1918. Eleven days later the Army purchased the site from the state for $1,317,509.10. This property included approximately 27 acres of already filled land and 30 acres of tidal flats.[135]

The initial authorization was for construction of a six-story reinforced concrete Storehouse (Building 4) measuring 1,092 x 126 ft. and a parallel 100-ft. wide two-story Wharf Shed (Building 10). In May, the Storehouse was increased to eight stories in height and 1,638 ft. in length. The Wharf Shed was similarly lengthened, and two three-story 924 x 100 ft. Pier Sheds (Buildings 7 and 8) were added at the eastern end of the site. These were projected for use by the Navy. The total storage capacity of the facility was 2,524,430 sq. ft.[136] The project also included construction of wharfs; dredging and filling of land; construction of Terminal St. from Summer and Harbor Sts. through the center of the site; erection of a Guard House (Building 1), Timekeepers Office (Building 2), Administration Building (Building 3), Electrical Substation (Building 5), Power Plant (Building 6), Fire Station (Building 9), and Waiting Room (Building 11); and laying of approximately 6.3 miles of railroad tracks to serve the facility.[137] The site was surrounded by wharves providing 4,150 ft. of berthing space on the south side, 300 ft. on the east side, and 950 ft. on the north side.[138] (See Figure 3-7)

On April 9, 1918, the Army awarded the contract for the construction of what was initially termed the United States Quartermaster Terminal but subsequently redesignated as the Boston Army Supply Base to the W.F. Kearns Co. of Boston. Construction work proceeded rapidly, and on October 25, 1918, the first goods were placed in the Storehouse. At the same time, a portion of the building was turned over to the Navy for use as a Receiving Station. This facility, which could accommodate approximately 1,000 sailors, would be used until June 1, 1919.[139] On December 30, 1918, the Norwegian bark *Skansen I*, carrying a cargo of Australian wool, became the first vessel to be berthed at the base.[140] The project, which cost $22,483,314, was completed on June 4, 1919.[141]

Work performed on the base in the 1920s and 1930s mainly involved the construction of fuel oil tanks and associated struc-

[132] Amy Hoke and Eliot Foulds, *Cultural Landscape Report for Fort Mason, Golden Gate National Recreation Area* (Brookline, Mass.: Olmsted Center for Landscape Preservation, 2004), TIC 641/D451, p. 77-80.

[133] Fay, Spofford & Thorndike, *Boston Army Supply Base: Final Report to the Construction Division, United States Army*, July 17, 1919, p. 1-3, 38-41, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 116.

[134] Ibid., p. 3, 35, 42-43.

[135] Ibid., p. 3-6, 20, 44-64; deed, Commonwealth of Massachusetts to United States of America, Apr. 23, 1918, Suffolk Deeds, bk. 4083, p. 12-15.

[136] Fay, Spofford & Thorndike, *Boston Army Supply Base*, p. 7-8, 23, 65-69; Fay, Spofford & Thorndike, *Report Upon the Utilities at the Boston Army Supply Base Made to the Construction Division of the United States Army* (Boston: Fort Hill Press, 1919), p. 212.

[137] Fay, Spofford & Thorndike, *Boston Army Supply Base*, p. 72-137, 150-203; Charles R. Gow, *Completion Report of the Constructing Quartermaster of the Boston Army Supply Base*, June 28, 1919, p. 20-34, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 116.

[138] Fay, Spofford & Thorndike, *Boston Army Supply Base*, p. 138-48.

[139] Ibid., p. 9; Gow, *Completion Report*, p. 1, 81. The Navy also used the Pier Sheds between late 1918 and June 1919. See Gow, *Completion Report*, p. 81.

[140] Gow, *Completion Report*, p. 81.

[141] Ibid., p. 82, 134.

Table 3-2
BOSTON PORT OF EMBARKATION, 1941-1945

Year	Ships	Cargo Tons	Passengers
1942	136	324,982	28,685
1943	419	1,910,797	143,075
1944	630	3,505,864	537,795
1945	766	3,449,739	829,060
Total	1,951	9,191,382	1,538,615

Source: *United States Naval Administration, World War II: Commandant, First Naval District*, 11 vols. (typescript; 1946), vol. 4, *History of the Headquarters Divisions, First Naval District: General Services*, pt. 1, *History of the Port Director's Office*, p. 77.

Table 3-3
ARMY SHIPPING IN WORLD WAR II, 1941-1945

Port of Embarkation	Cargo Tons	Passengers	Patients
East and Gulf Coasts			
Boston	9,481,780	768,898	35,383
New York	38,524,545	3,272,534	127,748
Philadelphia[1]	5,952,170	475	n/a
Baltimore[1]	6,865,643	1,434	169
Hampton Roads	12,955,734	763,405	14,800
Charleston	3,675,088	36,654	41,299
New Orleans	7,954,767	174,651	656
West Coast			
Los Angeles	9,164,364	217,886	15,417
San Francisco	25,028,759	1,728,941	55,789
Seattle	12,516,683	527,177	7,925

Source: Chester Wardlow, *The Transportation Corps: Movements, Training, and Supply*, United States Army in World War II: The Technical Services (Washington: Office of the Chief of Military History, 1956).

[1] Cargo port.



Women constituted pproximately 30 percent of the civilian employees of the Boston Army Base during World War II. Here, a woman operates a forklift. *NARA RG 336*



The Castle Island Terminal, on the opposite side of the Reserved Channel from the Boston Army Base, was developed during World War II to meet wartime shipping requirements. The property was transferred to the state by the Navy in June 1953. It is now the Massport Conley Container Terminal. Fort Independence is in the foreground of this aerial view taken in Aug. 1943. *BOSTS-7911*

tures. The most significant project in this period was the installation of 5,617 feet of steel sheet piling around the entire wharf. This work, which cost $954,000, was completed in March 1936.[142] The one major structure built in this period was Post Restaurant No. 2 (Building 21), a single-story facility located between the Storehouse and the Pier Sheds. Completed in 1938, it originally operated under the name of Liberty Lunch.[143]

With the coming of World War II, the Army, which had transferred the piers and sheds to the U.S. Shipping Board in 1921, resumed full control of the Army Base and established the Boston sub-port of the New York Port of Embarkation. Its first movement of troops occurred on February 18, 1942, when it dispatched the British transport HMS *Queen Mary* from Commonwealth Pier; the Navy transport USS *American Legion* (AP-35) followed in early March.[144]

By the end of the war, the port, raised to an independent Port of Embarkation on July 1, 1942, had handled 1,951 ships carrying over 9.1 million measurement tons of cargo and 1.5 million passengers.[145] (See Table 3-2)

The Boston Port of Embarkation's significance to the war effort can be seen by comparing it to similar facilities. Of the Army's five East and Gulf Coast ports of embarkation, Boston ranked third after New York (Brooklyn) and Hampton Roads in measurement tons of cargo and second after New York in passengers. (See Table 3-3) When all Army ports in the United States are taken into account, Boston ranked fifth in cargo and third in passengers. It also ranked fourth overall in terms of casualties debarked at Army ports.[146]

[142] Boston Army Base Property Record Card 15410, Bulkhead, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. 13347, Box 126; Parkman, *Army Engineers in New England*, p. 164.

[143] Boston Army Base Property Record Card 74064, Post Restaurant #2, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 126.

[144] *United States Naval Administration, World War II: Commandant, First Naval District*, 11 vols. (typescript; 1946), vol. 4, *History of the Headquarters Divisions, First Naval District: General Services*, pt. 1, *History of the Port Director's Office*, p. 68-69 [hereafter *First Naval District Port Director's Office*].

[145] Ibid., p. 77. It should be noted that these figures include all Army shipping from Boston, including the Castle Island Terminal, Commonwealth Pier No. 5, and the East Boston piers, not just from the Army Base itself.

[146] *Troops and Cargo Transported During World War II UnderU.S. Army Control* [web page] [http://www.usmm.net/armycargo.html], accessed Jan. 25, 2007]. This page summarizes statistics from Chester Wardlow, *The Transportation Corps: Movements, Training, and Supply*, United States Army

This postcard view of the Boston Army Base dates to the late 1950s. At left is the Dispensary (Building 28 [134]) constructed in 1944. Note the many bridges connecting the Storehouse (Building 4 [114]) with the Wharf Shed (Building 10 [119]). *Carlson Collection*



Although both the South Boston Annex and the Boston Army Base were somewhat isolated from residential areas, they were accessible by public transportation in the form of streetcars (and later buses) which ran along Summer St. from South Station to City Point in South Boston. The Wharf Shed (Building 10 [119]) is seen in the background of this Apr. 19, 1948, view of an inbound streetcar crossing the Summer St. bridge over the Reserved Channel. *Foster M. Palmer, Clarke Collection*



This view showing the two Pier Sheds (Buildings 8, 7) at the eastern end of the Boston Army Base was taken in the 1950s from a C-47 belonging to the Massachusetts Air National Guard. *Paul M. Paulsen*



Approximately 40 percent of the total movements at the port were for the Navy, which established a Navy Operating Group at the Army Base in April 1942 to "coordinate all activities between the Army and the Navy at the Army Base."[147] Under this arrangement, each service managed movements at the facilities they controlled.[148]

The Army utilized a combination of uniformed personnel, civilian employees, and contract longshoremen to handle loading and unloading. For example, in April 1943 there were two Port Battalions numbering 1,769 enlisted personnel assigned to the base.[149] Of the civilian employees, some 1,300, or 30 percent of the total workforce, were women.[150]

Despite its ten berths and massive storage capacity, the Army Base was insufficient to handle the volume of cargo and personnel being funneled to Europe through Boston. Thus, the Army established a new terminal at Castle Island on the south side of the Reserved Channel. Built by the Corps of Engineers and completed in early 1943, this facility had seven berths totalling 4,160 feet in length, two storage sheds enclosing 132,600 square feet, and an open area with extensive railroad sidings and about 445,000 square feet of storage space.[151] The property would be conveyed to the state by the Navy in June 1953 and has since been developed as the Conley Terminal, Boston's primary container port facility in 2008.[152] To provide temporary berthing for ships awaiting their turn to tie up at either the Army Base or Castle Island, the Navy in early 1943 installed a series of mooring dolphins on Bird Islands Flats in Boston Harbor.[153]

The one major addition to the post's physical plant in World War II came in late 1944 with the completion of a new Dispensary (Building 28). Located west of the Administration Building, the U-shaped structure measured 162 x 40.67 ft.[154]

Following the end of the war, the management of the waterfront reverted to the Maritime Commission (as the successor to the U.S. Shipping Board) and its commercial operator. By the early 1950s the Commerce Department, which had absorbed the Maritime Commission as the Maritime Administration, had decided to return control of the base to the Army. Since the Army considered it surplus to its needs, the possibility that it would be sold off by the federal government led local shipping interests to appeal to the state's Congressional delegation for assistance. In May 1954 Senators John F. Kennedy and Leverett Saltonstall, along with Representative John W. McCormack, introduced bills which, in Kennedy's words, would "prevent a scandal, which if permitted to develop would cause a

in World War II: The Technical Services (Washington: Office of the Chief of Military History, 1956). The numbers of personnel differ from those reported by the Navy.

[147] Port Director, Boston to Commandant, First Naval District, "Establishment of Navy Operating Group at Army Base, Boston, Mass.," Apr. 6, 1942, quoted in *First Naval District Port Director's Office*, p. 40-41.

[148] *First Naval District Port Director's Office*, p. 70.

[149] Ibid., p. 96.

[150] Charles E. Folsom, draft article for *Boston Post*, passed Dec. 14, 1943, Records of Port of Embarkation, Boston, Mass., 1941-1946, Records of the Office of the Chief of Transportation, RG 336, NARA.

[151] *First Naval District Port Director's Office*, p. 70-71, 74, 90, 95; Parkman, *Army Engineers in New England*, p. 138; Seasholes, *Gaining Ground*, p. 330.

[152] U.S. Army, Corps of Engineers, New England Division, *Boston Harbor, Massachusetts, Reserve Channel Survey (Review of Reports)*, Nov. 5, 1954 (Boston: The Corps, 1954), p. 8; Massachusetts Port Authority, *Conley Terminal* [web page] [http://www.mass-port.com/ports/conle_overv.html], accessed May 30, 2008.

[153] *First Naval District Port Director's Office*, p. 88; app. I, p. 5, 6.

[154] Boston Army Base Property Record Card 55010, Dispensary, Public Works Dept., Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 126.

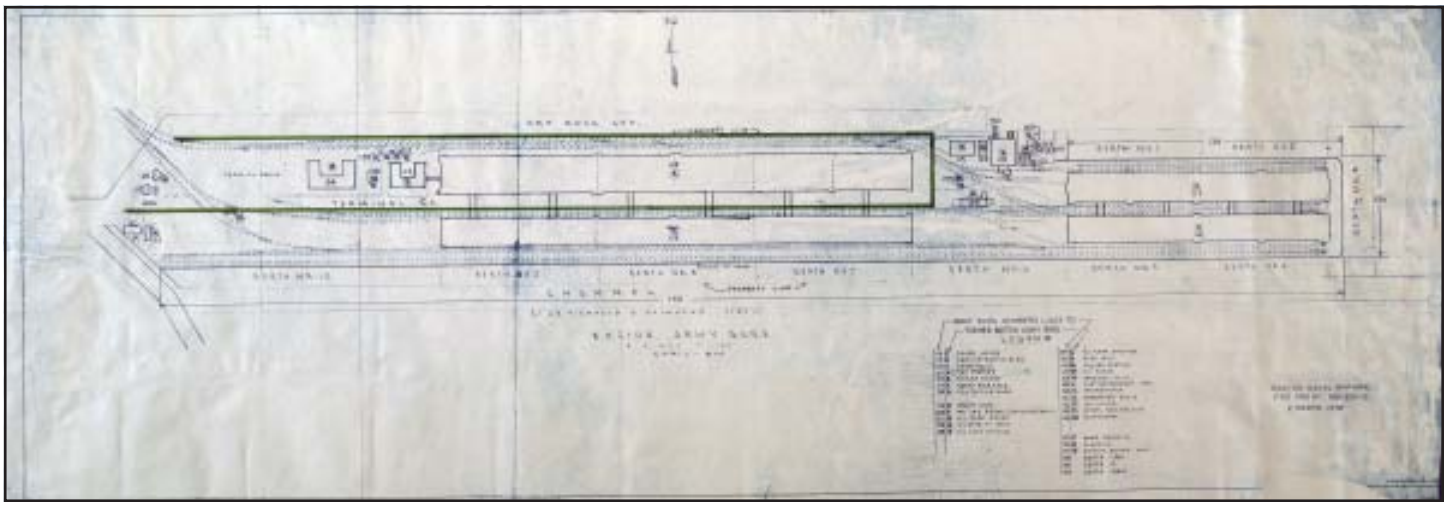


Figure 3-8 – Plan of Boston Army Base, 1970
"Boston Army Base," Mar. 6, 1970. This plan of the Boston Army Base shows the renumbering of buildings to occur upon transfer of the property to the Navy on July 1, 1970. *BOSTS-13442*



The freighter SS *Prudential Oceanjet* is seen at the North Pier Shed on Nov. 9, 1967. Launched in 1965, the vessel would later served as *Delta Africa* and *Santa Adela* before being broken up in 1991. *BOSTS-10093*



The innermost berth of the Army Base was used for government and non-commercial vessels. In Oct. 1964 two Soviet research ships, *Petr Lebedev* (left) and *Sergei Vavilov* (right) are tied up at Berth 10. *BOSTS-16279*

serious financial loss not only to the people of Massachusetts and New England, but also to the taxpayers of the United States."[155]

Their proposals, which were enacted by Congress in July 1954, authorized the Army to undertake necessary repairs to the piers and then lease portions of the Army Base to the state as a marine terminal.[156] The repairs, which consisted of the installation of a gravity-type seawall against the steel sheet piling bulkhead which cantilevered out above the mean high water level to support the pier deck, cost $11 million and were considered to be unique in terms of undewater concreting.[157]

The actual lease with the Port of Boston Commission was signed on March 26, 1956. The leased property included the wharves and piers (except Berth 10), Wharf Shed (Building 10), North and South Pier Sheds (Buildings 7, 8), sections A and/or B of the Storehouse (Building 4), the Guard Station (Building 1), Disinfestation Building, and Paymaster Building (Building 11). The term of the lease, which was for $1 per year plus a percentage of gross revenue, was 25 years, effective, according to a subsequent amendment, from July 1, 1958, following the completion of the improvements by the Army. The lease could be extended thereafter in five year increments to a maximum term of 75 years. The lease gave government vessels priority in usage of the terminal and could be terminated by the Army in times of national emergency or war.[158]

In July 1965 the Armed Forces Examining & Entrance Station was established at the Army Base.[159] The presence of this installation led to the base becoming a focal point for protests against the military draft and the Vietnam War. Several times between 1966 and 1970 demonstrators picketed the base and tried other means to disrupt the induction center.[160]

[155] "Remarks of Senator John F. Kennedy on the Boston Army Base Pier to Senate," May 11, 1954, John F. Kennedy Pre-Presidential Papers: Senate Files, Series 12, Speeches, John F. Kennedy Library, Boston, Mass.

[156] Pub. Law 83-534, July 27, 1954, 68 Stat. 535, 537.

[157] Parkman, *Army Engineers in New England*, p. 164-65.

[158] "Lease of Property on Boston Army Base Military Reservation," July 3, 1956, DA-19-016-Eng.4258; "Amendment No. 1 to Department of the Army Lease of Property on Boston Army Base Military Reservation," July 16, 1958, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 34. The date that the lease was signed by the state, Mar. 26, 1956, is usually cited as the date of the lease, rather than the date it was signed by the Army. The 1958 amendment deleted the Storehouse (Building 4) from the leased area and added half of Berth 10.

[159] *Military Entrance Processing Station, Boston, MA* [web page] [http://www.mepcom.army.mil/meps/bost/], accessed Feb. 6, 2007.

[160] See, e.g., W. Bruce Springer, "SDS Members Picket Boston Army Base," *Harvard Crimson*, Mar. 14, 1967; "Boston Draft Resistance Group," *Avatar*, no. 6 (Aug. 18-31, 1967), p. 9; "New Outbreaks of Non-Violence at Boston Army Base," *Avatar*, no. 9 (Sept. 29-Oct. 12, 1967), p. 5; Alfred F. Young, *The Shoemaker and the Tea Party: Memory and the American Revolution* (Boston: Beacon Press, 1999), p. 197-98.

The Boston Army Base In 1969: A Gallery

ON APRIL 17, 1969, the Navy Yard sent photographer Robert Snow to the Boston Army Base to document its facilities a little over a year before they were officially transferred to the Navy. This gallery presents images from this survey, arranged by Army building number. The number subsequently assigned by the Navy appears in brackets.



Terminal St. (Main Gate)

This panoramic view looks into the Boston Army Base along the line of Terminal St., which was the main entrance to the facility. The street in the foreground is Harbor St., with Summer St. just out of view to the right. Among the buildings seen here are, from left to right, the Guard House (Building 1 [112]), Dispensary (Building 28 [134], Administration Building (Building 3 [113]), Storehouse (Building 4 [114]), Wharf Shed (Building 10 [119]), Marine Repair Shop (Building 45 [137]), and Waiting Room (Longshoremen) (Building 11 [120]). Note the Army recuiting advertisement on the billboard. *BOSTS-7891*



Building 3 [113]

This view shows the rear of the four-story Administration Building (Building 3) (officially a basement and three stories). A two-story bridge at the third and fourth story levels connected this structure with the Storehouse (Building 4 [114]) seen at left. *BOSTS-7891*



Building 4 [114]

The 1,638-ft.-long eight-story Storehouse (Building 4) was one of the largest buildings in the country when completed in 1919. The north side of the structure was lined with railroad loading docks. *BOSTS-7891*



Buildings 5 [115] & 6 [116]

As a self-sufficient military installation, the Boston Army Base had its own power plant. This view shows the Electrical Substation (Building 5) at left and the Boiler House (Building 6), with its two chimneys, at right. Barely visible behind the car parked at the center of the picture is Building 14 [122], an Oil & Paint Shed. *BOSTS-7891*

The Boiler House was fed with fuel oil from Oil Tanks 15 [123] and 16 [124] seen in the view at right. Note in both views the Army vehicles parked around the Substation and Tanks. *BOSTS-7891*



The Boston Army Base In 1969: A Gallery



Buildings 7 [117] & 8 [118]
The eastern end of the base was dominated by the North Pier Shed (Building 7), left, and the South Pier Shed (Building 8), right. These buildings, connected by two-story bridges over Terminal St., served Berths 1, 2, 4, and 5. In the left foreground is Building 21 [129], identified officially as Post Restaurant No. 2. *BOSTS-7891*





Building 10 [119]
The Wharf Shed served Berths 7 through 9 and was linked to the parallel Storehouse by six bridges over Terminal St. As the signs indicate, much of the waterfront space at the Boston Army Base was operated under lease by the Massachusetts Port Authority. *BOSTS-7891*



Building 11 [120]
The Waiting Room (Building 11) for longshoremen who worked the ships which called at the Army Base was located just outside of the main gate. This structure was erected in 1958 to replace an earlier building. To the left is the Marine Repair Shop (Building 45 [137]), built in 1956. *BOSTS-7891*



Building 20 [128]
The Treasury Scale (Building 20) was owned by the Bureau of Customs and used in conjunction with the adjacent Truck Scale. Built in 1960 to replace an earlier facility, it was among the newest structures on the post. *BOSTS-7891*



Building 28 [134]
The Dispensary (Building 28) was built in 1944 to the west of the entrance into the base from Dry Dock Ave. The area next to the Dispensary contained an artillery piece display and the post's Flag Pole (Structure 44 [136]). South Boston Annex Building 15 can be seen to the right, while the General Storehouse (Building 32) is visible in the background. *BOSTS-7891*

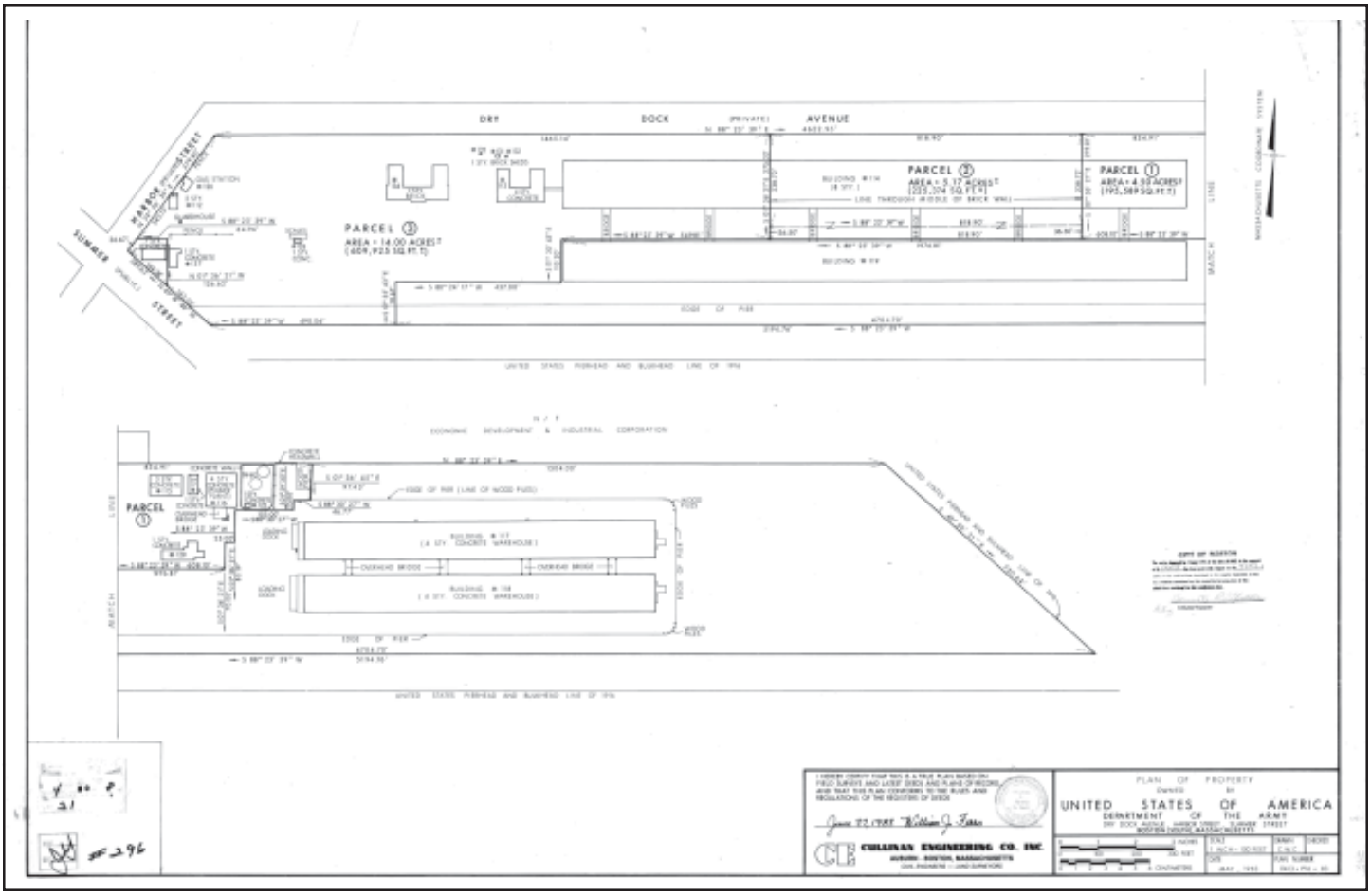


Figure 3-9, Boston Army Base Disposition Parcels, 1983

"Plan of Property Owned by the United States of America, Department of the Army," May 1983. This plan shows the division of the former Boston Army Base property into the parcels which would ultimately go to the Economic Development & Industrial Corp. and the Massachusetts Port Authority. In essence, Massport obtained all but one of the site's berths and the three pier sheds, while EDIC received the inland portion of the site, including the massive Storehouse (Building 114). *Suffolk Deeds, Book 10440*

Disposal Of Boston Army Base Property

In April 1971 the Navy Yard sent a memorandum to the Naval Ship Systems Command which addressed the situation with respect to the 666 Summer Street property. Since the "planned relocation to South Boston has been indefinitely postponed," the yard's role at the Army Base was "pure property management." It sought "action to relieve the Shipyard of its present assignment as landlord," and suggested three alternatives. These were either (1) to enter into an agreement whereby the Defense Supply Agency, the largest military tenant, would assume management, (2) to transfer the base to the General Services Administration (GSA) "pending firm occupancy date for Shipyard Modernization Program," or (3) to establish a separate Navy field activity to manage it.[161]

This memorandum set in motion the process leading to the yard's January 1972 declaration that the base was excess to its needs.[162] The formal disposal of the property was placed on hold, however, and in June 1973 the Army requested retension of approximately 23 acres of the 57 acre site, including Building 114.[163] This proposed retention was approved by the Deputy Assistant Secretary of Defense (Installations & Logistics) in March 1974.[164]

Despite this approval, the Army appeared reluctant to move forward with the actual transfer. Representatives of the two services spent the rest of 1974 negotiating exactly what was to be transferred. Finally, in January 1975 the Army Corps of Engineers issued a formal directive authorizing the acquisition of 22 acres.[165]

[161] Commander, Boston Naval Shipyard to Naval Ship Systems Command, "Role of Boston Naval Shipyard at 666 Summer Street, Boston, Mass.," Apr. 19, 1971, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[162] Commander, Boston Naval Shipyard to Commanding Officer, Northern Division, Naval Facilities Engineering Command, "Former Army Base Property at South Boston, Massachusetts; declaration of excess to Boston Naval Shipyard needs," Jan. 25, 1972, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22.

[163] "History of 666 Summer Street (Former Boston Army Base)," June 17, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9; E.V. O'Hanlan to J.W. O'Connell, "Boston Naval Shipyard, Boston, MA, 666 Summer St. (Former Boston Army Base); Report of Excess Real Property," Jan. 25, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[164] Edward J. Sheridan to Assistant Secretary of the Army (I&L), "Retention of Portion of Former Boston Army Base (South Boston Annex - Boston Naval Shipyard), Mass.," Mar. 8, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33.

[165] U.S. Army Corps of Engineers, Real Estate Directive No. 8059, "Real Property Acquisition - Portion of 666 Summer Street, (Former Bos-

(See Figure 3-9) The actual transfer took place in two transactions, primarily because representatives of Fort Devens, the installation which would be responsible for managing the property, did not want the base's Boiler House (Building 116). The first transfer (13.3 acres) took place on January 19, 1975, while the second (8.7 acres) occurred on July 1, 1975.[166] The remaining portion of the base, which remained under lease to Massport, was reported as excess and turned over to GSA for disposition.[167]

As discussed in detail below, the ultimate disposition of the Army Base property was the subject of negotiations between Massport and the Economic Development & Industrial Corp. of Boston (EDIC). The agreement reached between the two groups in 1979 set the stage for the final disposal of the site by the federal government. In July 1983 the Army parcel was sold to EDIC for $3.5 million.[168] A little over five years later, in August 1988, the GSA parcel was sold to Massport for $3,375,000.[169] The record does not indicate a specific reason why the final disposition was delayed, but it is possible that the Reagan Administration plan to possibly establish a Navy homeport in Boston may have played a role.

South Boston Support Activity

The 1973 closure order had envisioned that the Navy would dispose of all of its real estate in South Boston. This included not only the South Boston Annex and 666 Summer Street (former Boston Army Base) but also the Naval Support Activity, the former Naval Station encompassing the Fargo Building and the remaining portions of the "E" Street Annex. This property, which included the parking areas obtained from Massport in the 1965 land exchanges, totalled 26.1 acres.[170]

No sooner had this decision been made than the Defense Department began looking at the retention of the Fargo Building. On July 17, 1973, Deputy Assistant Secretary of Defense (Installations & Logistics) Edward J. Sheridan sent a memorandum to his counterparts in the Army, Navy, and Air Force, as well as the Defense Supply Agency, stating that it was "advisable to determine whether or not the Fargo Building should be retained to accommodate residual DoD activities in the Boston area," especially those currently housed in the former Army Base Storehouse (Building 114). As a part of this review, he tasked the Army to develop "a detailed cost estimate to modernize the Fargo Building."[171]



The rehabilitation of the former Fargo Building by the Army saw the original brick facade replaced by a new porcelain enamel curtain wall surface. *Bronstein Center*

The Navy continued to oppose retention of the Fargo Building. But Sheridan was not moved by its arguments. On February 19, 1974, he informed his counterpart in the Department of the Navy that "it is the determination of this office that the Fargo Building and certain supporting facilities should be retained in the DoD inventory." He denounced the excessing of both the Fargo Building and the South Boston Annex as a "unilateral" decision "without any regard to the future of the tenants therein." He directed that the Navy continue to operate the facility during Fiscal Year 1975, pending its transfer to another military department, and the submission of a construction project covering "minimum interior work needed for more efficient and self-sufficient operation of the building." He did, however, approve the excessing of the Recreation Area portion of the "E" Street Annex east of Buildings 42 and 60.[172]

The Commandant of the First Naval District responded to this memorandum by citing costs of over a half million dollars for upgrading the building and an annual operations and maintenance cost of $850,000.[173] The Navy argued that the building should be transferred to the General Services Administration, and on April 30, 1974, the Naval Facilities Engineering Command prepared a disposal report for the transfer of the entire 27.1 acres to GSA.[174]

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ton Army Base), Boston, Massachusetts," Jan. 6, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 23.

[166] Transfer and Acceptance of Military Real Property, 5-0055, Commanding Officer, Northern Division, Naval Facilities Engineering Command to Division Engineer, North Atlantic Division, Army Corps of Engineers, Jan. 19, 1975; Transfer and Acceptance of Military Real Property, 6-0001, Commanding Officer, Northern Division, Naval Facilities Engineering Command to Division Engineer, North Atlantic Division, Army Corps of Engineers, June 25, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 23.

[167] Doris S. Glick to O'COnnell, "Boston Naval Shipyard, Boston, MA - 666 Summer St. (Former Boston Army Base), Report of Excess Real Property bearing Control No. N-MASS-707A," May 12, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 23.

[168] Deed, United States of America to Economic Development & Industrial Corp., July 19, 1983, Suffolk Deeds, bk. 10440, p. 80-83.

[169] Deed, United States of America to Massachusetts Port Authority, Aug. 11, 1988, Suffolk Deeds, bk. 14940, p. 63-68.

[170] "Boston, Massachusetts, Naval Support Activity," enclosed in Acting Assistant Secretary of the Navy (Installations & Logistics) to Assistant Secretary of Defense (Installations & Logistics), "Implementation of the Shore Establishment Realignment (SER) Program, Relative to Real Property Retention, Transfer and Excessing; Supplemental Information Concerning," June 15, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 17.

[171] Deputy Assistant Secretary of Defense (Installations & Logistics) to Assistant Secretary of the Army (I&L) et al., "Use of the Fargo Building, Boston, Massachusetts," July 17, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 17.

[172] Deputy Assistant Secretary of Defense (Installations & Logistics) to Assistant Secretary of the Navy (I&L), "Disposition of Fargo Building and Other Facilities Comprising Naval Support Activity, Boston, Massachusetts," Feb. 19, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 17.

[173] COMONE Boston to CNO, "Retention of Fargo Bldg by Navy," Mar. 1, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 17.

[174] Disposal Report No. 463, Naval Support Activity, Boston, Massachusetts, Apr. 30, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 17.

The Defense Department, however, had different ideas. In late December 1974 the Deputy Secretary of Defense approved the transfer of the building to the Army and inserted an $8 million construction project to rehabilitate it into the Fiscal Year 1976 military construction budget. It informed GSA that "the Fargo Building and related facilities would be withdrawn from excess for continued Defense needs" and directed that the Army "immediately take over the operation of the building."[175]

The Army unsuccessfully argued against the decision, but on February 14, 1975, it conceded. In a teletype sent to the various Army commands which would be involved it reiterated that the Secretary of Defense "expects the fullest cooperation of all affected DOD components" in the "early implementation" of the decision.[176]

The Navy finally submitted a revised excess report to GSA on May 23, 1975, and the Fargo Building was turned over to the Army in July 1975.[177] The commanding officer of the Army's Fort Devens in Ayer, Mass., assumed responsibility for the management of what was renamed the South Boston Support Activity. Following the closure of Fort Devens in the mid-1990s, that responsibility was transferred to the commanding officer of Fort Dix in New Jersey. The facility includes 11.24 acres of land with three buildings having over 583,000 square feet of space.[178] The remaining 15.58 acres of the "E" Street Annex were sold to the Massachusetts Port Authority for $1.4 million on June 1, 1981.[179]

The Army undertook a four-year, $23-million renovation of the Fargo Building, which it renamed the Barnes Building in April 1982 in honor of Army Pfc. John A. Barnes III, who had received a posthumous Medal of Honor for actions in Vietnam. The most visible change was the replacement of the original brick facade with a porcelain enamel facade with rounded corner windows widely interpreted as expressing a nautical motif.[180] The structure houses a variety of military activities, including the Military Entrance Processing Station; Army, Navy, and Marine Corps recruiting offices; various Army Reserve units; the Defense Contract Management Agency; the Defense Investigative Service; the Naval Research Office; the Boston Detachment of the Puget Sound Naval Shipyard (the successor to the Navy Yard's Planning Division); and the United States Postal Service Security Offices.

In the summer of 1996 officials at Fort Dix began an initiative to surplus the facility. That proposal came to the attention of Representative J. Joseph Moakley in early 1997 when Massport developed a plan for a new stadium in South Boston for the New England Patriots on the former "E" Street Annex parcel. Part of that proposal envisioned using five acres of the base for a parking garage for the stadium. Moakley brought the issue to the attention of Secretary of the Army Togo G. West. West assured Moakley that "the property is not excess to the Army."[181]

The Navy Homeport Proposal

In the early 1980s President Ronald Reagan began a buildup of the Navy. In addition to an increase in warship construction, the program included the reactivation of the Navy's four remaining battleships. In conjunction with that reactivation, the Navy decided to develop a series of new bases, or homeports, for these vessels and their supporting ships. In the fall of 1982 Secretary of the Navy John F. Lehman, Jr., stated that one of the locations under consideration was Boston.[182]

By January 1983 a coalition had come together to promote the former Boston Army Base as a site for a Boston homeport.[183] Following a mid-January visit by Navy planners, the EDIC took the lead in the development of a formal proposal, which was submitted to the Navy on March 31. It involved the portion of the Army Base which was then leased by GSA to Massport.[184]

While the proposal had wide backing from the local political and maritime communities, it soon encountered opposition from activists opposed to nuclear weapons. An Ad Hoc Committee for a Safe Boston Harbor questioned why issues related to the safety and environmental concerns on nuclear weapons had not been addressed before the formal proposal had been submitted.[185] Other groups threatened legal action if the issues were not addressed in an environmental impact statement prior to selection of a homeport site.[186]

The Boston proposal was in competition with ones from New York City and Newport, R.I. On July 28, 1983, Secretary Lehman announced that the homeport would be developed at a location on Staten Island in New York.[187] Officially, the Navy stated that it had rejected the Boston location, which would have cost considerably

[175] Deputy Assistant Secretary of Defense (Installations and Housing) to Assistant Secretary of the Army (I&L) et al., "Former Naval Support Activity, Boston, Massachusetts (Fargo Building and Related Land and Facilities)," Jan. 15, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 17.

[176] Dept. of the Army to Commander, FORSCOM, Fort McPherson, et al., "Former Naval Support Activity, Boston, Massachusetts (Fargo Building) and Related Land and Facilities," Feb. 14, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 17.

[177] Northern Division, Naval Facilities Engineering Command, to Army Corps of Engineers District, New York, et al, "Former Naval Support Activity, Boston, MA (Fargo Building and Related Land and Facility) and South Boston Annex of the Boston Naval Shipyard; Proposed Transfer to Department of the Army," June 3, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 17.

[178] U.S. Army, Assistant Chief of Staff for Installation Management, *Real Property Summary And Site Statistics for Fiscal Year 2006 Quarter 2*, Apr. 17, 2006, p. 37, 156. Listed separately as Boston OMS is the Army Reserve Center, containing 2.2 acres and one building (Building 28). See ibid.

[179] Deed, United States of America to Massachusetts Port Authority, June 1, 1981, Suffolk Deeds, bk. 9769, p. 238.

[180] Press release, Public Affairs Office, Fort Devens, "Barnes Building Dedication," Apr. 5, 1982; Douglas S. Crocket, "The Fargo Building: It Was No Mystery to WWII Sailors," *Boston Globe*, Fe. 15, 1981.

[181] Chris Black and Tina Cassidy, "Army Won't Give Parcel for Stadium," *Boston Globe*, Feb. 7, 1997; Tina Cassidy and Meg Vaillancourt, "Massport Fires Back at Army With Stadium Shift," *Boston Globe*, Feb. 8, 1997; Chris Black, "Moakley Says He Blocked Army Bid to Close a South Boston Facility," *Boston Globe*, Feb. 8, 1997.

[182] Frank Maloney, "Hub Seen Competitor as a Harbor for Navy," *Boston Globe*, Oct. 19, 1982.

[183] "Action for the Navy," *Boston Globe*, Jan. 18, 1983.

[184] Gary McMillan, "City Works on Proposal to Get Naval Fleet at S. Boston Base," *Boston Globe*, Jan. 21, 1983; Gary McMillan, "Boston Offers a Berth for a 5-Ship Navy Fleet," *Boston Globe*, Apr. 1, 1983.

[185] Charles E. Claffey, "Nuclear Flap Follows the Fleet," *Boston Globe*, May 29, 1983; Gary McMillan, "Questions Minus Answers on N-Missile Fleet in Hub," *Boston Globe*, June 7, 1983.

[186] Gary McMillan, "Hub to Get Word on Fleet in Three Weeks," *Boston Globe*, July 28, 1983.

[187] Paul Feeney, "Boston Loses Bid to Berth Navy Ships," *Boston Globe*, July 29, 1983.

