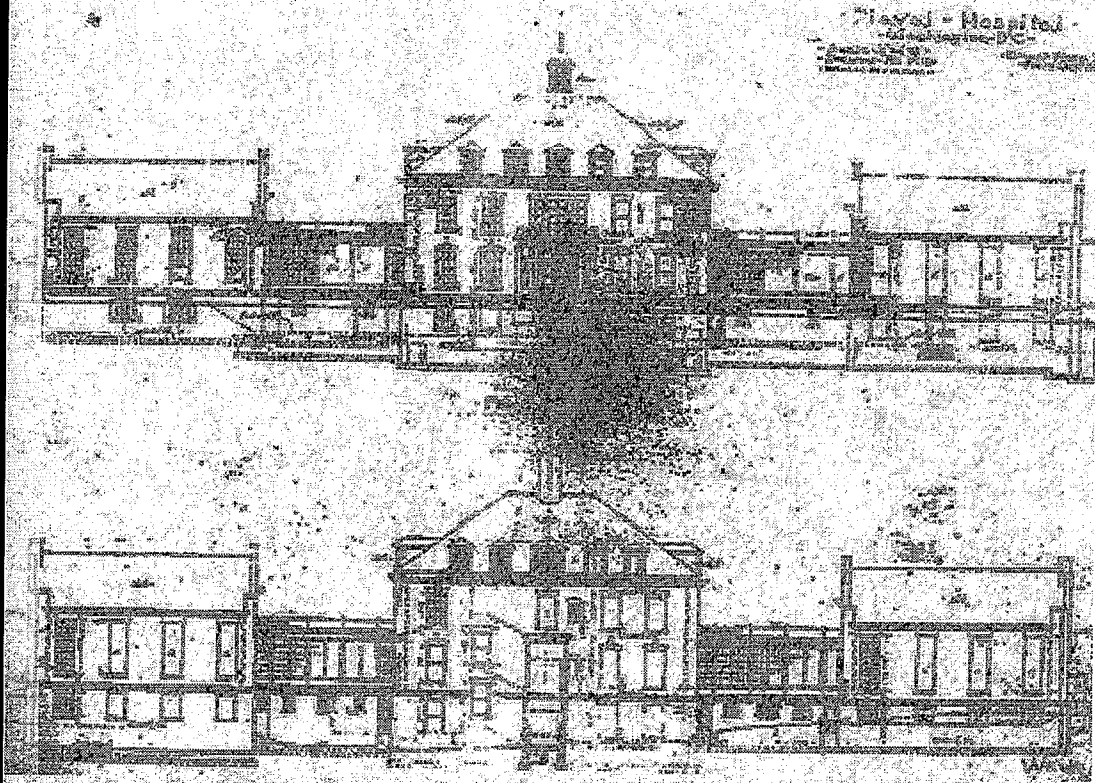


Potomac Annex: Buildings 1 & 3-7



Historic Structures Report, Corrected Final Submission
 General Services Administration Project Control Number: 44007
 September 9, 1997
 VOLUME 1 OF 2

HISTORIC STRUCTURE REPORT

**POTOMAC ANNEX
BUILDINGS 1, 3-7**

**GENERAL SERVICES ADMINISTRATION
NATIONAL CAPITAL REGION
WASHINGTON, D.C.**

PROJECT NUMBER: RDC44007

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CORRECTED FINAL SUBMISSION

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HISTORIC STRUCTURES REPORT (HSR)**POTOMAC ANNEX BUILDINGS 1, 3, 4, 5, 6, AND 7
(DC0592BE #1, DC0593BE, DC0594BE, DC0595BE, DC0596BE, DC0596BE)**

The study of buildings 1, 3, 4, 5, 6, and 7 at the Potomac Annex in Washington, D.C. was prepared for the National Capital Region of the General Service Administration (GSA Contract Number: GS11P91EGO0136; NGSAPCN: 44007).

The subject buildings are owned by the General Services Administration and are occupied by the Navy Bureau of Medicine and Surgery. The buildings were constructed for use as a hospital and its ancillary dependencies; their current use is as administrative offices.

The report was prepared by Swanke, Hayden, Connell Architects of Washington, D.C. and its consultants: Higgins & Quasebarth of New York City; George Wheeler, Ph.D. of New York City; Acroterion of Madison, New Jersey; and Hankins & Anderson of Richmond, Virginia. The Study was initiated in 1994 and completed in 1997. Andrea Mones-O'Hara, Architectural Conservator for the National Capital Region, was the chief reviewer for the GSA. Caroline Alderson and Marie Fennell, Assistant Regional Historic Preservation Officers, assisted in the review. Tyrone Anderson was the contract official for the GSA.

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This report is intended to provide:

- **guidelines for future building modifications which are in keeping with the original design;**
- **recommendations preserve the buildings and minimize disturbances resulting from future modifications;**
- **and preserve and enhance the cultural and historical significant aspects of these buildings in accordance with the Secretary of the Interior's Standards.**

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The subjects of this Historic Structures Report are Buildings 1, 3, 4, 5, 6 and 7 at the Potomac Annex in Washington, DC. The Potomac Annex, overlooking the Potomac River, is located on a ten-acre site at 23rd and E Streets, NW. Ten primary buildings ranging in date from 1844 through 1911 occupy the hilltop, which was formerly home to the United States Naval Observatory, the Naval Museum of Hygiene and the Naval Hospital and Medical School. It now is occupied by the Naval Bureau of Medicine and Surgery.

Summary of Chapter 2. Site History

Building 2, the old Observatory Building, is the central focus of the site and is the subject of a separate Historic Structures Report for Potomac Annex Building #2 (GSA PCN RDC-44008). The early institutional history is fully developed in that HSR. It is summarized briefly in Chapter II of this HSR to provide context for the 20th-century buildings, which are the subjects of this study.

The Naval Medical Complex, had a forty year history at Observatory Hill beginning in 1902 with the establishment of the Naval Medical School; it concluded in 1942 when the Bethesda Naval Hospital opened. During its tenure at Observatory Hill, the Naval Medical Complex evolved from an innovative attempt to address the particular demands of Naval medicine into a major center for the study and treatment of disease. Constantly dealing with the consequences of the international exposure of its troops and the changing technology of warfare, naval medicine was forced to be a progressive medicine, overcoming unprecedented obstacles of disease and war casualties with creative and inventive methods.

In 1902, the Naval Medical School established a post-graduate program at Observatory Hill and combined it with the Naval Hygiene Museum which had moved into the old Observatory Building in 1894. Soon after the establishment of the Naval Medical School, the Naval Hospital was introduced to the site in 1903. Working in tandem with the school, the hospital served as a resource for the medical students, while offering treatment for the sick and wounded of the military. The Navy, at the Washington Medical Complex, pioneered the study of "tropical" disease, chemical warfare, and aviation medicine. Naval medical staff dealt with the mundane but devastating problems of venereal diseases, and other contagious diseases, including the major epidemics of influenza, tuberculosis and typhoid that paralyzed the country in the first half of the century. Ultimately the Naval Medical Complex, like others of its kind, served as an important testing ground for medicine as it would be subsequently practiced in civilian hospitals in the United States and the world.

In 1903, the renowned New York architect, Ernest Flag, was commissioned to design the Hospital Building (Buildings 3 and 4). Flag's relationship with the Navy had been established at the end of the previous century; and in 1895, he had won the commission to design the new campus for the Naval Academy in Annapolis, Maryland. Ernest Flag was one of America's premier hospital architects in the late 19th and early 20th centuries. While the architectural expression of the hospital is conservative, and the spatial planning represented the contemporary thinking in American hospital design, the structural system was a significant and innovative development for its time. Ernest Flag is known for his experimentation in the use of reinforced

concrete, and this building is an early example of such use in this country. It is likely that Ernest Flagg's familiarity with the system was a deciding factor in the selection of reinforced concrete framing. Some of the buildings that Flagg designed at the Naval Academy were concrete structures.