The Black Falcon Terminal & International Cargo Port



In 1986 Massport converted the west end of the Army Base Wharf Shed (Building 119) into the Black Falcon Terminal in an effort to increase the port's use by the growing cruise ship trade. Its success in this effort can be seen in this image showing MV *Golden Princess*, MV *Crystal Symphony*, and MV *Queen Mary 2* at the terminal on Oct. 6, 2005. *BNHP*



The Black Falcon Terminal was the principal berthing location for the Class A tall ships which participated in Sail Boston 1992, which commemorated the 500th anniversary of Christopher Columbus' epic voyage. *Joseph R. Melanson, skypic.com*



Black Falcon also saw port visits by military vessels. On Nov. 3, 2007, two days after this photo, it was the site for the formal commissioning ceremonies for USS *Sampson* (DDG-102). *Richard Hearn, NavSource*



In 2000 the South Pier Shed (Building 118) was rehabilitated as the International Cargo Port. As part of the project, the North Pier Shed (Building 117) was demolished and a new one-story warehouse was added to the South Pier Shed. This view dates to Oct. 9, 2004. *Stephen P. Carlson, BNHP*

less than the New York site, because the location was too small for safe handling of ammunition, it lacked space for future expansion, lacked room to maneuver the battleship, the main channel required dredging, and the quality of life in Boston for naval personnel and dependents was rated as the lowest of the several proposed sites.[188] Local politicians, however, blamed politics (Staten Island was in a Republican congressional district while South Boston was in a Democratic one). Although the influence of the antinuclear activitists was officially discounted by Navy officials, Representative Brian Donnelly was probably correct in his analysis that it was a key factor in tipping the scales in favor of Staten Island.[189]

The Black Falcon Terminal

By the early 1980s the age of break bulk cargo ships had passed in favor of either container or roll-on/roll-off vessels. The Boston Army Base was not equipped to handle either form of shipping. Instead, Massport looked for another use for the property, then still under lease from the federal government. At the same time, Commonwealth Pier No. 5 was undergoing a transformation into the International Trade Center. While passenger vessels continued to use that pier, Massport saw the opportunity to develop a new passenger facility at the Army Base. Thus, in May 1986 it opened the Black Falcon Terminal, originally projected as the Harbor Gateway Terminal, in the western half of the Wharf Shed (Building 119).[190]

The new facility was named for a Norwegian cargo vessel, MV *Black Falcon*, which had suffered an explosion and fire in one of her holds while at Berth F at the Army Base on November 2, 1953. Eight persons died and 15 others received injuries requiring hospitalization. All of the casualties were longshoremen.[191] Around 2003

[188] Gary McMillan, "Navy Lists Reasons Boston Didn't Get Fleet," *Boston Globe*, Aug. 6, 1983.

[189] Gary McMillan, "Navy Picks NYC Over Boston as Port for New Fleet," *Boston Globe*, July 30, 1983. Through the years the author has had off-the-record conversations with knowledgeable individuals who informed him that the Navy would not bring a nuclear-powered ship into Boston for fear of demonstrations.

[190] "Massport to Build Cruise Ship Facility," *Boston Globe*, Jan. 12, 1985; Fred Pillsbury, "Boston Hopes Its Ship Will Finally Come In," *Boston Globe*, Jan. 29, 1985; Catherine Alison Hill, *The Political Economy of Military Base Redevelopment: An Evaluation of Four Converted Naval Bases* (Ph.D. dissertation, Rutgers, 1998), p. 388.

[191] Jerry Morris, "A Touch of the Riviera in the Caribbean," *Boston Globe*, Sept. 8, 1985. On the *Black Falcon* incident, see "Report of a Marine Board of Investigation convened at U.S. Coast Guard Base, Boston, Massachusetts, to inquire into explosion on the M/V BLACK FALCON (Norwegian) at Army Base, Boston, on 2 November 1953 with loss of life," enclosed in Chief, Merchant Vessel Inspection Division to Commandant, "Marine Board of Investigation; M/V BLACK FALCON (Norewgian), explosion, Boston, 2 November 1953, with loss of life," May 17, 1954, Marine Board of Investigation Marine Casualty Reports, U.S. Coast Guard [http://www.uscg.mil/hq/g-m/moa/boards/blackfalcon.pdf].

Massport adopted the designation Cruiseport Boston for the facility, although the Black Falcon Terminal name remains both on the structure and in common use.[192]

The new terminal was part of a successful Massport effort to increase the use of the port by cruise ships. In 1986 the facility saw 13 cruise vessels carrying 11,723 passengers. Twenty years later, there were 81 cruise ships carrying 209,000 passengers.[193] The number of cruise ships projected for the 2008 season, which opened in April, was 116.[194] While some of the cruises were one-time port-of-call visits, the majority were regular cruises based at the Cruiseport. The primary users of the facility in recent years have been the Norwegian Cruise Line, with weekly departures for Bermuda, and the Holland-America Line, with cruises to Canada.[195] At peak periods, all of the berths at the former Army Base and not just those adjacent to Building 119 have been used for berthing cruise ships. Indeed, the Black Falcon name has been commonly applied to the berths rather than just the actual terminal structure.

The Black Falcon Terminal has also seen port visits by United States and foreign naval vessels,[196] and was the primary tall ship berthing area for both Sail Boston 1992 and Sail Boston 2000.[197] The area was also utilized in the 1990s as the location where the prefabricated sections of the Ted Williams Tunnel were prepared for their placement under Boston Harbor.[198]

The increase in the cruise business led Massport in 2006 to request expressions of interest in the development of a second terminal in the eastern half of Building 119.[199] In November 2007 Cargo Ventures, the developer of the Bronstein Center in Building 114, came forward with a proposal to undertake that project as part of its proposed rehabilitation of Building 114.[200] Although greeted warmly by both the city and Massport, the proposal ran into trouble in April 2008 due to the city's opposition to the developer's plan to convert space in Building 114 from industrial to office use.[201]



The Black Falcon Terminal provided berthing space for most of the Class A tall ships participating in Sail Boston 2000. This July 13, 2000, view shows part of the crowd of visitors who came to see the vessels while they were in port. *BNHP*

International Cargo Port

While the EDIC successfully developed the Coastal Cement terminal on its portion of the eastern end of the Boston Army Base property, the Massport Pier Sheds remained unutilized for many years. Finally, in April 1998 a developer came forward with a proposal to create what it termed an intermodal terminal there. In May 1999 Massport formally leased 10.523 acres of the pier, including Buildings 117 and 118, to International Cargo Port-Boston.[202]

The $26 million project, completed in 2000, saw Building 118 renovated for warehouse use on the first floor and offices on the second and third floors. Building 117 and the connecting bridges were demolished and replaced by a single-level warehouse, distribution, and truck-loading facility with a rooftop parking area.[203] Designated as a Foreign Trade Zone, the International Cargo Port houses organizations involved in international trade.[204] Although technically accessible by rail, that mode has never been used because of the severing of rail connections to the entire Annex and Army Base by the Central Artery/Tunnel project. Its berths have been used not for cargo vessels but for additional cruise ship docking.

Closure Of The South Boston Annex

While a considerable portion of the South Boston Annex was inactive at the time the decision to close the Boston Naval Shipyard was announced in April 1973, it was not a shuttered facility. Thus, the yard needed to go through a process of deactivating buildings and facilities, making inventories of property ranging from office

[192] Press release, Massachusetts Port Authority, "Cruiseport Boston Kicks-Off Season Opener; 95 Vessels will call at Black Falcon Cruise Terminal in 2003," Apr. 25, 2003 [http://www.massport.com/about/press03/press_news_crui03.html]

[193] Massachusetts Port Authority, *Cruiseport Boston Fact Sheet* [2007] [http://www.massport.com/about/pdf/cp_fact_07.pdf].

[194] Massachusetts Port Authority, *Cruiseport* [web page] [http://www.massport.com/ports/cruis.html], accessed June 1, 2008.

[195] Massachusetts Port Authority, *News/Boston Cruiseport* (Spring 2008), p. 1, 4.

[196] See, e.g., U.S. Navy, Fleet Support Office Boston, "Port Visits to the Boston Area," 2002-2005, HRS Project File, Division of Cultural Resources, BNHP.

[197] "Events Schedule," *Boston Globe*, July 11, 1992; press release, Massachusetts Port Authority, "Alert for Cruiseship Passengers Using the Black Falcon Cruise Terminal on July 9th, July 14th and July 16," July 6, 2000 [http://www.massport.com/about/press00/press_news_sail. html]. The Army Base had also been used for Sail Boston 1980. See Andrew Black, "Tall Ships Ahoy!," *Boston Globe*, May 30, 1980.

[198] Steve Anderson, *Ted Williams Tunnel Historic Overview* [web site] [http://www.bostonroads.com/crossings/ted-williams], accessed June 1, 2008; Peter Vanderwarker, *The Big Dig: Reshaping an American City* (Boston: Little, Brown, 2001), p. 20-21.

[199] Massachusetts Port Authority, *Request for Expressions of Interest To Construct and Operate a New Cruise Terminal in South Boston, Massachusetts* [Nov. 2006].

[200] Thomas C. Palmer, "Firm Offers $75m Plan for New Cruise Terminal," *Boston Globe*, Nov. 16, 2007.

[201] Ibid.; Thomas C. Palmer, "Cruise Terminal Plan Runs Aground," *Boston Globe*, Apr. 26, 2008.

[202] Richard Kindleberger, "Cargo Facility Planned for South Boston," *Boston Globe*, Apr. 29, 1998; notice of lease, Massachusetts Port Authority to International Cargo Port-Boston, May 20, 1999, Suffolk Deeds, bk. 23780, p. 344-49.

[203] Lee Kennedy Co., *International Cargo Port* [web page] [http://www.leekennedy.com/Experience/Comm/ICP.htm], accessed June 1, 2008.

[204] Massachusetts Port Authority, *Other Maritime Properties: South Boston Properties* [web page] [http://www.massport.com/ports/othrmp_south.html], accessed June 2, 2008.

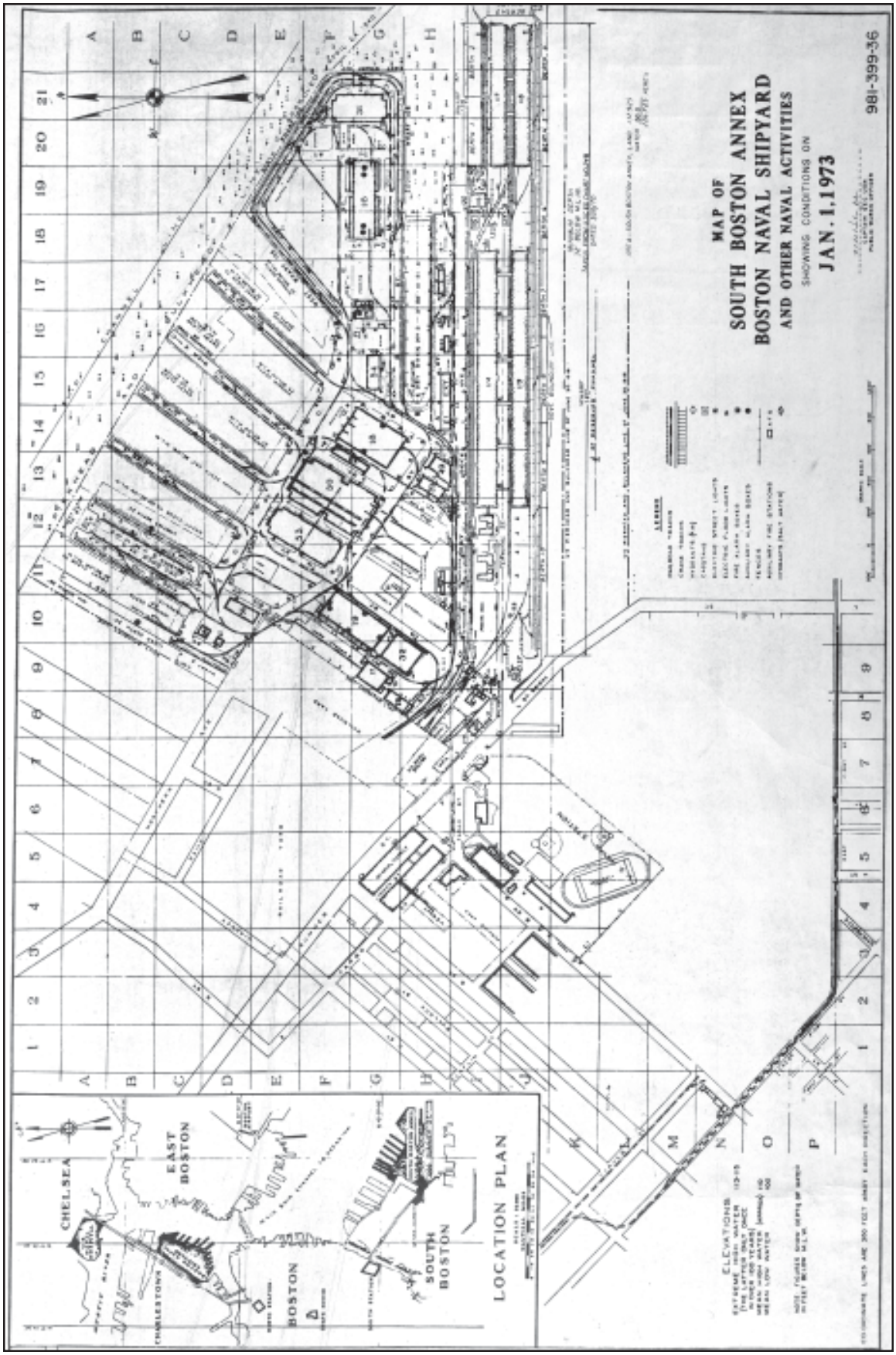


Figure 3-10 – Plan of South Boston Annex, 1973

"Map of South Boston Annex, Boston Naval Shipyard, and Other Naval Activities, Showing Conditions on Jan. 1, 1973," Jan. 1, 1973. This plan shows the former Boston Army Base property as an integral part of the Annex. It also shows, without numbering, the facilities of the Naval Station. Interestingly, both Fargo Buildings are outlined as if they are Navy property even though the rear structure had been sold in 1961. *BOSTS-13533*

The South Boston Annex In 1974: A Gallery

BETWEEN JANUARY AND MAY 1974 Navy Yard photographers made a photographic record of many of the structures at the South Boston Annex. The images, which have been supplemented by several taken by consultant Desmond, Childs & Adams for the General Services Administration in April, provide visual evidence that the site was largely abandoned long before the official closure. The 1973 yard plan (Figure 3-10) shows the location in the Annex of each structure shown.



Building 1, Jan. 28, 1974
The Pump House for Dry Dock 3 is framed by the sheds protecting two of Dry Dock 3's electric capstans. *BOSTS-8546*



Building 16, Apr. 2, 1974
Although largely used for storage since the early 1960s, Building 16 still housed the Electronics Shop workspace. *BOSTS-7831*



Building 18, May 15, 1974
Since the mid-1960s Building 18 had housed the Annex branches of nearly all of the yard's industrial shops. Inactivation of these spaces would be completed on May 27, 1974. *BOSTS-7835*

Building 20, Apr. 3, 1974
The Power Plant was one of the few Annex buildings which had remained active, providing utility service to the facility. The small structure in the foreground does not appear on yard maps. Note the overhead steam line crossing A St. to Building 18. *NPS TIC 457/D6391*



Building 15, Apr. 9, 1974
This view shows the rear of the only residential structure in the Annex. Built as a Marine Barracks, it was used in the postwar era as officer housing for first the Atlantic Reserve Fleet and then the staff of the First Naval District. *NPS TIC 457/D6391*



Buildings 17 & 28, Apr. 2, 1974
Buildings 17 and 28 (left) were among the few Annex buildings which were in active use, being assigned to the Naval Support Activity. Building 28 would be the only Annex structure to be retained by the military following closure of the Navy Yard. *BOSTS-7832*



Building 19, Apr. 3, 1974
The wood sheathing of the Temporary Storehouse was in poor condition, although the structure was still in active use by the Supply Dept.
NPS TIC 457/D6391



The South Boston Annex In 1974: A Gallery



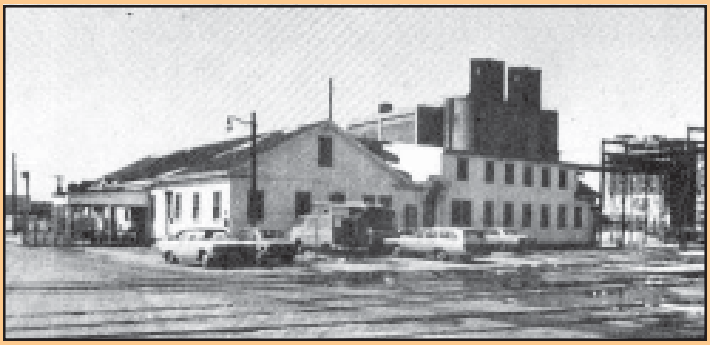
Building 21, May 15, 1974
The west and south sides of the Administration Building for the Annex are seen in this view. The original brick structure, completed in 1941, is at left, while the wooden extension completed in July 1943 is at right. The Annex's Flag Pole (Structure 92) is seen at the west end of the building.
BOSTS-7841



Building 22, Apr. 9, 1974
The Crews Head, listed on the 1974 property inventory as a Public Toilet, had been inactivated on Jan. 16, 1974. *NPS TIC 457/D6391*



Buildings 23 & 104, Apr. 9, 1974
The Officers Head (Building 23) (left) built as part of the World War II expansion of the Annex had been officially inactivated on Jan. 14, 1974. Although constructed during the war, the Auxiliary Fire Station at right was not placed on the yard's property inventory as Building 104 until the early 1960s. *NPS TIC 457/D6391*



Building 24, Apr. 9, 1974
The Police Station was one of a number of wooden buildings in the Annex which the General Services Administration's appraisers rated as being of little value because of their poor condition. *NPS TIC 457/D6391*



Building 28, Apr. 3, 1974
Building 28 would be the only Annex structure to be retained by the military following the closure of the Navy Yard. The small structure at left is the Gasoline Filling Station (Building 93), built in 1952. *NPS TIC 457/D6391*



Building 29, Jan. 28, 1974
Since the early 1960s the Navy Base Band had occupied quarters and practice rooms in the former Dispensary. The Annex Fire Station would be among the last facilities inactivated. *BOSTS-8546*



Building 30, Apr. 3, 1974
This view of Building 30 looks from the intersection of A and 6th Sts. Although the doors are all boarded up, inactivation of the structure would not be completed until May 27, 1974. *NPS TIC 457/D6391*



Building 31, Apr. 9, 1974
The Ordnance Work Shop was identified as a General Warehouse on the Navy's surplus property report. Like Building 30, its inactivation would be completed on May 27, 1974. *NPS TIC 457/D6391*

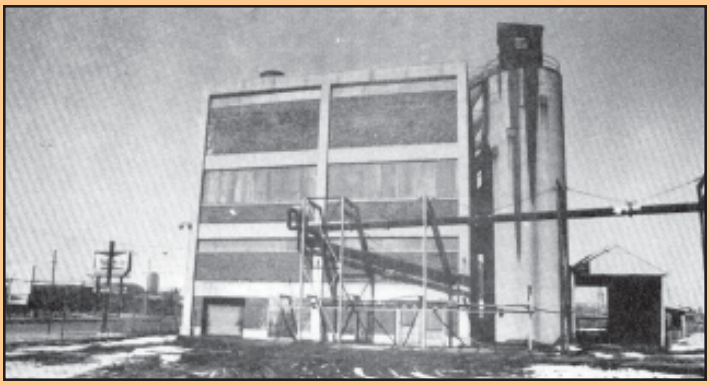
The South Boston Annex In 1974: A Gallery



Building 32, Apr. 3, 1974
This view shows the 7th St. side of the high-rise General Storehouse. Note the trailers stored on the site of Building 19A. *NPS TIC 457/D6391*



Building 39 & Pier 4, Jan. 28, 1974
The deteriorated state of the Annex's wooden piers can be seen in this view of Pier 4 with Electrical Substation No. 6 in front of it. *BOSTS-8532*



Building 46, Apr. 9, 1974
The Boiler House which supplied steam to the Annex's structures was located close to the railroad right-of-way which crossed the property to facilitate delivery of coal. This facility had been inactive since the 1960 decision to cease most operations at the Annex. *NPS TIC 457/D6391*



Building 49, May 15, 1974
The Public Works Shop, completed in 1942, had an unusual shape to maximize space at its location at the intersection of Dry Dock Ave., left, and 5th St. *BOSTS-7854*



Building 38, Apr. 3, 1974
Electrical Substation No. 5 was located at C and 9th Sts. in the northwest corner of the Annex. *NPS TIC 457/D6391*



Building 40, Apr. 3, 1974
Like its counterpart in Charlestown, the Weighing Facility at the Annex served both rail and road scales. By the time this photograph was taken, the Howe Railroad Scale (Structure 91), located on the tracks closest to Building 41, was inactive. The concrete platform for the 35-ton capacity Howe Truck Scale (Structure 98) can be seen to the right of the structure. *NPS TIC 457/D6391*



Buildings 48 & 89, Apr. 3, 1974
Listed as an Administration Building on yard inventories, the former Cafeteria building had been used by the Reserve Fleet and the Naval Reserve from the late 1940s to the mid-1960s. The small Paint Mixing Building (Building 89), built in 1956, is in the foreground. *NPS TIC 457/D6391*



Building 53, May 15, 1974
This view of Building 53 was taken from Pier 3. For many years approximately a quarter of the building had been used for storage by the Atomic Energy Commission's Cambridge Electron Accelerator facility. *BOSTS-7855*

The South Boston Annex In 1974: A Gallery



Building 54, May 15, 1974
The former Riggers' Shop, listed in 1974 as a General Warehouse, was inactivated on Feb. 6, 1974. Note the overhead steam line connecting it to Building 18. *BOSTS-7858*



Building 79, Apr. 9, 1974
The Salt Water Pump House can be seen in this view. It sat on the edge of C St. just between the West Jetty and Pier 1. Note the street lamp in the background. *NPS TIC 457/D6391*



Building 102, Apr. 3, 1974
This Guard House sat just inside the entrance into the Annex from Terminal St. onto 7th St., which would resume its original name of Harbor St. after the transfer of the Annex to the City of Boston. *NPS TIC 457/D6391*



Dry Dock 3, Jan. 28, 1974
The structure at left behind the head capstan shed is a portable elevator used to carry materials from the surface to the dock floor. *BOSTS-8546*



Buildings 56 & 94, Jan. 28, 1974
This view shows the Northern Ave. Gatehouse (Building 94) and the former Service Building (Building 56). Although officially inactivated on May 27, 1974, the Gatehouse had not been manned for many years as only the Summer St. entrance to the Annex had remained open following the shut-down of industrial activities in the 1960s. *BOSTS-8532*



Building 88, Apr. 9, 1974
The Submarine & Ship Salvage Gear Storage building sat on the North Jetty adjacent to Building 31. *NPS TIC 457/D6391*



Building 103, Jan. 28, 1974
The Public Toilet on Pier 6 was the newest building in the Annex, having replaced a World War II wooden Utility Building (Building 78).
BOSTS-8567



Dry Dock 4 and Piers 5 & 6, Jan. 28, 1974
The four portal cranes which served Dry Dock 4 are seen in this view of the dock and its surrounding Piers 5 (right) and 6. Building 56 is at right, while Building 103 can be seen next to Portal Crane 91 (center).
BOSTS-8532

furniture to industrial machinery and spare parts, and consolidating materials into disposal areas.

One of the first tasks in this process involved the yard sending formal notices to its tenants, terminating their occupancy of Annex facilities as of August 1, 1973.[205] The deactivation of individual buildings was done in accordance with standard Navy procedures, with utilities turned off and secured and the structures locked with "closure locks."[206]

In approaching the closure of the Annex, the yard was very aware of the dilapidated condition of the five wooden piers. On August 20, 1973, the Massachusetts Department of Public Works notified it that, under a 1970 state law intended to address hazardous materials in Boston Harbor, the "condition of your property is in violation of the law" and urged that the violation by resolved before the state had "to take legal action."[207] Anticipating this letter, Shipyard Commander Capt. Russel L. Arthur had on August 9 requested reinstatement of the cancelled projects to demolish the piers, suggesting that pollution control funds be tapped for that purpose.[208] Despite the state's threat, the Naval Ship Systems Command directed that the piers "be disposed of in their present condition."[209]

By the time that the Department of Defense began a program to remediate hazardous materials and conditions on former defense installations in 1986, the City of Boston had already addressed the piers. Surveys by the Army Corps of Engineers, which managed the program, found no eligible sites at the Army Base or the "E" and "K" Street Annexes.[210] There were, however, several eligible sites at the Annex itself. Remedial actions were completed during Fiscal Year 2004 at a total cost of $197,000.[211]



This photograph taken by the consultants Booz, Allen & Hamilton in mid-1974 shows the dilapidated condition of Pier 2. Note the sign at left warning that the pier was unsafe and the walkway laid down to provide access to the Collimation Tower (Structure 110). *NPS TIC 457/D6344*

U.S. Coast Guard Interest

Under the Federal Property and Administrative Services Act of 1949, other federal agencies have first claim on surplus real property. Following the announcement of the Navy Yard's closure, the Coast Guard expressed an interest in moving its Boston Support Base from its location on Commercial Street in the North End to the South Boston Annex.[212] It presented its preliminary concept, which involved Dry Dock 4 and the area west of 7th (Harbor) Street (48 acres), at a meeting with the Navy, Massport, and the City of Boston in November 1973.[213] (See Figure 3-11) Its plans conflicted with the desires of Massport to revive its earlier plan to relocate activities at the Fish Pier to that portion of the Annex.[214] Both potential uses impacted proposals to reuse the entire property for shipbuilding.

Although one report indicated that opposition from Representatives Thomas P. O'Neill, Jr., and John Joseph Moakley had "sunk" the Coast Guard proposal in December 1973,[215] it remained under consideration until the summer of 1975. At a July 8, 1975, meeting sponsored by the GSA, those plans gained strength when Massport withdrew "their expression of interest for movement of the Fish Pier in favor of the Coast Guard."[216] A few weeks later, at a meeting on July 28, the city, which had a ship repair firm interested in taking over Dry Dock 4, "requested that the Coast Guard give up all claims

[205] See, e.g., R.L. Arthur to Philip Thompson [AEC], Apr. 30, 1973; Commander, Boston Naval Shipyard to Commander, First Coast Guard District, "Coast Guard Storage Space at Boston Naval Shipyard, South Boston Annex," Apr. 30, 1973; Commander, Boston Naval Shipyard to Commander, Naval Support Activity, Boston, "Tenancy of Shipyard Property," May 2, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 26.

[206] "Status Report on Space/Facility Closure-South Boston Annex," June 12, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. 15157, Box 9.

[207] Malcolm E. Graf to Commander, U.S. Navy Yard, Boston, "Boston – Inner Harbor Waterfront Property," Aug. 20, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 29.

[208] Commander, Boston Naval Shipyard to Commander, Naval Ship Systems Command, "Demolition of Piers at Boston Naval Shipyard, South Boston Annex," Aug. 9, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 29.

[209] Code 400 (W.E. Kaloupek) to Code 100, "Public Works Department Turnover to Successor Activity," June 20, 1974, p. 2, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 9.

[210] U.S. Army Corps of Engineers, "Formerly Used Defense Sites (FUDS) Inventory: Massachusetts," Sept. 30, 2006 [web page] [https://ekopowered.usace.army.mil/ecop/downloaddbfile.cfm?file_id=0344476D-188B-313F-1B977B594F96DE04], accessed June 10, 2008.

[211] U.S. Dept. of Defense, *Defense Environmental Programs Annual Report*, Fiscal Year 2004, p. K-3-17 [https://www.denix.osd.mil/portal/page/portal/content/environment/ARC/FY2004/APPK-ATTACH3.PDF]. The project related to soil contamination by petroleum, oil, or lubricants and involved underground tank removals. See U.S. Dept. of Defense, *Defense Environmental Restoration Program (DERP): Annual Report*, Fiscal Year 2000, p. B-1-94 [http://deparc.xservices.com/pdfs/archives/FY00/B01_ADOBE5.pdf]; Marla Cumming to Steve Carlson, "BMIP Questions," June 19, 2008, HRS Project File, Division of Cultural Resources, BNHP.

[212] U.S. Office of Economic Adjustment, *Report of Economic Adjustment Program, Metropolitan Boston* (Mar. 1974) (Washington: Office of Economic Adjustment, Office of the Assistant Secretary of Defense (Installations & Logistics), 1974), TIC 457/D6353, p. 43.

[213] Ibid.; H.S. Pearson to Arthur, Oct. 29, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22; James H. Hammond, "Coast Guard Plans Move to S. Boston Naval Annex," *Boston Globe*, Nov. 7, 1973; Desmond, Childs & Adams, *Appraisal, Boston Naval Shipyard, South Boston Annex, Boston, Massachusetts*, May 15, 1974 [hereafter *Appraisal, South Boston Annex*], TIC 457/D6391, p. 143, 157-58.

[214] E.B. Hickey, memorandum for closure file (real estate), "MASSPORT Plans for South Boston Annex," Sept. 25, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22; *Appraisal, South Boston Annex*, p. 143, 165.

[215] Harold Banks, "A Hard Dose of Poignancy" [editorial], *Boston Herald Americam*, Dec. 18, 1973.

[216] Richard Kinnier to John Lynch, "Meeting Regarding the South Boston Annex, July 8, 1975," July 15, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22.

to the property at the South Boston Annex." In exchange, the city agreed to "investigate the possibility of making available to the Coast Guard adjacent property to the present Coast Guard Base." Should the Coast Guard not abandon its plans, the city warned, it would consider "going political" to obtain the Annex property.[217] There is no further reference to the transfer of any of the Annex property to the Coast Guard following this meeting.

In addition to the Coast Guard, another federal agency had expressed interest in obtaining part of the Annex. In 1973 the National Railroad Passenger Corp. (Amtrak) had indicated an interest in obtaining a 27-acre area in the center of the Annex containing Buildings 15, 18, 48, 30, and 53 for use as a maintenance facility. Nothing came of this idea.[218]

Disposal Of Annex Property

The disposal of the South Boston Annex property was complicated by the terms of the state legislation which had granted part of the site to the federal government. Under the 1941 act, the property conveyed was to revert to the state if it was no longer used for "naval purposes."[219] Attorneys for the Navy concluded that the state had forfeited that right under requirements enacted in 1954 and 1961 that it had to file notice for any reversion at least once every ten years. Thus, the entire property was reported to the General Services Administration for disposition.[220]

In approaching the disposition of the Annex, there is no evidence that either the Navy or the GSA made any effort to comply with the requirements of Sections 110 and 106 of the National Historic Preservation Act of 1966 and President Richard Nixon's executive order directing agencies to survey their holdings to identify potential National Register properties. As discussed in Chapter 2, the Navy's compliance with that order focused exclusively on Charlestown. Although much of the Annex was less than fifty years old, the "magic" age at which properties are considered to be historic under the still-too-prevalent thinking in the historic preservation community, both Dry Dock 3 and the Boston Army Base were 55 years old at the time of closure and clearly should have been evaluated.

This failure (which was repeated when the Boston Army Base was disposed of in the 1980s) meant that, unlike Charlestown, where part of the site could be conveyed to the City of Boston at no cost for historic preservation purposes, this alternative was not available for any of the South Boston properties. Thus, the GSA was required to sell the entire site at market value. In August 1975 Director Michael Westgate of the Economic Development & Industrial

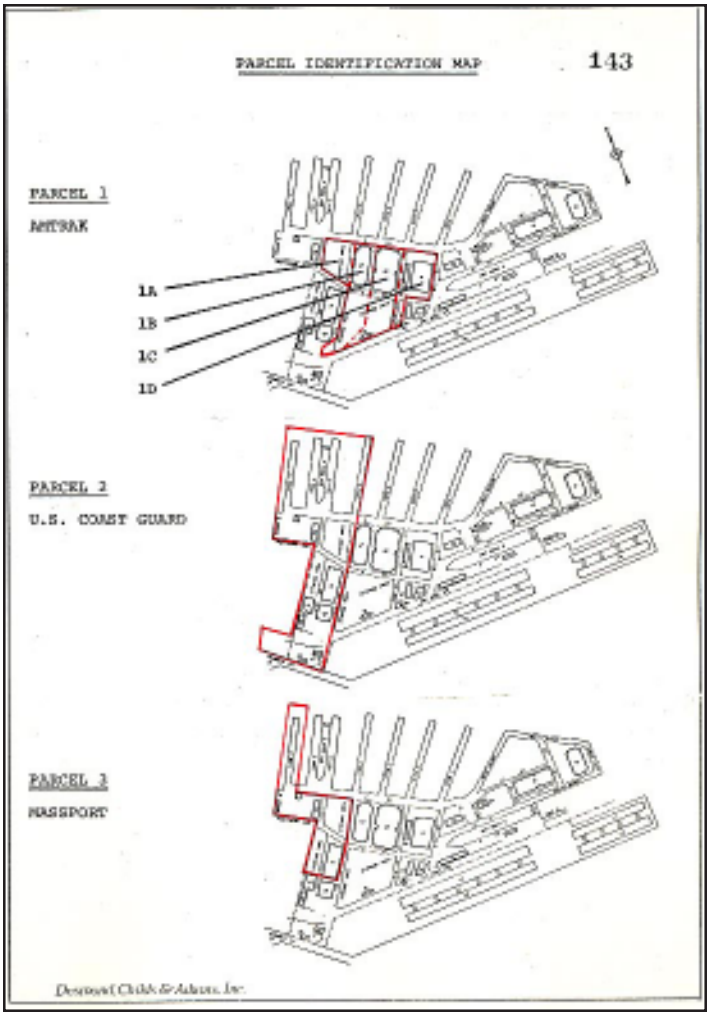


Figure 3-11 – Proposed Partial Disposition, South Boston Annex, 1974

This drawing from the General Services Administration appraisal of the South Boston Annex depicts the parcels in which the Coast Guard, Amtrak, and Massport had expressed interest in acquiring following the yard's closure. *NPS TIC 457/D6391*

Corp. of Boston, reluctantly agreed to the GSA's valuation of $4.2 million for the property.[221] This action was intended not to hold up the EDIC taking possession of the Annex prior to its formal purchase by the city.

On June 14, 1977, GSA sold the site, less a small parcel surrounding Building 28 retained as an Army Reserve Training Center, to the Government Land Bank for $4.7 million.[222] This organization was a state agency created in 1975 specifically to acquire surplus military property for economic development.[223] Under the law, the bank was authorized to spend up to $20 million to acquire "the Boston Naval Shipyard, including the South Boston Annex and the

[217] Code 910 (N.A. Bertrand) to Code 900, "Telephone conversation with R. Kinnier with regard to meeting held between GSA and the City of Boston on 28 July 1975," July 29, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22.

[218] J.B. Calarese, memorandum for file, "Bethlehem Steel Company Use of South Boston Annex," Oct. 17, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22; *Appraisal, South Boston Annex*, p. 143-47.

[219] Chap. 535, July 20, 1941, Massachusetts, *Acts and Resolves, 1941*, p. 644.

[220] K.K. Bridges to Commandant, First Naval District, "Legal Status of Boston Naval Shipyard Property," Nov. 8, 1973, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22.

[221] Michael Westgate to Albert A. Gammal, Jr., Aug. 7, 1965, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22. For the GSA's valuation of the property, *see Appraisal, South Boston Annex*.

[222] Deed, United States of America to Government Land Bank, June 14, 1977, Suffolk Deeds, bk. 8960, p. 478-83. The state had ceded its rights in the property to the Government Land Bank. See Chap. 432, Oct. 19, 1976, Massachusetts, *Acts and Resolves, 1976*, p. 624-25.

[223] "An Act creating a government land bank," chap. 212, May 15, 1975, Massachusetts, *Acts and Resolves, 1975*, p. 193-201.

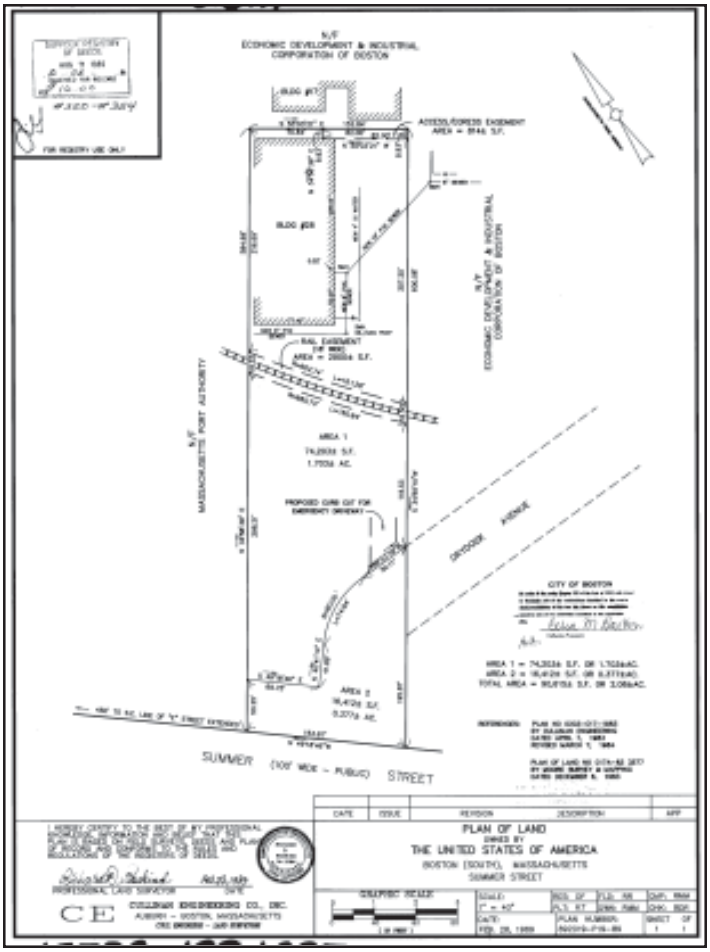


Figure 3-12 – Land Retained by the U.S. Army, 1989
This plan shows the portion of the Annex retained as an Army Reserve Training Center. It also shows the portion of that parcel subsequently transferred to the EDIC for the extension of Dry Dock Ave. to Summer St.
Suffolk Deeds, Book 15738

Boston Army Base."[224] The bank immediately sold the Annex to the EDIC, which financed the acquisition through the grant of a mortgage to the bank. Under the terms of the mortgage, any leases longer than four years required the bank's consent.[225]

In June 1978 the EDIC and the Government Land Bank filed suit against the federal government to enforce the reversionary terms of the original state conveyance, including recovery of the 2.18 acres transferred to the Army. This action dragged on for more than a decade. Although the initial suit was lost on appeal, a subsequent claim that the 1941 acquisition amounted to an eminent domain taking was successful.[226] The U.S. Court of Claims found for the EDIC, ordering the return of the $1,587,300 paid for the parcel and the payment by the United States of just compensation for "taking of various interests" in it. The parties reached a settlement on that compensation on April 19, 1989. Under this agreement, the U.S. Court of Claims on May 31, 1989, awarded the EDIC a judgment of $2,495,000 plus $190,000 in legal costs.[227] The actual payment was made in early August 1989.[228]

Although the United States formally released the 2.18 acres which had been retained by the Army to the Government Land Bank,[229] the settlement agreement provided that it would be sold back to it for $1.2 million (included in the overall settlement amount).[230] This transaction took place in August 1989, with the Army receiving 1.703 acres.[231] This deed covered a smaller area than the original retained parcel since it excluded the portion of the property included in an 0.38-acre easement granted to the EDIC by the Army in May 1988.[232] (See Figure 3-12)

Boston Shipbuilding Corporation

In November 1973 Lloyd Bergeson, former manager of the General Dynamics Fore River Shipyard at Quincy, Mass., established the Boston Shipbuilding Corp. (BSC) with the intention of constructing ships at the South Boston Annex.[233] His proposal, which promised to create 3,800 industrial jobs,[234] won favor from the City of Boston. On March 5, 1974, Mayor Kevin H. White informed Bergeson of the city's support and promised that until July it would "make no commitments to any other party which would foreclose the possibility of your implementing your proposal."[235]

On March 20, 1974, the city transmitted a plan for the reuse of the two Navy properties to the General Services Administration which reflected the BSC proposal.[236] This plan stated that "shipbuilding is the highest and best reuse of the South Boston Naval

[224] Ibid., p. 196.

[225] Deed, Government Land Bank to Economic Development & Industrial Corp., June 14, 1977; mortgage, Economic Development & Industrial Corp. to Government Land Bank, June 14, 1977; collateral assignment of leases and rents, Economic Development & Industrial Corp. to Government Land Bank, June 14, 1977, Suffolk Deeds, bk. 8960, p. 479-526.

[226] Notice ["Lis Pendens"], Mar. 10, 1982, Suffolk Deeds, bk. 9923, p. 102-104; *Economic Development and Industrial Corporation et al. v. United States of America, General Services Administration*, U.S. Court of Appeals, 1st Circuit, no. 82-1845, Sept. 28, 1983, *Federal Reporter*, 2nd series, vol. 720 (St. Paul, Minn.: West Publishing Co., 1983), p. 1-5; John King, "Hub Agency Finally Gets US Subsidy," *Boston Globe*, Aug. 17, 1989.

[227] Settlement Agreement, *Economic Development and Industrial Corporation of Boston and Government Land Bank v. United States*, U.S. Court of Claims, no. 280-78, Apr. 19, 1989, Suffolk Deeds, bk. 15738, p. 213-16; Judgment, *Economic Development and Industrial Corporation of Boston and Government Land Bank v. United States*, U.S. Court of Claims, no. 280-78, May 31, 1989, Suffolk Deeds, bk. 16894, p. 71.

[228] King, "Hub Agency Finally Gets US Subsidy."

[229] Release, United States of America to Government Land Bank, Apr. 19, 1989, Suffolk Deeds, bk. 15738, p. 199-201. The bank transferred the parcel to the EDIC on Aug. 7, 1989. See deed, Government Land Bank to Economic Development & Industrial Corp., Aug. 7, 1989, Suffolk Deeds, bk. 15738, p. 202-203.

[230] Certificate of vote, Economic Development & Industrial Corp., May 17, 1989; escrow agreement, May 10, 1989, Suffolk Deeds, bk. 15738, p. 205-206, 208-12.

[231] Deed, Economic Development & Industrial Corp. to United States of America, Aug. 7, 1989, Suffolk Deeds, bk. 15738, p. 231-36.

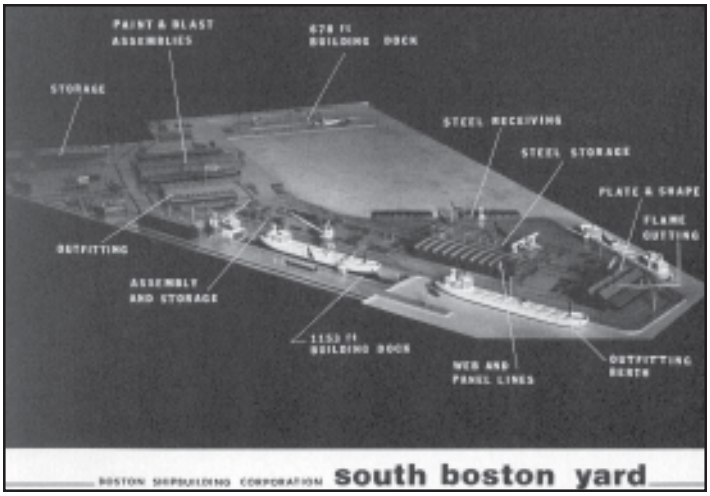
[232] Dept. of the Army, Easement for Road or Street, DACA 33-2-88-44, May 16, 1988, Suffolk Deeds, bk. 14762, p. 327-34.

[233] Boston Shipbuilding Corp., *Boston Shipbuilding Corporation, Boston, Mass.: Confidential Information Book* (July 1, 1974), TIC 457/D6347; Richard Lamere, "Consortium Eyes Hub Navy Yard," *Boston Herald American*, Dec. 10, 1973. On Bergeson's background, see Bryan Marquard, "Lloyd Bergeson, 89; Shipbuilder Warned Early of Global Warming," *Boston Globe*, Mar. 22, 2007.

[234] Kenneth D. Campbell, "3800-job Boston Ship Project Planned," *Boston Globe*, May 21, 1974.

[235] Kevin H. White to Lloyd Bergeson, Mar. 5, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22.

[236] Gerald W. Bush to Gammal, Mar. 20, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 17.



This illustration from a July 1974 document shows Boston Shipbuilding Corp.'s proposal for the use of the South Boston Annex. While the wooden piers would be demolished, most of the Annex's existing structures would be reused. *NPS TIC 457/D6347*

Annex" and that "part of the Charlestown facility is important for a viable operation in South Boston."[237]

In May 1974 Boston Shipbuilding signed letter agreements with three different firms to construct ten ships, contingent on the city obtaining the shipyards from the federal government.[238] At that time, Bergeson stated that "our goal is to operate these yards and their shops as a competitive business, engineering and building commercial ships such as large oil tankers and bulk carriers, offshore drilling rigs and smaller sevice ships."[239]

One week after the formal closure of the shipyard, Mayor White wrote a letter to the GSA stating that "I am so encouraged by BSC's progress as to be prepared to move forward to acquire the navy properties" from the federal government. The intent was that the city would purchase the properties and "lease all of South Boston plus a part of Charlestown to the shipbuilder." White requested "permission for early entry on the South Boston property … pending final completion" of the sale as well as "an occupancy permit for specific buildings necessary in Charlestown."[240]

White's letter came to the attention of Assistant Secretary of Defense for Installations & Logistics Arthur I. Mendolia, who on August 2 informed his counterpart in the Department of the Navy that "we are, of course, committed to do everything possible to assist the city and insure the success of this effort" and requested that the Navy "work with the City of Boston for interim occupancy" of the yard so that BSC could commence operations.[241] Although the Boston Caretaker Group spent several months working on such an agreement for Charlestown, it was never issued because the shipbuilding project was becoming a less likely alternative.

By early November 1974 the BSC proposal was running into trouble. As Gerald W. Bush, director of the Mayor's Office of Commerce & Manpower, told the press, "The problem with Bergeson is that he doesn't have any money."[242] Bergeson had wanted to use the shipyard property as a guarantee to the lenders from whom he was seeking funds. The Economic Development & Industrial Corporation, however, refused to agree.[243] While the city was not yet willing to give up on the shipbuilding proposal, by mid-month it was clear that BSC was no longer the exclusive candidate to implement it.[244] Shortly thereafter, Mayor White decided that achieving industrial reuse at both Charlestown and South Boston would be difficult and assigned the Boston Redevelopment Authority (BRA) the lead for the redevelopment of the Charlestown Navy Yard, while the EDIC continued to seek industrial reuse of the Annex.[245]

Economic Development & Industrial Corporation

By the late 1960s the industrial base of Boston had declined to a point where there were numerous vacant factories and growing unemployment within the so-called blue-collar worker segment of the city's population. The problem was not one which could be solved by either the ordinary operation of private enterprise or traditional urban redevelopment, and so in November 1971 the state legislature created the Economic Development & Industrial Corporation of Boston. The new agency was "a public body politic and corporate" with the same status under state law as other authorities such as the Boston Redevelopment Authority or the Massachusetts Port Authority. Its specific duties were to prepare and implement economic development plans for "any blighted open area or any decadent area … which … is zoned for general or restricted manufacturing uses or for general or waterfront industrial uses … and within which there are not more than forty-five dwelling units."[246]

Among the powers conferred on the EDIC were the right to acquire property by eminent domain; the authority to undertake redevelopment activities directly or through lease or sale of property to private developers; and the ability to issue revenue bonds to finance its projects. The agency was to be managed by a board comprised of seven individuals appointed by the mayor with the approval of the city council, which also had to approve any economic development plans the EDIC proposed.[247]

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[237] Boston, Mayor's Office of Commerce & Manpower, *Interim Reuse Plan for the Boston Naval Complex* (Mar. 19, 1974), TIC 457/D6352, p. III-2.

[238] Boston Shipbuilding Corp., News Release, May 20, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 18.

[239] Richard Lamere, "Shipbuilding Head Outlines Plan Here," *Boston Sunday Herald Advertiser*, May 26, 1974.

[240] White to Gammal, July 8, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 18.

[241] Arthur I. Mendolia to Assistant Secretary of the Navy (Installations & Logistics), "Boston Naval Shipyard," Aug. 2, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 18.

[242] Janice Elliott, "Firm's Proposal to Reopen Navy Yard Stalled," *Boston Herald American*, Nov. 8, 1974.

[243] Ibid.; Richard Lamere, "Lease Snarl Suspends Shipyard Takeover Talks," *Boston Herald American*, Nov. 7, 1974; Gary McMillan, "Boston Refuses Guarantee to Shipbuilder Bidding for Navy Yard," *Boston Globe*, Nov. 8, 1974.

[244] W.J. Norris, memorandum for file, "Fonecon between Mr. R. Kinnier and CAPT Norris this date," Nov. 15, 1974, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 18.

[245] Hill, *Political Economy of Military Base Redevelopment*, p. 214-15, 327-28.

[246] Chap. 1097, Nov. 15, 1971, Massachusetts, *Acts and Resolves, 1971*, p. 1093-1106.

[247] Ibid., p. 1096, 1097-1100, 1103-104.

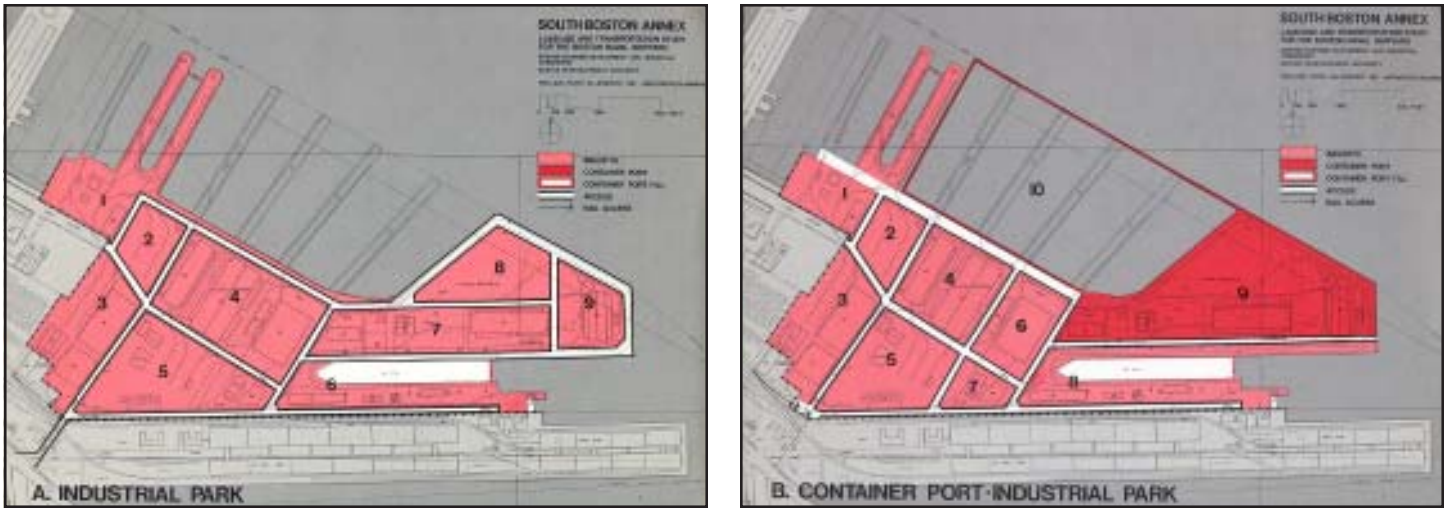


Figure 3-13 – Annex Reuse Options, 1974

The two options considered for the South Boston Annex were very similar, the primary difference being the filling in of the area occupied by Piers 1 to 4 in the container port scheme. Scheme A would have seen the demolition of Buildings 15, 15A, 19, 21 (partial), 22, 23, 29, 30, 39, 48, 54, 56, 57, 79, 88, 89, and 94; and Piers 1, 2, 3, 4, and 7. There would be 345,000 sq. ft. of new construction. Scheme B would have seen the demolition of Buildings 15, 15A, 16, 19, 21 (partial), 22, 23, 29, 31, 39, 48, 54, 56, 57, 79, 88, 89, and 94; and Piers 1, 2, 3, 4, and 7. In addition to the landfill (30 acres), there would be 230,000 sq. ft. of new construction. *NPS TIC 457/D6006*

The EDIC continued as an independent agency until the mid-1990s. In 1993 Thomas M. Menino succeeded Raymond L. Flynn as mayor of Boston. In an effort to gain greater control over the city's various redevelopment efforts, he promoted the merger of the EDIC into the BRA.[248] This proposal was implemented under a December 1993 act of the state legislature which designated the BRA's board of directors as the directors of the EDIC as well.[249] Over the next year, the EDIC staff was brought into the BRA, although for legal reasons some distinctions between the two organizations remain.

The Boston Marine Industrial Park

Unlike Charlestown, reuse options for the South Boston Annex always centered on industrial uses. In the fall of 1973 the Massachusetts Port Authority commissioned a study of the subject. In December the consultant, Gladstone Associates, issued a report which stated that a "shipbuilding and/or repair facility represents [the] highest potential re-use" and "a general manufacturing orientation represents [the] next highest potential re-use." Reflecting the interests of its client, Gladstone concluded that the move of Fish Pier tenants to 13 acres at Pier 7 "represents a desirable re-use." It cited "market factors and site constraints" in ruling out office, residential, and retail development for the site.[250]

Although the City of Boston had committed itself to the shipbuilding option, a study commissioned by both the BRA and the EDIC in July 1974 identified two other options. (See Figure 3-13) One was for an industrial park, while the other was for a combination of an industrial park and container port. The following excerpts from that report summarize the proposals:

> [Package A] This proposal assumes that the City will act as an industrial developer, dividing the site into suitable parcels, providing the necessary infrastructure and seeking tenants or purchasers for the land. The entire area is to be used for industrial purposes, with the existing large dry dock maintained as a ship repair facility.[251]

> [Package B] In this Package, the industrial park is reduced to 42 acres, to allow development of a container port facility on the northern end of the site. In the first phase, 24 acres of existing land would be devoted to this use. In the second phase the area behind the pierhead line would be filled to create approximately 30 acres of land for storage of the containers.[252]

With the collapse of the shipbuilding proposal, the city decided that development of the South Boston Annex should be for continued maritime industrial uses and for other manufacturing activities. Thus, the EDIC remained the appropriate agency to manage the property.[253] Its plan for a Boston Marine Industrial Park (BMIP) was approved by Mayor White on June 15, 1976, and by the City Council on July 6.[254]

Even as it was developing this plan, the EDIC had lined up a potential lessee for Dry Dock 4, Braswell Shipyards, and so in the summer of 1975 sought an early takeover of the Annex pending the purchase of the site. On August 12 the GSA requested that the

[248] Hill, *Political Economy of Military Base Redevelopment*, p. 367-68, 390.

[249] Chap. 341, Dec. 28, 1993, Massachusetts, *Acts and Resolves, 1993*, p. 1205-206.

[250] Gladstone Associates, "Development Potentials, South Boston Naval Annex," Dec. 18, 1973, p. 3, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 22.

[251] Wallace, Floyd, Ellenzweig, Inc., et al., *Land Use and Transportation Study, Boston Naval Shipyard: Phase II Report* (July 19, 1974), TIC 457/D6006, p. II-19.

[252] Ibid., p. II-23.

[253] Hill, *Political Economy of Military Base Redevelopment*, p. 214-15, 327-28.

[254] Economic Development & Industrial Corp., order of taking, Jan. 4, 1993, Suffolk Deeds, bk. 18160, p. 140. For the plan, see Economic Development & Industrial Corp. of Boston, *Economic Development Plan for the Boston Marine Industrial Park, Formerly the South Boston Naval Annex* (July 1976), TIC 457/D6382 [hereafter EDIC, *BMIP Plan*].

Navy prepare a license for that purpose.[255] The protection and maintenance agreement was finalized over the next few months, and on November 1, 1975, the EDIC took possession of the Annex, except for the retained Army Reserve parcel.[256]

Although the redevelopment of the South Boston Annex is still incomplete in 2008, one study has concluded that the EDIC was "highly successful," creating "a thriving and attractive facility" through its "capable leadership" and "high level of public investment" in infrastructure improvements. This investment turned what had begun "with a social mission to create jobs" into "a marketable endeavor" which has been successful in attracting private development.[257] This success was not without its challenges, however.

The condition of the Annex at the time the city took possession in late 1975 clearly showed the years of neglect by the Navy. Thus, the EDIC concentrated its initial efforts on the improvement of the infrastructure. In these efforts, it was highly successful in obtaining federal grants. For example, between September 1976 and January 1979 it received three grants from the Economic Development Administration (EDA) totalling $6.69 million for site improvements, infrastructure restoration, and renovations to Buildings 18, 32, and 53 as well as Dry Dock 3.[258]

The EDIC master plan for the Boston Marine Industrial Park envisioned that it would retain ownership of the property and enter into leases or licenses for use of individual buildings or sites. For that purpose, it divided the area into a number of parcels, designated by letters, based on existing buildings and the Navy's street layout. (See Figure 3-14) Initially, it retained the Navy's street names. Those names duplicated existing street names in South Boston, however, and so in 1985 and 1986 it adopted new names for all of them except Drydock Avenue.[259] Harbor Street revived the original name for 7th Street, while A Street became a continuation of Northern Avenue. Most of the other names had maritime associations, although C Street was named Fid Kennedy Avenue in honor of Thomas "Fid" Kennedy, a longtime attorney for the Longshoreman's Union.[260] The street numbers assigned to individual buildings as part of this redesignation have become the primary method of identifying structures within the BMIP, although Navy building numbers are still used and seen on many buildings.

A key element of the reuse plan involved the continued operation of the two dry docks for ship repair activity. Braswell Shipyards occupied Dry Dock 4 until it filed for bankruptcy in 1980.[261] In April 1981 the EDIC signed a ten-year lease with General Ship Corp. for the use of the dock as well as Buildings 38, 53, and 56.[262] Throughout the 1980s and into the early 1990s that firm performed repair work on naval vessels, as well as on the preserved destroyer USS *Joseph P. Kennedy, Jr.* (DD-850).[263] The start of construction of the Ted Williams Tunnel, as well as the financial difficulties encountered by General Ship, led to the discontinuance of operations at Dry Dock 4 in the early 1990s.[264]

Dry Dock 3 had opened as a public facility available for short-term lease by ship repair firms in 1976. Between that time and 1995, some 34 vessels were docked, the most important of which was RMS *Queen Elizabeth 2*, which was in the dock for inspection and temporary repairs following her grounding off New England in August 1992.[265] In 1995 the EDIC entered into a license agreement with Boston Ship Repair, which, despite the company's principals pleading guilty to paying kickbacks on Navy contracts, has built a steady business repairing both naval and private vessels, including the historic vessels USS *Massachusetts* (BB-59), USS *Lionfish* (SS-298), and USS *Salem* (CA-139).[266] Boston Ship Repair's opened a second facility in the former Philadelphia Naval Shipyard in 2008.[267]

As soon as it gained possession of the Annex, the EDIC began to market the property. By June 1977, when it finally purchased the site, it had leased Dry Dock 4 and some 200,000 square feet of space

[255] Lawrence F. Bretta to Albert R. Marschall, Aug. 12, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 33. The EDIC publicly claimed that GSA"demanded" that it take over the property. See EDIC, *BMIP Plan*, p. 118.

[256] George F. Hervochon, Jr., to Bretta, Oct. 31, 1975; Memorandum of Understanding Between United States Navy and the General Services Administration, Nov. 5, 1975; Northern Division, Naval Facilities Engineering Command, Contract NF(R)-26470, Economic Development & Industrial Corp. of Boston, "Interim Agreement for the Protection & Maintenance of Premises & Facilities at the South Boston Annex of the Boston Naval Shipyard, Boston, MA," Oct. 30, 1975, DOD/BCG Closure Records, 1951-1976, Records of the Boston Naval Shipyard, RG 1.9, BNHP, NPS Cat. No. BOSTS-15157, Box 21.

[257] Hill, *Political Economy of Military Base Redevelopment*, p. 382-83.

[258] Ibid., p. 385, 386.

[259] "Street Designation Plan, Phase I" [drawing], June 6, 1985, Suffolk Deeds, bk. 11757; "Street Designation Plan, Phase II" [drawing], Apr. 18, 1986, Suffolk Deeds, bk. 12464.

[260] Marla Cumming to Steve Carlson, "Fid Kennedy," Sept. 14, 2006, HRS Project File, Division of Cultural Resources, BNHP; Thomas Grillo, "Proposals Sought for Parcels in Marine Industrial Park," *Banker & Tradesman Online*, Sept. 3, 2007 [http://www.bankerandtradesman.com/adinfo/2007-09-03_MarineIndusPark.html], accessed June 17, 2008.

[261] EDIC, *BMIP Plan*, p. 112-14; Hill, *Political Economy of Military Base Redevelopment*, p. 385, 386.

[262] Notice of lease, Economic Development & Industrial Corp. to General Ship Corp., Apr. 28, 1981, Suffolk Deeds, bk. 9757, p. 93-94. In 1985 this lease was amended to delete Building 53 from the leased parcel. See notice of termination of certain leasehold interests, Economic Development & Industrial Corp. to General Ship Corp., July 29, 1985, Suffolk Deeds, bk. 11769, p. 227-28.

[263] Stratford Morss, "Drydocking ex-*USS Joseph P. Kennedy, Jr.* (DD-850): Stabilizing and Restoring a Museum Ship," *Warship International*, vol. 27, no. 1 (1990), p. 9-49.

[264] In Oct. 1994 the EDIC acquired a mortgage on General Ship's East Boston property to cover unpaid rent for Dry Dock 4 and a June 1994 license for use of Dry Dock 3. See collateral subordinate mortgage, General Ship Corp. to Economic Development & Industrial Corp., Oct. 24, 1994, Suffolk Deeds, bk. 19395, p. 244-53. On June 30, 1995, Fleet Bank foreclosed on the primary mortgage owed by General Ship. See evidence of possession, June 30, 1995, Suffolk Deeds, bk. 19909, p. 115.

[265] "Public Drydock No. 3, Marine Industrial Park," in Boston Redevelopment Authority, Capital Construction Dept., *Marine Industrial Park* (Sept. 2002), TIC 457/D6343 [hereafter *Marine Industrial Park*], chap. 3; "Dry Dock Readied for Look at Ship," *Boston Globe*, Aug. 11, 1992. See also "Boston Marine Industrial Park Drydock 3, Ship Dockings," Mar. 10, 1999, HRS Project File, Division of Cultural Resources, BNHP.

[266] "Public Drydock No. 3," in *Marine Industrial Park*, chap. 3; "USS Massachusetts: Ship Information and Photographs," in ibid., chap. 3; Joseph Lombardi, "Recent Projects," *Ocean Technical Services* [web site] [http://www.oceantechserv.com/projects.html], accessed June 17, 2008. On the kickback incident, see Judy Rakowsky, "Charges Put City Shipyard in Peril," *Boston Globe*, Aug. 14, 1999; press release, U.S. Dept. of Transportation, "New York Man Charged with Filing False Tax Return Related to Ship Repair Kickback Scheme," Oct. 13, 1999 [http://www.dot.gov/affairs/1999/oig1999.htm]; "Boston Ship Repair Agrees to Pay $250K in Kickback Probe," *MM&P Wheelhouse Weekly*, vol. 4, no. 42 (Oct. 20, 2000).

[267] Henry J. Holcomb, "Ship-repair Yard Opens in Philadelphia," *Philadelphia Inquirer*, May 23, 2008. In Dec. 2008 Boston Ship Repair became Atlantic Marine Boston. See "Atlantic Marine Acquires Boston Ship Repair and Millennium," *MarineLog*, Dec. 31, 2008.

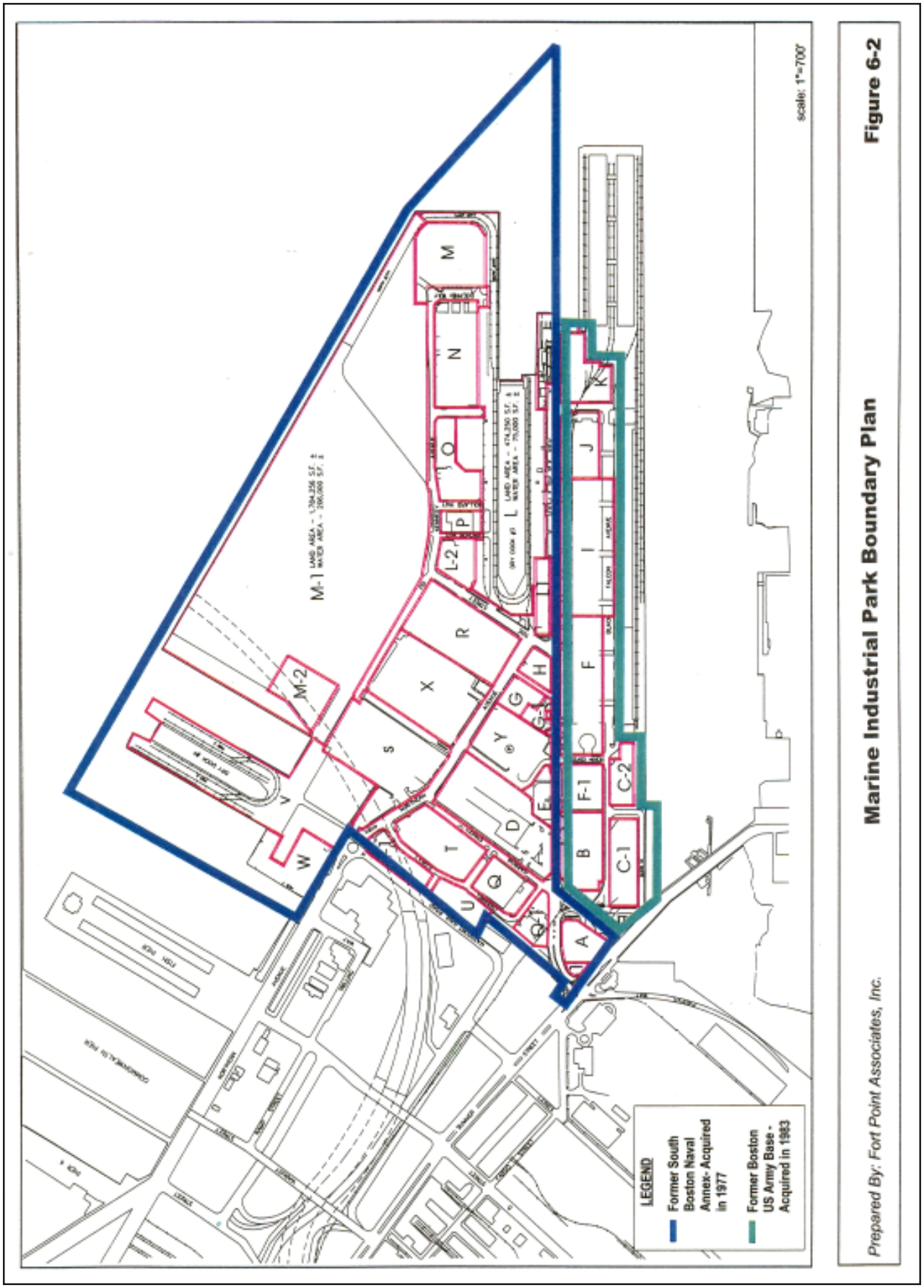


Figure 3-14 – Parcel Plan, Boston Marine Industrial Park, 2000

"Marine Industrial Park Boundary Plan." This plan shows how the Economic Development & Industrial Commission divided the Boston Marine Industrial Park into parcels for development purposes. Parcels B-C, F, and I-K are within the former Boston Army Base property. *NPS TIC 457/D6286*



in 10 different buildings. In addition to Braswell, the tenants included a van leasing business, a vending machine business, several warehouse firms, and even Harvard University.[268]

Initial efforts to attract manufacturing firms to the park centered on the former General Warehouse (Building 32). In April 1977 the Department of Commerce approved the designation of the building as a Foreign Trade Zone (FTZ). This status freed imported goods intended for ultimate export from normal customs duties. After rehabilitating the structure with a $1.2 million EDA grant, the EDIC attracted eight tenants, allowing full occupancy by 1980.[269] By 1982, it had managed to lease most of the Annex's major industrial buildings as well.[270] Most of these leases were for fairly short periods, with renewal options, rather than the long-term leases given to the developers at the Charlestown Navy Yard, reflecting the lesser level of lessee investment in property improvements. (See Table 3-4)

Unlike Charlestown, most of the buildings in the South Boston Annex were retained by the EDIC. Thus, even with the introduction of new structures, the property retains considerable integrity to the original wartime shipyard. The only major industrial building to be demolished was Building 30. Secondary structures removed between 1977 and 2008 included Buildings 14, 15, 15A, 21 (partial), 24, 29 (partial), 38, 39, 46, 48, 79, and 88.

Following the arrival of Marilyn Swartz Lloyd as director in 1984, the EDIC embarked on a program to improve the appearance of the site. One of the major projects involved the reconfiguration of the main entrance from Summer St. The short section of Harbor St. was abandoned and a new alignment extended Drydock Ave. to Summer St. As part of this project, the former Boiler House (Building 46) was demolished.[271] New guardhouses were erected at both

[268] Hill, *Political Economy of Military Base Redevelopment*, p. 328-29.

[269] Ibid., p. 337, 341-42; Anthony J. Yudis, "Boston Recycles to Keep Industry," *Boston Globe*, Sept. 28, 1980..

[270] For a summary of leases, see collateral assignment of leases and rents, Economic Development & Industrial Corp., Suffolk Deeds, bk. 16366, p. 288-90. Notices of most of the leases can be found in Suffolk Deeds.

[271] Hill, *Political Economy of Military Base Redevelopment*, p. 352; Joan Vennochi, "Boston Seeks State Grant for Marine Park Project," *Boston Globe*, June 15, 1984; Carol Pearson, "$3M Plan Announced for Marine Harbor Park," *Boston Globe*, Mar. 4, 1985; "Boston Gets Grant for Road Design," *Boston Globe*, Mar. 16, 1985.



Throughout the 1980s and into the early 1990s the General Ship Corp. had numerous contracts for repair work on Navy vessels. In addition to its lease of Dry Dock 4, it obtained temporary licenses from the EDIC for use of Dry Dock 3 when it needed the ability to dock larger vessels. Its most famous customer was RMS *Queen Elizabeth 2*, seen at left in Aug. 1992. The Oct. 1988 view above shows the frigate USS *Glover* (FF-1098) in Dry Dock 4 while USS *Stephen W. Groves* (FFG-29) is tied up at Pier 5.

General Ship (left); Stephen P. Carlson, Carlson Collection (above)



In 1995 EDIC issued a ten-year license to Boston Ship Repair Corp. for use of Dry Dock 3. That firm aggressively pursued both naval and private work. This view shows the cruise ship MV *Norwegian Majesty* being undocked in Nov. 2004. *Boston Ship Repair*

that entrance and at the Northern Ave. gate. The EDIC hired Jon Roll & Associates to design a uniform system of signage throughout the site—utilizing the new street numbers rather than the old Navy building numbers for identification—and installed bollards to enhance the maritime flavor of the site.[272]

In 1989 the EDIC created Dry Dock 3 Park, which featured an accessible platform which enabled the public to observe work going on in the dock. In September 2002 this park was dedicated in honor of Brian R. Skerry, a South Boston Vietnam veteran and member of the shipbuilder's union.[273]

In addition to ship repair, two classes of activity which are considered to be water-dependent have been key features of the Boston Marine Industrial Park. The first of these is seafood processing, discussed below. The second involved intermodal freignt handling operations. Because of its proximity to both Logan Airport and the Massachusetts Turnpike (Interstate 90) and other major highways, as well as its designation as a Foreign Trade Zone, the BMIP was an attractive site for freight handling firms. In 1982 the John J. Daly Co. obtained a 20-year lease for Building 18 to house its

[272] Roll, Barresi & Associates, "Marine Industrial Park" [http://www.roll-barresi.com/articles/marine park.pdf], accessed Oct. 28, 2009.

[273] "Dry Dock No. 3 Park," in *Marine Industrial Park*, chap. 5; Beverly O'Connor, "Brian Skerry Memorial Dedication," *South Boston Online* [web site] [http://www.southboston.net/About/brianskerry 91902.htm], accessed May 25, 2005.

Table 3-4
MAJOR LEASES, BOSTON MARINE INDUSTRIAL PARK[1]

Parcel[2]	Date	Lessee	Years[3]
B	09/02/1999	5-11 Drydock	25
D [12]	10/12/1982	Purolator Courier	20
D, E, T, T-1	08/01/2005	ICCNE	35
F [114/E-F]	03/21/1985	New England Design Center	50
G [20, 40]	01/18/1978	Marlyn Utilities	3*
I [114/B-D]	09/15/1983	DLJ-Hoffman	50
J [114/A]	10/01/1987	Drydock Associates	45
K	10/02/1985	Coastal Cement	15
L2 [54]	12/10/1999	Demetri Enterprises	66
M [31]	08/01/1984	Boston Port Service	20
N [16]	03/13/1979	PX Engineering	3
	04/01/1995	Boston Sand & Gravel	5
O [29]	01/24/1983	Au Bon Pain	15
P [14]	03/26/1982	Park Realty Trust	20
R [18]	07/15/1982	John J. Daly	20
S [53]	04/01/1981	General Ship	10*
	07/17/1985	John Nagle	20
T [19]	05/23/1979	Leonard Silver Manufacturing	2
	05/15/1995	Geo-Trans International	10
U [17]	12/02/1983	Stavis Seafood	20
V	04/01/1981	General Ship	10
W [56]	04/01/1981	General Ship	10
	10/19/2001	Wharf 8 Associates	40
W [57]	06/16/1980	O'Connell Seafood	20*
	11/09/1981	VII Corp.	20
X	07/23/1990	Boston Thermal Cogeneration	20*
	01/10/1997	New Boston Seafood Center	60
Y	06/20/1990	MIP Parking Facility Trust	45

Source: Suffolk Deeds, bk. 24205, p. 326-28; bk. 10091, p. 24-25; bk. 38097, p. 264-73; bk. 11472, p. 78-93; bk. 9061, p. 74-77; bk. 10538, p. 164-69; bk. 14313, p. 128-40; bk. 12094, p. 73-74; bk. 35954, p. 124-28; bk. 11416, p. 27-28; bk. 9162, p. 178; bk. 20400, p. 317-23; bk. 10205, p. 180-81; bk. 9931, p. 37-40; bk. 10013, p. 94-95; bk. 9757, p. 93-94; bk. 11769, p. 229-30; bk. 9189, p. 155-56; bk. 24692, p. 173-75; bk. 10668, p. 12-13; bk. 9757, p. 93-94; bk. 29496, p. 103-105; bk. 9581, p. 1-8; bk. 9869, p. 369-74; bk. 16395, p. 321-35; bk. 21134, p. 305-14; bk. 16366, p. 229-30

* Lease terminated prior to expiration of initial term.

[1] Excludes Massport Marine Terminal (Parcel M-1); subsequent transfers and assignments; licenses and non-recorded leases; subleases; and leases for individual tenants in multi-tenant structures (Parcels E [15], H [49], Q [32]).

[2] Current designations shown; building numbers shown in brackets.

[3] Base term only shown; most leases included one or more options.

operations.[274] Four years later, it expanded into Building 54 on a tenancy at will basis.[275]

Also in 1982 the Purolator Courier Co. leased the open parcel of land east of 7th (Harbor) Street.[276] It constructed a new warehouse building on the site, sometimes designated as Building 12. Often associated with one of its sub-tenants, British Airways World Cargo, this facility was the first major new construction in the park.[277]

[274] Notice of lease, Economic Development & Industrial Corp. to John J. Daly, July 15, 1982, Suffolk Deeds, bk. 10013, p. 94-95.

[275] Suffolk Deeds, bk. 16366, p. 289.

[275] Notice of lease, Economic Development & Industrial Corp. to Purolator Courier Corp., Oct. 12, 1982, Suffolk Deeds, bk. 10091, p. 24-25.

[277] Progress Photos, Parcel D, Sept.-Oct. 1983, Economic Development & Industrial Corp., Boston Marine Industrial Park, Boston, Mass.





The Harbor Gateway Project involved the construction of a new entrance to the Marine Industrial Park from Summer St. The 1986 view at top shows the area at the start of construction. The original awkward Harbor St./ Terminal St. entrance is seen behind Building 46. The new entrance road would be a continuation of Drydock Ave. and is seen above in Apr. 1988. Note the Gate House for use by the Municipal Police assigned to the area and the bollards which EDIC used to express the park's maritime connections.

Abbot-Boyle, Inc., BRA/EDIC (top); Photography Unlimited, BRA/EDIC (above)





The EDIC adopted a standardized system of signage for the Marine Industrial Park. These June 2008 views show directional signs at the corner of Drydock Ave. and Northern Ave. (above) and the building identification sign for 5-11 Drydock Ave. (right) which incorporates the park's diamond-shaped street number signs.

Stephen P. Carlson, BNHP





Freight handing was a major activity within the BMIP, taking advantage of the site's nearness to downtown Boston, the Massachusetts Turnpike, and Logan Airport. In 1983 and 1984 Peabody Construction erected a warehouse facility, sometimes identified as Building 12, for Purolator Courier. The view from the fall of 1983 at left shows Building 12 under construction, while the Nov. 1994 aerial view at right shows the completed building. It was often known by the name one of its principal tenants, British Airways World Cargo. *Anthony Taro, BRA/EDIC (left); Aero Photo, BRA/EDIC (right)*

The opening of the Ted Williams Tunnel increased the attractiveness of the park for such activities. Recognizing this, Neil Fitzpatrick, owner of Boston Freight Terminals, entered into a lease for Building 19 in May 1995.[278] Fitzpatrick later took over the lease of the Purolator parcel as well.

In the early 2000s, Fitzpatrick joined with Cargo Ventures of New York to create the International Cargo Center of New England (ICCNE). This project envisioned the creation of a new two-building complex replacing Buildings 12 and 19. In August 2005 the new firm entered into a 65-year lease agreement with the EDIC for the project.[279] Work on the first phase, which involved the demolition of the Purolator Courier facility as well as the former Marine Barracks (Building 15), began in November 2005.[280] The new structure was completed in May 2007. The second phase, involving replacement of Building 19, was scheduled to begin in 2008.[281]

Not all proposals for the site came to fruition. In 1987 the EDIC sought proposals for parcels within the former Boston Army Base near the new entrance.[282] In December it selected a proposal from a developer for a three-building complex known as Harbor Gateway. One structure, on Berth 10, would house fish processing firms, while the other two buildings would provide homes for graphic arts companies.[283] Although an option to lease was signed in December 1989, the project never came into being.[284]



In 2005 the Purolator building and the former Marine Barracks (Building 15) were demolished to allow the construction of a much larger freight handling facility for the International Cargo Center of New England. This Oct. 8, 2006, view shows construction at the corner of Harbor St. and Drydock Ave. *Stephen P. Carlson, BNHP*

In July 1990 the Boston Thermal Cogeneration Corp. signed a 20-year lease (with options which could extend the lease to a total of 70 years) for the parcel formerly occupied by Building 30. It proposed to construct a $100-million steam-electric cogeneration plant on the site. Opposition by environmentalists led Boston Thermal to abandon the project and cancel the lease the following December.[285]

As employment within the BMIP grew, so did the need for parking. In 1990, in a complicated series of transactions, the EDIC undertook the construction of a 1,100-car parking garage on a site

[278] Notice of lease, Economic Development & Industrial Corp. to Geo-Trans International (d/b/a Boston Freight Terminals), Feb. 17, 2000, Suffolk Deeds, bk. 24692, p. 173-75; Robert Stetson, "Neil Fitzpatrick, Boston Freight Terminals," *Atlantic Journal of Transportation*, Jan. 8, 1996, in *Marine Industrial Park*, chap. 5.

[279] Notice of assignment of lease, Geo-Trans International to International Cargo Development, Feb. 18, 2005, Suffolk Deeds, bk. 36586, p. 1-2; notice of lease, Economic Development & Industrial Corp. to ICCNE, Sept. 9, 1996, Suffolk Deeds, bk. 24692, p. 178; notice of lease, Economic Development & Industrial Corp. and Boston Redevelopment Authority to ICCNE, Aug. 1, 2005, Suffolk Deeds, bk. 38097, p. 264-73. Cargo Ventures had been a principal in the International Cargo Port project on the Massport portion of the former Army Base. However, it sold its interests in that project to a San Francisco-based firm in October 2003. See Assignment of lease, International Cargo Port-Boston to AMB Fund III Boston, Jan. 22, 2004, Suffolk Deeds, bk. 33811, p. 221-22. It would subsequently acquire the lease on the Bronstein Center in Building 114.

[280] Thomas C. Palmer, Jr., "Waterfront Cargo Facility Breaks Ground," *Boston Globe*, Nov. 29, 2005.

[281] Chris Reidy, "New Boston Cargo Center Opens," *Boston Globe*, May 29, 2007; Thomas Grillo, "Cargo Center Making Splash at Marine Park," *Banker & Tradesman Online*, June 4, 2007 [http://www.bankerandtradesman.com/adinfo/2007-06-04_CargoCenter.html], accessed June 23, 2007.

[282] Anthony Yudis, "Two Cleared Sites," *Boston Globe*, May 31, 1987; Anthony J. Yudis, "Six Developers Compete for South Boston Sites," *Boston Globe*, July 23, 1987.