It is interesting that reinforced concrete, a still-developing technology, was selected for the hospital, while steel and wood framing seemed to have been favored in the later buildings constructed on the site. It is possible that the specific benefits of reinforced concrete systems appealed to the hospital designers. Such benefits included concrete's inherent fire resistance, its stiffness, and its durability. Reinforced concrete provided an additional advantage of virtual airtightness. The original ventilation system in the hospital building consisted of exhaust fans in the end walls which created negative pressures in the attic. The resulting suction drew air up through vehicle shafts from the ward rooms into the attic above. This original ventilation system would be most efficient if the attic construction was virtually airtight--easily accomplished with monolithic poured concrete construction, but difficult to achieve with wood.

Construction of the Washington Naval Hospital began May 22, 1904 after a congressional appropriation the previous year. The following year, construction funds were depleted before the work was finished, and another appropriation was requested. At that time the Washington architectural firm of Wood, Donn and Deming was awarded the contract for completing Flagg's design. It was not until October 1, 1906 that the first patients were admitted to the hospital. A steam laundry, stable, greenhouse and power plant were completed in 1908. The Bureau of Yards and Docks (the Department of the Navy responsible for construction projects) proceeded with plans and specifications for the Sick Officers' Quarters (Building 5), Quarters for Female Nurses (Building 1), Quarters for Male Nurses (Building 7) and the Contagious Disease Building (Building 6). By 1911, all buildings were ready for occupancy. These later buildings, and three additional residences (Buildings A, B and C) were designed by the Naval Bureau of Yards and Docks under the direction of architect, F. W. Southworth, then Chief Architect of the Bureau.

World War I was a significant period for the hospital, causing a tremendous increase in the number of patients; while in 1912, there had been only five hundred and eight admissions, in 1918, at the height of American involvement in the War, two thousand patients were admitted. Following the Armistice; the influx of war veterans further strained the hospital's resources as did the great influenza epidemics starting in 1918. In 1929, the Navy recognized the necessity for a bigger and more technologically advanced facility, and began planning for one. However, the medical complex remained in operation at Observatory Hill until the current Naval Medical Complex in Bethesda was established in 1942. At that time, the Observatory Hill was quickly rehabilitated for use as the administrative center for the Naval Bureau of Medicine and Surgery, which currently occupies the site.

Summary of Chapter 3. Description of the Buildings As Originally Built

Observatory Hill is clearly enhanced architecturally by the campus-like environment created by the hospital complex. The architectural style of the buildings is a rather conservative Georgian Revival, domestic in scale, composition, materials and ornamentation. The complex is

characterized by buildings which are two-and-one-half stories on raised basements. They are clad with buff- or yellow-colored brick and trimmed with limestone (Buildings 3 and 4) or granite (Buildings 1, 5, 6, 7). The hipped roofs were originally covered with gray slate tiles; although some have been replaced. Most of the original wood multi-pane double-hung windows in frames remain. Ornamental features include classical portes cocheres and entrance porticos; cupolas, roof cornices, dormers and balustrades; keystones, quoins and columns. Wood ornamental elements were painted white; the windows were painted dark green. Many of the buildings were equipped with two-story porches opening to the south, but they were later enclosed to accommodate interior office spaces. While the building exteriors retain a high degree of integrity, the interiors of all of the buildings have been altered, some of them quite substantially.

Buildings 3 and 4 are actually separate parts of the same building. The building plan originates from two main cores. The administrative office to the north is now known as Building 3. Building 4, to the south, was constructed as the operating room and related facilities. Radiating from the cores are four pavilions. All are connected to each other by glass-enclosed solarium corridors. The Female Nurses' Quarters (Building 1) is a two-and-one-half story brick building with a hipped roof and a classical balustraded portico supported by Tuscan columns. An addition, which more than doubled the size of the building, was constructed on the south end in 1926. The addition continues the architectural detail and materials without the sense of balance and symmetry. The other buildings share the same characteristics of height, materials, composition and roof shape as the original section of Building 1. The Sick Officers' Quarters (Building 5) is T-shaped; its most impressive feature is the colossal portico on the north facade. The Contagious Diseases Hospital (Building 6) is characterized by double porticos with Tuscan columns. The Hospital Corps' Quarters (Building 7) has a semi-elliptical arch framing the main entry into the portico and an arched entry onto the portico roof.

Summary of Chapter 4. Existing Conditions Survey

The exteriors of Buildings 1, 3, 4, 5, 6 and 7 are, for the most part, in good condition, and they retain a high degree of integrity. The entries and sun porches on the buildings have been altered unsympathetically, however, for the most part, other buildings have not had significant irreversible additions made to them. Furthermore, they retain their original windows, which are in good condition. Generally, the masonry has not been coated, painted or inappropriately cleaned. The interiors, however, have been heavily altered over time. The interior changes, have been undertaken to convert the buildings to office use. While, for the most part, the original floor plans are still distinguishable, the quality of most alterations does not in any way add to the significance of the buildings; rather, they tend to detract from their architectural character. The nature of the interior alterations includes enclosing stair cases and corridors for fire-rating and dropping acoustic tile ceilings.

Building 1

The exterior of Building 1 retains much of its 1926 appearance, after the south addition was made. The major alterations include: changes to the southeast entry, reconfiguration of the northeast entry, and the lowering of a window opening to accommodate a door. The significant conditions to be noted on the exterior include: paint failure; various minor masonry disorders; and major disrepair of the masonry of the main entry porch and areaway.

The interior of Building 1 has been severely compromised by the introduction of non-original finish materials in the main entry lobby and the closure of the main entry stair. However, there are two spaces, the Surgeon General's office and the south stair hall, which retain many of their original features and finishes.

Buildings 3

The exterior of Building 3 (including its pavilions and solarium corridors) retains much of its original appearance. The major alterations include: reconfiguration of the main entry and the replacement of original slate roofing with asphalt shingles. The significant conditions to be noted on the exterior include: paint failure; various masonry disorders, including extraordinary soiling and major disrepair of the masonry in the areaway.

Some spaces on the interior of Building 3 have been severely compromised by the introduction of suspended ceilings and non-original partitions, particularly in the pavilions and solarium corridors. The lobby, stair hall and first-floor corridor, however, retain much of their original spatial configuration and interior features. Many interior features remain intact, particularly the staircases, windows, doors, frames and the ornamental plaster in the lobby.

Building 4

The exterior of Building 4 (including its pavilions and solarium corridors) retains much of its original appearance. The only major alteration is the reconfiguration of the south entry and porte cochere. The significant conditions to be noted on the exterior include: paint failure; various masonry disorders, including extraordinary soiling and major disrepair of the masonry of the south porch.

Some of the interior spaces of Building 4 have been severely compromised by the introduction of suspended ceilings and non-original partitions, particularly in the pavilions and solarium corridors. Some historic features are noted, particularly, windows, doors, frames and fragments of ceramic tile in the original operating room.

Building 5

The exterior of Building 5 retains much of its original appearance. The major alterations include: reconfiguration of the north entry, enclosure of the south sun porch, and installation of a wood fire-escape on the south. The significant conditions to be noted on the exterior include: paint

failure; water damage caused by poor roof drainage (especially in the porte cochere), various minor masonry disorders; and disrepair of the masonry in the areaway.

The interior of Building 5 has been severely compromised by the closure of the main entry stair, and the introduction of fire doors and partitions in various corridors and lobby spaces. Other interior features remain intact to a large degree, particularly the main stair, windows, doors and frames.

Building 6

The exterior of Building 6 retains much of its original appearance. The major alterations include: changes to the south porte cochere; reconfiguration of the north entry; poor repairs and alterations to the north entry porch; and the introduction of an obtrusive metal fire escape on the north facade. The significant conditions to be noted on the exterior include: paint failure; various minor masonry disorders; and major disrepair of the masonry of the main entry porch.

The interior of Building 6 is the most compromised of all the interior spaces on the site. It has been severely impacted by the introduction of non-original finish materials and suspended ceilings throughout. However, the perimeter walls do retain some original features, particularly window frames and baseboards.

Building 7

The exterior of Building 7 retains much of its original appearance. The major alterations include: reconfiguration of the east entry, enclosure of the south sun porch, and installation of a wood fire-escape on the north side. The significant conditions to be noted on the exterior include: paint failure; various minor masonry disorders; and severe disrepair of the masonry in the areaway.

The interior of Building 7 has been compromised somewhat by the closure of the main entry stair, and the introduction of fire doors and partitions in various corridors and lobby spaces. However, the floor plans still reflect a certain amount of the original configuration. Many interior features remain including windows, doors and frames.

Summary of Chapter 5. Paint Analysis

A scientific paint analysis is based upon the removal of small samples of the accumulated paint layers on original architectural elements of a building in order to determine the early colors of such elements, the sequence of finishes, and an appropriate color match for restoration. A second purpose of this paint analysis is to determine relative dates for alterations, using the historic paint sequences as a common point of reference. Paint analysis was requested for Potomac Annex Buildings 1, 3, 4, 5, 6 and 7 as part of a Historic Structures Report of the complex of historic buildings built as the Washington Naval Hospital. Building 2, the original Naval Observatory, is covered in a separate Historic Structures Report.

The period of significance for the Potomac Avenue complex covers the first third of the twentieth century, when the campus was fully built for the Washington Naval Hospital. Buildings 1,3,4,5,6, and 7 were constructed between 1902 and 1908. Their original paint colors are recommended for restoring the buildings to their historic appearance. This means retaining the unpainted yellow brick walls, accented with white cornices, porticoes, balustrades, and dormers. Where sun porches exist, they are also to be painted all white. A dark yellowish green color was originally used on the window sash and frames of all the buildings. Repainting the windows dark green will give a definite "historic" appearance to the buildings, as dark colored sash in particular was a very common paint treatment in the 19th and early 20th centuries, which has generally fallen out of fashion since World War I.

Most of the doors in the Naval Hospital complex have been replaced. If the metal and glass replacements are removed, and wooden doors replicating the originals are reinstalled, the same dark green paint found on the windows should be used. An original varnish finish was identified on Building 7, and it is unknown if it is typical for the complex. Varnish should be returned to the wooden doors of Building 7, but on any wooden replacement doors on Buildings 1, 3, 4, 5, and 6, dark green paint should be used as is documented on a few service entries for these buildings, and has the advantage of being a more practical finish.

Inside the Potomac Annex buildings, finishes reflected their utilitarian nature. For the most part, interiors were finished with cream-colored paint on the walls, and stained and varnished woodwork. The lobby of Building 3, which was the most public space in the complex during the early years of this century, retains its original, modest architectural features in its beamed ceiling and bracket cornice. The walls of this space were originally painted a warm reddish brown color, making it a literal "bright spot" in the Potomac complex. There is no evidence of complex finishes, such as glazing, or graining, or the use of wallpapers, in any of the areas sampled

Summary of Chapter 6. Materials Conservation Analysis

The conservation issues observed on the Potomac Annex Buildings are listed below. Generally, the conditions occurred consistently and can be grouped according to building. Buildings 1,5,6,& 7 exhibit many of the same conditions, while Buildings 3 & 4 exhibit some different conditions. This chapter presents the various conditions, a range of conservation options, and recommends the most appropriate option.

Buildings 1, 5,6,7

Conditions on Buildings 1, 5,6, & 7 at the Potomac Annex are generally good. The yellow brickwork on these buildings exhibits light and superficial soiling and requires little or no intervention. The granite on these building shows more moderate soiling. The use of window air conditioners has resulted in staining of some granite elements such as window sills and the water table or band course.

The pointing is generally in excellent condition with notable exceptions: 1) where granite building elements such as keystones, sills and band courses meet brickwork, the mortar joints are

open; 2) the end joints of canted brick lintels are consistently open; 3) the butt joints on the granite band courses at ground level are open or have been badly repointed or caulked. From these open joints on the band course have emanated cracks and open joints which extend in almost all cases to the first floor granite window sills and in some cases up to second floor windows. Damage to brickwork other than stress cracks is minor.

The wood elements require only typical periodic maintenance consisting of scraping and painting except for the dormer windows which have been recently repainted.

Concrete has generally not fared well on these buildings. Sidewalks and associated walls exhibit deterioration which is at times severe; efflorescences, bulging, and network cracking are noted particularly in areaways. Steps and slabs which have been repaired and painted are not visually well integrated into the rest of the building.

Metal railings are in good condition with some rust evident where they are anchored into the concrete. Copper gutters and leaders - some recently replaced are in good condition but require periodic cleaning.

Buildings 3 & 4

Conditions on Buildings 3 & 4 at the Potomac Annex are generally fair-to-good. Buff colored brick is moderately and selectively soiled. This soiling appears to be embedded in a cracked and crazed surface glaze which itself is not entirely intact. White glazed brick is lightly soiled and is damaged in some areas.

Pointing on Buildings 3 & 4 is in good condition with notable exception: 1) Where limestone building elements such as lintels, sills and band courses meet brickwork, the mortar joints are open; 2) Vertical butt joints on the limestone water table are open; 3) From these open joints on the water table step cracks have emanated to window sills; 4) Blue stone window wells have open joints.

Some limestone elements are damaged and stained, but the wood elements require only typical periodic maintenance consisting of scraping and painting.

Metal railings are in good condition with some rust evident where they are anchored into the concrete. Copper gutters and leaders - some recently replaced - are in good condition but require periodic cleaning. Paint on metal roofs is in poor condition and requires a more intense and more frequent maintenance program.

Summary of Chapter 7. Mortar Analysis

This mortar analysis addresses the brick and stone water table pointing mortars found on Buildings 1, 3-7 of the Potomac Annex. Generally, the sampled mortars are in good condition and most appear to be original to the buildings. Aesthetically, it appears that the brick and water table pointing mortars for Buildings 1,5,6,& 7 were identical and appear to be original. The mortars

found on Buildings 3 & 4, which indicate a different color range from the remaining buildings' mortars, appear to be original except for the water table pointing mortar of Building 4. The pointing mortar joint profiles for all buildings are slightly concave. This chapter describes the analytical protocol used to study the mortars. Each mortar is considered separately and the physical and aesthetic characteristics of each are described and documented. All original mortars are to be replicated according to the results of this analysis.

Summary of Chapter 8. Materials Cleaning Analysis

The range of soiling conditions found on Buildings 1, 3-7 range from minimal to moderate. Though most cleaning issues are largely cosmetic, all types of soiling must be addressed soon to prevent the eventual need for more invasive, and potentially damaging, cleaning efforts. Buildings 1,5,6,& 7 consistently suffer from the same types of soiling: light soiling of brick and granite elements, soiling by gypsum and flyash deposits on both limestone and brick and bitumen stains on both brick and granite. Buildings 3 & 4 suffer from soiling of brick and limestone. A number of cleaning tests were performed on each type of soiling, and the most appropriate cleaning solution was recommendation for each condition. The only exception is the brick soiling on buildings 3 & 4 where the unique soiling condition found there cannot be cleaned without further damaging the surface. The recommended cleaning procedures have been further described in Chapter 10: Guideline Specifications.