[283] Anthony J. Yudis, "Development Team Chosen for Project at Marine Park," *Boston Globe*, Dec. 5, 1987.

[284] Jerry Ackerman, "$30M Marine Park Plan OK'd," *Boston Globe*, Dec. 24, 1989; notice of option to lease, Economic Development & Industrial Corp. to Harbor Gateway Associates, Mar. 12, 1990, Suffolk Deeds, bk. 16166, p. 171-77.

[285] Hill, *Political Economy of Military Base Redevelopment*, p. 354, 388; Peter J. Howe, "Development, Job Training are on Agency Head's Agenda," *Boston Globe*, Feb. 14, 1990; notice of lease, Economic Development & Industrial Corp. to Boston Thermal Cogeneration Corp., July 23, 1990, Suffolk Deeds, bk. 16395, p. 321-35; notice of termination of lease, Economic Development & Industrial Corp. to Boston Thermal Cogeneration Corp., Jan. 10, 1997, Suffolk Deeds, bk. 21134, p. 300.



The Central Park Facility was built in 1990 to serve tenants and visitors of the BMIP. Its completion freed up several sites within the park previously used for parking lots for development. *Engineers Design Group*

which had been open space on Northern Ave. next to Building 20. Construction of this facility freed up for development the area originally occupied by Buildings 30 and 48, which had been demolished and paved as a parking area. In 2002, to cope with the increased use of the facility by cruise ship passengers, a 300-car addition was completed.[286]

As well as providing homes for industrial firms, the EDIC has been involved with a number of job training activities. One of its first tenants was the Boston Technical Center located in Building 49. Opened in 1977 as a division of the EDIC and becoming an independent, full-accredited school in 1985, it provided training in construction and building trades as well as secretarial and office skills.[287]

The EDIC also provided space in the park for a unique culinary training program sponsored by the Federated Dorchester Neighborhood Houses. This saw placement in 1995 of what was named the Big Dig Diner on Parcel Q-1 near the BMIP's Summer Street entrance. Plagued by funding problems, the facility operated only from 1998 to 2003. Some 300 individuals earned certificates from its program. The diner was sold in 2007 and moved to Grafton, Ohio.[288]

[286] "Marine Industrial Park (MIP)–Overview," in *Marine Industrial Park*, chap. 1; Mass. Dept. of Environmental Protection, License No. 2347, Economic Development & Industrial Corp., May 9, 1990, Suffolk Deeds, bk. 16286, p. 60-63; Mass. Dept. of Environmental Protection, License No. 9230, Economic Development & Industrial Corp., Apr. 4, 2002, Suffolk Deeds, bk. 28377, p. 248-52. The site of the garage was leased by the EDIC to a real estate trust, which in turn subleased it back to the EDIC. See Notice of lease, Economic Development & Industrial Corp. to MIP Parking Facility Trust, June 20, 1990; notice of sublease, MIP Parking Facility Trust to Economic Development & Industrial Corp., June 20, 1990, Suffolk Deeds, bk. 16366, p. 229-32. The principal trustee of the trust was the director of the EDIC. See declaration of trust, MIP Parking Facility Trust, June 20, 1990, Suffolk Deeds, bk. 16366, p. 223-26.

[287] Hill, *Politics of Military Base Redevelopment*, p. 336-37, 388; Peter J. Howe, "City May End Subsidy to Job Training School," *Boston Globe*, Mar. 3, 1989; "Economic Development and Industrial Corporation of Boston (EDIC)," in *Marine Industrial Park*, chap. 1.

[288] Randy Garbin, *Diners of New England* (Mechanicsburg, Pa.: Stackpole Books, 2005), p. 45-46; Art Kramer, "Students' Program to Bring New Life to Vintage Diner," *Boston Globe*, Aug. 10, 1995; Robert Preer, "Diner Scrambles to Hash Out a Deal," *Boston Globe*, Oct. 22, 2006; "Big Dig Diner–MA," *Roadside Magazine Forum* [web site] [http://www.roadsideonline.com/forum/threads.php?id=798_0_10_0_C], accessed June 17, 2008.



The Big Dig Diner, seen here in 2003, represented a specialized job training program which while successful in terms of producing graduates ultimately failed because of funding difficulties. The diner itself was removed from the Marine Industrial Park in 2007 to become Nancy's Mainstreet Diner in Grafton, Ohio. *Road Age Media*

Seafood Processing In The BMIP

Although most of the BMIP is located within a Designated Port Area, the majority of the tenants within it are not truly maritime-related (or in the language of state law, water-dependent) businesses. Most of the tenants in the two major multi-tenant structures—Buildings 32 and 114—are industrial but of a nature where they could be located anywhere. Given that the EDIC's goals in the park were not just to promote port-related activities but also to provide homes for industrial firms being squeezed out of other areas of Boston, this was to be expected.

Next to ship repair, the highest level of water-dependent uses involved seafood processing. This activity had been one which the Massachusetts Port Authority had long advocated for the property. Beginning shortly after the creation of the park, it has grown through the years. Much of this growth has come as a result of developments elsewhere along the South Boston waterfront between the park and the Fort Point Channel.

The first proposal to bring the seafood industry into the park came in late 1979, when the O'Connell Seafood Co. proposed establishing a facility for the the repair of fishing boats at Pier 7 and Wharf 8. O'Connell and the EDIC joined to apply for a $2.1 million federal Urban Development Action Grant (UDAG) for the project, which was received in April 1980.[289] The EDIC signed a 20-year lease with O'Connell for the property in June.[290] It also used the UDAG funds to grant O'Connell a mortgage to fund the execution of the project.[291]

Work began at once, and involved construction of a facility containing an Ice Plant (Building 58), Vessel Repair Shop & Offices (Building 57), and a floating dry dock, as well as the demolition of the deteriorated Piers 7 and 8. In March 1981 EDIC Director Brian F. Dacey called the project "one of our biggest success stories at the park."[292] By October the situation had changed. On October 23,

[289] Fred Pillsbury, "A $2.1M Boost to Fishing Due Today," *Boston Globe*, Apr. 7, 1980; Fred Pillsbury, "HUD Confirms $2.1M Grant to O'Connell Seafood Corp.," *Boston Globe*, Apr. 8, 1980.

[290] Notice of lease, Economic Development & Industrial Corp. to O'Connell Seafood Co., June 16, 1980, Suffolk Deeds, bk. 9581, p. 1-8.

[291] Mortgage, O'Connell Seafood Co. to Economic Development & Industrial Corp., June 16, 1980, Suffolk Deeds, bk. 9580, p. 316-44.

[292] Anthony J. Yudis, "Boston: A $1 Billion Building Program," *Boston Globe*, Mar. 10, 1981.



The first new water-dependent use attracted to the BMIP was O'Connell Seafood, which developed a facility for repairing fishing boats at Wharf 8. This May 24, 1981, aerial view shows a floating dry dock tied up at Pier 6. An Ice Plant (Building 58) is at the edge of the wharf, while the main building (Building 57) is south of the Substation (Building 38). The third new structure, Building 55, is seen next to Building 56, then under lease to the General Ship Corp. *Aerial Photos International, BRA/EDIC*

1981, the EDIC declared O'Connell in default, citing the fact that it was seven months behind on its rent and had made no payments on its mortgage.[293] In early November, it terminated the lease.[294]

At that time, it leased the property to a new tenant, VII Corporation, which agreed to assume O'Connell's mortgage and purchased the facilities O'Connell had constructed after the EDIC had declined to take possession of them.[295] Five years later, VII Corporation received permission to expand its facilities by the construction of a marina for fishing vessels.[296]

The lease for O'Connell Seafood included provision for what was labeled "Commercial Relocation." This referred to the Commercial Lobster Co., which opened its wholesale and retail lobster facility in 1981. It remained there as a tenant at will until the city approved the relocation of the Harborlights Pavilion on the Wharf 8 site. One of the conditions of the state's approval of that project was the "successful relocation" of Commercial Lobster. Thus, on March 16 the EDIC/BRA board was presented with a proposal to provide the firm with "build-to-suit space" adjacent to its current site. Both a temporary building to house the firm during the relocation and the new permanent structure would be constructed as part of the pavilion development.[297]

The actual project involved the reconstruction of Building 56 rather than a totally new building. That structure was cut in half, with the eastern portion refurbished for Commercial Lobster.[298] The firm moved into the new premises in March 2002 under a 40-year lease. The operation included a retail store and restaurant doing business as Yankee Lobster Co.[299]

During the 1980s two additional seafood processing firms moved into the park. In 1983 Stavis Seafood leased Building 17.[300] Two years later, the John Nagle Co. leased Building 53.[301] Nagle subsequently subleased a portion of the building to the Mass. Bay Brewing Co., which opened the Harpoon Brewery there in 1987.[302] In 2008 the Nagle lease was voluntarily terminated and the EDIC entered into separate leases with Nagle and Mass. Bay Brewing for their respective portions of the site.[303]

In March 1996 the City of Boston and the Massachusetts Port Authority completed a Port of Boston Economic Development Plan. A key element of that plan involved the expansion of seafood processing within the BMIP.[304] In January 1997 work began on the New Boston Seafood Center on Parcel X, the former site of Buildings 30 and 48. This project involved the construction of a modern fish processing facility divided into six separate condominiums in two buildings. This approach "provided a mechanism for pooled financing by aggregating the small space and finance needs of each firm into one larger project."[305]

[293] Brian F. Dacey to John A. O'Connell, Jr., "Notice of Defaults," Oct. 23, 1981, Suffolk Deeds, bk. 9869, p. 366-67.

[294] Termination of lease, Economic Development & Industrial Corp., Nov. 9, 1981, Suffolk Deeds, bk. 9869, p. 359-65. John A. O'Connell, Jr., and his attorney were subsequently convicted of conspiracy to defraud the government through the submission of false and forged documents in conjunction with the UDAG grant. See *United States of America v. James H. Norton, Jr., and John A. O'Connell, Jr.*, no. 83-3410, U.S. Court of Appeals, 11th Circuit, Mar. 22, 1985, *Federal Reporter*, 2nd series, vol. 755 (St. Paul, Minn.: West Publishing Co., 1985), p. 1428; "US Sues 2 for Funds, Alleges Harbor Fraud," *Boston Globe*, July 22, 1986.

[295] Termination of lease, Economic Development & Industrial Corp., Nov. 9, 1981; notice of lease, Economic Development & Industrial Corp. to VII Corp., Nov. 9, 1981; deed, Economic Development & Industrial Corp. to VII Corp., Nov. 9, 1981; mortgage, VII Corp. to Economic Development & Industrial Corp., Nov. 9, 1981, Suffolk Deeds, bk. 9869, p. 359-65, 369-404.

[296] Mass. Dept. of Environmental Quality Engineering, License No. 1378, VII Corp., May 23, 1986, Suffolk Deeds, bk. 12518, p. 42-47; Dept. of Army Permit MA-BOSS-86-050, VII Corp., May 15, 1986, Suffolk Deeds, bk. 14088, p. 9-17.

[297] "O'Connell Seafood UDAG—Project Boundaries" [drawing], June 11, 1980, Suffolk Deeds, bk. 9581, p. 8; Robert Baldwin to Economic Development & Industrial Corp. et al, "Build-to-suit seafood facility at 300 Northern Avenue in the Marine Industrial Park to be leased to Commercial Lobster Company," Mar. 16, 1999, Suffolk Deeds, bk. 26198, p. 180-83.

[298] Marla Cumming to Steve Carlson, "BMIP Questions," June 19, 2008, HRS Project File, Division of Cultural Resources, BNHP; Lisa Van der Pool, "The Waterfront Has a Fish Story," *Boston Business Journal*, Apr. 3, 2006..

[299] Van der Pool, "Waterfront Has a Fish Story"; notice of lease, Economic Development & Industrial Corp. to Wharf 8 Associates, Feb. 5, 2002, Suffolk Deeds, bk. 29496, p. 103-105; press release, Boston Redevelopment Authority, "Mayor Menino Celebrates Yankee/Commercial Lobster's Grand Reopening," Mar. 19, 2002 [http://www.ci.boston.ma.us/bra/press/PressDisplay.asp?pressID=73], accessed May 3, 2005.

[300] Notice of lease, Economic Development & Industrial Corp. to Stavis Seafood, Dec. 2, 1983, Suffolk Deeds, bk. 10668, p. 12-13; "Stavis Seafood Moves to So. Boston Park," *Boston Globe*, Mar. 4, 1984.

[301] Notice of lease, Economic Development & Industrial Corp. to John Nagle Co., July 17, 1985, Suffolk Deeds, bk. 11769, p. 229-30.

[302] Harpoon Brewery, *The History of Harpoon* [web page] [http://www.harpoonbrewery.com/index.cfm/page/Harpoon-History/pid/28499], accessed June 22, 2008; Bob MacDonald, "Boston's New Pour: Harpoon Ale," *Boston Globe*, June 4, 1987.

[303] Lease termination agreement, Economic Development & Industrial Corp., John Nagle Co., and Mass. Bay Brewing Co., Feb. 11, 2008; notice of lease, Economic Development & Industrial Corp. to John Nagle Co., Mar. 11, 2008; notice of lease, Economic Development & Industrial Corp. to Mass. Bay Brewing Co., Mar. 1, 2008, Suffolk Deeds, bk. 43253, p. 270-83, 286-92.

[304] Boston Redevelopment Authority, *South Boston Waterfront District Municipal Harbor Plan* [hereafter *South Boston Waterfront Harbor Plan*] (draft; Mar. 2000), TIC 457/D6286, p. 59-60; "A New View of the Harbor" [editorial], *Boston Globe*, Sept. 27, 2003.

[305] Karl F. Seidman, *Economic Development and Finance* (Thousand Oaks, Calif.: Sage Publications, 2004), p. 346; Mass. Dept. of Environmental Protection, License No. 5937, New Boston Seafood Distribution Center, Nov. 27, 1996, Suffolk Deeds, bk. 21134, p. 301-304; notice of lease, Economic Development & Industrial Corp. to New Boston Seafood Center,

Not all of the moves of seafood processing firms into the park were voluntary. In 1995 Paul's Lobster Co. moved into Building 20 after changes in Northern Avenue eliminated truck access to its previous facility.[306] The North Coast Sea-Foods Corp., through its alter ego of 5-11 Drydock LLC, constructed a new facility on Parcel B in 2000 after its original facility was taken by eminent domain for the construction of the Boston Exhibition & Convention Center.[307]

EDIC Redevelopment Of The Army Base

The EDIC amended its development plan for the Marine Industrial Park in March 1980 to reflect the inclusion of a portion of the Army Base within it.[308] Following the actual acquisition of the property three years later, it began efforts to rehabilitate and lease the massive Storehouse (Building 114). It decided to approach it on a piecemeal basis. Thus, the structure was redeveloped in three segments—Section A as the Drydock Center; Sections B, C, and D as the Bronstein Center; and Sections E and F as the Boston Design Center. Because of its high profile, the Boston Design Center has dominated public attention, and many people refer to the entire building by that name.[309]

In conjunction with the Boston Design Center, the Army Base Administration Building (Building 113) and Dispensary (Building 134) were demolished for landscaping and parking. Redevelopment also saw the removal of all but one of the railroad tracks extending along the length of the facility and the widening of Drydock Ave.[310] Rail service into the property, however, was severed during the Central Artery/Tunnel project. Although there have been proposals to reconnect what is termed Track 61, and even to extend rail service to the Massport Marine Terminal, no action appears imminent as of mid-2008.

The other major development on the former Army Base property involved the creation of the sole water-dependent industry in the BMIP not related to ship repair which actually used pier space. In 1985 the area of the former Boiler House (Building 116) was leased to the Coastal Cement Corp. for the construction of a bulk cement handling facility.[311] EDIC Director Swartz Lloyd chose a pink with bold red trim color scheme for the building which accompanied the Spanish-owned firm's new silos.[312] Coastal Cement also funded the construction of Pier 10 Park adjacent to its site, while the EDIC obtained funding to reconstruct Pier 10 itself.[313]



The redevelopment of Section F of Building 114 saw the creation of an entrance at the west end of the structure facing a landscaped plaza. Note also the distinctive pediment added to the roof parapet.

Boston Design Center



This Oct. 29, 1986, photograph shows two of the four silos of the Coastal Cement complex under construction.

Aerial Photos International, BRA/EDIC

Jan. 10, 1997, Suffolk Deeds, bk. 21134, p. 305-14; master deed, New Boston Seafood Center Leasehold Condominium, Mar. 24, 1998, Suffolk Deeds, bk. 22291, p. 245-84.

[306] Thomas C. Palmer, Jr., "'Happy Lobster' Sours in New Home," *Boston Globe*, Nov. 10, 1996.

[307] Lisa Van der Pool, "Boston's Blue-Collar Blues," *Boston Business Journal*, Apr. 20, 2007; Mass. Dept. of Environmental Protection, License No. 7917, North Coast Sea-Foods Corp., Mar. 3, 1999, Suffolk Deeds, bk. 23622, p. 44-47; notice of lease, Economic Development & Industrial Corp. to 5-11 Drydock, Sept. 2, 1999, Suffolk Deeds, bk. 24205, p. 326-28; notice of sublease, 5-11 Drydock to North Coast Sea-Foods Corp., Aug. 18, 2000, Suffolk Deeds, bk. 25338, p. 34-36.

[308] Economic Development & Industrial Corp., order of taking, Jan. 4, 1993, Suffolk Deeds, bk. 18160, p. 140. For the amendment, see Economic Development & Industrial Corp. of Boston, *First Amendment to the Economic Development Plan for the Boston Marine Industrial Park* (Jan. 1980).

[309] Hill, *Political Economy of Military Base Redevelopment*, p. 342-50; "Building 114, Boston, Massachusetts," in *Marine Industrial Park*, chap. 4, p. 190-97.

[310] "Building 114, Boston, Massachusetts," in *Marine Industrial Park*, chap. 4, p. 194; Hill, *Political Economy of Military Base Redevelopment*, p. 352.

[311] Notice of lease, Economic Development & Industrial Corp. to Coastal Cement Corp., Oct. 2, 1985, Suffolk Deeds, bk. 12094, p. 73-74; Hill, *Political Economy of Military Base Redevelopment*, p. 351, 387, 388; HMFH Architects, *Coastal Cement Corporation* [web page] [http:www.hmfh.com/specialized_projects/commercial/cement/project1.shtm], accessed Aug. 27, 2006.

[312] Hill, *Political Economy of Military Base Redevelopment*, p. 352.

[313] Ibid., p. 351; Halvorson Co., "Pier 10 Park, Boston, Massachusetts," in *Marine Industrial Park*, chap. 5; Mass. Dept. of Environmental Protection, License No. 1636, June 22, 1987, Suffolk Deeds, bk. 13826, p. 139-41. This park was sometimes referred to as "Flynn Park" (after Mayor Raymond L. Flynn), but that designation is no longer in common usage.

As discussed above, the Harbor Gateway project would have seen development on the parcels at the west end of the Army Base. Although this did not occur, all of the structures on the property (other than Building 120, which belongs to Massport) were demolished. Parcel B was finally utilized in 1999 for the North Coast Sea-Foods building. Berth 10 has been used for boats serving the Thompson Island Outward Bound Education Center located on Thompson Island in Boston Harbor.[314]

One of the more interesting proposals for the site has been for the establishment of a heliport on Parcel C-2. A tentative developer was selected in June 2008 to explore the concept. The idea, however, has received considerable negative comment from members of the South Boston community.[315]

BMIP Master Plan Revisions

In January 1996 Mayor Thomas Menino proposed selling the industrial park. "It's time to let the private sector take over" and "put the property back on the tax rolls," he argued.[316] At the same time, the mayor favored relaxing of the zoning which limited the area to maritime-related industrial uses. Opposition from both the South Boston community, concerned over the potential loss of blue-collar jobs, and advocates of preserving Boston as a working port killed the proposal.[317] As an editorial in the *Boston Globe* explained, "the Marine Industrial Park is a key component of the city's overall plan for a working harbor" and "private developers are unlikely to see sufficient profit in such maritime uses."[318]

The debate over the sale of the park came as the BRA/EDIC began development of a new master plan for it. A draft released in July 1996 proposed changing the boundary of the Designated Port Area (DPA) by moving it closer to the water. Under this proposal, Building 114 would be removed from the DPA and the Harbor Gateway parcel to its west would be opened to "full commercial activity," with a hotel being reported as the city's preference for the site.[319] In the face of public opposition, Mayor Menino announced in October that he did not favor the hotel idea.[320]

In July 1998 a revised draft of the plan was released. Taking into account the comments received during the public review process on the 1996 version, it ruled out sale of the park. It kept the DPA boundary as it was currently drawn, and, while still revising some of the zoning, restricted commercial office use. Parcels A and Q-1, near the Summer St. boundary of the site, were proposed as a waterfront commercial district, while Wharf 8 was identified as a waterfront retail area. Under the plan, two-thirds of all development in the park would be devoted to maritime industrial uses.[321]

In reviewing the environmental impact report accompanying the 1998 draft, Massachusetts Secretary of Environmental Affairs Trudy Coxe required further examination of the proposed zoning changes for Wharf 8. This November 1998 decision also pointed out that many of the proposed uses within the maritime industrial zone were either banned or inconsistent with "transitional uses" of a DPA. Coxe noted that the decision did not take into account the recently announced proposal to temporarily relocate the Harborlights Pavilion to Wharf 8 (discussed in detail below), stating that it should go through its own formal review process.[322]

The final environmental impact report for the master plan was submitted in December 1999. Although nearly identical with the 1998 version, it did eliminate the proposed waterfront retail zoning.[323] It was approved as adequate by the Secretary of Environmental Affairs in March 2000.[324] This approval, however, was not the final review of the plan. That review was by the Department of Environmental Protection under the state waterways regulations, commonly known as Chapter 91. The Chapter 91 review was completed in March 2005, when a formal Chapter 91 license was issued to the BRA/EDIC for the park.[325]

A key condition of the license, which was good for 65 years, was that "under no circumstances shall less than 67% of the DPA portion of the BMIP … be dedicated exclusively to … water-dependent industrial uses."[326] This included Parcels B, C-1, C-2, D, G, K, L, L-1, L-2, M-1, M-2, V, V-1, W, X, and Z. As discussed elsewhere, the FleetBoston Pavilion could continue until a water-dependent use was identified for Parcel W.[327] The license incorporated the definitions of acceptable uses within each different zoning category, and provided a simplified review process for future minor changes.[328]

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[314] Economic Development & Industrial Corp., Minutes, Board of Directors' Meeting, Sept. 12, 2002. The Thompson Island Outward Bound Education Center is a non-profit organization providing outdoor adventure and learning programs for youngsters from diverse economic backgrounds. See *Thompson Island Outward Bound* [web site] [http://www.thompsonisland.org/english/about], accessed June 25, 2008.

[315] Boston Redevelopment Authority, Minutes, Board of Directors' Meeting, June 24, 2008; Donna Goodson, "Heliport Plan Doesn't Fly in South Boston," *Boston Herald*, June 7, 2008; Rick Winterson, "Heliport Meeting Held at Condon," *South Boston Online*, June 12, 2008 [http://www.southbostononline.com/heliportmeeting061208.cfm].

[316] Tina Cassidy, "Menino: City to Sell Industrial Park," *Boston Globe*, Jan. 1996. This was not the first such proposal. In Sept. 1985 EDIC board member Kevin Phelan had made a similar suggestion. See Bruce Mohl, "Boston Agency Ponders Selling Industrial Park," *Boston Globe*, Sept. 12, 1985. A divided board resulted in the idea being abandoned. See Hill, *Political Economy of Military Base Redevelopment*, p. 359 n.56, 387.

[317] Hill, *Political Economy of Military Base Redevelopment*, p. 360-61; Geeta Anand, "Mayor Won't Sell Marine Industrial Park," *Boston Globe*, Oct. 16, 1997.

[318] "A Sellout on the Harbor" [editorial], *Boston Globe*, Mar. 27, 1996.

[319] *South Boston Waterfront Harbor Plan*, p. 49; Richard Kindleberger, "Marine Industrial Park Has Some Growing Pains," *Boston Globe*, Sept. 8, 1996; Hill, *Political Economy of Military Base Redevelopment*, p. 390. For a description of uses allowed within a Designated Port Area (and the city's Maritime Economy Reserve [MER] zoning within such areas), see Boston Redevelopment Authority, *Harborpark Plan: City of Boston Municipal Harbor Plan* (Oct. 1990), TIC 457/D6276, p. 62-63.

[320] "Menino Doesn't Back Hotel at Marine Park," *Boston Globe*, Oct. 16, 1996.

[321] *South Boston Waterfront Harbor Plan*, p. 49, 50-52; "BRA Issues MIP Master Plan Update," *South Boston Tribune*, Aug. 13, 1998.

[322] Seaport Alliance for a Neighborhood Design, *SAND News!*, Nov. 23, 1998 [web page] [http://bostonseaport.com/SAND/Archive/981123mip.html], accessed June 10, 2008.

[323] Economic Development & Industrial Corp., *Marine Industrial Park Master Plan Final Environmental Impact Report*, EOEA #08161 (Dec. 1999).

[324] Certificate of the Secretary of Environmental Affairs, "Boston Marine Industrial Park," EOEA #08161, Mar. 16, 2000, in Massachusetts Environmental Policy Act Office, *The Environmental Monitor*, vol. 53, no. 10 (Mar. 22, 2000).

[325] *South Boston Waterfront Harbor Plan*, p. 52; Mass. Dept. of Environmental Protection, License No. 10233, Boston Redevelopment Authority and Economic Development & Industrial Corp., Mar. 16, 2005, Suffolk Deeds, bk. 36864, p. 235-62.

[326] Suffolk Deeds, bk. 36864, p. 236.

[327] Ibid., p. 237.

[328] Ibid., p. 238-41, 258, 260-62.

Introduction Of Non-Water-Dependent Uses

Throughout its history, the BMIP has been subject to pressures to introduce activities into it which were not maritime or industrial-related. The focal point for the resolution of these issues has been the licensing procedure under Chapter 91 of the Massachusetts General Laws, which governs state waterways. Many of the licenses received under Chapter 91 mandated certain water-dependent uses in exchange for approval of non-water-dependent uses. For example, the license received for the construction of the Boston Design Center mandated that the area surrounding Dry Dock 3 be reserved "for use by water-dependent industries," that the Design Center "shall remain in industrial use (warehouse and design showroom and accessory uses)," and that part of the building's lobby could be used by groups "for special water-related or fundraising events designed to encourage and support the public's understanding of Boston Harbor."[329]

Pressures to allow non-maritime-related uses came to a head in late 1998, when the City of Boston decided to allow the Harborlights Pavilion, a seasonal entertainment venue, to relocate to Wharf 8 at the BMIP from the Fan Pier.[330] This proposal drew considerable opposition from groups opposing the introduction of non-industrial uses into the park.[331] The state Department of Environmental Protection (DEP) in February 1999 agreed to allow the move under a five-year license.[332] Renamed the BankBoston Pavilion, the new facility featured an innovative tensile pavilion design and opened the following July.[333]

While the license was intended to be temporary, it is clear that neither the owner of the pavilion nor the city had any real intention of moving it. In late 2001 the state sought information as to the progress towards identifying an alternate site. In December the DEP expressed "surprise" to learn from promoter Don Law that "none of the 19 alternative sites evaluated … passed … for suitability" and requested that he "undertake a more rigorous alternatives analysis."[334] Law's request for an extension of his permit received strong support from city officials, who told the press that the pavilion was "consistent with our waterfront planning effort" and that "nobody's approached the city on an appropriate maritime use for the site."[335]

In late June the DEP issued a one-year extension of the permit, through 2004. At the same time it called on the BRA to issue a formal request for expressions of interest in a maritime use for the site. BRA Director Mark Maloney rejected this proposal in late July. In a letter to the DEP, he opposed "the push to hastily attract a maritime user." Stating that "the pavilion is a worthwhile interim use that attracts residents and visitors to our waterfront," he wrote that "it would be nonsensical to remove the pavilion and add to the supply of vacant waterfront property."[336]



The FleetBoston Pavilion, located in the area of Wharf 8 at the west end of the Marine Industrial Park, opened in July 1999. Wharf 8 is also the home of A.C. Cruise Lines. *Jay Connor, A.C. Cruise Lines*

While the BRA took the attitude that "no one is knocking on our door for that site," proponents of maritime use such as the Boston Harbor Associates countered that the city had "not actively marketed it." The *Boston Globe*, citing maritime businesses who were interested in the area but were frustrated by the city's attitude, agreed, urging the city "to escalate … search efforts for water-dependent businesses."[337] But, despite backing from state environmental officials, opponents of the pavilion appeared to be in a minority and lacking in political support.

In an effort to circumvent the requirements of the state's permit, political supporters of the pavilion inserted a rider into the state's Fiscal Year 2004 budget which provided for its continued presence on Wharf 8 until 18 months after the BRA had submitted a certificate that it had identified a water-dependent user for the property.[338] Although this section was vetoed by Acting Governor Kerry Healey on June 30, 2003,[339] the Department of Environmental Protection saw the handwriting on the wall. Thus, in issuing its Chapter 91 license for the Boston Marine Industrial Park master plan in March 2005, it incorporated the vetoed language.[340]

The Massport Marine Terminal

By 1976, redevelopment of the South Boston Annex and the Boston Army Base had became subject to a "turf war" between the

[329] Mass. Dept. of Environmental Protection, License No. 5317, Boston Design Center and Economic Development & Industrial Corp., Feb. 12, 1986, Suffolk Deeds, bk. 20355, p. 297-301.

[330] Anthony Flint, "Harborlights Move to Crowd Business at Port, Group Says," *Boston Globe*, Oct. 20, 1998.

[331] Anthony Flint, "Officials Raise Doubt on Harborlights Move," *Boston Globe*, Nov. 21, 1998; Anthony Flint, "Harborlights Proposal Questioned at Hearing," *Boston Globe*, Dec. 17, 1998.

[332] "License is OK'd for Harborlights," *Boston Globe*, Jan. 27, 1998; Paul Langner, "Harborlights Gets 5-Year Deal at New Site," *Boston Globe*, Feb. 12, 1999; Mass. Dept. of Environmental Protection, Determination of Applicability JD 98-6009, Feb. 11, 1999, Suffolk Deeds, bk. 23575, p. 2-7.

[333] Steve Morse, "Aretha Fires Up New Pavilion," *Boston Globe*, July 13, 1999; Andrew Formicella, "Tensile Pavilion in Boston," *Architecture Week*, no. 59 (July 25, 2001), p. B1.1-2. Reflecting changes in bank ownership, the facility's name became first the FleetBoston Pavilion and then the current Bank of America Pavilion.

[334] Thomas C. Palmer, Jr., "Pavilion Aims to Stay on Waterfront," *Boston Globe*, Feb. 13, 2002.

[335] Thomas C. Palmer, Jr., "Promoter, State Clash on Music Tent," *Boston Globe*, May 23, 2002.

[336] Thomas C. Palmer, Jr., "Boston at Odds with DEP Over FleetBoston Pavilion," *Boston Globe*, Aug. 3, 2002.

[337] Ibid.; "Waterfront Intrusion" [editorial], *Boston Globe*, Oct. 30, 2002. For an opposite editorial view, see "State Gets It Wrong on the Waterfront" [editorial], *Boston Herald*, July 3, 2002.

[338] Chap. 26, Acts of 2003 (Session Laws) [http://www.mass.gov/legis/laws/seslaw03/s1030026.htm], accessed June 19, 2008.

[339] Ibid.

[340] Suffolk Deeds, bk. 36864, p. 237.

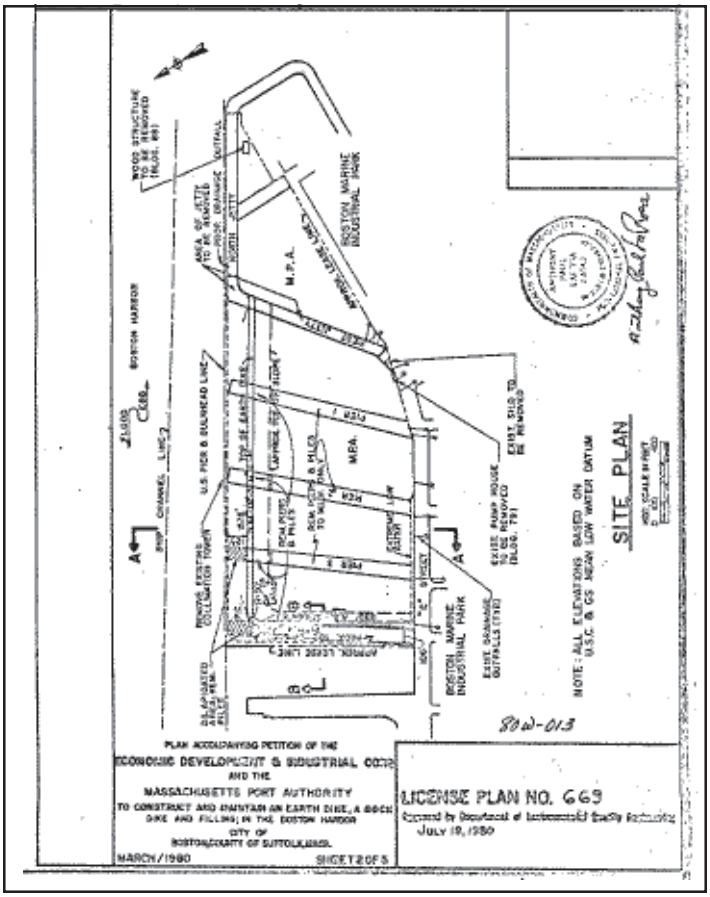
EDIC and the Massachusetts Port Authority. The successor of a series of agencies which since the late nineteenth century had promoted the development of Boston as a working port, Massport had already staked a claim to the South Boston Annex in the early 1960s, when, as discussed above, it had tried to obtain portions of the property from the Navy under the reversionary clauses of the original grant of land to the Navy. It also possessed a long-term lease with the federal government for operation of the waterfront portions of the Boston Army Base.

In the 1960s and 1970s the development of containerized cargo dramatically altered the nature of port activities and facilities. Rather than the storage and transfer sheds next to merchant ship berths required when bulk cargo was moved on and off ships by large numbers of longshoremen, containers required vast open areas where gantry cranes could load and offload them from ships and also transfer them to either railroad flat cars or flatbed trucks.

Massport saw the opportunity to develop the Annex property as a container port to complement its facilities on Mystic Pier in Charlestown and at Castle Island on the opposite side of the Reserved Channel from the Army Base. It sought to acquire 100 of the 138 acres at the Annex, a proposal which would have severely compromised the ability of the EDIC to develop the Marine Industrial Park in a way which would create the maximum number of jobs.[341]

The dispute between the two agencies dragged on for several years. By early 1979 it was threatening to affect development at Charlestown as well, with Massport refusing to waive its potential claims to that shipyard. Boston Mayor Kevin White stepped into the dispute and appointed an arbitration team to settle the issue.[342] The ultimate agreement, reached on May 10, 1979, was ratified by a series of actions by both parties over the next few months, starting with a May 1979 deed from Massport waiving any rights to acquisition of the Annex property.[343] In late November, EDIC leased 47 acres of the Annex to Massport. This included 10 acres at the North Jetty and the 37 acres between the West Jetty and Pier 4. That area was to be filled and would become what is currently known as the Massport Marine Terminal (MMT).[344] In return, Massport agreed that Building 114 and the remainder of the non-Massport-leased portion of the Army Base would go to EDIC when disposed of by the federal government. On its part, EDIC agreed not to pursue acquisition of the portion of the former Naval Support Activity ("E" Street Annex) not being retained by the Army.[345]

As part of these transactions, Massport subleased Buildings 117 and 118 at the Boston Army Base to EDIC.[346] There is no record



This Mar. 1980 drawing showing the proposed filling of the area between the West Jetty and Pier 4 accompanied the Chapter 91 license for the project. *Suffolk Deeds, Book 9532*

that EDIC ever pursued the use of those structures, nor is there any recorded document cancelling the lease.

The initial use of the Massport Marine Terminal was as an area for the unloading of imported automobiles, and the site became known informally as the Subaru Pier.[347] The Central Artery/Tunnel project, however, had a substantial impact on the site. As the Massachusetts Highway Dept. took over the area under temporary construction easements as a staging area in the early 1990s, Subaru departed.[348]

With the highway project coming to an end, planning for the future of the site began.[349] In keeping with the concept of using the BMIP and MMT for fish processing developed in the 1996 port plan, Massport set aside a ten-acre area at the western edge of the site for that purpose. In the early 2000s these parcels were developed with the construction of two seafood processing facilities,

[341] Hill, *Political Economy of Military Base Redevelopment*, p. 337-38.

[342] Ibid., p. 338-39; Fred Pillsbury, "A New Life for the Old Navy Area," *Boston Globe*, Dec. 25, 1979.

[343] Hill, *Political Economy of Military Base Redevelopment*, p. 339; Massachusetts Port Authority, Certificate of Vote, Dec. 27, 1979, Suffolk Deeds, bk. 9455, p. 75; release deed, Massachusetts Port Authority to Economic Development & Industrial Corp., May 24, 1979, Suffolk Deeds, bk. 9455, p. 68-70.

[344] Notice of lease, Economic Development & Industrial Corp. to Massachusetts Port Authority, Jan. 9, 1980, Suffolk Deeds, bk. 9444, p. 247-48; Seasholes, *Gaining Ground*, p. 330, 332; Mass. Dept. of Environmental Quality Engineering, License No. 669, Economic Development & Industrial Corp. and Massachusetts Port Authority, July 18, 1980, Suffolk Deeds, bk. 9532, p. 177-86.

[345] Hill, *Political Economy of Military Base Redevelopment*, p. 339 n. 24.

[346] Notice of sublease, Massachusetts Port Authority to Economic Development & Industrial Corp., Jan. 9, 1980, Suffolk Deeds, bk. 9455, p. 71-80. While some sources indicate this was only an option, the language is clearly that of an actual lease.

[347] Fred Pillsbury, "Subarus Find a Berth at Hub Industrial Park," *Boston Globe*, May 2, 1984; notice of lease, Massachusetts Port Authority to Boston Port Service, July 31, 1984, Suffolk Deeds, bk. 11416, p. 29-30. In addition to the property subleased from Massport, Boston Port Service also leased Building 31 from EDIC. See notice of lease, Economic Development & Industrial Corp. to Boston Port Service, Aug. 1, 1984, Suffolk Deeds, bk. 11416, p. 27-28.

[348] Joan Vennochi, "The Name Game," *Boston Globe*, Apr. 14, 1993.

[349] Massachusetts Port Authority, Business Development and Maritime Depts., *Massport Marine Terminal Development Issues and Alternatives Analysis: Executive Summary* (Sept. 2002).

Massport Marine Terminal





Between 1981 and 1984 the EDIC demolished Piers 1 to 4 and created a new filled pier. Leased to Massport as the Massport Marine Terminal, it was used as an automobile unloading facility until the Mass. Highway Dept. took it over for Central Artery/Third Harbor Tunnel activities. The filling of the area has just begun in the May 24, 1981, view at left, while it is nearing completion in the June 7, 1984, view above.

Aerial Photos International, BRA/EDIC



The filled area became commonly known as the Subaru Pier because of its use as an automobile unloading terminal. This view of the site was taken from USS *Cassin Young* (DD-793) in Oct. 1988.

Stephen P. Carlson, Carlson Collection



Vent Building 6, Aug. 27, 2006

The first permanent structure on the Massport Marine Terminal was this vent building for the Ted Williams Tunnel. Note the landscaped Boston HarborWalk along the water's edge. *Stephen P. Carlson, BNHP*



Used as a laboratory by the Central Artery/Tunnel project, this structure, also designated Building 88, had originally housed a car wash. This view dates to Aug. 27, 2006. *Stephen P. Carlson, BNHP*



Legal Sea Foods, Aug. 29, 2004

The Legal Sea Foods processing center and corporate headquarters opened in 2003. *Stephen P. Carlson, BNHP*



Harbor Seafood, May 18, 2008

The northwest portion of the area was set aside for seafood processing facilities. Originally Pilot Seafood, this facility opened in 2001.