Summary of Chapter 9. Design Guidelines/ Rehabilitation Actions

Recommendations for treatments to the buildings recognize their current use as offices, as well as their historic character. Maintenance and repair recommendations are meant to bring the buildings up to sound condition and to ensure the future of their productive lives. The restoration and alteration recommendations are intended to enhance the historic and architectural character of the buildings without inconveniencing the occupants.

The most common conditions noted on the exteriors of the building include paint failure and various masonry disorders. The most common intrusion on interior spaces is suspended ceilings, which frequently obscure historic features, and interfere with the spatial quality of the rooms and with the appearance of the windows. Many partitions have also been added throughout the buildings, and stairs have been enclosed.

For the exteriors of all the buildings it is recommended that all repair work be done, as soon as possible. Masonry should be cleaned and repointed as necessary. Windows should be repaired and painted; their condition does not warrant replacement. Original paint colors should be utilized on all the wood work. Recommendations for design changes include restoration of missing elements, and the redesign of the enclosed sun porches on most of the buildings. These changes will enhance the aesthetic and historic appearance of these features, particularly the entries.

Building specific recommendations are outlined below:

Building 1

The exterior of Building 1 retains much of its 1926 appearance. Repair of the masonry of the main entry porch and areaway should be undertaken to ensure the future performance of the materials. The main entry should be restored or redesigned to be more compatible with the historic character of the building.

The interior of Building 1 has been severely compromised on the first floor by the introduction of non-original finish materials in the main entry lobby and the closure of the main entry stair. Future interior work should recognize the spatial configuration of the main entry hall and stair on the first floor and the double-loaded corridors on the first, second and third floors. In addition, the existing original doors, door frames, windows, window frames and wood trim on the corridors and perimeter walls should be preserved. There are two spaces, which warrant restoration: the Surgeon General's office and the south stair hall. These retain their integrity to a high degree, and restoration of their finishes and spatial arrangements would do much for the quality of the building.

Buildings 3

The exterior of Building 3 (including its pavilions and solarium corridors) retains much of its original appearance. The masonry should be repaired and cleaned, particularly the masonry in the areaways. The major exterior features recommended for restoration include the slate roofing, main entry, and the balustrades on the porte cochere and north solarium corridors.

Future interior work should recognize the spatial configuration and materials of the main entry hall and stair and the double-loaded corridors. The spatial arrangement of the pavilions and solarium corridors should be restored to their original appearance. In addition, the existing original doors, door frames, windows, window frames and wood trim on the corridors and perimeter walls should be preserved. The entry lobby and main stair warrant restoration because they are largely intact and because they are still major important spaces on the site.

Building 4

The exterior of Building 4 (including its pavilions and solarium corridors) retains much of its original appearance. The masonry should be repaired and cleaned, especially at the south porch. Restoration of the south porch entry is also recommended.

Future interior work should recognize the spatial configuration of the original operating room and ancillary spaces. In addition, the existing original doors, door frames, windows, window frames and wood trim on the corridors and perimeter walls should be preserved. Ceramic tile fragments should be documented and preserved if possible; but restoration is not recommended.

Building 5

The exterior of Building 5 retains much of its original appearance. It is recommended to do all repair work as soon as possible. It is also recommended to restore the north entry, to remove the fire escape and to redesign the infill on the south sun porch.

Future interior work should recognize the spatial configuration of the main entry hall and stair on the first floor and the double-loaded corridors on the first and second floors. In addition, the existing original doors, door frames, windows, window frames and wood trim on the corridors and perimeter walls should be preserved.

Building 6

The exterior of Building 6 retains much of its original appearance. It is recommended to do all repair work as soon as possible. It is also recommended to redesign the main entry and the infill of the south porte cochere to be more compatible with the historic character of the building.

Future interior work should preserve the existing original windows, window frames and baseboards on the perimeter walls.

Building 7

The exterior of Building 7 retains much of its original appearance. It is recommended to do all repair work as soon as possible. Restoration of the east entry and the removal of the fire escape would do much to enhance the historic quality of this building. It is also recommended to redesign the infill of the south sun porch.

Future interior work should recognize the spatial configuration and materials of the main entry hall and stair on the first floor and the double-loaded corridors on the first and second floors. In addition, the existing original doors, door frames, windows, window frames and wood trim on the perimeter walls and the corridor walls should be preserved.

Summary of Chapter 10. Guideline Specifications

Chapter 10 presents outline specifications of products, materials and workmanship for recommended treatments described in Chapter 9. The specifications follow, with certain modifications, the MASTERSPEC format, and are intended to serve as a guide for the preparation of complete construction specifications. They are based on the condition of the buildings as of the completion of the existing conditions survey, and address deficiencies identified in Chapters 4 through 6.

The outline specifications cover concrete repair, limestone repair, exterior masonry cleaning, capstone resetting, wood repair and replacement, concrete waterproofing, and masonry repointing.

CHRONOLOGY OF IMPORTANT EVENTS

- 1893** The Naval Observatory left Observatory Hill for a new facility on Massachusetts Avenue.
- The Naval Museum of Hygiene occupied Observatory Hill from 1893-1905. The Museum altered the original Observatory building (Building 2) to accommodate its user.
- The Navy established its first formal medical instruction at the Naval Hospital in Brooklyn, New York.
- 1902** The Navy established a Medical School in Washington at Observatory Hill. Between 1902-1903, further alterations and additions were made to the original Observatory to accommodate the Medical School.
- 1903** Congress appropriated funds for a new Washington Naval Hospital on Observatory Hill to replace the outmoded facility located on Pennsylvania Avenue at 10th Street, SE.
- The Navy commissioned New York architect, Ernest Flagg, who had been working at the Naval Academy in Annapolis, to design the new hospital building in Washington.
- 1904** Construction began on the new hospital building (Buildings 3-4).
- 1906** Construction of the hospital building was completed.
- 1911** The remaining permanent buildings in the hospital complex were completed.
- 1917** The United States entered World War One, which caused a great influx of war-wounded and sick patients at the hospital. Patient admissions quadrupled from 1912 to 1918.
- 1918** World War One ended.
- The influenza epidemic began, which caused an additional burden on the hospital complex, with admissions of 25 to 30 cases per day.
- 1931** The Navy commissioned the Allied Architects to design a Naval Medical Center on Observatory Hill. That plan was never realized.
- 1937** The Naval Act of 1931 was amended to allow construction of a new facility elsewhere in the vicinity.
- 1942** President Franklin D. Roosevelt dedicated the Naval Medical Center in Bethesda, Md.
- The Naval Bureau of Medicine and Surgery transformed Observatory Hill into an administrative center, rapidly turning the old buildings into administrative offices.

INTRODUCTION

The Potomac Annex, overlooking the Potomac River, is located in the northwest quadrant of Washington, D.C. on a ten-acre site. Ten primary buildings ranging in date from 1844 through 1911 occupy the hilltop, which is the former home to the United States Naval Observatory, the Naval Museum of Hygiene and the Naval Hospital and Medical School. While the site's primary importance rests with the extraordinary Observatory Building, between the years 1902 and 1942 Observatory Hill was occupied by the Naval Medical School and Hospital. It was during these years that most of the buildings on the site were constructed. These developments enhance the significance of the site, both through the quality of the architecture, and through the important role the School and Hospital played as the Navy's medical headquarters in the Nation's Capital. Potomac Annex currently functions as administrative offices for the Naval Bureau of Medicine and Surgery. It serves as the headquarters of the Surgeon General of the Navy.

The Naval Medical Complex, in its forty years at Observatory Hill, began as an innovative attempt to address the demands of Naval medicine; it evolved into a major center for its study and treatment. Combined with the former Hygiene Museum's¹ eccentric collection, the Medical School established a post-graduate program (1902) aimed to address the specific needs of naval medicine. Constantly dealing with the consequences of the international exposure of its troops and the changing technology of warfare, naval medicine was forced to be progressive, overcoming unprecedented obstacles of foreign disease and war casualties with creative and inventive solutions.

Soon after the establishment of the Naval Medical School, the Naval Hospital was introduced to the site in 1903. Working in tandem with the school, the hospital served as a resource for the medical students, while offering treatment for the sick and wounded of the military. The Navy at the Washington Medical Complex, pioneered the study of tropical disease, chemical warfare, and aviation medicine. Naval medical staff dealt with the mundane but devastating problems of venereal diseases, and other contagious diseases, including the major epidemics of influenza, tuberculosis and typhoid. Ultimately the Naval Medical Complex, like others of its kind, served as an important testing ground for medicine as it would be subsequently practiced in civilian hospitals in the United States and the world. The medical complex remained in operation at Observatory Hill until the current Naval Medical Complex in Bethesda was established in 1942.

The Naval Medical Complex, while important as a military and medical institution, did not receive the same recognition as the Naval Observatory, therefore secondary sources are scant. Jan K. Herman, Historian at the Navy Bureau of Medicine and Surgery (BUMED) was an essential resource both in his knowledge of the site, and his generosity in providing access to his

¹By 1905, the Museum of Hygiene was viewed as superfluous, and the institution and most of its collection was disassembled. Most of the collection may have been transferred to the Smithsonian Institution, but a portion of it probably remained for use by medical students. The Smithsonian has no record of such a transaction, and the status of the collection is unknown.

files and library at the BUMED headquarters. A Hilltop in Foggy Bottom, the book he wrote in 1991, subsequently directed research to primary sources. Naval records at the BUMED library proved to be most valuable for information regarding the development and evolution of the Naval Medical School and Hospital, particularly the Annual Report of the Surgeon General, and the United States Naval Medical Bulletin. Documentation on BUMED, itself, also is located in the BUMED library. While there are records housed at the National Archives, research is difficult, since military records are only partially indexed. Records are incomplete and scattered through files of different agencies; correspondence between agencies and individuals varies in location according to agency, rank of individuals, etc. Many records were destroyed. However, the files at the National Archives, particularly Record Group 71, Records of the Bureau of Yards and Docks, and Record Group 52, Records of the Bureau of Medicine and Surgery, proved important and include general correspondence, plans, building documentation, and general records. Photographs and architectural plans were found at the National Archives' Cartographic Division. Bureau of Yards and Docks contracts are kept at the Archives' branch at Suitland, but there is no index.

The Medical School

The first formal medical training program in the Navy was instituted in 1893 at the Naval Hospital in Brooklyn, New York. The concept of formal medical training had been proposed as early as 1809, by Surgeon William Paul Crillan Barton,² but it was not until 1829, that Congress even established Medical Examining Boards for the Navy. Surgeon General of the Navy, Joseph Beale, considered the idea of a medical school in 1873, but it was his successor, William Grier, who finally accomplished the task at Brooklyn. Grier started a two-year program focusing on naval hygiene³ and military surgery in 1893.⁴ The initial term at the United States Naval Laboratory and Department of Instruction in Brooklyn was inaugurated by Surgeon General James R. Tryon. Course work included chemistry, hygiene, microbiology, microscopy, military and operative surgery, clinical medicine and hospital work, the construction and ventilation of modern warships, examination of recruits, lifesaving methods, naval regulations, naval rations, and administration.⁵ Upon completion of the program, graduates were either sent to sea or general duty. The instruction program operated continuously until its transfer to Washington, with the exception of a four-month hiatus during the Spanish-American War in 1898.

Surgeon General Presley M. Rixey, a friend and personal physician of President Theodore Roosevelt, envisioned a plan for the relocation of the Brooklyn program and a consolidation of it with the Museum of Hygiene in Washington. The museum seemed to be an appropriate setting for the school, with its ample facilities for lab work, classrooms and library. The staff of the museum would form a core faculty, while the city itself offered extensive resources of military

²Barton was to be the first Chief of the Bureau of Medicine and Surgery named in 1842.

³James Chambers Pryor, A. M., M. D., head of the Department of Hygiene at the Naval Medical School in his book, *Naval Hygiene* of 1918, defined "hygiene" as "that branch of medical science which concerns itself with the preservation of the health of individuals and communities," with "Naval Hygiene" concerned with "men aboard ship...men in camp or barracks ashore." James Chambers Pryor, *Naval Hygiene*. (Philadelphia: P. Blakiston's Son and Co., 1918), p. 1.

⁴Jan K. Herman, *A Hilltop in Foggy Bottom*. (Washington D.C.: Bureau of Medicine and Surgery, Department of the Navy, 1991), p. 67.

⁵H.G. Danilson, "The United States Naval Medical School." *Military Surgery*, Jan. 1937, p. 54, as quoted in Herman, *A Hilltop in Foggy Bottom*, p. 67.

and civilian medical specialists as lecturers.⁶ On May 27, 1902, the United States Naval Medical School⁷ was formally established in Washington "for the instruction and training of newly appointed medical officers in professional branches peculiar to naval requirements."⁸ Also joining the move from New York was the Naval Medical Examining Board, the group responsible for screening incoming naval physicians.

When the Hygiene Museum moved to the site in 1893, it had undertaken many significant alterations to the Observatory Building to accommodate its very different function. With the role of the museum enhanced to include the Naval Medical School, additional changes were required, including another "story constructed on the two connecting wings to provide laboratory facilities...."⁹ A second story was added to the south wing in 1903, to accommodate student officers' lockers and sitting rooms.¹⁰

The school building, originally occupied by the Naval Observatory and later by the Museum of Hygiene, has, with slight remodeling and some additions, proved peculiarly adapted to its present purpose.¹¹

The east wing, used as the residence of the museum's medical officer and formerly of the Observatory Superintendent, became an office for the Medical Examining Board. New laboratories were fitted for work in pathology, clinical microscopy, bacteriology, and medical zoology with space and fixtures for twenty-six people. The lab was also equipped with a large incubator and ovens. The chemical lab contained thirty-two working spaces. The basement provided room for photography and photomicrography, and a room for cold storage. The library, consolidated with the museum's collection, continued to grow in the south rotunda, with important foreign and domestic medical journals in addition to standard works on medicine and surgery.

Medical Director Robert A. Marmion served as the school's commanding officer over the first class of twelve medical students. The first course of instruction lasted five months with studies

⁶...the following thirteen gentlemen, prominent in professional, scientific, and educational circles...accepted the invitation to deliver lectures and give demonstrations before the class: Col. W.C. Gorgas, Maj. L. A. La Garde, Maj. W. C. Borden, First Lieut. James Carroll, and Dr. W. M. Gray, of the Army; Medical Director A. F. Price, of the Navy; Passed Asst. Surg. M. J. Rosenau and Dr. C. W. Stiles, of the Public Health and Marine-Hospital Service; Dr. L. O. Howard, of the Department of Agriculture; and Drs. S. S. Adams, G. M. Kober, C. W. Richardson, and A. B. Richardson. The members of the naval examining board, consisting of Medical Director R. A. Marmion, Medical Director J. W. Ross, Medical Inspector J. B. Boyd, and Surg. A. C. H. Russell, have been utilized as a faculty, to which the school has been fortunate in having added Mr. E. P. Hanna, solicitor of the Navy Department, for the course in naval law; Lieut. D. L. Wilson, U.S. Navy, retired, in the department of signals, tactics, etc., and Passed Asst. Surg. T. D. Myers, U. S. Navy, retired, for the course in ophthalmology. Surg. E. R. Stitt, U.S. Navy, planned and superintended the construction and equipment of the laboratories, and has charge of the department of which they are a part. He is assisted by Hospital Steward E. R. Noyes, U. S. Navy, chemist of the Museum of Hygiene, who also conducts the course in general chemistry." Bureau of Medicine and Surgery, "Naval Medical School," Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1903), p 7.