Stephen P. Carlson, BNHP



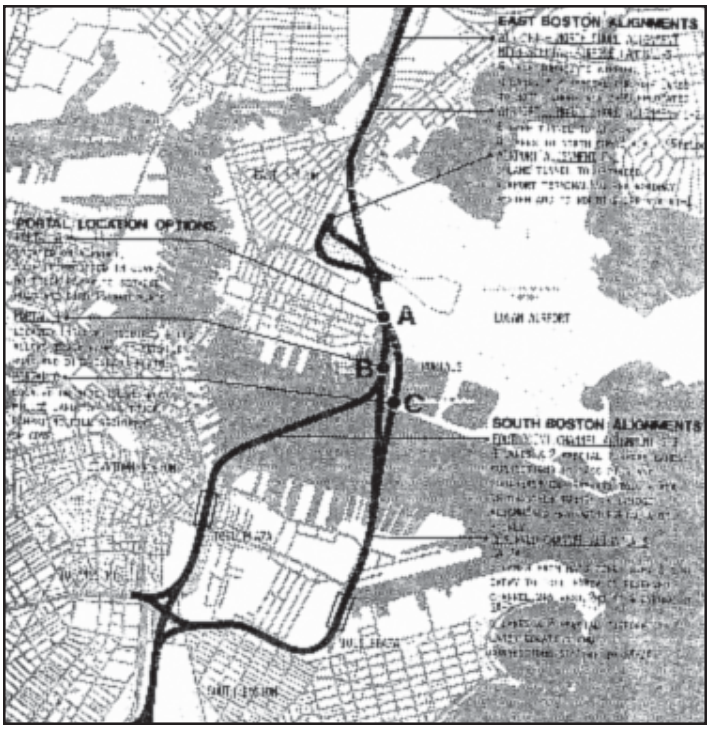
This graphic shows the proposed Boston Cargo Terminal, construction of which is scheduled to begin in 2008. The project includes three structures as well as a bulk cement facility and repairs to the North Jetty. *Massport*



This Feb. 16, 2000, aerial photograph shows the Boston Marine Industrial Park and the Black Falcon Terminal. Note the portal of the Ted Williams Tunnel just to the west of the site's boundary. The FleetBoston Pavilion (now the Bank of America Pavilion) occupies the area adjacent to Dry Dock 4. The Massport Marine Terminal still shows signs of its use as laydown space for the Central Artery/Tunnel project, together with the beginning of construction of new seafood processing facilities at the west end of the site. The historic vessel USS *Salem* (CA-139) is undergoing restoration in Dry Dock 3. *Mark C. Flannery, BRA/EDIC*

including the headquarters of the Legal Sea Foods restaurant chain. In keeping with the maritime industrial nature of the area, that facility did not include a retail outlet or restaurant.[350]

Massport then sought proposals for the rest of the site.[351] After a metal recycling facility proposal came up against considerable opposition from the City and South Boston community,[352] Massport chose a proposal for a Boston Cargo Terminal. It was scheduled to begin construction in 2008. The project will see three buildings placed on the site, along with two cement storage structures. The North Jetty is to be repaired for use by deep draft vessels. Public walks and other amenities are also included in the scheme.[353]



This 1972 plan shows several alternative routings for a tunnel under Boston Harbor connecting the Massachusetts Turnpike and Logan Airport. One of the proposed South Boston alignments would have crossed the South Boston Annex. A variation of this routing would be the one ultimately chosen for the project. *Bostonroads.com*

[350] Susan Diesenhouse, "New Wave of Business," *Boston Globe*, Sept. 27, 2003; press release, Massachusetts Port Authority, "Cellucci, Menino, Moakley, Law Announce New Fish Processing Facility," Apr. 27, 2000 [http://www.massport.com/about/press00/press_news_seafo.html], accessed June 10, 2008; press release, Massachusetts Port Authority, "Swift, Menino, Hart, Kelly Open New Fish Processing Facility," Sept. 6, 2001 [http://www.massport.com/about/press01/press_news_fish.html], accessed June 10, 2008; press release, Boston Redevelopment Authority, "Mayor Menino, Massport & BRA Welcome New Legal Sea Foods' Facility to the Boston Marine Industrial Park," Nov. 21, 2002 [http://www.ci.boston.ma.us/bra/press/PressDisplay.asp?pressID=124], accessed May 3, 2005;

[351] Press release, Massachusetts Port Authority, "Prime Waterfront Land Available for Maritime Use; Interest Sought for Maritime Industrial Development on Massport Marine Terminal," Jan. 23, 2003 [http://www.massport.com/about/press03/press_news_mmter.html], accessed June 24, 2003.

[352] Chris Reidy, "Massport Drops Facility Plan," *Boston Globe*, Mar. 5, 2005.

[353] Thomas C. Palmer, Jr., "Group Proposes $50m Subaru Pier Project," *Boston Globe*, Sept. 20, 2005; Certificate of the Secretary of Energy &

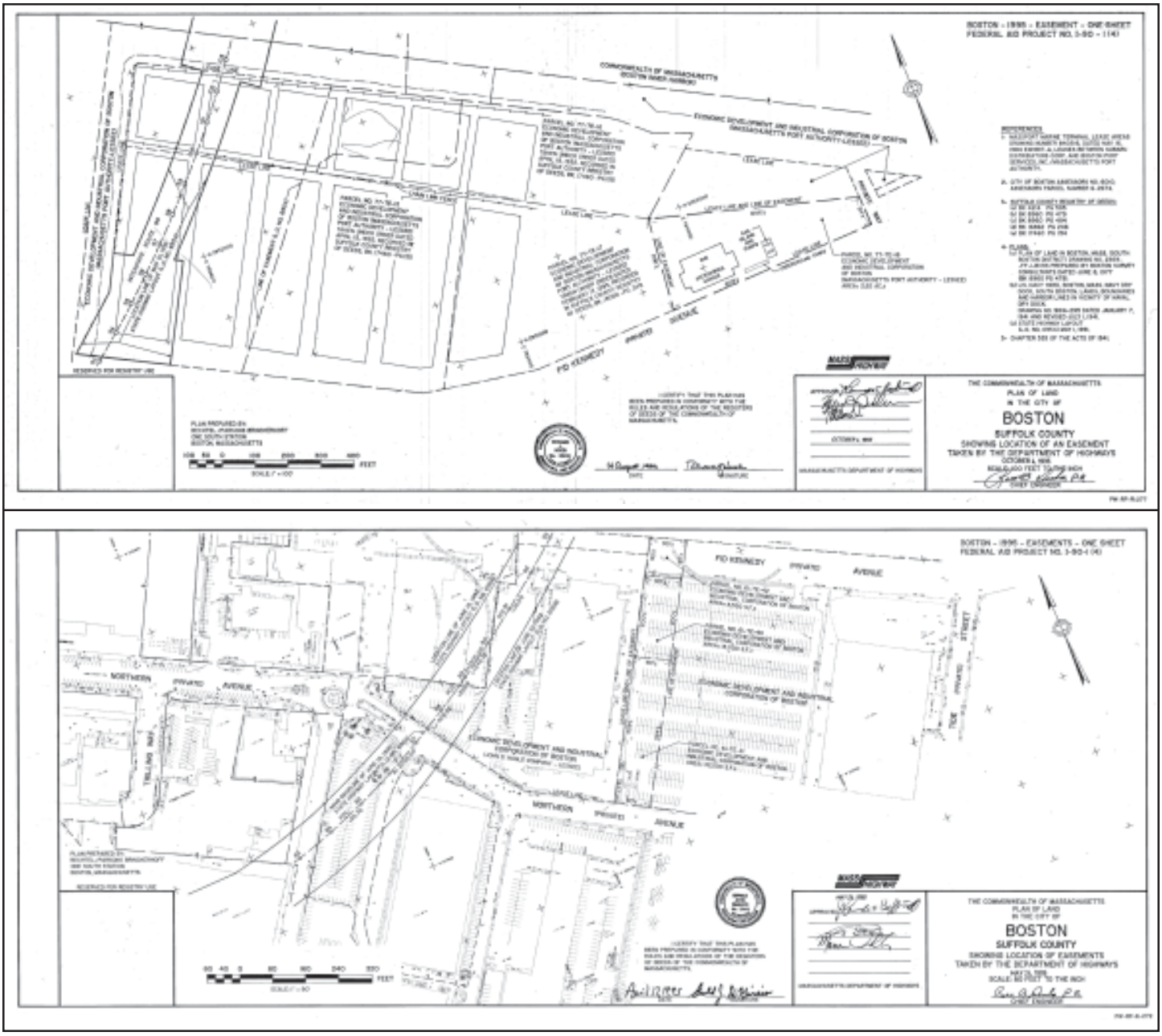


Figure 3-15 – Highway Construction Easements, 1995

These two plans show the route of the Massachusetts Turnpike (Interstate 90) and Ted Williams Tunnel across the Boston Marine Industrial Park and the temporary construction easements taken by the Massachusetts Highway Department for the project. The top plan shows that the entire Massport Marine Terminal parcel was used as a construction staging area. The wider area at the lower left corner of the actual highway right of way is the footprint of the Ted Williams Tunnel ventilation building. *Suffolk Deeds, Book 20092 (top), 19789 (above)*

The Ted Williams Tunnel

The construction of the Third Harbor Tunnel, subsequently named the Ted Williams Tunnel, had a major impact on the Boston Marine Industrial Park. While its improvements in linking the area with Logan Airport would ultimately make the site even more attractive to freight handling firms, its construction severely disrupted access and delayed development of the Massport Marine Terminal area.

Environmental Affairs, "Boston Cargo Terminal Project," EOEA #8161/ 14045, Aug. 1, 2007, in Massachusetts Environmental Policy Act Office, *The Environmental Monitor*, vol. 68, no. 8 (Aug. 22, 2007) [http://www.mass.gov/envir/mepa/pdffiles/certificates/080107/8161enf.pdf].



Fireboats greet the Sept. 16, 1992, arrival from Baltimore of the first section of the Third Harbor Tunnel. The tunnel sections would be berthed at the Army Base while being finished and prepared for placement beneath the harbor. *Peter Vanderwarker, Central Artery/Tunnel Project*





In the 1980s the Massachusetts Port Authority filled the area between the West Jetty and Pier 4 at the former South Boston Annex to create the Massport Marine Terminal. In the early 1990s, the site was taken over as a staging area by the Central Artery/Tunnel, or "Big Dig," highway project and as the site of the South Boston end of the Ted Williams Tunnel under Boston Harbor. At left, MV *Cape Juby* (T-AK-5077), a Maritime Administration-owned cargo ship assigned to the Military Sealift Command's Ready Reserve Force, sits at Pier 5 adjacent to Dry Dock 4 as work begins on the cofferdam for the tunnel in 1992. The cofferdam became the site for Vent Building 6. The completed vent building is seen at right.

Peter Vanderwarker, Central Artery/Tunnel Project

As early as 1972 the Massachusetts Department of Public Works had begun studies of a routing for a tunnel connecting the Massachusetts Turnpike with Logan Airport. One of the proposals involved a route which would cross under the South Boston Annex roughly parallel to 7th (Harbor) Street and Pier 4.[354]

Little happened for over a decade. In the mid-1980s the state combined the Third Harbor Tunnel and the replacement of the Central Artery into the Central Artery/Tunnel (CA/T) project. It developed several different schemes for the route of the tunnel crossing the BMIP. As the project team began to finalize the proposed route, concerns over the potential impacts on Dry Dock 4, then the primary ship repair facility in the BMIP, surfaced.[355] In August 1985 the Federal Highway Administration and the Massachusetts Department of Public Works released an environmental impact statement which identified its preferred route as running through the area between Pier 5 and the Massport Marine Terminal. A vent building for the tunnel would be placed on the vacant parcel between Buildings 56 and 53.[356]

Concern for General Ship's operations remained.[357] To address these, the plans for the tunnel were revised to shift it slightly eastward to go under the western edge of the Massport Marine Terminal and to place the vent building on the southwest corner of this parcel rather than between Buildings 56 and 53.[358] (See Figure 3-15)

Construction of the project began in 1991 as the Massachusetts Highway Department began to acquire permanent easements (largely sub-surface) from the EDIC for the final roadway and the vent building as well as temporary easements required for construction purposes.[359] Initially, the Massachusetts Highway Department only took easements along the route of the tunnel. Soon, however, it extended its temporary construction easements to include most of the MMT, which it used as a construction staging area not only for the tunnel but also for the entire CA/T project.[360] (See Figure 3-15) In 1992 it erected a temporary pier to support barges which conveyed excavated soils from the project to Spectacle Island and other disposal sites.[361]

The tunnel itself consisted of prefabricated steel tubes which were sunk into a trench dug in the harbor floor.[362] In 1991 a Charlestown businessman, Arnold L. Mende, proposed to merge two BMIP tenants, General Ship and PX Engineering, and put forth a proposal to use Dry Dock 3 for the fabrication of these sections.[363] Despite local political support, the CA/T contractor selected Bethelehem Steel's Sparrows Point shipyard in Baltimore for that work. It did, however, agree to have the final outfitting of the tunnel sections performed in Boston.[364] The first tunnel section arrived in

[354] Boston Transportation Planning Review, *Harbor Crossing Draft Environmental Impact Statement, Preliminary Location Report, Program Package Evaluation Report* (Sept. 1972).

[355] Dacey to James S. Hoyte, "Third Harbor Tunnel EIS," Aug. 16, 1983, in U.S. Federal Highway Administration and Mass. Dept. of Public Works, *Third Harbor Tunnel, Interstate 90/Central Artery, Interstate 93: Final Environmental Impact Statement and Final Section 4(f) Evaluation* [hereafter *Third Harbor Tunnel EIS*], 2 vols., FHWA-MA-EIS-82-02-F (Aug. 1985), TIC 457/D6400, vol. 2, p. 123-24.

[356] *Third Harbor Tunnel EIS*, vol. 1, p. 22, 25.

[357] See, e.g., William P. Coughlin, "Harbor Tunnel Could Sink Boston's Last Ship Repair Facility," *Boston Globe*, Oct. 6, 1987.

[358] U.S. Federal Highway Administration and Mass. Dept. of Public Works, *Central Artery (I-93)/Third Harbor Tunnel (I-90) Project: Supplemental Environmental Impact Statement/Report and Supplemental Final Section 4(f) Evaluation*, 2 vols., FHWA-MA-EIS-82-02-DS2 (Agency Review Draft; Mar. 1989), TIC 457/D6401, vol. 1, p. 2-53, 2-56, 4-35.

[359] Mass. Highway Dept., Layout No. 6954 and order of taking, May 1, 1991, Suffolk Deeds, bk. 16862, p. 246-65; Mass. Highway Dept., Layout No. 6968 and order of taking, June 10, 1992, Suffolk Deeds, bk. 17568, p. 68-112; Mass. Highway Dept., Supplement to Layout No. 6954 and order of taking, Suffolk Deeds, bk. 20270, p. 55-60.

[360] Hill, *Political Economy of Military Base Redevelopment*, p. 357; Mass. Highway Dept., order of taking, Apr. 15, 1992, Suffolk Deeds, bk. 17460, p. 155-58; Mass. Highway Dept., order of taking, Feb. 17, 1993, Suffolk Deeds, bk. 18052, p. 346-49; Mass. Highway Dept., order of taking, Oct. 4, 1995, Suffolk Deeds, bk. 20092, p. 142-49.

[361] Boston Conservation Commission, Order of Conditions 6-509, Mass. Highway Dept. and Economic Development & Industrial Corp., Apr. 16, 1992, Suffolk Deeds, bk. 17462, p. 340-49.

[362] Anthony R. Lancellotti and Walter C. Grantz, "From Concept to Completion: The Ted Williams Tunnel," in Charles Ford, ed., *Immersed Tunnel Techniques 2* (London: Thomas Telford, 1997), p. 151-58; Massachusetts Turnpike Authority, *TWT-How Was It Built?* [web page] [https://www.massturnpike.com/bigdig/background/twt_built.html], accessed June 25, 2008.

[363] William P. Coughlin, "Plan to Reopen Drydock Pushed," *Boston Globe*, July 21, 1997.

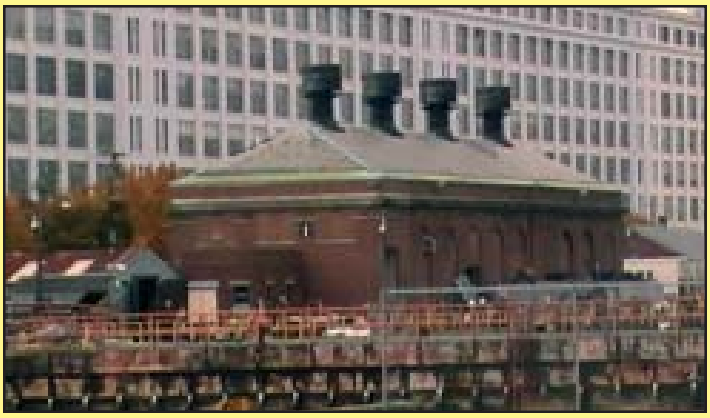
[364] William P. Couglin, "Flynn Backs Local Firms for Harbor Work," *Boston Globe*, Aug. 18, 1991; William P. Coughlin, "Contractors Say Plan to Reopen Drydock Could Mean 450 Jobs," *Boston Globe*, Sept. 8, 1991.

Boston Marine Industrial Park: A Gallery

ALTHOUGH CONSIDERABLE CHANGE has taken place in the former South Boston Annex in the three decades since its closure, the Boston Marine Industrial Park still retains considerable integrity to its naval origins. This gallery includes contemporary views of the area, except for the Massport Marine Terminal area (also known as the Subaru Pier or North Jetty), covered elsewhere. The 2006 existing conditions plan (Appendix F) shows the location in the Annex of each structure shown.



Dry Dock 3 Caisson, May 18, 2008
Building 16 can be seen at the upper right of this view showing the Dry Dock 3 Caisson in place in the inner seat. *Stephen P. Carlson, BNHP*



Building 1, Oct. 31, 2009
This view of the Dry Dock 3 Pump House was taken from the South Jetty. Note the shed covering Capstan 7 at left. *Stephen P. Carlson, BNHP*



Building 16, Aug. 29, 2004
Building 16 was the first industrial building erected as part of the World War II construction program. Although it has been used by several tenants for brief periods, the building is vacant as of mid-2008.
Stephen P. Carlson, BNHP



Dry Dock 4, Oct. 9, 2004
Dry Dock 4 is seen from the harbor side. Visible on Pier 5 at left are two of the three portal cranes serving the dock. *Stephen P. Carlson, BNHP*



Building 14, Aug. 29, 2004
McDonald Steel erected this steel building on Parcel P, which encompasses the site of Building 14. *Stephen P. Carlson, BNHP*



Building 17, Aug. 27, 2006
Seafood processing is a major activity in the industrial park. Stavis Seafood occupies the former Net Depot building. *Stephen P. Carlson, BNHP*



Building 18, Mar. 7, 2004
The J.J. Daly Co., an inventory management, warehousing, and distribution firm, was one of the earliest tenants of the industrial park.
Stephen P. Carlson, BNHP

Boston Marine Industrial Park: A Gallery



Building 19, May 18, 2008
This World War II wooden warehouse is scheduled to be demolished for the second phase of the International Cargo Center project.
Stephen P. Carlson, BNHP



Building 21, Apr. 22, 2007
This view shows the Annex Administration Building following the 2006 demolition of the World War II wooden addition. Note that the original building number sign on the end wall has survived.
Stephen P. Carlson, BNHP



Buildings 23 & 104,Aug. 29, 2004
The Officers Head (Building 23) is seen behind the Auxiliary Fire Station (Building 104). *Stephen P. Carlson, BNHP*



Building 29, May 18, 2008
The corporate headquarters of the Au Bon Pain bakery/cafe chain incorporate the original portion of the Annex Fire Station & Dispensary.
Stephen P. Carlson, BNHP



Building 20, June 22, 2008
The former Annex Power Plant is currently houses a number of lobster packing firms. *Stephen P. Carlson, BNHP*



Building 22, Oct. 31, 2009
Built as a Crews Head, Building 22 is one of several used by Boston Ship Repair. *Stephen P. Carlson, BNHP*



Building 28, May 18, 2008
The former Auto Vehicle Maintenance Shop is the only former Annex structure still owned by the federal government. It is currently used as an Army Reserve Center. *Stephen P. Carlson, BNHP*



Building 31, May 18, 2008
The former Ordnance Work Shop is occupied in 2008 by Cavalier Coach as a bus garage and repair facility. *Stephen P. Carlson, BNHP*

Boston Marine Industrial Park: A Gallery



Building 32, May 18, 2008
The former General Warehouse, one of the first building to be developed by the EDIC, houses a variety of businesses. *Stephen P. Carlson, BNHP*



Building 49, June 22, 2008
The EDIC utilizes the former Public Works Shop for its own offices as well as a business center. Among the groups housed in the building is the Hull Lifesaving Museum. *Stephen P. Carlson, BNHP*



Building 56, Aug. 29, 2004
When the Bank of America Pavilion came to the industrial park, Building 56 was reduced in size by removal of the west side of the structure. It is occupied by Commercial Lobster and the Yankee Lobster Fish Market.
Stephen P. Carlson, BNHP



Building 40, Sept. 26, 2009
The former Scale House is utilized as a telephone switching station for the Boston Marine Industrial Park. Note the infill of the side window and the presence of the Navy building number. *Stephen P. Carlson, BNHP*



Building 53, Oct. 31, 2009
The tanks which are part of the Harpoon Brewery reinforce the industrial character of the building. Originally a tenant of the John Nagle Co., Harpoon obtained its own lease from the EDIC for its portion of the structure in March 2008. *Stephen P. Carlson, BNHP*



Building 54, May 18, 2008
The boom of Portal Crane 90 can be seen over the roof of the former Riggers Shop, used by Thermo King for many years but vacant as of mid-2008. *Stephen P. Carlson, BNHP*



Building 94, Aug. 29, 2004



Building 102, Oct. 8, 2006
The EDIC erected two guardhouses at the Northern Ave. (left) and Drydock Ave. (right) entrances to the industrial park. Note the bollard behind the Drydock Ave. facility. *Stephen P. Carlson, BNHP*

Boston Marine Industrial Park: A Gallery



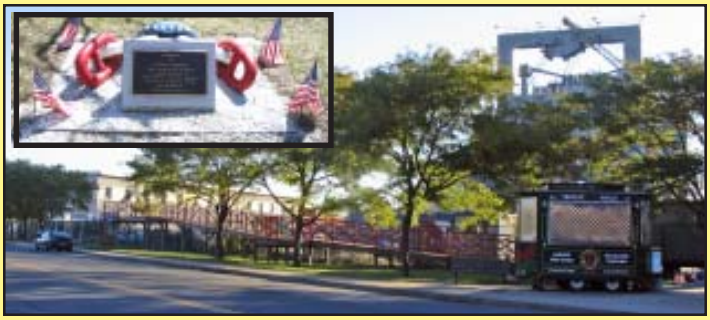
Bank of America Pavilion, Oct. 9, 2004
The move of what was then the Harborlights Pavilion from the Fan Pier to the BMIP in 1999 was opposed by many groups afraid that it was the start of an erosion of the use of the site for marine-related industrial activities.
Stephen P. Carlson, BNHP



International Cargo Center, May 18, 2008
Because of its location close to both Logan Airport and routes I-90 and I-93, the BMIP has attracted bonded freight handling firms. The largest new structure in the industrial park, the International Cargo Center replaced a 1984 warehouse (Building 12) as well as the former Marine Barracks (Building 15).
Stephen P. Carlson, BNHP



McCourt/Obayashi Shed, Aug. 27, 2006
In November 1999 this quonset hut was placed on Parcel V as a mechanical repair shed for McCourt/Obayashi, a joint venture working on the Central Artery/Tunnel project.
Stephen P. Carlson, BNHP



Brian R. Skerry Memorial Park, Oct. 8, 2006
The small Dry Dock 3 Park, designed by Carol R. Johnson Associates, was completed in 1989 and contains a platform allowing people to view work taking place in Dry Dock 3. In 2002 the park was dedicated in memory of Brain R. Skerry (inset), a Vietnam veteran and member of the Shipbuilders Union.
Stephen P. Carlson, BNHP



Central Parking Structure, Mar. 23, 2009
The parking garage serves not only employees and visitors to the industrial park but also passengers on cruise ships departing from the Black Falcon Terminal.
Aaron1, Panoramio





New Boston Seafood, Aug. 27, 2006
The two-building New Boston Seafood Center was erected on the site of the former Buildings 48 and 30. Building 1 (top) has the address of 310-312 Northern Ave. while Building 2 (above) is 5-7 Fid Kennedy Ave.
Stephen P. Carlson, BNHP



Pier 10 Park, May 18, 2008
Completed in 1987, the Pier 10 Park is one of two small park areas within the industrial park.
Stephen P. Carlson, BNHP

Boston Marine Industrial Park: A Gallery

IN ADDITION TO THE FORMER SOUTH BOSTON ANNEX, the Boston Marine Industrial Park includes a major portion of the former Boston Army Base. The remainder of that facility is owned by Massport and is part of Massport's South Boston properties. Although Massport calls the area Cruiseport Boston and the International Cargo Port, it is commonly known as the Black Falcon Terminal and often erroneously considered to be a part of the BMIP. These views show the various portions of the former Army Base.



Building 114, May 18, 2008
Although commonly called the Boston Design Center, that facility only occupied the western end of the massive structure. The center portion is the Bronstein Center, while the eastern portion, seen here, is the Drydock Center. *Stephen P. Carlson, BNHP*



North Coast Sea-Foods, May 18, 2008
Completed in 1999, the North Coast Sea-Foods building, also known as 5-11 Drydock Ave., occupied Parcel B in the former Army Base.
Stephen P. Carlson, BNHP



Black Falcon Terminal, May 18, 2008
MV *Norwegian Dream* awaits passengers for her week-long cruise from Boston to Bermuda in this view. The road in the foreground is still known as Terminal St., becoming Black Falcon Ave. as it reaches the terminal building.
Stephen P. Carlson, BNHP



Coastal Cement, Oct. 9, 2004
The Coastal Cement complex saw cement silos replace the smokestacks of the Army Base Boiler House (Building 116). As a part of the project, the developer constructed the adjoining Pier 10 Park.
Stephen P. Carlson, BNHP



International Cargo Port, May 18, 2008
The International Cargo Port (Building 118) occupies the eastern end of the former Boston Army Base. As part of its development, the parallel Building 117 was demolished. *Stephen P. Carlson, BNHP*



Building 120, Oct. 4, 2009
The only small structure on the former Boston Army Base to survive in 2008 is the former Longshoremen's Waiting Room. This structure and the small parcel it sits on belong to Massport rather than the EDIC, having been excluded from the sale to the city because of its functional relationship to the operation of the base's marine terminal facilities.
Stephen P. Carlson, BNHP



One of the most popular Navy ships to visit Boston was the aircraft carrier USS *John F. Kennedy* (CVA-67). Long lines of visitors snake along the West Jetty during the vessel's first visit to the hometown of her namesake on Aug. 4, 1970. *Paul M. Paulsen*

Over the next 35 years the carrier made several additional visits to Boston. During what was then called perhaps her last visit, she is maneuvered towards the North Jetty on May 19, 2005. Sailors on deck spell out "Jack Is Back." *PO3 Joshua Karsten, USN 050519-N-8704K-001*

USS *John F. Kennedy* (CV-67): A Popular Visitor



Boston HarborWalk In The Marine Industrial Park

ALTHOUGH SPECIAL EVENTS such as visits by Navy and tall ships, performances at the Bank of America Pavilion, and cruise ship sailings were the primary attractions drawing the public into the Boston Marine Industrial Park, it is also a key point on the Boston HarborWalk. These June 2005 views from the Boston Harbor Associates show (clockwise from upper left) the HarborWalk at the Black Falcon Terminal, the International Cargo Port, Legal Sea Foods and Vent Building 6, and the Bank of America Pavilion.









September 1992.[365] The preparation work was performed not in Dry Dock 3 but at berths at the former Army Base.[366]

The one permanent surface element of the tunnel within the BMIP is Vent Building 6. Located at the southwest corner of the Massport Marine Terminal parcel, the structure contains four supply fans forcing fresh air into the tunnel and six exhaust fans pulling exhaust fumes from it and dispersing them into the atmosphere.[367]

The tunnel was completed and opened to traffic on December 14, 1995.[368] The project, however, continued its use of the MMT site, although the parcels directly over the completed tunnel were turned back to Massport to allow it to start work on its seafood processing zone in 2000. As of mid-2008 the CA/T project still had a presence on the site as it maintained a laboratory facility in the former Subaru car wash building (Building 88).

Public Use Of The BMIP And Army Base

Except for open houses for Armed Forces Day and visiting ships, the South Boston Annex was a secure facility open only to authorized personnel. This began to change as soon as the EDIC took control, as the North Jetty, along with the Army Base (Black Falcon Terminal), was a key location for Sail Boston events between 1976 and 2000.[369] Among the most popular ships to be berthed at the North Jetty was the aircraft carrier USS *John F. Kennedy* (CVA-67, later CV-67), which made several visits between 1970 and 2007.[370]

While there are a few restaurants within the park, these are primarily to serve workers rather than the general public. Most people come into the Boston Marine Industrial Park to attend performances at the Bank of America Pavilion or either to take cruises or to drop off/pick up cruise passengers at the Black Falcon Cruise Terminal. Few probably have any idea of what the area is currently, let alone the two sites' history as military intallations.

As previously discussed, the development of the Boston Marine Industrial Park included small public parks at the head of Dry Dock 3 and at Pier 10, but these lack any interepretive features and are largely unknown to the public at large. The Boston HarborWalk has been routed along the edges of the Massport Black Falcon Terminal and International Cargo Port, as well as on the western edge of the Massport Marine Terminal and at Wharf 8.[371] The emphasis of HarborWalk is on contemporary activities, recreation, and views. There is no interpretation of the site's rich history.

[365] Andrew Blake, "325-Foot Tube for Tunnel is Unlikely Tourist Draw," *Boston Globe*, Sept. 17, 1992.

[366] Vanderwarker, *Big Dig*, p. 21.

[367] *TWT-How It Was Built?*.

[368] Anderson, *Ted Williams Tunnel Historic Overview*.

[369] Blake, "Tall Ships Ahoy!"; "Events Schedule"; "Sail Boston Schedule," *Boston Globe*, July 11, 2000.

[370] "USS John F. Kennedy to Visit Hub; Carrier Schedules 'Open House' at South Boston Annex on August 4th," *Boston Naval Shipyard News*, vol. 35, no. 2 (July 24, 1970), p. 1, 8; Blake, "Tall Ships Ahoy!"; "USS Kennedy Open for Tour in S. Boston," *Boston Globe*, Sept. 5, 1987; Scott S. Greenberger, "For Many, the USS Kennedy Stood the Tallest," *Boston Globe*, July 17, 2000; John Ellement and Joanna Weiss, "Big John Carries On," *Boston Globe*, May 20, 2005; Megan Tench, "Boston Gets One Last Look at Big John," *Boston Globe*, Mar. 2, 2007.

[371] "South Boston," *Boston HarborWalk* [web site] [http://www.bostonharborwalk.com/placestogo/location.php?nid=6], accessed June 25, 2008. This page provides access to pages on the individual sites (Bank of America Pavilion, Black Falcon Cruise Terminal, International Cargo Port/88 Black Falcon Ave., Legal Sea Foods, Vent Building #6).



Visiting naval ships draw the public to the BMIP and the Black Falcon Terminal. This May 21, 2005, view shows USS *John F. Kennedy* (CV-67) tied up to the North Jetty. This is the only location in Boston which can berth aircraft carriers. *Stephen P. Carlson, BNHP*

As further discussed in Chapter 4, this study recommends that both the former South Boston Annex and the former Boston Army Base be properly recognized as nationally significant historic sites. The BRA/EDIC should, in conjunction with the Boston HarborWalk, develop appropriate historical interpretation waysides throughout the area.

Conclusion

Unlike the Charlestown Navy Yard, the South Boston Annex had only a short history—54 years—as a naval installation. While Charlestown still incorporates some shipyard functions, the current Boston Marine Industrial Park is anchored by an active ship repair company. Despite pressures to incorporate non-water-dependent industrial activities (and most of its tenants in its large, multi-tenant facilities are not water-dependent), it has largely retained its industrial character.

The development of the BMIP is incomplete. In particular, Building 16 remains vacant. Although the EDIC designated developers for the structure in both November 2002 and July 2003,[372] nothing has occurred, and in September 2007 it issued a request for proposals to redevelop both it and Building 31.[373] Dry Dock 4 remains unused, and there are a few vacant parcels remaining to be developed.

Whether the park can resist the encroachment of non-maritime and non-industrial development is uncertain. The debate over what are the appropriate uses in the area has been going on since the property first passed out of federal government control, and will continue. The December 2006 proposal by Mayor Thomas Menino to construct a new Boston City Hall at Dry Dock 4/Wharf 8,[374] if adopted, will certainly increase pressure to bring more commercial office and retail activity into the park.

[372] Press release, Boston Redevelopment Authority, "BRA Board Names Marine Industrial Park Developer-Highland Marine Limited Partnership to Redevelop Parcel N," Nov. 14, 2002 [http://www.ci.boston.ma.us/bra/press/PressDisplay.asp?pressID=122], accessed May 3, 2005; Economic Development & Industrial Corp., Minutes, Board of Directors' Meeting, Nov. 14, 2002. On June 12 and July 31, 2003, the board approved Preferred Freezer Services as the developer of the structure. See Economic Development & Industrial Corp., Minutes, Board of Directors' Meeting, June 12, 2003, July 31, 2003; press release, Boston Redevelopment Authority, "Mayor Menino's Back Streets Program Logs Two More Success Stories," July 31, 2003.

[373] Grillo, "Proposals Sought for Parcels."

[374] Michelle Hillman, "Menino Proposes City Hall Sale," *Boston Business Journal*, Dec. 12, 2006. While not totally abandoning the idea, Mayor Menino, citing poor economic conditions, deferred further consideration of it in December 2008. See Donovan Slack, "Menino Shelves Plan to Replace City Hall," *Boston Globe*, Dec. 30, 2008.

Chapter 4

Overview And Assessment

THE BOSTON NAVAL SHIPYARD was designated as a National Historic Landmark (NHL) in November 1966. Because the designation process occurred prior to the implementation of formal National Register of Historic Places nomination and documentation processes, the property is officially considered to be undocumented.[1] This Historic Resource Study (HRS) is intended in part to provide the basis for the completion of the formal documentation.

The analysis of the Navy Yard contained in this chapter, as well as the individual property information presented in Chapter 5, has been based on the inclusion of the entire yard—Charlestown and South Boston—as a part of the National Historic Landmark. Data on the 666 Summer Street (Boston Army Base) property has been included in the discussion of relevant National Register themes and property types to assist in the future nomination of that facility to the National Register in its own right. These structures, however, are not individually discussed in Chapter 5.

Drawing on the historical narratives in Chapters 2 and 3 and the individual resource descriptions found in Chapter 5, as well as the National Military Context and other contextual studies, this chapter will define the Navy Yard's period of significance, historical themes, character-defining features, and integrity. It will also provide guidelines for the management of the portions of the shipyard which the National Park Service (NPS) owns (Charlestown Navy Yard unit of Boston National Historical Park) or for which it possesses preservation restrictions under the deeds transferring portions of the yard to the City of Boston (Historic Monument Area of the Charlestown Navy Yard), as well as the development with the Boston Redevelopment Authority (BRA) of a joint master plan for the entire Charlestown Navy Yard.

The approach of this overview and assessment is holistic rather than dealing solely with architecture since the cultural resource is the Navy Yard, not its individual components taken in isolation. It is not, however, a substitute for more detailed studies to define specific preservation treatments for individual buildings, structures, and features. Rather, the recommendations herein should be used in conjunction with those in the Cultural Landscape Report (CLR)[2] and individual building Historic Structure Reports to inform the decision-making process in developing plans for such components of the yard.

What Constitutes The Boston Naval Shipyard?

On November 15, 1966, the Secretary of the Interior designated the "entire Boston Naval Shipyard" as a National Historic Landmark (NHL).[3] This designation resulted in its automatic listing on the National Register of Historic Places, itself but a month old. At that time, no formal, detailed nomination forms were utilized to document the property being designated.

At the time of its disestablishment on July 1, 1974, Boston Naval Shipyard consisted of three distinct properties—Charlestown Navy Yard; South Boston Annex; and 666 Summer Street, the former Boston Army Base. The last property, which had been a part of the yard for just four years, has a distinct history and should be considered for separate listing on the National Register. The remaining two parts of the yard existed at the time that the "entire Boston Naval Shipyard" was designated as a National Historic Landmark and listed on the National Register.

The National Register, based on a 1972 nomination form prepared administratively by NPS personnel, defined the NHL as the Charlestown property only.[4] It contains no justification for its exclusion of the South Boston Annex, which had been an integral—if underutilized—portion of the yard since its acquisition in 1920. This form led to the Navy's failure to apply Sections 110 and 106 of the National Historic Preservation Act to the South Boston Annex as a part of its disposal process. (It must be noted that the fifty-year rule—a standard which is all-too-rigidly applied—cannot be used as an excuse for not reviewing South Boston under Section 110 since its most significant feature, Dry Dock 3, was 55 years old in 1974. Similarly, the Boston Army Base was also 55 years old at the time of the yard's closure.) Despite this lack of preservation review, the reuse made of that facility, even with major demolition and new construction, has resulted in its retention of considerable integrity to its historic period.

As the historical narratives in Chapters 2 and 3 of this study document, the two areas were managed as a single property. It is impossible to historically separate them. Thus, this HRS has consistently treated the shipyard as a single entity and recommends that both areas be included within the boundaries of the NHL in the final documentation. However, because the Boston Army Base property, which was part of the shipyard for only the last four years of its existence as a naval facility, has a distinct history and significance of its own, this study recommends that the boundary be that which existed as of the date of the landmark designation rather than that at

[1] Although widely distributed, the 1978 nomination form prepared by the NPS as part of the boundary expansion study for the Charlestown Navy Yard was never officially accepted by the National Register. See Patrick Andrus, Meeting Report, "Boston Naval Shipyard," Feb. 21, 1980, Boston Support Office Boston Naval Shipyard NHL File [copy], Division of Cultural Resources, BNHP.

[2] Christopher Stevens, et al., *Cultural Landscape Report for Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts* (Boston: National Park Service, 2005), TIC 457/D154.

[3] National Survey of Historic Sites and Buildings, "Boston Naval Shipyard," Oct. 10, 1966, enclosed in Howard R. Stagner to Paul H. Nitze, Nov. 15, 1966, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 25.

[4] National Register Inventory-Nomination Form, "Boston Naval Shipyard," Aug. 29, 1972, Boston Support Office Boston Naval Shipyard NHL File [copy], Division of Cultural Resources, BNHP.

the end of the period of significance. It is the primary recommendation of this report that National Register documentation of the Boston Naval Shipyard, including the South Boston Annex, be prepared by the National Park Service.

This study also recommends that the Boston Landmarks Commission pursue the nomination of the Army Base to the National Register, including a study as to whether or not it meets NHL criteria. That latter study could be included in any larger thematic study done under the Department of Defense Legacy Program of Army ports of embarkation and supply depots.[5]

Too often studies of large facilities draw historic district boundaries which are less-encompassing than the formal site limits. These boundaries are often justified on one or both of two grounds. The first, and most defensible ground, is that the boundary is intended to include resources which relate to a lesser theme or period than the overall mission or time span of the facility. The second, and less defensible ground, is that the excluded areas have lost their integrity or are less than fifty years old. As will be discussed in detail later in this chapter, the issue of integrity for a constantly evolving property is not a cut-and-dried formula which automatically excludes properties which are not in their original state.

Much emphasis has been placed on the concept that a property must be at least fifty years old to be considered historic, unless there are exceptional circumstances. While it is not argued that there is a need to allow time to determine what is actually significant, a review of available documentation indicates that the rule has largely been applied to active military bases to exclude newer facilities which may continue to evolve and thus relieve managers from compliance with the requirements of Section 106 of the National Historic Preservation Act of 1966. (This, of course, ignores the need for review because of potential affects on adjacent historic properties.) Unfortunately, preservationists, by emphasizing the retention or replacement-in-kind of "historic fabric," have made the compliance process be seen as something which prevents evolution rather than as a tool which encourages alterations and modifications which are sympathetic to the older fabric to which they are to be applied.

While this study shows that the NHL boundary should include the historic limits of the Navy Yard, it excludes as contributing resources of the NHL two historic naval vessels permanently berthed at the Charlestown Navy Yard. Both USS *Constitution* and USS *Cassin Young* (DD-793) are NHLs in their own right which, while possessing historic connections with the active shipyard, are not integral elements of the shipyard.[6] The primary significance of both vessels relates to their operational history, with *Constitution* having additional significance as a national icon. This significance is independent of where the vessels are located. In addition, while their presence enhances the shipyard from an interpretive viewpoint and reinforces its integrity, their absence does not alter the significance of the yard. Thus, this analysis does not include either ship in its discussion of the significance of the NHL.[7]

Statement Of Significance

The following statement of significance for the Charlestown Navy Yard represents a synthesis of information developed during this study:

> 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, civil engineering, and technology.

National Register Criteria

The Boston Naval Shipyard is listed on the National Register of Historic Places. The National Register includes properties which meet the following criteria:

> The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:
>
> A. That are associated with events that have made a significant contribution to the broad patterns of our 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, that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> D. That have yielded, or may be likely to yield, information important in prehistory or history.[8]

As this study has clearly shown, the shipyard includes both the Charlestown and South Boston properties and meets three of the four criteria (A, B, C) for National Register listing with a significance level of national. There are several elements of the yard which independently meet National Register criteria for architecture

[5] The existing Massachusetts Historical Commission inventory form for the Boston Army Supply Base [BOS.RT], prepared for the Boston Landmarks Commission in July 1997, is an incomplete mixture of the Army Base and the South Boston Annex and contains numerous errors.

[6] The inclusion of USS *Constitution* in the definition of the Charlestown Navy Yard in the Boston National Historical Park Act of 1974 is irrelevant to whether or not it is a contributing resource of the yard.

[7] The current national park boundary includes property outside of the historic Navy Yard limits. Because Hoosac Stores No. 1 & 2 has no historic association with the yard, it has not been considered in the analysis in this chapter. The building, however, is listed on the National Register in its own right, and thus is managed by the NPS as an historic structure.

[8] U.S. National Park Service, *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, rev. ed. (Washington: National Register, History and Education, Cultural Resources, National Park Service, 1997), p. 2.

and engineering (C), with at least two—Dry Dock 1 and the Ropewalk Complex—meeting the stricter NHL criteria 2 and 4 as well.

One of the areas which is under-represented in National Register nominations of military facilities is Criteria B, which deals with lives of significant persons. This under-representation "may be partly due to the difficulties inherent in learning about and documenting the association of historically important persons with specific military buildings and structures."[9] This difficulty is lessened when one looks at individuals not in connection with a particular building but in connection with the entire facility.

There is a possibility that Charlestown may also meet the fourth National Register criteria (D) in that it may contain unidentified archeological resources relating to the pre-1800 period (both in terms of early colonial occupancy and Native Americans), although the extensive development of the yard limits this possibility to a very limited area at the northwest corner. While there are inventories of potential archeological resources for the national park and Buy (New Development) Parcels,[10] both documents concentrate on post-1800 resources. Neither addresses the Historic Monument Area or the Public Park parcel, nor do they reflect more recent field experience with both Navy Yard resources and resources in Charlestown outside of the yard's boundaries. It is recommended that a comprehensive archeological overview and assessment be prepared as a part of the National Park Service's Servicewide Archeological Inventory Program (SAIP). While such a study would concentrate on the NPS area of the yard, it should not be limited exclusively to that parcel.

Because of the determination that the period of significance for the Navy Yard encompasses its entire 174-year span as a naval facility and rejects the idea of selectivity, this study does not address the "exceptional significance" requirements of National Register Criteria Exception G, which covers resources less than fifty years old. In addition, since the last major physical additions to the Navy Yard, the concrete piers, were completed in the mid-1950s, they have now achieved the "magic" threshold for historic status.

NHL Criteria

As a National Historic Landmark, the Boston Naval Shipyard needs to be evaluated in the terms of the criteria for NHLs, which are similar to the general National Register criteria. These criteria are as follows:

> The quality of national significance is ascribed to districts, sites, buildings, structures, and objects that possess exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archeology, engineering, and culture and that possess a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association, and:
>
> 1. That are associated 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 and from which an understanding and appreciation of those patterns may be gained; or
> 2. That are associated importantly with the lives of persons nationally significant in the history of the United States; or
> 3. That represent some great idea or ideal of the American people; or
> 4. That embody the distinguishing characteristics of an architectural type specimen exceptionally valuable for a study of a period, style or method of construction, or that represent a significant, distinctive and exceptional entity whose components may lack individual distinction; or
> 5. That are composed of integral parts of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively compose an entity of exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of life or culture; or
> 6. That have yielded or may be likely to yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Such sites are those which have yielded, or which may reasonably be expected to yield, data affecting theories, concepts and ideas to a major degree.[11]

A site needs only to meet one of the six areas of significance in order to qualify as an NHL. The Navy Yard clearly meets the first criteria for its role as a key naval shipyard from its creation in 1800 to its disestablishment in 1974. It also meets the second criteria in the person of Loammi Baldwin, considered by the American Society of Civil Engineers to have been the "Father of Civil Engineering" in the United States and who was responsible for the development of both the first master plan for the yard and the construction of its first dry dock. While the yard does meet similar National Register criteria B for its association with various naval officers assigned to the yard who have been recognized as significant by both the Navy and naval historians (see Table 4-1), none rise to the more limited NHL criteria since, with the possible exception of Capt. William R. Rush, their service at the yard has not been the reason why the Navy chose to honor such officers by naming ships for them. The yard, as a district containing resources spanning its entire 174 year period of significance, meets the fourth criteria both individually in the form of the works of Alexander Parris, Joseph Billings, and the unknown architects of the early 20th century and as an assemblage of structures which are characteristic of both a military installation and a maritime industrial site.

While both Charlestown and South Boston have undergone significant alterations since the end of the period of significance, both sites retain considerable integrity in terms of layout and character-defining features of both a military installation and a maritime industrial site. Given that the site is not one which can be "frozen in time" to represent its appearance at a particular time in history (as with, for example, the home of a famous person preserved to its appearance at the time that person occupied the home), change from the site's appearance at the end of the period of significance is inevitable. While some might argue that the NHL boundaries should be drawn to exclude areas which have less integrity than others, this

[9] Foster Wheeler Environmental Corp., et al., *California Historic Military Buildings and Structures Inventory*, 4 vols. (Sacramento: U.S. Army Corps of Engineers, Sacramento Division, 2000), vol. 1, chap. 3, p. 18.

[10] Audrey R. Marie, *Cultural Resources Inventory: Potential Archeological Resources, Charlestown Navy Yard, Boston National Historical Park* (Denver: Denver Service Center, 1980), TIC 457/D1555; Michael S. Raber and Matthew W. Roth, *Boston Naval Shipyard: A Plan for Cultural Resource Management in the Buy Parcel Area* (New Haven, Ct.: Raber Associates, 1981), TIC 457/D6154.

[11] National Register Bulletin 15, p. 50.

Table 4-1
NAVAL VESSELS NAMED FOR COMMANDANTS

Commandant	Years	Ship(s)
Oscar C. Badger	1882-1885	DD-126; DE-1071
William Bainbridge	1812	*Bainbridge* (Brig)
	1813-1815	DD-1; DD-246; DLGN-25;
	1823-1824	DDG-96
	1832-1833	
DeWitt Coffman	1911-1914	DE-191
William M. Crane	1812-1813[a]	DD-109
	1825-1827	
Louis R. de Steiguer	1923-1925	AGOR-12
John Downes	1835-1842	DD-45; DD-375
	1849-1852	
Albert Gleaves	1921	DD-423
Francis H. Gregory	1852-1855	DD-82; DD-802
William L. Hudson	1859-1862	DD-475
Isaac Hull	1813	DD-7; DD-330; DD-350;
	1815-1823	DD-945
Lewis A. Kimberly	1885-1887	DD-80; DD-521
John B. Montgomery	1862-1863	DD-121
Charles Morris	1827-1833	TB-14; DD-271; DD-417
Samuel Nicholson	1801-1811	TB-29; DD-52; DD-442
Foxhall A. Parker, Jr.	1876-1878	DD-48
Samuel S. Robison	1919-1921	DDG-12
John Rodgers	1866-1869	DD-574
William R. Rush	1914-1919	DD-714[1]
William T. Sampson	1899-1901	DD-63; DD-394; DDG-10;
		DDG-102
Thomas O. Selfridge	1890-1893	DD-357
William B. Shubrick	1824-1825[a]	TB-31; DD-268; DD-639
Silas H. Stringham	1855-1859	TB-19; DD-83
	1863-1866	
Joseph Tattnall	1848-1849[a]	DD-125; DDG-19
Henry A. Wiley	1921-1923	DD-749

Source: *Dictionary of American Naval Fighting Ships*

This table excludes officers for whom ships have been named such as George Dewey, Stephen B. Luce, and Alfred Thayer Mahan who served in lesser capacities in the yard during their naval careers.

[a] Denotes Acting Commandant

[1] Name reassigned from cancelled DE-556; originally assigned to cancelled DE-288.

practice places too much emphasis on the physical appearance rather than the historical associations which are the overarching reasons for the yard's designation as an NHL in the first place. For that reason, this study recommends that the landmark boundary be that of the entire Boston Naval Shipyard as it existed in November 1966.

Related Themes Not Considered

This Historic Resource Study focuses on the themes which are related specifically to the Boston Naval Shipyard as a military-industrial facility. It does not address additional themes which may apply to the yard. These unrelated areas of significance are summarized below and are noted in the statements of significance for individual resources found in Chapter 5 of this study.

The Charlestown Navy Yard contains the sites of the landing of British forces on June 17, 1775, for the assault on colonial positions on Breeds Hill and other locations in Charlestown. This extended battlefield is commemorated by two historical markers located on Buildings 5 and 105. The site, however, retains no integrity to its appearance at the time of the battle. Other than preservation of these historic markers and mention of the site's role in the battle in interpretive materials, no further consideration of this theme is recommended.

Dry Dock 3 (Commonwealth Dry Dock) at South Boston was constructed by the state as a part of a major development of the South Boston waterfront in the first two decades of the 20th century. Along with Commonwealth Pier No. 5 and Fish Pier No. 6, the Commonwealth Dry Dock would be a contributing resource to a National Register district representing several maritime-related themes, including international trade, the fisheries industry, and the shipbuilding and repair industry. The district also relates to the theme of urban development and planning and contains structures which have architectural significance. Commonwealth Pier may already be individually listed on the National Register.[12] It is recommended that the Boston Landmarks Commission and the Massachusetts Historical Commission address these themes with a view to nominating an Early 20th Century South Boston Waterfront Development district to the National Register.

The former Boston Army Base was a part of the Boston Naval Shipyard only from 1970 to 1974. It has a distinct history and significance of its own, and appears to meet National Register criteria A and C at a national level of significance. The Boston Landmarks Commission and the Massachusetts Historical Commission should proceed to undertake a National Register nomination for the Boston Army Base with a period of significance of 1919-1970. This nomination should take the National Military Context into consideration in its evaluation of the property and address whether the property rises to the level of a National Historic Landmark as a military port of embarkation during World War II.[13] This may best be done in the context of a national thematic study of other Army supply depots and ports of embarkation undertaken under the auspices of the Department of Defense Legacy Program.

Historic Contexts

The evaluation of historic properties requires that they be placed into their context with regard to their time period, historical themes, and property types. As a site which evolved continually from its establishment in 1800 to its closure 174 years later, the Charlestown Navy Yard has a long and complex history. It is both a military installation and an industrial facility. As a military installation, it changed as the Navy it served underwent both mission and technological change. As an industrial facility, it reflected developments in both shipbuilding and the manufacture of materials including rope and chain. These changes have never been properly evaluated in

[12] The Massachusetts State Register of Historic Places and the MACRIS database [BOS.7179] indicate that Commonwealth Pier Five was individually listed on Oct. 10, 1979. The listing does not, however, appear in the National Register database.

[13] Although, as discussed in Chapter 3, there were numerous Army ports of embarkation during World War II, only two—Fort Mason in San Francisco and the Brooklyn Army Base (New York Port of Embarkation)—are listed on the National Register. While the Boston Army Base was not addressed in the NPS theme study of the homefront during World War II, the site meets the same criteria that led to the report's recommendation for the consideration of the New York Port of Embarkation as a potential NHL. See Marilyn M. Harper, et al., *World War II & the American Homefront: A National Historic Landmarks Theme Study* (Washington: National Historic Landmarks Program, Cultural Resources, National Park Service, 2007), p. 144.

the context of military facilities in general, let alone naval shipyards as a specific subset of those facilities.

Recognizing that there was a need to provide a uniform basis for analyzing military properties under Section 110 of the National Historic Preservation Act, the Army Corps of Engineers in the mid-1990s contracted for the production of two studies which were intended to provide a contextual framework for military installations constructed between 1790 and 1945.[14] This National Military Context (NMC) forms the principal basis for evaluation of the Navy Yard. However, because the yard was also an industrial plant and a community unlike traditional military posts, it also has contexts outside of the National Military Context. The industrial aspects of the yard, both as an industrial plant in general and as a maritime industrial complex in particular, are an overlay to the military context. Thus, as described below, this report expands upon that context to more fully evaluate the Navy Yard.

The National Military Context is, necessarily, an overview and is not a substitute for thematic contextual studies which take a more specialized approach to a subset of military facilities such as shipyards. Nor does it take into account post-1945 developments.

While there is a considerable literature on naval shipbuilding, it concentrates primarily on the design concepts and issues of particular ship types, not the execution of these designs by both naval and private-sector shipbuilders. Many of the yard's facilities relate directly to that process, and are poorly documented.

The individual studies of shipyards which exist range from collections of photographs to scholarly histories, but few, if any, have looked at the larger context of naval shipbuilding and repair policies and practices, let alone the issue of industrial specialization. Cultural resource studies and inventories have examined the architecture and engineering features of individual shipyards in a vacuum with respect to similarities and differences from yard to yard. The issue of navy yard industrial activities should also be examined in the larger context of other military manufacturing operations such as the Army's arsenals.

It is therefore recommended that the National Park Service contract for the preparation of a specific contextual study of naval shipyards. The purposes of this study are described in the PMIS project statement:

> The study will examine subjects including the original decision as to the location of the first six yards, the influence of the Board of Navy Commissioners on the master plans developed in 1828, rationale for the industrial specialization of the various yards, attempts to close or realign yards throughout the entire period, the role of central offices such as the Bureau of Yards and Docks in the physical development and architecture of the yards, decisions as to the roles of the various yards in the various wars engaged in during the period, and other topics that will allow the analysis of the specific contributions of the Charlestown Navy Yard to the development and growth of the United States Navy.[15]

Within the National Park Service, the project should include involvement from the Maritime Heritage Program. It should also be done in cooperation with relevant Navy offices, including the Navy's Federal Preservation Officer, the Naval Historical Center, and the Naval Facilities Engineering Command, as well as the State Historic Preservation Officers of the states having present or former naval shipyards. In particular, the Cold War period must be thoroughly analyzed with regard to shipyards, since current National Register nominations tend to deal only with significance up to the end of World War II and post-World War II resources are far more vulnerable to change than earlier ones.

The proposed study should look at existing histories of all naval shipyards and relate developments to broader policy decisions made by the naval hierarchy in Washington, including the Board of Navy Commissioners, the Bureau of Yards & Docks, and the Naval Facilities Engineering Command. There is anecdotal, documentary, and photographic evidence that there was considerable commonality in facilities and their design. The study should examine this topic through both archival records concerning facility design and construction and the physical evidence of the resources themselves. Examination of the careers of key naval officers may illuminate this topic as well, since rotation between shipyards may have been an important method by which common concepts were spread between yards.

The lack of a contextual, or theme, study of naval shipyards can be seen in the inconsistent representation of shipyards on the National Register, particularly when compared with facilities of other military services. Eight naval shipyards are represented as districts on the National Register (see Table 4-2). Individual resources from two others are listed, but, except for Norfolk's dry dock, are considered significant for their architecture rather than their relationship to the shipyard. (This analysis excludes Pearl Harbor, listed as a part of the larger naval base which is on the National Register for reasons other than its shipyard function; Pensacola, which had closed as a shipyard in 1911 and is listed primarily for its associations with naval aviation; and Sackett's Harbor, which is listed because it is within a War of 1812 battlefield.)

Four of the eight shipyards on the National Register—Boston, Mare Island, Puget Sound, and Washington—are also National Historic Landmarks, along with, for other reasons, Pearl Harbor and Pensacola. Even there, the listings tend to be confined to particular time periods rather than looking at the entire period of a yard's history, and thus exclude resources added after those periods, or are limited to specific portions of a yard such as officers' quarters areas. Since shipyards are, by their very nature, evolving institutions, the arbitrary policy of excluding more recent resources and limiting the nominations to the more distant past must be forgotten.

The resultant study will provide a consistent, national base for making assessments of the significance of both individual structures and features and entire shipyards under Sections 106 and 110 of the National Historic Preservation Act. One of the major results of a contextual study will be revisions to existing and additional National Register nominations, as well as revised or additional National Historic Landmark designations. It would be a vehicle for finalizing informal determinations of eligibility made during the various base closure programs of the 1980s and 1990s (see Table 4-3).

While individual resources within a given shipyard may have unique aspects which give them different levels of significance than the installation as a whole (and thus qualify them for independent

[14] R. Christopher Goodwin & Associates, *National Historic Context for Department of Defense Installations, 1790-1940: Final Report*, 4 vols. (Baltimore: Baltimore District, U.S. Army Corps of Engineers, 1995) [hereafter *National Military Context*]; R. Christopher Goodwin & Associates, *Historic Context for Department of Defense Facilities: World War II Permanent Construction* (Frederick, Md.: Goodwin, 1997).

[15] PMIS 81068, "Produce Contextual Study of Naval Shipyards," last updated Nov. 3, 2006.

General Storehouses: A Common Design

DURING WORLD WAR I the Navy realized that it needed large storehouses to stock and issue all of the materials required to supply an expanded fleet. The Bureau of Yards & Docks developed a standard design for general storehouses in the industrial style popularized by architect Albert Kahn. These standard details were issued to individual navy yards, which constructed buildings to both fit available space within the yards and provide the square footage required for their particular needs. The general storehouse was the first documented instance where Washington mandated not only general form but also actual construction details of structures at all naval facilities. This standard design continued to be used into World War II.



This Mar. 6, 1918, view shows the General Storehouse (Building 149) for the Charlestown Navy Yard under construction. Even before the building was complete, the yard began work to add two additional floors to the facility. *BOSTS-9895*



Building 143 at the Washington Navy Yard, completed in 1914, was the first general storehouse to use the new standard design. Building 28 at right was built in 1942 to replace an 1863 Foundry. *J. Brough Schamp, HABS*



Building 5 was one of two general storehouses constructed at the Philadelphia Navy Yard during World War I. Note the overhead utility line running along the building's facade in this 1995 view. *Jet Lowe, HAER*



The General Storehouse (Building 290) at the Puget Sound Navy Yard is seen around the time of its completion in 1917. The 10-story structure provided 288,000 sq. ft. of storage space. *Bureau of Yards & Docks*



The General Storehouse (Building 4) at the Charleston Naval Shipyard is seen here shortly after the closure of that yard in the mid-1990s. It was one of the smallest constructed during World War I, containing only 96,000 sq. ft. *S.C. Dept. of Archives & History*

Marine Barracks Architecture

WHILE THE NAVY did not generally construct barracks for enlisted sailors until the 20th century, its subsidiary service, the U.S. Marine Corps, provided such facilities for its personnel. Although these barracks were built to a number of different architectural styles—often reflecting the prevailing styles of the time and place—they followed a general design which has become the most significant character-defining feature of a Marine Barracks. This design consisted of a central barracks for enlisted men flanked on either end by multi-story quarters for officers or families. Both of the Marine Barracks constructed at Boston (Quarters I at Charlestown and Building 15 at South Boston) conformed to this design pattern.

The earliest barracks such as those at Portsmouth and Boston featured single-story central sections. Over time these were raised to the same height as their wings. Many barracks featured porches running the width of the central sections. In a number of cases, these open structures were subsequently enclosed to provide extra space within the barracks.

A likely explanation as to why this design was adopted is the nature of the Marine presence at naval shore facilities. Unlike the Army, where units occupied an entire post, the Marines were stationed within naval facilities. The area given over to the Corps was often the smallest possible. Thus, space was limited so that the separation of enlisted men and officers prevalent in the Army was impossible. Indeed, Marine Barracks areas were always under pressure from competing naval needs. Throughout the history of the Charlestown Navy Yard, for example, there were repeated proposals to remove the barracks from the yard so that the grounds could be used for other yard activities.

This gallery presents a selection of images of Marine Barracks which illustrate this common design feature.



Marine Barracks (Quarters I), Boston Navy Yard, ca. 1900-1910
It is the oldest extant Marine Barracks structure, having been begun in 1811. *acc. BOSTS-295*



Marine Barracks (Building M1), Portsmouth Navy Yard, ca. 1900-1910
The original portions of this structure date to 1828. *SeacoastNH.com*



Marine Barracks, New York (Brooklyn) Navy Yard, 1870.
This structure is unusual among Marine Barracks in being only two stories high. *Harper's Monthly*



Marine Barracks (Building 169), Puget Sound Navy Yard, ca. 1912-1920
Completed in 1912, it still employed the central section and wings design of 19th-century barracks. Although the separate officers' quarters built at the same time survive, this structure has been demolished. *BNHP*



Marine Barracks (Building M37), Mare Island Navy Yard, ca. 1920
This structure dates to 1917. *NARA (Pacific Region) RG 181*

Table 4-2
NAVAL SHIPYARD NATIONAL REGISTER PROPERTIES

Shipyard	National Register Property	Type	NR Number	Criteria	NHL
Boston	Boston Naval Shipyard	District	66000134	A,C,D	Yes
Charleston	Charleston Navy Yard	District	06000699	A,C	No
	Officers' Quarters Historic District	District	07000100	A,C	No
Long Beach	[None]	—	—	—	No
Mare Island	Mare Island Naval Shipyard	District	75002103	A	Yes
	Mare Island Historic District	District	96001058	A,C,D	No
New York	Quarters A	Individual	74001252	B,C	Yes
Norfolk	Drydock No. 1	Individual	70000862	A	Yes
	Quarters A, B, and C	Individual	74002242	A,C	No
Pearl Harbor	United States Naval Base	District	66000940	A,C	Yes
Pensacola	Pensacola Naval Air Station	District	76000595	A	Yes
Philadelphia	Philadelphia Naval Shipyard	District	99001579	A,C	No
	Commandants' Quarters	Individual	76001661	A,C	No
	Marine Barracks	Individual	76001664	A	No
Portsmouth	Portsmouth Naval Shipyard	District	77000141	A,C	No
Puget Sound	Puget Sound Naval Shipyard	District	88003053	A	Yes
	Marine Reservation Historic District	District	88003051	A	No
	Officers' Row Historic District	District	88003054	A	No
Sacketts Harbor	Sackets Harbor Battlefield	District	74001247	A,C,D	No
San Francisco	[None]	—	—	—	No
Washington	Washington Navy Yard	District	73002124	A,C	Yes
	Commandant's Office	Individual	73002077	A,C	No
	Main Gate	Individual	73002098	C	No
	Quarters A	Individual	73002111	A,C	No
	Quarters B	Individual	73002112	A,C	No
	USMC Barracks & Commandant's House	District	72001435	A,B,C	Yes

Source: National Register Information System; National Historic Landmark Database
Excludes Naval Hospitals and other non-industrial facilities within or associated with shipyards as well as historic naval vessels berthed at shipyards.

listing on the National Register), the basic assumption which must underlie the listing of any naval shipyard on the National Register is whether or not it played a significant role in naval history as a shipyard. Thus, while it is appropriate to distinguish between contributing and non-contributing resources within the shipyard, it is not appropriate to divide a shipyard into historic and non-historic sections.

Period Of Significance

The Charlestown Navy Yard existed for 174 years, from August 1800 to July 1974. While the level of activity varied throughout this period, reflecting larger developments in American military history, it performed its functions for the entire time that it was in formal existence. Thus, the period of significance for the yard has been defined as 1800 to 1974. Similarly, the period of significance for the South Boston Annex of the Boston Naval Shipyard is 1919 to 1974, covering the entire period of its existence as a military installation

The National Military Context divides the period from 1790 to 1940 into four chronological eras. Under each, it addresses a number of historical sub-themes by service. Those which relate to the Navy are as follows, with **bold** type denoting those which are relevant to the Charlestown Navy Yard:

1. The Military in the Early Republic and Antebellum Era, 1790-1860
   Naval Yards and Stations
2. The Civil War and National Expansion, 1860-1890
   Results of the Civil War
   Beginnings of Naval Modernization
   Changing Roles of Shore Installations
3. The Military and the Progressive Era, 1890-1916
   Steel Ship Construction and Repair
   Development of Naval Ordnance
   Logistical Support to the Fleet
   Officer Education and Recruit Training
   Personnel Support
   New Technology: Submarines, Aircraft, and Radio
   World War I Navy Construction
4. The Inter-War Years, 1918-1940
   War Plans and the Shift to the Pacific
   Submarines and Aviation[16]

A further contextual study covers the World War II period (1940-1945). No comprehensive contextual studies have been produced for the post-World War II period. With the ending of the Cold War in 1989, however, Congress recognized that many Cold War resources would slip through the cracks of preservation because of the "fifty year rule" precluding nomination of recent sites or structures to the

[16] *National Military Context,* vol. 1, p. 3.

Table 4-3
POTENTIAL NAVAL SHIPYARD NATIONAL REGISTER PROPERTIES

Shipyard	Property	Type	Note
Boston[1]	Dry Dock 1	Individual	P
	Dry Dock 3 (South Boston)	Individual	P
	Ropewalk	Individual	P
Long Beach	Roosevelt Base Terminal Island	District	D
New York	Navy Yard Brooklyn	Individual[2]	C
Norfolk	Norfolk Naval Shipyard	District	P
Philadelphia	Building 4	Individual	C
	Building 6	Individual	C
	Navy Base Philadelphia	District	C
Portsmouth	Portsmouth Naval Shipyard	District	A
San Francisco	Commercial Dry Docks	District	C
	Dry Dock 4	Individual	C
	Ordnance and Optical Building	Individual	P
Washington	Gun Assembly Plant	Individual	D
	Washington Navy Yard Annex	District	D

Source: U.S. Dept. of the Navy, *Reference Guide to Historic Properties.*

Note:
A – Potential additions to existing districts
C – Consensus determination of eligibility by Navy and SHPO
D – Formal Determination of Eligibility for the National Register
P – Potentially eligible for the National Register

[1] This list does not include the resources (Commandant's House; Buildings 5, 31, and 266) for which the Navy drafted but never submitted National Register nominations in 1972.

[2] Consensus determinations cover approximately 33 individual properties.

National Register. It thus directed the Department of Defense to undertake a series of studies to begin the process of developing the necessary context studies for the evaluation of these resources. Even with this effort, the preservation community has been somewhat reluctant to embrace Cold War resources as being significant. This reluctance has been coupled with other influences, such as the belief that National Register listing precludes successful reuse of a military installation for civilian purposes following its closure. Much of the Section 110 and Section 106 efforts made in conjunction with facilities being closed or realigned under the Base Realignment and Closure (BRAC) rounds of the 1990s and early 2000s have concentrated on World War II or earlier-era resources.

One specialized theme within the Cold War era is that of the development of guided missiles for military purposes. The Navy's historic context study on that theme identifies four sub-themes: Research and Development, Test and Evaluation, Training and Education, and Logistical and Operational Support.[17] This latter category has been defined as encompassing "storage, assembly, and inspection of the missiles."[18] Property types associated with this sub-theme are inspection and test buildings, assembly buildings, and missile magazines.[19]

Shipyard facilities involved in the construction and modification of ships to carry and operate missiles are not specifically addressed. However, the Philadelphia Naval Shipyard is listed as having significance under the Logistical and Operational Support subtheme, citing the yard's construction of two guided missile frigates and its involvement "in the conversion of destroyers and cruisers, providing them with the equipment necessary to carry guided missiles."[20] Based on this listing, it is clear that the Boston Naval Shipyard, which was the lead yard for several of the Navy's earliest ship conversion projects, would qualify as significant under this aspect of the Cold War guided missile context theme.

The broad periods of the National Military Context need to be refined to reflect the particular history of individual naval shipyards. For example, a cultural resources survey of the Portsmouth Naval Shipyard identified the following seven periods:

1. Establishment (1800-1815)
2. Early Nineteenth-Century Growth (1815-1840)
3. Development in the Age of Steam (1840-1860)
4. Redesigning the Fleet (1861-1898)
5. War, Expansion, and International Prominence (1898-1913)
6. World War to Depression and Back Again (1914-1945)
7. The Cold War Era (1945-1989)[21]

Similarly, a context study focusing solely on California established the following seven periods:

1. Colonial Era (1789-1846)
2. Frontier Era (1846-1865)
3. Traditional Era (1866-1902)
4. Modernization Era (1903-1918)
5. Interwar Ear (1919-1938)
6. World War II (1939-1945)
7. Cold War Era (1946-1989)[22]

For the Charlestown Navy Yard, the following periods represent the historical development of the yard and show how they fit under the broader chronological sweep of the National Military Context. For each period, there is a brief description of the historical events which have been utilized in defining the period. The yard today contains features which are associated with each of these periods.

1. The Military in the Early Republic and Antebellum Era, 1790-1860
   A. **Establishment (1800-1828)** — From the establishment of the Navy Yard, through the War of 1812 and the start of shipbuilding, up until the issuance of the 1828 master plan for the yard.
   B. **Early Nineteenth-Century Growth (1828-1853)** — From the 1828 master plan up until the appointment of Joseph Billings as the yard's first permanent Civil Engineer. Includes the construction of Dry Dock 1 and the Ropewalk Complex.

[17] R. Christopher Goodwin & Associates, *Navy Cold War Guided Missile Context: Resources Associated with the Navy's Guided Missile Program, 1946-1989: Final Report*, Aug. 1995 (Norfolk, Va.: Atlantic Division, Naval Facilities Engineering Command, 1995), p. 91.

[18] Ibid., p. 149.

[19] Ibid., p. 261-62, 269-70.

[20] Ibid., p. A-13. Interestingly, the Portsmouth Naval Shipyard, which designed and produced ballistic missile submarines, has no relevant sub-themes identified with it. *See* ibid., p. A-8. Although the Trident Refit Facility at the Strategic Weapons Facility Atlantic, Kings Bay, Ga., is identified, no other naval shipyard is included in the report's listing of Navy installations associated with the Navy's Cold War guided missile program. *See* ibid., p. A-6.

[21] Cultural Resource Group, Louis Berger & Associates, *Cultural Resources Survey, Portsmouth Naval Shipyard* (Draft; Aug. 1996), p. 14-34.

[22] *California Historic Military Buildings and Structures Inventory*, vol. 3, p. 1-2.

2. The Civil War and National Expansion, 1860-1890
   A. **Development in the Age of Steam (1853-1869)** — From the appointment of Joseph Billings as Civil Engineer through the modernization of the yard to handle steam-powered vessels and the Civil War up to the 1869 master plan.
   B. **The Post Civil War Period (1869-1890)** — From the 1869 master plan through the proposed conversion of the yard to a manufacturing facility to the resurrection of the yard to handle steel warships.
3. The Military and the Progressive Era, 1890-1916
   A. **The Yard Resurrected (1890-1919)** — From the start of plant modernization and the Spanish-American War through the major modernization campaign of the early 20th century and the start of steel shipbuilding up to the end of World War I.
4. The Inter-War Years, 1918-1940
   A. **The Stagnant 1920s (1920-1931)** — From the end of the World War I programs up until the first orders for destroyer construction.
   B. **The Yard Revitalized (1931-1939)** — From the start of destroyer construction through the WPA modernization of yard facilities up to the outbreak of World War II.
5. World War II, 1940-1945
   A. **World War II (1939-1945)** — From the declaration of national emergency in 1939 through the end of World War II and the yard's redesignation as Boston Naval Shipyard, including the development of the South Boston Annex.
6. The Post-War Years, 1945-1989
   A. **The Cold War Era (1945-1974)** — From the end of World War II through the Korean War, Cold War, and Vietnam War until the yard's closure.

The precise definition of these periods is somewhat arbitrary, being keyed to significant events, and there is an overlap between most of them. In addition, the periods could be further broken down. For example, while the Civil War could have been considered as a separate period, it has been included within the larger period from 1853 to 1869 since it represented more of an acceleration of developments already in progress than new directions for the yard. As can be seen, this places the period within two of the periods in the National Military Context.

Although the post-1974 period may achieve significance in its own right under the themes of historic preservation and the conversion of military facilities to other uses, these developments are still too new to allow the development of appropriate historic contexts. Thus, while post-1974 structures and features are included in this study, none are recommended as contributing resources at this time.

Historical Themes

The National Military Context identifies six major historical themes as important to the evaluation of military facilities. These six themes, which are based on National Register themes, are further related to both individual services and chronological periods. The following is a listing of the themes and sub-themes shown as relevant to the Navy under one or more time period, with sub-themes relevant to the Charlestown Navy Yard in **bold**, without regard to whether or not there are extant physical resources relating to those themes:

1. Communications
   Early Communications
   Navy Wireless Communications during the Twentieth Century
2. Education
   Military Education in the Early Republic
   Beginnings of Military Professionalism
   Military Education during the Progressive Era and World War I
3. Medicine
   Military Medicine in the Early Republic
   Military Medicine during the Inter-war Years
4. Planning and Architecture
   Industrial Eclecticism: Ordnance Facilities and Shipyards
   Consolidation and Modernization: The Transition from Eclecticism to Beaux Arts
   World War I: Temporary and Permanent Construction
   Inter-war Years: Regional Architecture and Community Planning
5. Technology
   Weapons and Ammunition
   Warships
   Military Aircraft
6. Transportation
   Military Contributions to Transportation Development[23]

No themes specific to the Marine Corps shown in the National Military Context are applicable to the resources of the Navy Yard.

It should be noted that the National Military Context does not list Military as a theme since all properties that it encompasses, by definition, fall under that theme. The listed themes are closely related to physical resources. Thus, they do not encompass the full range of National Register themes applicable to military facilities in general and a military-industrial facility in particular.

Several of these additional National Register themes can be considered as falling under one of the National Military Context themes. Thus, the military contribution to manufacturing processes (Industry; Invention) forms a logical sub-theme under Technology, while civil engineering (Engineering) can be placed under Planning and Architecture.

The Social History theme (as distinct from Education and Medicine) is completely lacking from the National Military Context. The two primary sub-themes under such a theme as it would relate to the Navy Yard include labor history and the facility as a community, both for its assigned military personnel and for its civilian employees.

Because a portion of the Charlestown Navy Yard is a unit of the National Park System, it is also useful to examine the yard in relation to the eight elements of the NPS thematic framework:

1. Peopling Places
2. Creating Social Institutions and Movements
3. Expressing Cultural Values
4. Shaping the Political Landscape

[23] *National Military Context,* vol. 1, p. 3.

5. Developing the American Economy
6. Expanding Science and Technology
7. Transforming the Environment
8. Changing Role of the United States in the World Community[24]

Unlike the National Military Context, which focuses on the physical resources of military installations, the NPS thematic framework is intended to present "a larger and more integrated view of history" and to conceptualize "an approach to thematically connecting nationally significant places."[25]

In 1978 NPS historian Edwin C. Bearss prepared a historic base map for the Navy Yard.[26] In that document, he evaluated the individual resources of the Navy Yard as to their significance with respect to four major historical themes. These themes fit well within the revised NPS thematic framework. In addition, the six themes of the National Military Context, together with the additional National Register themes mentioned above, can be assigned to these four themes as follows:

1. History of the American Navy
   NR Theme: Maritime History; Military
2. History of Technology
   NMC Theme: Communications; Technology; Transportation
   NR Theme: Industry; Invention
3. History of Social and Worker Movements
   NMC Theme: Education; Medicine
   NR Theme: Social History
4. History of American Architectural Design and Planning
   NMC Theme: Planning and Architecture
   NR Theme: Engineering

Because the 1978 Bearss' framework incorporates all of the themes of the National Military Context together with additional themes mentioned above, it has been utilized in the analysis of individual resources in Chapter 5 of this report.

Character-Defining Features

One of the major developments in the approach to historic preservation over the forty years since the passage of the National Historic Preservation Act of 1966 has been a movement away from an emphasis on individual buildings and structures first to historic districts and then to multiple sites sharing thematic connections. This philosophical change is especially important when dealing with national topics such as the military and properties containing a large variety of buildings, structures, and other features.

A comprehensive study of military facilities in California explains the rationale for taking a larger approach to such properties:

> … the service branches could achieve better consistency in evaluating historic buildings and structures at military bases by taking a statewide and interservice approach. Such a coordinated approach would help in avoiding the pitfalls of over-representing or under-representing important time periods or historic themes in National Register … nominations.[27]

One of the pitfalls has been a bias towards architecture. The same California study states: "In considering World War II buildings and structures, the challenge is to evaluate historic rather than architectural significance (association with significant events, rather than association with a unique or important architectural or engineering design)."[28] This becomes even more important in approaching Cold War period resources.

Character-defining features are defined as prominent or distinctive aspects, qualities, or characteristics of a property that contribute significantly to its physical character and which must be retained in order to preserve that character. They exist on several levels. This study deals with those features which define the overall historic property rather than those which characterize any particular resource within the yard. The character-defining features of individual resources within the yard should be developed as part of historic structure reports.

The Navy Yard is a shipyard. Primary character-defining features of a shipyard include a waterfront location; the presence of wharves and piers for berthing ships; the existence of dry docks and/or marine railways for repairing ships; and/or the presence of shipways for ship construction, together with industrial buildings devoted to the myriad activities necessary to support ship construction and repair.[29]

A shipyard is a subset of an industrial complex. Among the character-defining features of an industrial facility are internal circulation using both roadways and railways; the presence of manufacturing, storage, and office buildings; and the existence of specialized facilities customized to the products being produced. The use of building materials such as brick, concrete, and granite reflect the heavy and permanent nature of such sites. A systematic building identification scheme and signage promoting job safety are also characteristics of industrial complexes.

The Navy Yard is also a military installation. As such, as will be seen in the following section, it includes property types which are characteristic of a military installation. Among the general characteristics of a military installation are fences and gates to control access; distinct ceremonial, residential, and recreational areas; and areas for the carrying out of the specific functions of the installation. As with an industrial facility, a systematic building identification scheme is a characteristic of a military installation. As a naval base, it possesses characteristics such as waterfront facilities and the presence of a Marine Barracks. It is the overlay of these two groups of character-defining features which constitute a naval shipyard.

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[24] U.S. National Park Service, *History in the National Park Service: Themes & Concepts*, rev. 2nd printing (Washington: Park History Program, National Park Service, 2000), p. 7-14.

[25] Ibid., p. 15, 17.

[26] *Historical Base Map: Evaluation of Extant Structures, Charlestown Navy Yard, Boston National Historical Park* [graphic], Mar. 1978, TIC 457/40016.

[27] *California Historic Military Buildings and Structures Inventory*, vol. 2, p. viii.

[28] Ibid., vol. 1, p. xiii.

[29] See, e.g., the official definition of a shipyard by the Canadian government states: "**Shipyards** are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as water-craft suitable or intended for **other than personal or recreational use**. The activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship sections and barge sections, and specialized services, such as ship scaling, when performed at the shipyard." See Industry Canada, "Definition – Ship Building and Repairing (NAICS 336611)" [web page] [http://strategis.ic.gc.ca/canadian_industry_statistics/cis.nsf/idE/cis336611defE.html, accessed Feb. 12, 2008].

20th Century Naval Shipyards: A Gallery

THESE AERIAL VIEWS of 20th century naval shipyards show the key character-defining features of a shipyard: a waterfront lined with piers; dry docks and shipbuilding ways; mobile and stationary cranes; and industrial buildings.



Portsmouth Naval Shipyard, ca. 2005

Boston.Com



New York (Brooklyn) Navy Yard, Mar. 9, 1944

NHC NH-93234



Philadelphia Navy Yard, ca. 1945

NHC



Charleston Navy Yard, ca. 1945

NHC



Norfolk Naval Shipyard, ca. 2005

Norfolk Naval Shipyard

20th Century Naval Shipyards: A Gallery



San Francisco (Hunter's Point) Naval Shipyard, Mar. 27, 1967
LC HAER-CA-181



Mare Island Navy Yard, Oct. 1930
LC HABS-CA-1543



Puget Sound Navy Yard, July 25, 1941
NHC NH-84926



Pearl Harbor Navy Yard, Dec. 10, 1941
NARA 80-G-387598



Naval Gun Factory (Washington Navy Yard), ca. 1946
NHC NH-91946



Long Beach Naval Shipyard, Oct. 6, 1993
Dept. of Defense DN-SC-94-00782

The specific features which are important in defining the character of the Charlestown Navy Yard include:

1. Navy Yard Boundary Wall and Fence surrounding the yard and separating it from Charlestown; pedestrian and vehicular gates.
2. Grid circulation pattern, with predominately rectangular buildings arranged parallel to the grid; paving materials: asphalt, brick, granite, and wood block.
3. Division of the yard into ceremonial/residential; working waterfront; and production and manufacturing areas.
4. Marine Barracks and Parade Ground.
5. Landscaped and open spaces, including laydown yards.
6. Large scale industrial buildings and smaller scale residential structures; building materials: brick, granite, concrete, and wood.
7. Industrial facilities representing the yard's manufacturing activities: Ropewalk Complex (Building 58 and 60) and Forge Shop (Building 105), including in-situ equipment.
8. Dry docks and piers.
9. Railroad and crane tracks.
10. Large scale structures such as cranes; grit hoppers; floodlights; aboveground utility lines; and the remains of Shipways 1 and 2 and the Marine Railway.
11. Small scale features such as trash receptacles, monuments and memorials, and identification and safety signage; use of historically-accurate colors for crosswalks, dry dock railings, hydrants, bollards, etc.