⁷Official titles of the school included "Naval Museum and Medical School," 1902-1905; and "Naval Medical School," 1902-1906.

⁸Bureau of Medicine and Surgery, "Prospectus of the United States Naval Medical School," United States Naval Medical School Bulletin, (Washington, D.C.: G.P.O.,1910), p. 585.

⁹Bureau of Medicine and Surgery, Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1902), p. 44.

¹⁰Bureau of Medicine and Surgery, Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1904), p. 222.

¹¹Bureau of Medicine and Surgery, "Prospectus of the United States Naval Medical School," United States Naval Medical School Bulletin, (Washington, D.C.: G.P.O.,1910), p. 587.

in microscopy, naval hygiene, ophthalmology, psychiatry, military surgery, military medicine, the duties of naval medical officers, and military law. The program also included physical exercise and military drills. The school was also the first major center for the study of tropical diseases in the United States, doctors with clinical experience in the field visited as guest lecturers. Colonel William C. Gorgas, who frequently visited the school, was a renowned expert on yellow fever and later became Surgeon General of the Army.¹²

The first class graduated April 4, 1903, and the program was deemed a success by Marmion in a special report of the first year's progress.¹³

The officers graduating from this school can go forth confidently to meet the new and strange duties which they are called upon to perform with little or no inconvenience or discomfort. They will have received not merely a much broader education from a medical standpoint than it is practicable for them to obtain in the medical colleges of our country, but they will have, in addition to that, a knowledge of matters purely naval which is sure to enhance their value to the service in fields other than those in which the medical officer of a few years ago was ever called upon to labor.¹⁴

The course of instruction...[is] primarily intended to prepare an already well-educated medical man for grappling with the problems presented by a rapidly growing naval medical service, and to enable him from the very beginning of his career in the service to assist in solving some of these problems.¹⁵

When the hospital opened in 1906, it was expected to be "of the greatest assistance in practical instruction,¹⁶ and the Bureau of Medicine and Surgery anticipated growth in the school's enrollment.¹⁷ In the annual report for 1906, Medical Director, J.C. Wise, reiterated the school's role in stating that

...despite the fact that military medicine has greatly progressed in late years, from the scientific standpoint, and that members of the service have done much to create the branch known as 'colonial medicine,' which is in reality medicine considered in its relation to commerce, still the principal object of a school such

¹²William Crawford Gorgas (1854-1920) was appointed Surgeon General of the Army in 1914.

¹³R. A. Marmion, "Report on the United States Naval Medical School, Washington, D.C.," Annual Report of the Surgeon General, (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., 1904), p. 217.

¹⁴R. A. Marmion, "Report on the United States Naval Medical School, Washington, D.C.," Annual Report of the Surgeon General, (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., 1904), p. 224.

¹⁵Bureau of Medicine and Surgery, "Prospectus of the United States Naval Medical School," United States Naval Medical School Bulletin, (Washington, D.C.: G.P.O., 1910), p. 585.

¹⁶J. C. Wise, "Report on the United States Naval Medical School", Annual Report of the Surgeon General, (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., 1906), p. 166.

¹⁷"The Bureau anticipates that during the next six years it will be possible to assemble a class from 35 to 40 members at each session, and the outlook is most promising for furnishing the service with well-trained and equipped medical officers...." from J. C. Wise, "Report on the United States Naval Medical School," Annual Report of the Surgeon General, (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., 1903), p. 7.

as this is to fit the entrant into the Medical Corps of the Navy for practical duties on board ship, and the greater will be its success the more constantly this end is kept in view; thus the courses on hygiene, surgery, medicine, pathology, bacteriology, chemistry, and hospital-corps work are based on this conception.¹⁸

In 1906, the school claimed to have "taken its place among the best postgraduate schools not only of the country, but of the world."¹⁹ New course work included instruction in meat inspection, pharmaceuticals, climatology, and dental emergencies. The study of tropical disease continued to be an important component of study. The treatment of burns and scalds, occupied another prominent place in course work. The school was receiving many applications for entry.²⁰

By 1910, the majority of school instructors was occupied, at least partially, with hospital duty. The school's training program was expanded as classes were instituted for hospital corpsmen, stewards and nurses. However, in 1914, the school was emptied of its students after President Woodrow Wilson sent Marines into Veracruz following an incident involving an arrest of U.S. sailors.²¹ Only a small number of students were trained during the school's early years; the total number graduating from September 1906 to the end of 1916 was only two hundred thirty-five.²²

Then, with the beginning of U.S. involvement in World War One in 1917, instruction was reduced from six to four months, and then to two months.²³ The problem of maintaining a regular faculty became critical since there was little time to devote to teaching. The Surgeon General lamented that

...unlike the usual college instructors, [they] can give but a portion of their time to this work. They are on duty at the Naval Hospital, at the Naval Dispensary, at St. Elizabeth's Hospital, and in the laboratory of the school. They serve as members of examining boards and are constantly burdened with varied additional duties.²⁴

Despite international conflict and a preoccupied faculty, 1917 stood as a banner year for the school as one hundred seventy five student officers received instruction, a number nearly equal to the entire cumulative amount previously graduated.

18 J. C. Wise. "Report on the United States Naval Medical School". Annual Report of the Surgeon General. (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., 1906), p. 166.

19 J. C. Wise. "Report on the United States Naval Medical School." Annual Report of the Surgeon General. (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., 1907), p.12.

20 J. C. Wise. "Report on the United States Naval Medical School". Annual Report of the Surgeon General. (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., 1907), pp. 12-13.

21 "Mexico-U.S. Relations." Eric Foner and John A. Garraty, editors. The Reader's Companion to American History. (Boston, MA: Houghton Mifflin Company, 1991), p. 725.

22 Bureau of Medicine and Surgery. "Schools." Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1917), p. 25.

23 Bureau of Medicine and Surgery. "Schools." Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1917), p. 25.

24 Bureau of Medicine and Surgery. "Schools." Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1917), p. 26.

The Naval Hospital

The first decades of the century marked a time of great expansion for the Navy. The Navy and Marine Corps grew from 10,500 in 1893, to over 61,000 by 1912.²⁵ The consequences of the Spanish American War instigated the need for new naval bases in the Philippines, Hawaii, Cuba, and at locations at Guam, Samoa and Puerto Rico. Older hospitals had provided for the needs of a small Navy, but they proved insufficient for a rapidly expanding one. Many felt it was the duty of the Navy to provide "the benefit of treatment in modern and well-appointed hospitals" to those "personnel of the service who risk limb and life."²⁶ The Navy recognized the need for enlarging, rehabilitating and replacing most of their hospitals throughout the country.

The Washington Naval Hospital on Pennsylvania Avenue at 10th Street SE, which had been established in 1866, had long complained of insufficient space and outdated facilities.²⁷

For many years a need has been felt for a naval hospital in Washington commensurate with the importance and dignity of the station. The present building is antiquated and insufficient, and conforms in no respect to the conditions of modern hospital requirements. Its quarters are cramped, the operating room small and of a makeshift character, and the only provision made for sick officers is one small room originally intended for a restraining room for insane patients. There is no proper provision made for the isolation of contagious diseases....²⁸

After considering a number of locations for a new hospital in Washington, Congress appropriated \$125,000 for a facility on Observatory Hill on March 3, 1903.²⁹

An estimate for a new building, planned on modern lines of hospital construction, is submitted, and a site offering ideal advantages for the location of a hospital has been selected on the grounds of the Museum of Hygiene and Medical School, under control of the Bureau.³⁰

The renowned New York architect, Ernest Flag, was commissioned to design the new Washington Naval Hospital.³¹ Flag's relationship with the Navy had been established at the end

²⁵ A. W. Dunbar. "A Description of Recent Hospital Construction in the United States Navy." U.S. Naval Medical Bulletin, No. 4 (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., Oct., 1912), p. 473.

²⁶ Bureau of Medicine and Surgery. "Hospitals", Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1905), p. 15.

²⁷ The hospital was decommissioned 26 May 1911. File, "U.S. Naval Hospital, Washington, D.C.," "Hospital" file. BUMED library.

²⁸ Bureau of Medicine and Surgery. "Naval Hospital, Washington D.C.," Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1902), p. 31.

²⁹ "The Fifty-seventh Congress appropriated \$125,000 for a new hospital structure, to be erected on the grounds of the Museum of Hygiene and Medical School, a site admirably adapted to the purpose, and providing many features peculiarly appropriate. The plans for this new institution have been prepared with much care and study, and it is believed that a model hospital and a building of architectural beauty will be added in the near future to the public buildings of Washington." Bureau of Medicine and Surgery. "Naval Hospital, Washington, D.C.," Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1903), p. 12.

³⁰ Bureau of Medicine and Surgery. "Naval Hospital, Washington D.C.," Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1902), p. 31.

³¹ "Wards A and B, and the operating pavilion were constructed in 1903 from plans and specifications prepared by Ernest Flag, Architect. Wards C and D were constructed in 1907 from plans and specifications prepared by Wood, Donn and Deming, Architects." 6 March 1935 Memorandum to Mr. Southworth from Ben Moreell and B.W. Fink, Jr., File

of the previous century. In 1895, he had won the commission to design the new campus for the Naval Academy in Annapolis, Maryland, the largest commission of his career. The Naval Academy project was fraught with problems, particularly relating to budgets and the use of materials. Although he was frequently at odds with government officials, the Navy clearly had respect for the architect's work since it commissioned at least three additional projects from Flagg including the Washington Hospital on Observatory Hill, officers' housing at the Brooklyn Navy Yard (1903) and the Naval Hospital in Annapolis (1904-1907).³² The employment of a civilian architect for Naval hospitals was unusual, and with the exception of Flagg's hospital at Annapolis and Washington, only one other contemporary naval hospital was designed by a civilian architect.³³

Hospital Design of the Early Twentieth Century

Historically, the function of caring for the sick was fitted into architectural forms originally designed for other purposes; hospital plans were borrowed figuratively and literally from other types of buildings: monasteries, palaces, estates, prisons and barracks.³⁴ The ward plan, specifically the cross-shaped ward plan, was introduced during the Renaissance.³⁵ Eventually, the trend toward the separation of patients produced detached wards, which eventually developed into the popular pavilion plan hospital.³⁶ By the 18th century, the pavilion plan was the most common and accepted design for hospitals, virtually extinguishing the cross-shaped ward and its derivatives.³⁷ The pavilion plan,³⁸ a style derived from French court architecture, acted in a hospital essentially as a "sanitary code embodied in a building."³⁹ Pavilions were open wards of limited size, which had individual service rooms, were ventilated by windows and doors, and were connected by corridors serving similar pavilions. The pavilion plan dominated hospital design in France, England and America into the 20th century.⁴⁰

In his 1912 essay "A Few General Principles of Hospital Construction," F. W. Southworth, architect and leading draftsman for the Bureau of Yards and Docks, explicated exemplary modern hospital design.⁴¹ Southworth noted that most contemporary naval hospitals were

NH6/N9 Washington Hospital. Box 1469, Volume 3, General Correspondence 1925-1942, RG71, The Bureau of Yards and Docks, National Archives. The hospital was formally known by several names including "Washington Naval Hospital" 1906-1934, "Naval Medical Center" or "National Naval Medical Center" 1934-42.

32Andrew S. Dolkart. "Historic Overview of the U.S. Naval Academy Chapel: Historic Building Conditions Report." (New York: Beyer, Blinder, Belle, Architects, 1994).

33"With the exception of the naval hospitals at Washington, Annapolis, and Great Lakes...the designing of the plans and the inspection of the work for new construction has been done by the Bureau of Yards and Docks based upon the general plans recommended by the Bureau of Medicine and Surgery." The hospital at Great Lakes, Illinois was designed by Jarvis Hunt. Bureau of Medicine and Surgery. A. W. Dunbar. "A Description of Recent Hospital Construction in the United States Navy." U.S. Naval Medical Bulletin, No. 4 (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., Oct., 1912), pp. 493, 522.

34John D. Thompson and Grace Goldin. *The Hospital: a Social and Architectural History*. (New Haven: Yale University Press, 1975), p. xxvii.

35The cross-shaped ward was known to be the usual form of hospitals in many Roman Catholic countries in the eighteenth century. See Thompson and Goldin, p. 128.

36Thompson and Goldin, p. 159.

37Thompson and Goldin, p. 79.

38The pavilion hospital was derived in its form from the most infamous and dangerous hospital in eighteenth-century Paris, the Hotel-Dieu. Thompson and Goldin, p. 126.

39Thompson and Goldin, p. 118.

40Thompson and Goldin, p. 118.

41The Bureau of Yards and Docks was the department of the Navy responsible for construction of new buildings. As leading draftsman for the Bureau of Yards and Docks, Southworth's name appears on drawings as project manager and supervisor for the later complex buildings constructed in 1908, and for the additions and alterations to the old

designed as either the "block," the "corridor," or the "pavilion" hospital plans.⁴² Southworth identified two major elements as crucial components for hospital design: "administration and construction". Administrative needs called for the central location of executive features and convenient placing of utility rooms and supplies, while construction was obligated to create ample natural and artificial light for ventilation and heat.

Southworth described in great detail his recommendations for hospital design and construction, and many of his suggestions were harmonious with Flagg's design for the main hospital building in Washington.⁴³ Southworth recommended that wards have at least two outside walls with windows, and that sunlit and properly placed solarium be used.⁴⁴ He also advised that administrative offices were "most advantageously placed along the front of the main or administration building, on the first floor, near the first story wards...providing easy supervision over the main hospital life." Southworth opined that in lighting for operating rooms "southern light [was]...obviously the worst."⁴⁵ Here Flagg's design departed from Southworth's ideal. The naval hospital operating room did face south, and it was criticized for its glare (the sun's reflection on the tiles) and sweltering temperature in summer.⁴⁶ However, many of the building materials that Southworth recommended were utilized by Flagg, including linoleum, white wooden trim, terrazzo and tile flooring, and "Tennessee marble." Southworth included recommendations for ventilating and heating systems, hardware, radiators, plumbing, fixtures, etc.

Ernest Flagg was one of America's premier hospital architects in the late 19th and early 20th centuries. Flagg's first design commission had been for St. Luke's Hospital in New York City (1892-97). This project earned him considerable reputation as a hospital designer and led to three other hospital commissions for him. All were derived from the pavilion plan type.⁴⁷ Flagg's pavilion plan at St. Luke's in New York was no more than a perfection of that long-established type, still generally regarded in the 1890s as the safest and most hygienic

Observatory building. These included the Contagious Disease Hospital, the Female Nurses' Quarters, the Quarters for Hospital Corpsmen, Sick Officers' Quarters, and three houses for Junior and Senior Medical Officers. F.W. Southworth, "A Few General Principles of Hospital Construction" U.S. Naval Medical Bulletin, (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., Oct. 1912), pp. 523-524.