Property Types

A facility such as the Navy Yard consists of many different types of properties. The National Military Context has identified ten major categories of buildings typically found on military installations. These categories correspond to the National Register's system for classifying properties by historic function and help to link historic properties to historic contexts and aid in the comparison of related historic properties. Each major category of property types is divided into sub-categories that describe specific building types. The categories of property types are related to the historic functions of buildings on military installations, not their current uses.[30] In the following list, property sub-categories which are found in the Navy Yard (both for the Navy and the Marine Corps) are in **bold** type:

1. Administration
   - **Fire Stations**
   - **Guardhouses/Gatehouses/Sentry Boxes**
   - **Headquarters Buildings, Administration Buildings, and Office Buildings**
   - Post Offices
2. Communications
   - **Radio Buildings**
   - **Telegraph and Telephone Buildings**
3. Education
   - **Classroom Buildings**
   - **Drill and Riding Halls**
4. Health Care
   - **Dispensary/Infirmary**
   - Hospitals
5. Industrial
   - **Maintenance and Repair Shops**
   - **Manufacturing**
   - **Service Facilities**
     - Bakeries
     - **Laundries**
   - Storage
     - **General Storage**
     - **Ordnance**
6. Infrastructure
   - **Power Plants/Electrical Systems**
   - **Water and Sewage Systems**
7. Recreation/Social/Cultural/Religion
   - **Assembly Halls**
   - **Athletic Facilities**
   - Chapels
   - **Clubs (Officer and NCO)**
   - Elementary Schools
   - **Exchange**
   - **Theaters**
   - YMCA and Red Cross Buildings
8. Research and Development
   - **Laboratories/Research and Testing Facilities**
9. Residential
   - Institutional Housing
     - **Bachelor Officers Quarters**
     - **Barracks/Dormitories**
   - Institutional Housing Support Buildings
     - Detached Lavatories/Bathhouses
     - **Mess Halls**
   - Family Housing
     - Non-Commissioned Officers (NCO) Housing
     - **Officer Housing**
   - Family Housing Support Buildings
     - **Garages**
     - Servants Quarters
10. Transportation
    - Air-Related
      - Airplane Hangers
      - Lighter-than-Air Aircraft Hangers
    - Animal-Related
      - **Stables and Stable Complexes**
    - Vehicle-Related
      - Gas Stations
      - **Motor Pools**[31]

Studies of the Cold War era follow a similar breakdown in property types, emphasizing elements which are closely related to technological development. They generally add an additional category for Weapons Systems and Platforms. Although warships and aircraft would generally fit within that property type, the existing surveys tend to restrict it to missiles and their support infrastructure.

These general property types do not specifically include landscape-related properties, although the National Military Context study includes such features in its specific listings of property types for individual military installations. For example, dry docks and piers are listed under the manufacturing sub-category of industrial properties. In other cases, an additional Landscape property type

[30] *National Military Context*, vol. 2, p. 1-2.

[31] Ibid., vol. 2, p. iii-iv.

Character-Defining Features: A Gallery

1. Boundary Wall, Fence & Gates



Navy Yard Boundary Wall/Gate 2, Nov. 3, 2006
The Navy Yard Boundary Wall extended along the west and north sides of the Navy Yard. It was punctuated by a series of gates providing access into the yard, which were opened and closed in response to operational needs. *Stephen P. Carlson, BNHP*



Navy Yard Boundary Fence, Sept. 11, 2006
In order to increase the amount of light in the Ropewalk, the section of the Boundary Wall along Chelsea St. parallel to that structure was removed in 1929 and replaced by a concrete post and iron picket fence.
Stephen P. Carlson, BNHP

2. Grid Circulation Pattern





Views Along First and Second Aves., Aug. 23, 2004
The spine of the grid pattern in the Navy Yard is First Ave. (left), although Second Ave. (right) had originally been projected in the 1828 master plan by Loammi Baldwin as its "Main Avenue." These views show how the yard's structures have been organized according to the grid pattern. First Ave. is paved with asphalt, which had become the predominant paving material in the yard by the 1950s. Second Ave. has been paved with granite pavers which reflect historic materials, although the profile and details do not exactly match the original granite paving. *Stephen P. Carlson, BNHP*

3. Division of Yard Into Distinct Zones



Shipyard Mall, Quarters G, and Marine Barracks, Dec. 14, 2006
The core of the yard's ceremonial and residential area is the Shipyard Mall. Quarters B-F border the west side of 3rd St., while the Commandant's House (Quarters G) occupies the north side of Second Ave. Note the yellow brick paving on 3rd St. and the use of historic Navy Yard colors on the fire hydrant and crosswalk. *Stephen P. Carlson, BNHP*



Working Waterfront, 2006
This view of the working waterfront area shows several character-defining features, including Portal Crane 30, Pier 2, Dry Dock 1, the laydown area west of Dry Dock 1, the Grit Hoppers, and the Aboveground Steam Line. *Ralf Brown*

Character-Defining Features: A Gallery

4. Marine Barracks & Parade Ground



Marine Barracks and Parade Ground, Mar. 3, 2008
This view shows the Marine Barracks following the replacement of the 1960s-vintage design storm windows in the main portion of the structure with new windows which replicate those used when the porch was permanently enclosed in the early 1950s. *Stephen P. Carlson, BNHP*

5. Landscaped & Open Spaces



This Apr. 14, 2005, view shows the landscaped area to the west of the driveway leading to the Commandant's House and the interior face of the Navy Yard Boundary Wall. *OCLP*

6. Large Scale Industrial Buildings & Smaller Scale Residential Buildings



Building 42, Oct. 5, 2006
The Machine Shop Complex (Building 42) was one of the largest of the yard's industrial structures. The portion of the structure seen in this view was a World War II addition which matched the structure's World War I additions in architectural detail. *Stephen P. Carlson, BNHP*



Quarters P, Oct. 31, 2006
The only residential structure in the yard built in the 20th century, Quarters P is part of the residential compound at the northeast corner of the yard. *Stephen P. Carlson, BNHP*

7. Specialized Manufacturing Facilities



Ropewalk Complex, Oct. 19, 2006
This view shows the Tarring House (Building 60) at left and the Ropewalk (Building 58) at right. *Stephen P. Carlson, BNHP*



Forge Shop, July 25, 2001
This view looking west shows the equipment in the Forge Shop (Building 105) following hazardous materials cleanup. *Stephen P. Carlson, BNHP*

Character-Defining Features: A Gallery

8. Dry Docks & Piers



Waterfront, Oct. 9, 2004

This view of the yard waterfront between Dry Dock 1 and Dry Dock 2 shows Pier 2, the site of the Marine Railway, the Pier 3 Marginal Wharf, and Pier 3. Note the Bunker Hill Monument in the background. Other character-defining features visible include all three of the yard's remaining portal cranes and three light towers. *Stephen P. Carlson, BNHP*

9. Railroad & Crane Tracks



This May 6, 2003, view shows the crane tracks at the head of Dry Dock 1. The mast in the background sits on railroad tracks which run parallel to First Ave. Note the yellow safety striping surrounding the crane rail and the section of red brick paving. *OCLP*

10. Large Scale Structures



Grit Hoppers, Nov. 2, 2006

This view of the two Grit Hoppers in the laydown area north of Building 10 also shows (right) the Aboveground Steam Line running the length of the pier. *Stephen P. Carlson, BNHP*



Shipways 2, June/July 2003

While condominiums have been built on top of Shipways 2, elements of that feature remain visible. *Jane Carolan, BNHP*

11. Small Scale Features



This 2003 view shows an array of signage on Building 107, including the building number and identification, a safety promotional message, and a sign indicating that the structure is in the controlled industrial area of the shipyard. *Jane Carolan, BNHP*



Displays of anchors, cannons, and other military hardware are typically found on naval installations. This 2003 view of the anchors next to 4th St. also shows one of the yard's yellow trash receptacles in the left background. *Jane Carolan, BNHP*

has been used for parade grounds, flagpoles, and similar features. These listings, as well as the Landscape category, have been used as a guide in assigning such features of the Navy Yard to the property type categories and sub-categories. Because the two weapons systems and platforms (warships) found at the Navy Yard are not treated here as contributing features of the NHL but as historic properties in their own right, the Weapons Systems and Platforms category has not been shown in Table 4-4, which lists extant historic properties by the eleven property types. Because many structures have served multiple functions through the years, some properties are shown under more than one property type. It should be noted that extant properties may or may not retain their historic integrity with respect to any or all of the property types under which they are shown.

Table 4-5 provides an index of property types broken down by both historical periods and themes. In assigning properties to historical periods, the dates of usage, not solely dates of original construction, have been used. As can be seen, property types associated with all historical periods (other than the period from 1869 to 1890 when no development occurred) are present in the Navy Yard. (Note that the chronological span for the South Boston Annex is 1914 to 1974 only.) In addition, there are property types representing all four of the major historical themes used in this report.

Integrity

"Architectural attractiveness is often mistaken as the sole source of historical value," an Army study of Cold War historic resources warns.[32] Similarly, Air Force guidance on the same subject cautions that "change does not automatically mean that a property has lost integrity."[33] These two statements are important to keep in mind as one evaluates the integrity of the Boston Naval Shipyard.

The National Register defines integrity as "the ability of a property to convey its significance."[34] It identifies seven different criteria with which to evaluate a resource's integrity. These are location, design, setting, materials, workmanship, feeling, and association. A property need not meet all of these criteria to retain its integrity.

The following analysis sets aside the criteria of location since, unlike individual buildings or structures, a site cannot be physically moved and its integrity depends on the combination of the other six aspects. Thus, the analysis will concentrate on those aspects.

The relative level of integrity under any of the criteria will vary from period to period and from location to location within the yard. Facilities such as Dry Dock 1 and Dry Dock 3, which continue to perform their historic function, retain a high degree of integrity. While Pier 7 retains integrity in terms of design and materials, its feeling has been compromised by the construction of structures on what had historically been an open pier**.**

As could be expected for a property which continually evolved over 174 years, the Navy Yard possesses its greatest integrity to its most recent historic period. Even that integrity, however, has been compromised as the site has continued to evolve into new uses. It is not unreasonable to expect that, given the passage of time, post-1974 developments will be evaluated under the broad theme of reuse of military facilities and that the period of significance of the Navy Yard will be extended to incorporate this period and theme.

Despite these changes over time, the yard possesses one or more of the seven elements of integrity for all of its historic periods.

Setting: The Charlestown Navy Yard setting is diminished due to the changes that have taken place inside and outside of the gates of the Navy Yard. Construction of the Mystic River Bridge in the late 1940s physically and visually separated the yard from the surrounding community even more than the yard's gates and stone walls. As both Charlestown and the yard grew, services, such as hotels, barrooms, grocery stores, and other small retail establishments were often located immediately outside of the yard's main gates. The closure of the yard in the 1974 heavily impacted these small businesses, resulting in their closure as well. In the 1970s and 1980s these structures were demolished. In more recent times, reuse of the Navy Yard as a historic site and a residential and institutional community has changed the mission of the yard and therefore its relationship to Charlestown, opening the yard to greater interaction with surrounding community.

Design: The Navy Yard retains the basic elements of its overall design, with the interrelationship between circulation, structures, buildings, and open space intact. The grid pattern developed in the master plan of 1828 is still intact as is the relationship of rows of piers and dry docks oriented to Boston Harbor and on axis with the major north/south streets. For the most part, buildings are aligned parallel to streets. Most buildings are uniformly rectangular in shape. Materials such as brick, stone, wood, and granite work in harmony with each other to demonstrate the evolution of building design and the Navy's periods of expansion. Within the national park area, the historic relationship between housing/ceremonial areas and the working waterfront is intact. While the buildings in the Historic Monument Area of the yard have lost most of their additions and accretions, they retain their historic scale and massing. New construction has been sited within the grid to minimize disruption of new construction and support the historic layout.

Materials and Workmanship: The Navy Yard retains its integrity of materials and workmanship, with architectural forms and building materials from every construction campaign from 1800 through 1974, with an emphasis on the periods 1828-1869 and 1890-1919. This includes materials such as brick, granite, concrete, steel, and wood. Construction techniques are evident from all periods as well and most buildings and structures retain a high degree of workmanship.

Feeling and Association: Integrity of feeling and association varies within the Navy Yard. The national park section retains feeling and association of the former Navy Yard due to the retention of not only buildings and landscape but the smaller, less noticeable features such as building additions, small buildings, and laydown areas for construction material. The presence of an active-duty naval force and two historic vessels reinforce this feeling and association. The activity of visitors to this section of the yard lends a level of activity that makes this section feel "busy" in the way a working yard would function. The remainder of the yard does have integrity of feeling and association but it is diminished. While the grid pattern is still evident, as are the piers and dry docks, and

[32] U.S. Army Environmental Center, *Thematic Study and Guidelines: Identification and Evaluation of U.S. Army Cold War Era Military-Industrial Historic Properties*, Jan. 1998, p. 89.

[33] "Interim Guidance, Treatment of Cold War Historic Properties for U.S. Air Force Installations," June 1993, in U.S. Dept. of Defense, Legacy Cold War Project, *Coming in From the Cold: Military Heritage in the Cold War* [n.d.], p. 117.

[34] National Register Bulletin 15, p. 44.

Table 4–4

NAVY YARD PROPERTY TYPES

The following table assigns individual extant properties in the Navy Yard to one of the eleven property types identified in the National Military Context. Because some buildings housed different functions at different times (or were multi-functional), individual structures may be shown under more than one category. However, buildings used for storage in 1974 which were originally built for other purposes are shown only under their original use.

1. Administration

Fire Stations

SBA: Building 29; Building 104

Guardhouses, Gatehouses, Sentry Boxes

CNY: Boundary Fence; Boundary Wall; Building 1; Building 267; Gate 1; Gate 2; Gate 4; Gate 5; Railroad Gate; USS *Constitution* Gate

Headquarters, Administration, and Office Buildings

CNY: Building 5; Building 31; Building 32; Building 39; Building 109

SBA: Building 21; Building 49

2. Communications

Radio Buildings

CNY: Building 10

Telegraph and Telephone Buildings

CNY: Building 31

3. Education

Classroom Buildings

CNY: Building 5

Drill and Riding Halls

CNY: Building 5

4. Health Care

Dispensary / Infirmary

CNY: Building 120

SBA: Building 29

5. Industrial

Maintenance and Repair Shops

CNY: Building 96; Building 105; Building 107

SBA: Building 28; Building 49

Manufacturing

CNY: Building 10; Building 22; Building 24; Building 28; Building 33; Building 36; Building 38; Building 40; Building 42; Building 58; Building 60; Building 62; Building 79; Building 103; Building 104; Building 105; Building 106; Building 110; Building 114; Building 125; Building 195; Building 197

SBA: Building 16; Building 18; Building 31; Building 53; Building 54; Building 56

Maritime Facilities

BAB: Berth 1 through 10

CNY: Building 22; Building 123; Caisson, Dry Dock 1; Capstans, Dry Dock 1; Capstans, Dry Dock 2; Dry Dock 1; Dry Dock 2; Dry Dock 5; Finger Pier; Marginal Wharf 3; Marine Railway 11; Pier 1; Pier 2; Pier 3; Pier 4; Pier 5; Pier 6;Pier 7; Pier 8; Pier 11; Portal Crane 30; Portal Crane 62; Portal Crane 65; Protective Dolphins 289; Shipways 1; Shipways 2

5. Industrial

Maritime Facilities – *Continued*

SBA: Building 1; Caisson, Dry Dock 3; Caisson, Dry Dock 4; Capstans, Dry Dock 3; Capstans, Dry Dock 4; Dry Dock 3; Dry Dock 4; Pier 5; Pier 6; Pier 10; Portal Crane 64; Portal Crane 66; Portal Crane 68; Portal Crane 89; Portal Crane 90; Portal Crane 91; Wharf 106; Wharf 107; Wharf 108

Service Facilities

CNY: Building 10; Building 19; Building 28; Building 36; Building 124; Building 228; Building 230; Building M-39; Grit Hopper 259; Grit Hopper 273; Light Tower 238; Light Tower 239; Light Tower 240; Light Tower 246; Light Tower 247; Scale 234; Scale 235

SBA: Building 22; Building 23; Building 40; Building 103

Storage – General

BAB: Building 4 (SBA 114); Building 8 (SBA 118); Building 10 (SBA 119)

CNY: Building 4; Building 5; Building 34; Building 62; Building 75; Building 103; Building 149; Building 199

SBA: Building 17; Building 19; Building 32

Storage – Ordnance

CNY: Building 32; Building 39; Building 272

SBA: Building 31

6. Infrastructure

Power Plants/Electrical Systems

CNY: Building 22; Building 28; Building 79; Building 96; Building 105; Building 108; Building 109; Building 224; Building M-1; Aboveground Steam Line 281; Underground Conduit 280; Underground Fuel Storage Tank 220

SBA: Building 20

Water and Sewage Systems

CNY: Dewatering Tunnel 1; Dewatering Tunnel 2; Underground Conduit 280; Underground Fuel Storage Tank 220; Underground Water Storage Tank 221; Underground Water Storage Tank 223

7. Recreation/Social/Cultural/Religion

Assembly Halls

CNY: Building 38

Athletic Facilities

CNY: Tennis Court 236; Tennis Court 237

Clubs (Officer and NCO)

CNY: Building 4; Building 5

Exchange

CNY: Building 4; Building 38; Building 79

Theaters

CNY: Building 38

Table 4–4

NAVY YARD PROPERTY TYPES — *Continued*

8. Research and Development

Laboratories / Research and Testing Facilities

CNY: Building 10; Building 22; Building 28; Building 34; Building 62

SBA: Building 16; Building 53

9. Residential

Institutional Housing – Bachelor Officers Quarters

CNY: Building 5

Institutional Housing – Barracks/Dormitories

CNY: Building 33; Building 36; Quarters I

SBA: Building 29

Institutional Housing Support Buildings – Mess Halls

CNY: Building 5; Building 33; Building 36; Quarters I

SBA: Building 21

Family Housing

CNY: Building 265; Building 266; Quarters G; Quarters I, Quarters P

Family Housing Support Buildings – Garages

CNY: Building 1; Building 245; Building 269

10. Transportation

Animal-Related – Stables and Stable Complexes

CNY: Building 21

10. Transportation – *Continued*

Vehicle-Related – Motor Pools

CNY: Building 1

SBA: Building 28

11. Landscape

Miscellaneous Features

CNY: Anchors; Band Stand 260; Cannon & Cannonball Display (Shipyard Mall); Flag Pole 242; Historical Plaque 270; Saluting Battery 261; Torii Gate 282; War Memorial 279

Parks and Parade Grounds

CNY: Commandant's House Grounds; Marine Barracks Parade Ground; Shipyard Mall

Transportation Infrastructure

BAB: Railroad Tracks; Terminal Street

CNY: Crane Tracks, Dry Dock 1 & 2; Crane Tracks, Pier 11; Railroad Tracks; Road System (First Avenue; Second Avenue; Third Avenue; Fourth Avenue; Fifth Avenue; Lincoln Avenue; 3rd Street; 4th Street; 6th Street; 7th Street; 8th Street; 9th Street; 13th Street; 16th Street; Baxter Road)

SBA: Crane Tracks, Dry Dock 3; Crane Tracks, Dry Dock 4; Railroad Tracks; Road System (Dry Dock Avenue; 7th Street; A Street; C Street)

Key: BAB = Boston Army Base; CNY = Charlestown Navy Yard; SBA = South Boston Annex

symmetrically arranged rectangular buildings, the rehabilitation of the area and adaptive reuse has lessened the feeling and association of an active navy yard. Here, the details of the industrial process such as cranes and railroad and crane tracks are missing.

In conclusion, while the Charlestown Navy Yard has undergone changes that have diminished its integrity it still possesses a high enough level to be considered to retain integrity. As demonstrated above, each area of the yard has enough of the basic characteristics of the former Navy Yard, particularly circulation patterns, street grid, buildings, and structures to retain integrity, albeit diminished.

The South Boston Annex also retains a high degree of overall integrity. Like Charlestown, the degree of integrity varies from location to location. The basic circulation pattern consisting of Dry Dock Ave., 7th St. (Harbor St.), Northern Ave. (A St.), and Fid Kennedy Ave. (C St.) remains. Because Dry Dock 3 continues as an active ship repair facility, it possesses a very high degree of integrity.

As the individual resource profiles in Chapter 5 show, all structures and features existing as of November 1966 or which were added to the shipyard prior to July 1974 related in some way to the operation of the Navy Yard. They have, therefore, been considered to be contributing resources to the site. Table 4-6 summarizes the contributing and non-contributing resources of the Navy Yard based on the four National Register categories of buildings, structures, objects, and sites. The relative significance of these resources differs, ranging from those which could stand alone as National Historic Landmarks to those which have minimal historical value. These relative values, shown in the individual listings in Chapter 5, provide a means of evaluating the impact of proposed changes. The individual character-defining features of these resources need to be established; in so doing, it is important to evaluate changes over time in the context of the individual resource. Not all physical changes are necessarily significant and worthy of preservation. While the basic philosophy of sympathetic change should be applied to the evaluation of alterations made in the historic period, functional significance of an unsympathetic change must be considered as well. For example, the large picture windows installed in the southeast corner of the second floor of Building 125 in the mid-1950s had no functional relationship to the building and were thus found to be "insensitive" and "detrimental to the building's architectural and historical integrity."[35] For that reason, they were removed and replaced by windows matching the original configuration during the structure's recent rehabilitation.

One of the major factors in maintaining the integrity of the Navy Yard is the presence of active-duty naval personnel. Ironically, their presence also leads to severe pressures on the National Park Service area of the Navy Yard because of the Navy's concern with the protection of its forces from perceived threats, especially in the aftermath of the September 11, 2001, terrorist attacks. Thus, there has been an overlay of security imposed upon the yard which impacts both the historic fabric of the site and the movement of

[35] Einhorn Yaffe Prescott, *Historic Structure Report for Building 125 (Paint Shop), Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts* (Boston: Einhorn Yaffe Prescott, 2003), TIC 457/ D6326, p. 49.

Table 4–5

INDEX OF PROPERTY TYPES WITH CHRONOLOGICAL OVERVIEW AND THEMES

KEY:
- ● Charlestown Navy Yard
- ● South Boston Annex

	PROPERTY TYPES										
	Administration	Communications	Education	Health Care	Industrial	Infrastructure	Recreation/Social/ Cultural/Religion	Research and Development	Residential	Transportation	Landscape
CHRONOLOGICAL OVERVIEW											
The Military in the Early Republic and Antebellum Era, 1790-1860											
Establishment (1800-1828)	●				●				●		●
Early Nineteenth Century Growth (1828-1853)	●				●				●	●	●
The Civil War and National Expansion, 1860-1890											
Development in the Age of Steam (1853-1869)					●						
The Post Civil War Period (1869-1890)											
The Military and the Progressive Era, 1890-1916											
The Yard Resurrected (1890-1919)	●	●		●	●●	●			●	●	●
The Inter-War Years, 1918-1940											
The Stagnant 1920s (1920-1931)			●					●			●
The Yard Revitalized (1931-1939)					●	●			●●	●	●
World War II, 1940-1945											
World War II (1939-1945)	●●			●	●●	●●				●	●●
The Cold War, 1945-1989											
The Cold War Era (1945-1974)					●●	●	●	●	●		●
THEMES											
History of the American Navy	●●				●●				●●		●●
History of Technology		●			●●			●		●●	●●
History of Social and Worker Movements	●●		●	●●			●●		●●		
History of American Architectural Design and Planning	●●				●●	●●			●●		●●

visitors seeking to experience the park's resources. This is a complete reversal of historic practice, where USS *Constitution* was freely accessible to visitors while the remainder of the yard was closed for both safety and security reasons.

The Department of Defense has recognized that it has a dual function to ensure personnel safety and security and "to ensure that properties representing significant aspects of U.S. military history and culture are not severely or irreparably damaged."[36] While proposals to better segregate naval personnel from the public have been put forth,[37] such projects are unlikely to occur in the short term. Thus, there will be a need to balance security needs and the access that the public expects within a national park. Any security enhancement project within the Charlestown Navy Yard should take into account the guidance developed in 2006 by the Department of Defense Legacy Resource Management Program.[38]

[36] Julie L. Webster, Patrick E. Reicher, and Gordon L. Cohen, *Antiterrorism Measures for Historic Properties*, ERDC/LAB TR-06-23 (Champagne, Ill.: Construction Engineering Research Laboratory, U.S. Army Engineer Research & Development Center, 2006), p. 2.

[37] See, e.g., PMIS 88983, "Relocate Navy Functions and Upgrade Park Systems to Protect Public Safety and Historic Resources," last updated Feb. 5, 2008.

[38] Webster, et al., *Antiterrorism Measures for Historic Properties*.

Table 4-6
CONSTRIBUTING RESOURCES SUMMARY

	Charlestown		South Boston	
	C	NC	C	NC
Buildings	51	18	19	16
Structures	62	8	23	2
Objects	3	1	0	0
Sites	3	2	0	2
Total	119	29	42	20

Source: Table 5-1
C = Contributing; NC = Non-Contributing

Existing Conditions

The changes which have occurred in the Navy Yard since 1974 have tended to create four distinct areas within the yard. The westernmost portion of the yard, the Charlestown Navy Yard unit of Boston National Historical Park, retains the greatest integrity to the historic period, although adaptation of facilities for both administrative and public use have resulted in significant changes. The Historic Monument Area, which has the strictest preservation guidelines of any of the three conveyed parcels, has a mixture of treatments which both imposed a more typical city streetscape over the industrial site and arbitrarily "restored" structures to their so-called original appearance. The Recreation (Public Park) Parcel saw the permanent flooding of Dry Dock 2 and the creation of a contemporary urban park on a site which had been first a more austere recreation field and then an industrial shop. The New Development Area (Buy Parcel) has seen some structures restored, others rehabilitated beyond recognition, and contemporary structures built in place of industrial buildings or on top of historic features making them barely if at all recognizable. Heavy industrial piers have become parts of recreational marinas.

In all three of the transferred parcels change has virtually eliminated the industrial character of the Navy Yard in favor of more typical urban features. Preserved structures have been cleaned up, philosophically (although not actually) restored to their "original" appearance. New construction has introduced modern architectural elements in areas which were historically open piers or shipways. Even in the national park parcel, buildings and sites have been cleaned up to remove overlays of utilities which detract from the more significant features of them. Thus, in reality, the park is no longer preserving the industrial character present in 1973, but a cleaned up version of what the yard once was.

Appendix F contains drawings showing existing conditions within the Boston Naval Shipyard NHL, including both the Charlestown Navy Yard and South Boston Annex (Boston Marine Industrial Park), as of January 2006. The drawings differentiate between contributing (historic) and non-contributing (post-historic) resources, reflecting the assessment of individual resources shown in Chapter 5.

The Historic Monument Area was developed under guidelines that included historic preservation restrictions for 18 of the 21 buildings with an emphasis on reuse rather than new construction. The New Development Area, although containing six historic structures, was dominated by new streetscapes and new buildings in contemporary designs. Unfortunately, in both areas, preservation guidelines were not strictly adhered to. The period of significance for the Navy Yard is 1800 to 1974 and during that time period many buildings acquired additions sometimes in materials other than the original building along with overlays of utilities. The streets contained railroad and crane tracks. The BRA tended to focus on the original "block" of the structure and on the mid-19th and early 20th century periods, removing anything later, including many World War II wooden additions, as well as all the industrial supply lines running along buildings and streets. It should be noted, however, that the work on the exterior of the buildings themselves did retain character-defining features such as original windows, doors, and entryways and the treatment of the surfaces of the buildings did not detract from the granite and brick structures. But the connecting elements of the yard, those things that made it look like a working shipyard, were stripped to be replaced with buildings set amidst green spaces giving the areas more of a campus, rather than military/industrial setting.

Within the New Development Area great liberties were taken with the structures. The Shipways were partially demolished and new housing built on top of them. Building 42, the massive Machine Shop, was partially demolished. Condominiums were built on Pier 7, and similar plans for Pier 5 are proceeding through the regulatory process. Building 197, the Electronics Shop, had two stories and wings added to it, as well as new skin to complete the transformation to luxury condominiums. Recreational marinas have sprouted from former industrial piers. The BRA is still struggling with the area designated Yard's End, at the most eastern end of the yard. All the buildings in the area have been demolished. A number of development options now under active consideration will introduce new institutional buildings in a much larger scale than was historically present.

Redevelopment of the Historic Monument Area is also incomplete. The Power Plant (Building 108) remains vacant, development stymied by the lack of funding by the Army Corps of Engineers to complete hazardous material abatement and demolition. The Chain Forge, the Ropewalk, and the Tarring House, all within the national park boundary but owned by the city, are also undeveloped. These buildings will be developed in a partnership between the NPS and the BRA. Financial constraints make it impossible for any of these buildings to be used only for interpretative exhibits. Therefore, a new use for each building, combined with an interpretative area as well, will have to be determined. The current guidelines, which call for them to be renovated under the Standards for Rehabilitation (rather than that for preservation as in the original transfer deed), need to be reviewed and amended as necessary in response to specific proposals for reuse.

The marketing of the new condominium developments has not, with the exception of the Shipways and Parris Landing (inappropriately-named since the structure post-dated Parris' death), reflected its historic heritage. Names such as Flagship Wharf and HarborView have no historic precedents and do not immediately bring an image of a former Navy base to mind. (In contrast, the Admiral's Hill development on the site of the former Chelsea Naval Hospital on the opposite side of the Mystic River prominently reflects its naval antecedents.)

The National Park Service has had to grapple with a complex set of issues within its Navy Yard holdings. The 1980 General Management Plan (GMP) for the NPS portion of the Navy Yard called for "the preservation and maintenance of the 20th century industrial character of the Navy Yard as it existed in 1973 prior to transfer to the National Park Service."[39] This "Preservation Subzone" created considerable controversy because it was often interpreted to mean the literal retention of the yard as it looked in 1973 rather than a recognition that the yard was an active, always changing, facility and that it would be both economically impossible and inappropriate to restore the yard to any particular point in time. The GMP, both as written in 1980 and as amended in 1987, however, supported the introduction of visitor amenities and the selective restoration of historic elements of the yard.

Preservation Guidelines

Both the National Park Service and the Boston Redevelopment Authority, as well as the private parties who have purchased portions of the Navy Yard from the BRA, have a responsibility under the Boston National Historical Park Act of 1974 and the provisions of the various deeds from the United States to the BRA to preserve and protect the historic character of the Charlestown Navy Yard.

While the preservation guidelines for the non-park sections drawn in the late 1970s are not those which would be drawn under contemporary historic preservation practices (especially with regard to recognition and retention of later additions and the cultural landscape), it must be recognized that for the most part they have been successful in helping to transform the non-park portions of the Navy Yard into a mixed-use community containing housing, offices and research laboratories, and public amenities. However, the sense of the Navy Yard as something special has gradually eroded as standard city design practices have made its streets into nothing different from other city streets, historic signage has been allowed to deteriorate, and promised interpretive programs have yet to materialize.

Obviously, it is neither possible nor desirable to correct deviations from the guidelines (particularly the groundplane guidelines which called for retention of railroad tracks and some of the overhead utility lines). However, it remains possible to reinforce the feeling of the Navy Yard in the non-park portions through measures which are not costly to implement.

This task is a challenging one, for the yard continues to evolve as it is adapted for new uses, whether they are the interpretation of the yard's history to visitors or the creation of housing, office and laboratory space, and establishment of other commercial uses and public amenities in the yard. The existing preservation guidelines provide a framework for the treatment of the Navy Yard, but, while considered some of the best prepared for transferred federal property,[40] they unfortunately serve to reinforce the artificial division of the site into distinct areas.

Today, with new scholarship and a rethinking of the meaning of preservation, rehabilitation, restoration, and reconstruction treatments, both the NPS and the BRA are in a better position to make choices that will support their mandate of development, interpretation, and visitor services. In 1996 the Secretary of the Interior published Guidelines for the Treatment of Cultural Landscapes, which takes a more holistic approach than previous guidelines.[41] The Cultural Landscape guidelines are expansions of the Secretary of the Interior's Standards so that all cultural resources are included, not just buildings and structures. Now landscape and elements (buildings, structures, and objects) within a landscape (be it natural or manmade) can be addressed as an interrelated whole.

This study does not recommend a wholesale revision of the guidelines. The process of amending the guidelines for individual buildings and parcels on a case-by-case basis in response to specific development proposals has worked and is consistent with the spirit of the Secretary of the Interior's Standards. However, there is a need for the revision of the groundplane portion of the guidelines and their expansion to include the entire yard, not just the Historic Monument Area. The completion of the Cultural Landscape Report for the remainder of the Navy Yard will provide a major opportunity to involve all of the stakeholders in the yard in this process.

Recommended Approach: Rehabilitation And Interpretation

The Secretary of the Interior's Standards for Historic Preservation define four major treatment approaches for historic properties—preservation, restoration, rehabilitation, and reconstruction.[42] Reconstruction of the yard to an earlier appearance is neither desirable nor feasible. Neither preservation nor restoration treatments are appropriate for the Navy Yard as a whole, although there may be individual resources within the yard where such treatments best reflect their historic significance and character (e.g., the restoration of the Muster House). Rather, rehabilitation, which balances necessary evolution to meet contemporary needs with the retention of those features which best define the historic character and significance of both the overall yard and the specific contributing resource being treated, is the one recommended by this study.

Clearly, reuse of a facility such as a military base for other uses requires changes, including the removal of structures and the addition of new structures. Unfortunately, the approach to many evolved structures has been to remove subsequent additions to restore them to their original appearance. For a facility where continual change has been the norm, this practice, while aesthetically pleasing, too often results in the removal of additions which, while not architecturally in keeping with the original design, express both the evolving function of the structure and the style of their own period. Thus, it is extremely important in the Historic Monument Area of the Navy Yard to preserve the existing form of the Chain Forge (Building 105) and not to either remove or alter for aesthetics the World War II additions since in all other cases in that part of the yard all evidence of post-World War I alterations have been destroyed. Similarly, approaches to the redevelopment of the Power Plant (Building 108)

[39] National Park Service, *Charlestown Navy Yard, Boston National Historical Park: General Management Plan, Volume II* (Denver, National Park Service, 1980), TIC 457/D1553A, p. 9.

[40] Author's conversation with Alisa McCann, NPS, Aug. 16, 2006.

[41] Charles A. Birnbaum with Christine Capella Peters, eds., *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (Washington: Historic Landscape Initiative, Heritage Preservation Services, Cultural Resource Stwardship and Partnerships, National Park Service, 1996).

[42] For brief definitions of these treatments, as well as other historic preservation terminology, see the appropriate entries in the Glossary in Appendix D of this report.

should consider the retention of the portion of the structure along Third Ave. which forms a continuous streetscape with Building 107.

In arriving at a comprehensive approach to the yard which both meets contemporary use needs and retains the sense that this area is historically distinct from surrounding urban neighborhoods, one must concentrate on the yard's major character-defining features, identified in a previous portion of this chapter.

The most important character-defining feature of the Navy Yard is its grid plan developed in the 1820s and the relationship of buildings, structures, and open space to it. The grid, with buildings constructed parallel to the street line, defines the yard to a great extent. In the national park section the grid breaks down a bit due to the size of Pier 1 in proportion to its surroundings but a plan view clearly show the grid in place. Even with new gates added or expanded, such as Gates 4, 5, and 6, the grid is still intact. Therefore, since the grid was and is of primary importance in the way the Navy Yard was arranged and utilized, and is considered a contributing element to the significance of the Navy Yard[43] and is within the period of significance, it would make sense that the grid be treated under the guidelines of preservation.

Maintaining the integrity of the character-defining features of a facility as complex as the Charlestown Navy Yard is a task that must balance the needs of current uses of the facility with an understanding of how changes to accommodate such needs impact those features. While "freezing" the yard's appearance to the end of its period of significance is as impractical as restoring it to any past period, changes should respect the essential character-defining features and be as sympathetic as possible in their treatment of historic fabric. In particular, efforts should be made to retain the industrial overlay of pipes, conduits, etc., rather than to restore a pristine appearance that a structure probably never had.

Alterations and change can be done in ways which are sensitive to and reflective of the historic character of a facility. For example, the post-and-chain railing around Dry Dock 2 can be painted in its historic safety yellow color rather than the generic black favored for contemporary urban waterfront railings. Similarly, while the existing violations of the groundplane guidelines such as the removal of railroad tracks are not easily corrected—and this study does not recommend that tracks be reinstalled—other measures such as the use of historically accurate solid green crosswalks rather than City of Boston white ladder patterns require little effort except education of those responsible for the site. The maintenance of historic signage, particularly building numbers, is another easily done step in helping to make sure that the feeling of the Navy Yard as something distinct from other urban neighborhoods is preserved. (In some ways, the approach of the EDIC in the Boston Marine Industrial Park in using typical marine bollards throughout the site creates a maritime feeling lacking in non-waterfront areas of the Charlestown Navy Yard.)

While the presence of an active-duty Navy contingent means that the entire yard can never be a totally open site, simple measures can be taken to help express the unity of the yard. Historic building number signs, as well as historic street signs attached to buildings, can be kept in good condition, and other signs specified for retention which have not been retained (such as those on the west end of Building 39) can be restored. The Safety Shoe sign can be returned to its historic location adjacent to the west side of Building 36. The typical black round trash receptacles in the Historic Monument Area and Shipyard Park can be replaced by new, historically accurate yellow "Keep Our Shipyard Clean" trash receptacles similar to those used by the park.

While changes since 1974, particularly in the non-National Park Service portion of the Navy Yard, have severely reduced the integrity of the industrial facility the yard once was, much still exists, albeit in smaller pockets. Wherever possible, those elements which exemplify the site's industrial character, even if aesthetically unattractive, should be retained. Thus, the compressed air line running on a trestle from Building 24 and the west face of Building 125 should be retained since such utility lines are a basic feature of an industrial complex. The desire to "clean up" areas such as the laydown space around the Grit Hoppers must balance the need not to accumulate inappropriate materials with a recognition that a working shipyard—and the Navy Yard remains a working shipyard—requires places for materials and equipment to be stored. Such laydown spaces should be managed, not eliminated.

Nothing is more characteristic of a working shipyard than a dry dock. Dry Dock 1 should be rehabilitated in accordance with the recommendations of the recently completed historic structure report[44] and then used for the maintenance of historic vessels. While the experience of the park with SS *Nobska*, which ran out of money and encumbered the dock for many years prior to her disposal, illustrates the potential problems surrounding such use, the park should either restrict work to federally-owned vessels (including USS *Cassin Young*, USS *Constitution*, and Salem Maritime National Historic Site's *Friendship*) or permit work on private vessels only after receipt of bonds which would cover the cost of clearing the dock in case of default.

Cranes are another key character-defining feature of a shipyard. In particular, Portal Crane 62 should be repositioned from the west side of Dry Dock 1 to Pier 1 near USS *Cassin Young* to reinforce the image of the yard as a place where work was done on ships, not just simply piers for tying up vessels making port visits. Efforts should be made to ensure that Portal Crane 30, considered excess to its needs by the Navy, be retained by the NPS.

Because so much of the industrial yard has disappeared, wayside and other exhibits become important in helping to convey this theme to visitors, most of whom come to the yard only because of USS *Constitution*. The relocation of the primary Navy Yard exhibit to the new Navy Yard Visitor Center in Building 5 exposes greater numbers of visitors to the history and significance of the yard. Although large numbers of visitors will not go beyond the immediate area of Pier 1, the National Park Service and the BRA should actively pursue the development of interpretive waysides throughout the Navy Yard for the benefit of those who do, as well as for the thousands of workers and residents in the yard who have little awareness of its historic significance. In particular, Dry Dock 2 and the Pump House (Building 123) should be interpreted for the thou-

[43] In concurring with the NPS assessment of what constituted contributing resources of the national park section of the yard, the Massachusetts State Historic Preservation Officer wrote that "we recommend that those streets that are part of the Parris [*sic*] plan should contribute as a single structural system." See Brona Simon to Marie Rust, Jan. 30, 1995, Boston Support Office Boston Naval Shipyard NHL File [copy], Division of Cultural Resources, BNHP.

[44] McGinley Kalsow & Associates, *Dry Dock 1 Historic Structure Report, Charlestown Navy Yard, Boston National Historical Park*, June 21, 2007, TIC 457/D6348.

sands of commuters and tourists who pass these structures each day to access the water shuttle.

A uniform series of interpretive markers can be installed throughout the yard. Care should be taken that any approach to the interpretation of the yard not create a series of maritime "theme parks" which have little or no grounding in the actual history of the shipyard. The Waterfront Activation Network Plan for the yard released by the BRA in 2007 needs to be carefully reviewed and revised so that its recommendations not only serve the goal of increasing public activity in the yard but also that of preserving and interpreting those elements of the yard which make it one of the nation's most significant historic sites rather than presenting generic maritime-related themes.[45]

Although visitation will never be large, the promised theme museums in both the Ropewalk and the Forge Shop should be developed. Building developers should be encouraged to use historic imagery not simply for lobby decoration but to present an interpretive story. The entrance lobby of Building 114 is an excellent example of how graphics can be used for both decoration and interpretation.

Coordination Between NPS And BRA

The National Park Service and the Boston Redevelopment Authority should work together to ensure that actions by either agency within the Navy Yard take into consideration the historic character of the area. In particular, the BRA should take steps to ensure that its lessees conform to the preservation guidelines, especially with regard to the retention and maintenance of historic signage. While regrettable, past deviations from guidelines, especially those relating to the groundplane, cannot be easily corrected. However, the BRA and the NPS need to emphasize to tenants and to other agencies of the City of Boston that the Navy Yard buildings and streets are not simply urban buildings and streets but contributing features of a nationally-significant historical resource. Deviations from standard practices which do not compromise vehicular or pedestrian safety to maintain the yard's historic industrial character should not be rejected simply because they "do not meet code" or are not aesthetically pleasing. Many such actions, such as the use of historically-accurate colors for dry dock railings, crosswalks, and fire hydrants have no cost impact.

From the outside, it would appear that the fact that two different National Park Service offices interface with the Boston Redevelopment Authority is counterproductive. While this could be simplified by the delegation of the responsibility for the oversight of the deeds of transfer, now vested in the Northeast Regional Office in Philadelphia, to the Superintendent of Boston National Historical Park, such a transfer may create a tension between the park, as a regulator, and an agency with which it needs to work cooperatively to promote and interpret the Navy Yard to the American people. Therefore, this study recommends that the lines of communication between the various NPS offices and both the BRA and the wider historic preservation community be improved and that the preservation guidelines be reviewed and updated comprehensively to take into account both a better understanding of the history and significance of yard features and the evolution of historic preservation philosophy and practices over the three decades since they were put into place.

The National Park Service, the Boston Redevelopment Authority, and other interested parties should work together to produce a master plan for the development of the Navy Yard as a whole which reflects a rehabilitation treatment for the yard. Where economically feasible, the BRA and other stakeholders should be encouraged to utilize historic precedents and treatments rather than standard, off-the-shelf contemporary approaches. While it is totally impossible to create a seamless yard, every effort should be made to reinforce the fact that, while now used for differing purposes, all areas of the yard share a nationally-significant historic heritage.

As a part of this master plan effort, the NPS and the BRA should review the boundaries of the park in the vicinity of Buildings 58, 60, 105, and 107. For example, it may be desirable from both a maintenance and law enforcement perspective to include the area between the Ropewalk and Chelsea Street within park boundaries. Any changes recommended in the master plan could be handled under existing NPS legal authority to make minor boundary changes without requiring specific Congressional action.

Documentation Of The Navy Yard

The Historic American Engineering Record (HAER) was established in 1969 by the National Park Service, the American Society of Civil Engineers, and the Library of Congress to document historic sites and structures related to engineering and industry. From its inception, HAER focused less on the building fabric and more on the machinery and processes within, although structures of distinctly industrial character continue to be recorded. In recent years, maritime documentation has become an important program focus.

A large portion of HAER projects have been instituted as mitigation for adverse effects under the procedures established for the implementation of Section 106 of the National Historic Preservation Act. Thus, projects tend to be initiated at a point in time when a full documentation of machinery and processes is virtually impossible. Such was definitely the case with the Charlestown Navy Yard. Starting in 1976, there have been several HAER campaigns to record the Navy Yard. Each dealt with very specific goals rather than attempting to provide an overall picture of a large and complex military-industrial facility.

Complicating the HAER project has been the fact that, more than three decades later, most of the documentation produced has yet to be transmitted to the Library of Congress, the official repository for HAER material. Table 4-7 lists the individual HAER documentation packages and shows which ones have, at least in part, been transmitted.

The Historic American Buildings Survey (HABS), from which HAER evolved, included the Commandant's House in its initial efforts during the 1930s. Subsequently, the Ropewalk and Tarring House were recorded by a HABS team in 1988. That effort focused on the architecture of the structures and not on the industrial processes which took place in them.

The individual HAER projects in the yard can be summarized as: (1) the initial Navy-sponsored effort to record machinery and cranes being disposed of (MA-90-1-9); (2) the creation of Shipyard Park (MA-90-10-11); (3) the Gate 4/5th St. project (MA-90-12-14); (4) the BRA redevelopment of the yard (MA-90-15-65); (5) the Building

[45] Boston Redevelopment Authority, *Waterfront Activation Network Plan for the Charlestown Navy Yard* (2007), TIC 457/D6350A.

Table 4–7

HISTORIC AMERICAN ENGINEERING RECORD DOCUMENTATION
BOSTON NAVAL SHIPYARD

Survey No.	Subject	In LC
MA-90-1	Building 114	No
MA-90-2	Building 58	No[1]
MA-90-3	Building 105	No
MA-90-4	Pier 7	No
MA-90-5	Portal Crane 20	No
MA-90-6	Pier 5	No
MA-90-7	Pier 10	Yes
MA-90-8	Hammerhead Crane 2	No
MA-90-9	Hammerhead Crane 4	No
MA-90-10	Building 195	No
MA-90-11	Building 123	No
MA-90-12	Gate 4	No
MA-90-13	Building 136	No
MA-90-14	Building 198	No
MA-90-15	Building 31	No
MA-90-16	Building 33	No
MA-90-17	Building 34	No
MA-90-18	Building 36	No
MA-90-19	Building 38	No
MA-90-20	Building 39	No
MA-90-21	Building 40	No
MA-90-22	Building 42	No
MA-90-23	Building 58	No[1]
MA-90-24	Building 60	No[1]
MA-90-25	Building 62	No
MA-90-26	Buildings 75, 187	No
MA-90-27	Building 79	No
MA-90-28	Building 96	No
MA-90-29	Building 103	No
MA-90-30	Building 104	Yes
MA-90-31	Building 105	No
MA-90-32	Building 106	No
MA-90-33	Building 107	No
MA-90-34	Building 108	Yes
MA-90-35	Building 120	No
MA-90-36	Building 127	No
MA-90-37	Building 131	No
MA-90-38	Building 143	No
MA-90-39	Building 149	No
MA-90-40	Building 150	No
MA-90-41	Building 165	No
MA-90-42	Building 178	No
MA-90-43	Building 191	No
MA-90-44	Building 193	No
MA-90-45	Building 195	No
MA-90-46	Building 196	No
MA-90-47	Building 197	No
MA-90-48	Building 199	No
MA-90-49	Building 200	No
MA-90-50	Building 203	Yes
MA-90-51	Building 206	No
MA-90-52	Building 210	No
MA-90-53	Building 211B	No
MA-90-54	Building 224	No
MA-90-55	Building 225	No
MA-90-56	Building 226	No
MA-90-57	Building 228	No
MA-90-58	Building 230	No
MA-90-59	Building 233	No
MA-90-60	Building 266	No
MA-90-61	Building 217	No
MA-90-62	Building 277	No
MA-90-63	Building 279	No
MA-90-64	Dry Dock 5	No
MA-90-65	Quarters P	No
MA-90-66	Shipways	No
MA-90-67	Pier 9	Yes
MA-90-68	Pier 11	Yes
MA-90-69	Marine Railway	Yes

[1] HABS documentation (MA-1247-A) has been submitted.

104 project (MA-90-30); and (6) the Army Corps remediation project (MA-90-7, 34, 50, 67-69). In addition, the NPS produced a recordation project for the Marine Railway which was perhaps the most comprehensive done for any structure but which was never formally a HAER effort.

In particular, the BRA effort was minimal, and largely consisted of exterior photographs of structures, many of which had originally been taken for other purposes. While the stripping of buildings had rendered process documentation impossible, there is no excuse for the BRA not to have recorded the interior of the major industrial structures.

The existing HAER material needs to be finalized and transmitted to the Library of Congress. The two projects completed in the 1990s should be the model for this effort, incorporating historic materials along with the original HAER photography. In particular, the 1974 Navy Yard recordation project (see the Navy Yard In 1974 gallery in Chapter 2) should be included in the final HAER package, along with the 1973 images taken by Eric DeLony of the HAER staff. The NPS recordation project for the Marine Railway should also be integrated into the existing HAER documentation for that facility.

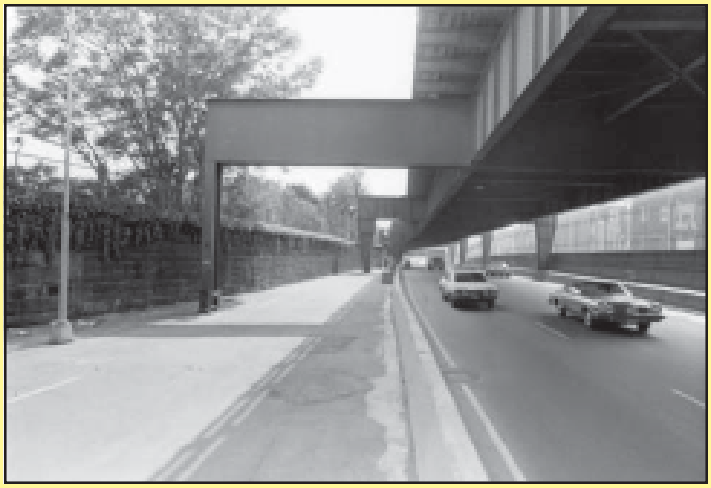
To this end, the park has prepared a PMIS funding request (PMIS 119094) to complete the HAER documentation of the Navy Yard. This project should be funded as soon as possible.

It is also recommended that a HAER project be undertaken to record Dry Dock 3 and Dry Dock 4 at South Boston. Such a project should include not only the docks themselves but also all of their supporting structures, including caissons, capstans, cranes and crane trackage, and pump houses.

On a broader level, the HAER efforts for the Navy Yard point to the need for establishing general HAER guidelines for both when and how to record large military or industrial complexes. For military installations, such a project should be the first project required once a base closure or realignment is approved. It should be scoped to record the entire facility—ignoring any distinction between historic and non-historic areas or contributing and non-contributing features—as a "snapshot" of the base at that particular point in time. The package must include aerial and other overall views of the property. Views of streetscapes and landscapes, as well as details of representative small-scale features such as signs, street furniture, etc., must be included along with both exterior and interior views. While it is not necessary to make a detailed record of the interior of identical structures (for example, a series of barracks), representa-

1978 National Register Nomination Photographs: A Gallery

IN MAY 1978 Edwin C. Bearss and Peter J. Snell of the National Park Service prepared a National Register nomination form for the Charlestown Navy Yard. Accompanying this nomination form, which was never officially accepted although it is widely circulated as such even by the NPS, were a series of historic and existing conditions photographs. The latter were taken in June and July 1978 by Richard Frear (mislabeled as Fear in the captions) of the NPS Mid-Atlantic Regional Office. This gallery presents those images, with the original captions but with the geographic orientation corrected to the Navy/NPS conventions used throughout this report. These images should eventually be incorporated into the HAER record for the yard.



Navy Yard Wall, North Boundary, View West, June 1978



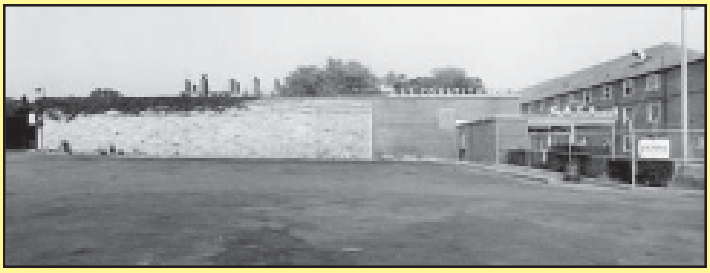
Second Ave., View East, July 1978



Shipways 2 (at right), View North, June 1978



Navy Yard Wall, West Boundary, View East, June 1978



Gate 2, Yard Wall, Gate 1, Building 5, View East, July 1978



Gate 4, View South, June 1978



Building 10, Crane 65, Dry Dock 1, Building 24, View Northeast, June 1978

1978 National Register Nomination Photographs: A Gallery



Building 24, Dry Dock 1, Crane 65, View South, June 1978



Building 197, Dry Dock 2, Buildings 125, 24, View South, June 1978



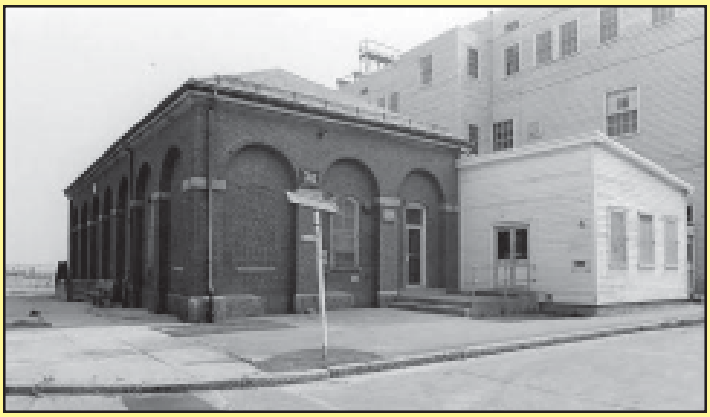
Building 22, Building 24, West Elevations, June 1978



Crane 65, Building 24, View Northeast, June 1978



Building 31, Building 120, View Northeast, June 1978



Building 32, View Southwest, June 1978



Building 33, Second Ave., Building 34, View East, June 1978

1978 National Register Nomination Photographs: A Gallery



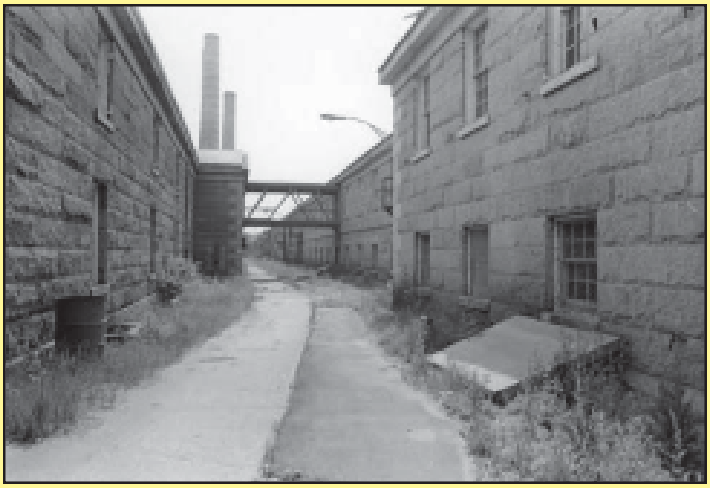
Building 34, Building 200, West Elevation, June 1978



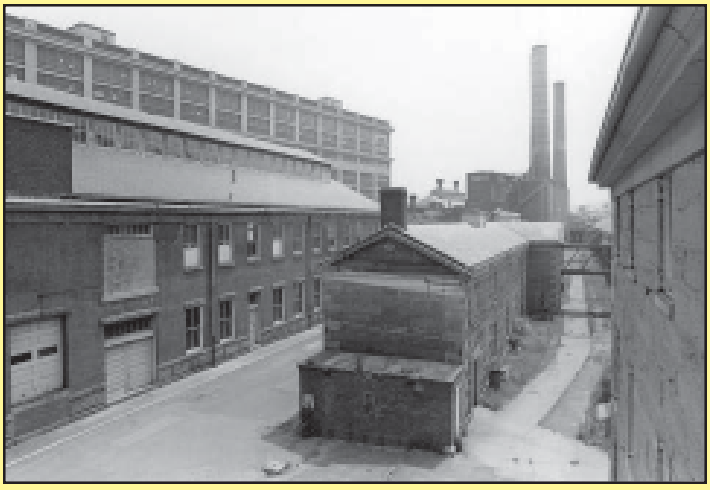
Building 42, View Northeast, June 1978



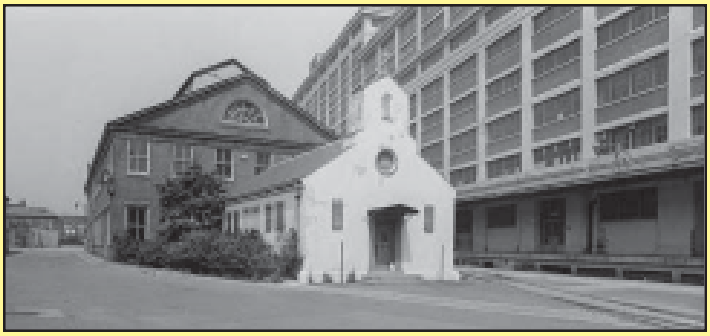
Building 58, North Boundary, View Southwest, June 1978



Building 60, Building 58, View West, June 1978



Building 60, Building 62, Building 58, View Southwest, June 1978



Building 62, Building 143, View East, July 1978



Second Ave., Building 75, View Northwest, June 1978



Bridge Across Shipways 1, Building 103, View West, June 1978

1978 National Register Nomination Photographs: A Gallery



Building 79, View Southwest, June 1978



Building 103, Shipways 1, Building 105, Building 104, View North, June 1978



Building 103, View Southwest, June 1978



Building 103, East Elevation, June 1978



Building 105, View Northwest, June 1978



Building 105, West Elevation, June 1978



Building 107 and Third Ave., View East, June 1978



Building 107, View Northeast, June 1978

1978 National Register Nomination Photographs: A Gallery



Building 108, View Northwest, June 1978



Building 120, South Elevation, June 1978



Building 120, Building 58, View Northwest, June 1978



Building 123, View East, June 1978



Building 136, West Elevation, June 1978



Building 197, South Elevation, June 1978



Building 198, View Southeast, June 1978

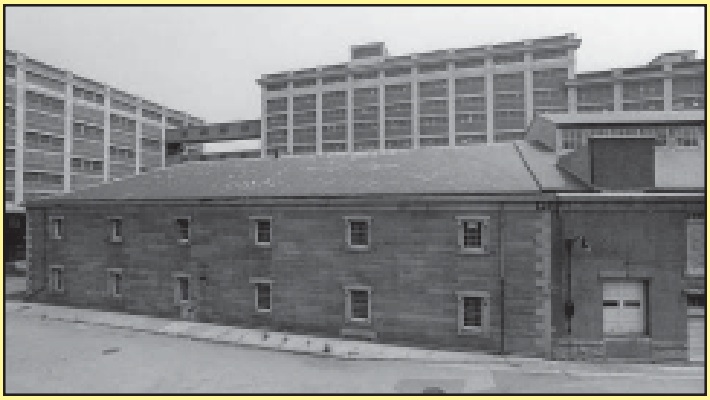


Gate 5, Building 199, Building 79, View South, June 1978

1978 National Register Nomination Photographs: A Gallery



Building 199, Gate 5, Building 79, View Southwest, June 1978



Building 199, Building 62, Building 149, View Southeast, June 1978



Building 199, View Southeast, June 1978



Barracks I, Parade Ground, Building 136, View Northeast, June 1978



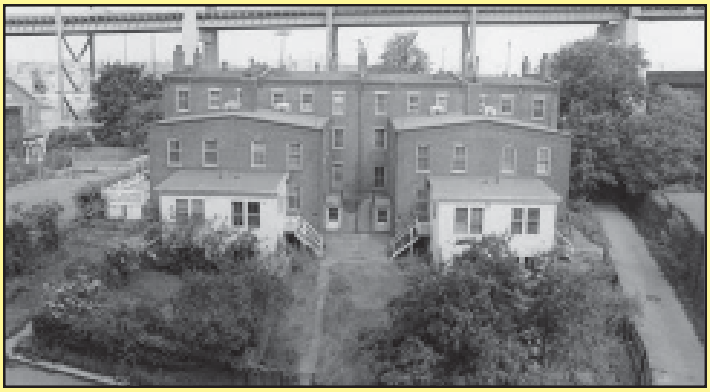
Barracks I, South Elevation, June 1978



Yard Wall, Quarters G, View South, June 1978



Quarters G, View Northeast, June 1978



Quarters L, M, N, O, View North, June 1978

tive interiors should be included. Photography of industrial shops should be done before any disposal of even the smallest equipment is permitted. Significant office spaces should also be recorded, as administrative activities are as important to the overall operation of a facility as are mission-related ones. Where appropriate, such as in the case of landscapes or structures of particular architectural merit, companion Historic American Buildings Survey (HABS) and Historic American Landscape Survey (HALS) projects should be encouraged. Historic materials, including original plans and photographs, should be identified, but need not be included in the HAER package if their preservation as intact collections is assured through agency and National Archives regulations. The acceptance of the HAER package should be a prerequisite to the finalization of any Section 110 and 106 review and/or transfer of a property out of federal ownership.[46]

Recommendations For Physical Treatment

The following is a summary of the recommendations for the physical treatment of the Navy Yard. These recommendations should help inform the comprehensive management plan for the yard discussed above which recognizes the yard's historic nature while allowing for future development for other uses.

These recommendations highlight major actions needed to maintain the character-defining features of the Navy Yard. They do not include most projects to stabilize, preserve, or rehabilitate individual structures or other elements within the national park currently identified in the NPS Project Management Information System (PMIS) or the specific treatment recommendations contained in the Cultural Landscape Report which should, with minor exceptions such as the preservation rather than removal of the Building 198 foundation, be implemented. Where existing PMIS projects are closely related to the recommendations, they are shown in parentheses. The individual project statements should be consulted for further detail, as well as for cost information.

(1) Maintain the Historic Grid Circulation Pattern of the Yard and Associated Viewsheds. The grid pattern established by the 1828 Baldwin master plan, while compromised in a few areas, remains largely intact. Since this grid governed the growth of the yard, it should be maintained. In particular, new development should be inserted within the existing grid pattern. Views along both First and Second Avenues, the primary yard thoroughfares, should be preserved. Views along the north-south streets extending to the harbor should be preserved.

(2) Maintain the Navy Yard Boundary Wall and Fence (PMIS 73612). The Navy Yard Boundary Wall and Fence are character-defining features of the yard as a military installation. The NPS should repoint the Boundary Wall, while the BRA should repair the Boundary Fence parallel to the Ropewalk.

(3) Maintain the Boston HarborWalk through the Navy Yard. The Boston HarborWalk is an effort to provide public access along Boston's inner harbor, an area historically inaccessible to the general public. Portions of the HarborWalk have already been constructed within the Public Park and New Development Areas. While security considerations mean that the HarborWalk through the national park cannot follow the western edge of Pier 1, an alternative routing along First Ave. and 3rd St. to the south end of Pier 1 is possible. The NPS and the BRA should work to create a safe pedestrian route across the caisson for Dry Dock 1, the site of the Marine Railway, and Dry Dock 2 to connect the HarborWalk on Pier 1 to the remainder of the HarborWalk in the yard.

(4) Retain Dry Dock 1 as a Working Dry Dock (PMIS 152558, 75135). Dry Dock 1 is the most important historic structure in the Navy Yard since it not only is one of the first two dry docks in the United States but also the most characteristic of the industrial nature of a naval shipyard. Dry Dock 1 should be rehabilitated in accordance with the recommendations of the recent historic structure report, and should be used for the drydocking of appropriate historic ships. Use of the dock by non-federal vessels should be allowed only with sufficient guarantees that such use will not encumber the dock in the same manner as occurred with SS *Nobska*.

(5) Retain Portal Cranes. Portal cranes are a character-defining feature of a shipyard. The three existing portal cranes should be retained and repositioned in ways which enhance their interpretive value while minimizing restrictions on active ship repair activities. The NPS should pursue the formal transfer of Portal Crane 30 from the Navy and restore its original number as Portal Crane 63.

(6) Restore Remaining Navy Yard Piers (PMIS 151177). The NPS and the BRA should move ahead to complete the restoration of Piers 2 and 3. The BRA should ensure that development at the eastern end of the yard does not preclude the future use of Pier 11 for berthing of visiting ships.

(7) Dredge Piers 1, 2, 3, 4, and 11 for Visiting Ships (PMIS 2099). Visiting ships reinforce the maritime nature of the Navy Yard and attract visitors to the yard. Both the NPS and the BRA have been active in promoting scheduled harbor ferry and harbor tour boat service between the yard and downtown Boston. Such vessels, however, do not require the same depths of water as do larger visiting ships. The NPS and the BRA should, in association with the Army Corps of Engineers, Massport, and other partners, dredge the berths at Piers 1, 2, 3, 4, and 11 to provide sufficient draft to accommodate visiting ships, especially American and foreign naval vessels and tall ships.

(8) Stabilize and Interpret the Marine Railway (PMIS 88432). The NPS should stabilize the remaining portions of the Marine Railway and interpret the facility, including the machinery room in Building 24, to the public as a part of the HarborWalk.

(9) Preserve Small-Scale Features (PMIS 12892, 88437, 116758, 124804). The NPS should ensure the preservation of the remaining industrial features of the yard such as the Grit Hoppers and Light Towers, as well as the smaller-scale buildings such as Buildings 110 and 124. The remaining Light Towers on Piers 4 and 6 should be retained by the BRA.

(10) Complete Restoration of the Muster House (Building 31). The Muster House (Building 31) was restored to appearance at the

[45] For an example of HAER documentation which approaches a military installation from a comprehensive point of view, see HAER RI-15, Quonset Point Naval Air Station, 1979, HABS/HAER Collection, Library of Congress. For naval shipyards, the HAER documentation for the Philadelphia Naval Shipyard comes closest to the approach recommended here, although it is not as comprehensive as that for Quonset Point. See HAER PA-387, Naval Base Philadelphia–Philadelphia Naval Shipyard (Philadelphia Navy Yard), 1994, HABS/HAER Collection, Library of Congress. Supplementing the overview package are packages (PA-387-A to PA-387-W) covering 23 individual structures. Although a brief HAER package was prepared for the Mare Island Naval Shipyard (HAER CA-3), the recording of that facility was done as a HABS project (HABS CA-1543), which treats each of the recorded structures individually rather than holisticly.

Boston HarborWalk In The Navy Yard



This map shows the existing and proposed routing of the Boston HarborWalk. *The Boston Harbor Associates*

IN 1984 the BRA and The Boston Harbor Associates (TBHA) began work to create a 46.9-mile public walkway along Boston's waterfront. Boston's HarborWalk includes parks, public art, seating areas, cafes, exhibit areas, interpretive signage, water transportation facilities, and other amenities. Within the Navy Yard, portions of the HarborWalk have been completed around Dry Dock 2 and from Pier 4 to Pier 8, using the former Dock St. and the Shipways' bridges, as well as along the edges of the adjoining piers. In 2007 it was extended along the Parcel 4 area as part of the HarborView project. Completion of the walk around Dry Dock 5 and along Pier 11 will be part of the development of those areas of the yard.

While the route of the HarborWalk on Pier 1 has been designated as running from the Lincoln Ave. (Railroad) Gate along the edge of the pier, the security zone created in the wake of the September 11, 2001, attacks has meant that the portion on the west side of the pier is no longer freely accessible. An alternate route should be developed using First Ave. and 3rd St., and the gap across Dry Docks 1 and 2 and the Marine Railway site needs to be bridged.



The former Dock St. between Pier 4 and Pier 7 has been developed as part of the Boston HarborWalk, as seen in this 2005 view. *John P. Harris*

conclusion of the construction of the third floor in 1871. However, the brick walls are currently bare brick. During the entire period prior to the demolition of the building's canopy around 1929, it was painted (or otherwise coated). The walls should be painted with historically accurate colors.

(11) Review Existing Preservation Guidelines and Amend as Appropriate. The NPS and the BRA should review the existing preservation guidelines to ensure that they have been complied with or to amend them to reflect better information on the history of the structure being treated. The NPS should work with the BRA to enforce guideline provisions which are being ignored by tenants (such as maintenance of historic building signage). New groundplane guidelines for the entire yard should be developed in accordance with the Cultural Landscape Report for the non-NPS portion of the yard.

(12) Rehabilitate and Interpret the Ropewalk and Tarring House (PMIS 71089). The Ropewalk and Tarring House are two of the most significant buildings in the yard yet to be redeveloped. The NPS and the BRA should move forward to amend the current guidelines to reflect a more modest exhibit component in any future development. The physical treatment of the building, including interpretive exhibits, should be in accordance with the guidelines or amendments made in response to specific programmatic needs.

(13) Rehabilitate and Interpret the Chain Forge (PMIS 16850, 19802, 70250). The Chain Forge should be rehabilitated following the completion of hazardous material abatement. This should include conservation of in situ equipment and development of interpretive exhibits. The NPS and the BRA should review and amend the curent guidelines to balance the preservation of the yard's only intact industrial shop with the spatial needs for successful rehabilitation. The World War II additions to the structure should be maintained and restored.

(14) Rehabilitate and Interpret the Dry Dock Pumphouse (Building 123). The BRA should be encouraged to rehabilitate the Dry Dock Pumphouse in a manner which allows public viewing of in situ pumping equipment.

(15) Maintain Historic Signage (PMIS 16704). Existing historic signage in the yard, including building numbers and identification signs, street signs, safety signage, etc., should be maintained in accordance with NPS policies and the transfer guidelines. The NPS and the BRA should consider replacement of the Safety Shoe Sign in its historic location at the west end of Building 36. Within the national park, minor signage such as utility location stencils should be maintained (and updated where appropriate).

(16) Treat Streetscape Features in Accordance with Historic Precedents. Streetscape features, including crosswalks, fire hy-

drants, and dry dock safety railings should be painted in historic colors in accordance with 1973 photographic evidence and the provisions of the Navy's manual on *Color for Naval Shore Facilities*.[14] The BRA and other property managers within the non-national park portions of the yard should be encouraged to utilize trash receptacles which duplicate historic Navy Yard trash receptacles.

(17) Develop Comprehensive Interpretive Waysides. The NPS and the BRA should work together to develop a comprehensive system of interpretive waysides, especially along the route of the HarborWalk. These waysides should be of a uniform design so as to reinforce the concept that the yard was historically a single property. While the NPS standard waysides can form the basis for the new waysides, the NPS should not refuse to consider variant designs simply because of policy.

(18) Manage Laydown Spaces. Because the NPS portion of the yard remains an active shipyard, laydown spaces are essential. The NPS should work with the Navy to ensure that defined laydown spaces do not spill over into other areas of the yard and do not become dumping grounds for obsolete equipment and materials.



The NPS has installed a number of interpretive waysides in its portion of the yard, including this one at the head of Dry Dock 1. A comprehensive series of waysides in either this or another uniform design should be extended throughout the entire yard. *OCLP*

Recommendations For Further Studies

The following is a summary of the recommendations for further study or other actions as a result of this report. Most of these projects have been included in the National Park Service's Project Management Information System (PMIS). The individual project statements should be consulted for further detail, as well as for cost information.

(1) Prepare Contextual Study of Naval Shipyards (PMIS 81068) — The evaluation of the significance of the Charlestown Navy Yard in its larger contexts of both naval shipbuilding and technology has been difficult because of the lack of a comprehensive study of naval shipbuilding policies and practices. It is recommended that this study, as discussed above, be undertaken in partnership with the Navy. The study should be coordinated with the appropriate State Historic Preservation Officers so that it can inform the completion of National Register nominations for both shipyard properties already identified as eligible and those so identified during the study. While it is probably still too early to evaluate the reuse of shipyard properties,[48] reuse plans should be examined to the extent that they impacted decisions made as part of the closure process.

(2) Revise National Register Documentation (PMIS 16784) — The existing National Register documentation for the Navy Yard consists primarily of a 1978 draft document never officially accepted, although distributed by, the National Register. Because it was drafted before extensive research had been conducted into Navy Yard records, it contains numerous factual errors. This documentation should be updated to both correct those errors and to reflect current conditions, as well as to include the entire Boston Naval Shipyard. The study should also look at the possibility of preparing individual National Register nominations for Dry Dock 1 (which should be combined with the existing NHL designation of Norfolk Dry Dock 1as a multi-property thematic nomination for the Navy's first two dry docks), Dry Dock 3, and the Ropewalk. (This work could be incorporated into the broader contextual study recommended above.)

The PMIS project is broader than just the Navy Yard, encompassing all sites within Boston National Historical Park. As a part of this larger effort, the existing documentation for USS *Cassin Young* (DD-793) should be reevaluated in terms of the role of the vessel during the Cold War in the 1950s, the period which the physical fabric of the ship represents and the period where it has a close association with the Navy Yard's primary mission of modernizing and overhauling naval vessels.

Since the former Boston Army Base property is not proposed to be within the revised boundaries of the Boston Naval Shipyard NHL, the Boston Landmarks Commission should be encouraged to undertake the necessary work to nominate the Boston Army Base to the National Register. This study should include consideration of proposing the property for nomination as a National Historic Landmark in its own right.

(3) Complete HAER Documentation, Charlestown Navy Yard (PMIS 119094) — At the time of the closure of the Boston Naval Shipyard in 1974, documentation of the yard to the standards of the Historic American Engineering Record was begun, but that effort has never been finalized. Only limited material has been processed and transferred to the Library of Congress. This project would locate and organize (in accordance with the original MA-90-Subnumber scheme) HAER photographs taken in 1973 and 1976 by Eric DeLony and Jack Boucher of the HABS/HAER staff, those taken in 1977 by the Boston Redevelopment Authority (BRA) as mitigation under various deeds of transfer, and subsequent documentation prepared under the auspices of the Army Corps of Engineers and private developers. In addition, it will make copies to HAER archival standards of photographs taken by Navy Yard photographers in 1973 and 1974 intended to document the conditions of the yard at the time of its closure.

(4) Update List of Classified Structures (PMIS 100030) —

[47] Naval Facilities Engineering Command, *Color for Naval Shore Facilities*, NAVFAC P-309 (Washington: Naval Facilities Engineering Command, 1971).

[48] To date, studies on the reuse of naval shipyards have dealt only with Boston, Philadelphia, and San Francisco (Hunters Point). See Catherine Alison Hill, *The Political Economy of Military Base Redevelopment: An Evaluation of Four Converted Naval Bases* (Ph.D. dissertation, Rutgers, 1998); Ron Hess, et al., *The Closing and Reuse of the Philadelphia Naval Shipyard*, MR-1364-Navy (Santa Monica, Calif.: National Defense Research Institute, RAND, 2001).

The existing entries in the List of Classified Structures (LCS) should be updated to reflect the information developed in this report. The descriptive fields of this document should identify the character-defining features of each structure to the extent that they have been developed in historic structure reports (HSR), and the LCS should be subsequently updated as further HSRs are completed.

As a part of this project, structures outside of the national park boundaries but which are subject to preservation restrictions under the deeds of transfer, which have been created as drafts in the "shadow" LCS database, should be completed and incorporated into the LCS database so that all resources in the Navy Yard can be monitored in the same way.

(5) Prepare Archeological Overview and Assessment (PMIS 100018) — The current archeological overview dates to 1980 and represents an assessment based solely on documentary materials. A more detailed overview and assessment, taking into account the findings of archeological work in and adjacent to the yard, should be prepared. Ideally, this project should be done in cooperation with the Boston Redevelopment Authority and include the entire Charlestown Navy Yard within its scope. This project is currently funded for FY 2010 under the regional archeological resources inventory (SAIP) program.

(6) Complete Cultural Landscape Report (PMIS 16796) — The remaining phase of the project for the Navy Yard cultural landscape report, covering non-NPS areas of the yard, should be undertaken. In developing treatment guidelines for this portion of the Navy Yard, the project should engage the park, the Boston Redevelopment Authority, local community groups, and other stakeholders in a visioning process and landscape character study of this portion of the yard as it transitions from predominantly industrial to institutional and residential uses. The result of this study will be used to develop revised groundplane treatment guidelines for the Historic Monument Area.

(7) Complete Draft/Prepare Historic Structure Reports (PMIS 12449, 16786, 74409, 74774, 144744) — The Historic Structure Report (HSR) provides essential information regarding the history of individual structures, identifies their character-defining features, and makes recommendations for their ultimate treatment. Most HSRs completed to date for Navy Yard structures have been done as part of the preliminary planning process for major rehabilitation projects. The most recent of these have been ones on Building 24, Building 125, and Dry Dock 1.

In the earliest years of the park, a number of HSRs were begun but never completed. These draft HSRs in the park's Technical Information Collection should be reviewed, and those which represent sound research should be finalized. Currently, statements exist for finalizing the HSRs on Quarters G (PMIS 16786) and the Chain Forge (PMIS 144744) and undertaking HSRs on Building 22 (PMIS 12449), Building 265 (PMIS 74774), and the Marine Barracks (PMIS 74409). A systematic program for the preparation of additional historic structure reports should be instituted.

(8) Prepare Administrative History (PMIS 12450) — The administrative history of Boston National Historical Park, especially as it relates to the creation of the park and the decision to include the Navy Yard in it, should be undertaken as soon as possible, while it is still possible to interview individuals involved in that process. This project is currently programmed for funding in FY 2014 under the regional cultural resources preservation program. Because this document may be of value in the preparation of the new General Management Plan for the park currently underway, it may be expeditious to explore working with the public history community to encourage graduate students to undertake it as a thesis/dissertation project.

(9) Prepare Labor History Studies — While the administrative, architectural, and technological history of the Navy Yard is fairly well represented in existing studies, special history and other studies are required to provide more information on the yard work force, its relationship to the Charlestown community, and how its composition changed over time, including women and minority workers. Since NPS funding for such studies is unlikely to be obtained in the near future, it is recommended that the park work with the public history community to encourage graduate students to adopt them for thesis/dissertation projects.

(10) Revise/Update Scope of Collections Statement and Collection Management Plan (PMIS 90812) — The current Scope of Collections Statement (SOCS) was prepared in 1985, while the Collection Management Plan (CMP) was approved in 1994. Both documents are outdated and not in compliance with current NPS standards for those documents. A project to produce a new CMP for the park is currently underway. An update of the SOCS is currently scheduled for FY 2011.

(11) Prepare Comprehensive Finding Aid, Boston Naval Shipyard Archival Collections (PMIS 108004) — The current finding aids for the Boston Naval Shipyard Archival Collections are outdated, both in terms of changes to the organization of the collection since the original finding aid was prepared in 1981 and in terms of including all Navy Yard-related collections. This project will provide a comprehensive and consistent finding aid for the Records of the Boston Naval Shipyard, the Boston Naval Shipyard Related Collections, the Boston Naval Shipyard Oral History Project, and the Boston Naval Shipyard Photo Collection.

(12) Digitize Photographs to Provide Access to Collection (PMIS 16841) — The Boston Naval Shipyard Photo Collection and the architectural drawing files in the Records of the Boston Naval Shipyard are among the most-utilized material in the Boston National Historical Park Archival Collection. To facilitate access to this material, it is recommended that portions of these collections be digitized and made available to researchers in electronic form through the Internet. Among the series of items which should be digitized first are general views (including aerial photographs), exterior views of significant structures, selected views of ships (including USS *Cassin Young* and USS *Constitution*) and material from the two ship history files relating to them, and the annual yard site plans. The yard newspaper, *Boston Naval Shipyard News*, has previously been microfilmed. It is recommended that this microfilm be converted to digital format and made available in electronic form as well. As an initial step, pending creation of archival-quality scans, the images digitized for this report should be made available.

Back Cover:
This aerial photograph of the South Boston Annex was taken by Airphoto of Wayland, Mass., on Apr. 10, 1971. In contrast to Charlestown, it was essentially a moribund facility. Note the lack of ships except at the jetties and at the piers on either side of Dry Dock 4. Wooden Piers 1 through 4 were in extremely poor condition, essentially condemned. Dry Dock 3 is flooded in this view. *BOSTS-13344*

National Park Service
U.S. Department of the Interior

Boston National Historical Park
Charlestown Navy Yard