Indexes at the National Archives indicate that the Thompson-Starrett Company was responsible for the contract of the additional buildings at the Hospital Complex built by the Bureau of Yards and Docks. See RG 52, Records of the Bureau of Medicine and Surgery, "Headquarters Records Correspondence," Index to General Correspondence, 1896-1925, "Washington D.C. Hospital (New) - Whirlpool Manufacturing."

42"...The hospitals at Boston and Washington may be said to have been constructed on no recognized plan whatever." A. W. Dunbar, "A Description of Recent Hospital Construction in the United States Navy," U.S. Naval Medical Bulletin, No. 4, (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., Oct. 1912), p. 474.

43Southworth includes recommendations as detailed as the appropriateness of decorative trim, the use of materials, etc.

44F.W. Southworth, "A Few General Principles of Hospital Construction," U.S. Naval Medical Bulletin, (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., Oct. 1912), pp. 523-524.

45 F.W. Southworth, "A Few General Principles of Hospital Construction," U.S. Naval Medical Bulletin, (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., Oct. 1912), p. 524.

46Herman, A Hilltop in Foggy Bottom, p. 72.

47After St. Luke's, Flagg designed St. Margaret Memorial Hospital in Pittsburgh (1894-98), the Washington Naval Hospital, and the Annapolis Naval Hospital (1904-07). See Mardges Bacon, Ernest Flagg: Beaux-Arts Architect and Urban Reformer, (Cambridge, MA: The M.I.T. Press, 1986), p. 98.

arrangement.⁴⁸ The design for St. Luke's had been loosely modeled after the celebrated design for Johns Hopkins Hospital (1876) by Dr. John S. Billings, where wards were housed in separate pavilions, and maximum use was made of natural sunlight and ventilation. Flagg's plan made each pavilion even more autonomous than those in Billings' hospital in a centralized and bilaterally symmetrical plan, which strongly adhered to Beaux-Arts principles.⁴⁹ Flagg took inspiration from French pavilion hospitals because he saw in them a successful combination of the art and science of hospital planning, with equal importance placed on aesthetic and practical elements.⁵⁰ Flagg generalized his design of St. Luke's into guiding principles in his article "The Planning of Hospitals" which appeared in the trade periodical, Brickbuilder, in 1903.⁵¹

The Naval Hospital Building

Many fundamental components of Flagg's designs for St. Luke's, and St. Margaret's Memorial Hospital (Pittsburgh 1894-98) were brought together in his designs for the hospitals at Washington and at the Naval Academy in Annapolis (1904-7). Following the pavilion plan, Flagg accommodated the architectural styles of both buildings to "Tidewater regionalism."⁵² The buildings relate to Tidewater colonial domestic architecture through plan, composition, scale, materials, ornament, and functional details.⁵³ The building ornament is similar to those found in illustrations from Pierre Chabat's French publication of 1881, La Brique et la Terre Cuite.⁵⁴ Flagg demonstrates in these buildings his concern to rationalize and beautify utilitarian buildings in plan and materials.⁵⁵

Flagg described his design for the Washington hospital in a letter accompanying his drawings sent to the Navy in September 1902. The building plan originated from two main cores, one for administration (north) and one for the operating room and related facilities (south). Radiating from the cores were three one-story pavilion wards connected by glass-enclosed solaria. A fourth ward was outlined in the drawing, but no concrete evidence suggested that this was meant to be implemented as part of the initial construction.⁵⁶ As in his other hospital plans, Flagg designed the wards and solaria for the Naval Hospital specifically for maximum sunlight and ventilation.

48Mardges Bacon. Ernest Flagg: Beaux-Arts Architect and Urban Reformer. (New York and Cambridge: The Architectural History Foundation and The M.I.T. Press, 1986). p. 94.

49Bacon, p. 95.

50Bacon, p. 97.

51 Brickbuilder XII (June 1903), p. 111.

52Bacon, p. 101.

53Bacon suggests that the buildings relate particularly to mid-eighteenth century houses by William Buckland. Bacon, pp. 101-102.

54Bacon, p. 102.

55Bacon, p. 102.

56Flagg's first floor plan illustrates a ghost outline where a fourth ward to the southwest could have been. It can only be speculated that Flagg was working with the intent that the hospital would grow, since then only limited funding was available. In fact, only two of the three wards designed by Flagg were built before money ran out: construction (and design) for the third and fourth wards were instead done by the firm of Wood Donn and Deming. Flagg had also designed St. Luke's with the intent that additional pavilions would be built in the future.

The first floor of the administration building was designed for offices, an examining room, a reception room, and dispensary, two dining rooms, and a doctor's "living room."⁵⁷ Eight rooms for sick officers, a parlor or dining room, and kitchen, nurse and store rooms were located on the second floor, and eleven nurses' rooms were located on the third floor. In the south building, the operating room was to be "oblong, of ample size," one wall entirely built of glass.⁵⁸ Connecting to the operating room was a doctors' room, instrument room, nurses' and sterilizing room, and etherizing room. The basement under the operating room contained the kitchen and its dependencies, and two serving rooms. The north section of the basement contained a "smoking or lounging room," a store room, and drug store room.⁵⁹

Flagg described the outlying three wards as "all alike," containing twelve beds each, with windows on "both sides," (north and south) and fireplaces. The southeast ward would be used as an isolation ward. Dependencies within the wards contained a quiet room and toilet room. Connecting the wards would be three solarium "from which there will be a magnificent view."⁶⁰ Flagg intended the building to be made of "brick...with simple stone trimmings and slate roofs. The construction would be substantial, but plain." Interiors were of an "aseptic character, such as is used in the most approved modern hospitals."⁶¹ Heating was "direct-indirect steam." For lighting, Flagg suggested that it could "be by electricity, but I recommend the use of acetylene gas."⁶²

While the architectural expression of the hospital is conservative, and the spatial planning represented the contemporary thinking in American hospital design, the structural system was a significant and innovative development for its time. Ernest Flagg is known for his experimentation in the use of reinforced concrete, and this building is an early example of such use in this country. It is likely that Ernest Flagg's familiarity with the system was a deciding factor in the selection of reinforced concrete framing. Some of the buildings that Flagg designed at the Naval Academy were concrete structures.

The Naval Academy Chapel was probably the first use of reinforced concrete structural system for a church in the United States⁶³. In fact, the superintendent of the Naval Academy perhaps lacking confidence in this new structural system, wrote a letter to the chapel's building contractor in 1904 stating, "I cannot authorize you to proceed with the construction until all doubt as to the ultimate stability of the building is settled."⁶⁴ Flagg's penchant for reinforced concrete as a

⁵⁷Flagg, p. 3.

⁵⁸Flagg, p. 3.

⁵⁹From page 2, "Architect's Description of Proposed Naval Hospital at Washington, D.C.," RG 52, Records of the Bureau of Medicine and Surgery, Headquarters Records Correspondence, 1896-1925, 12 Sep 02, Description and plans, letter 73736, National Archives.

⁶⁰Flagg, p. 3. Flagg's description does not match his plans in orientation for the interiors of the wards, or the direction of the operating room (north vs. south). This could have simply been an error in the description.

⁶¹Flagg, p. 4.

⁶²Flagg, p. 5.

⁶³Dolkart, Andrew S., "Historical Overview of the U.S. Naval Academy Chapel: Historic Building Conditions Report." (New York: Beyer Blinder Belle Architects, 1994), p.13.

⁶⁴William H. Brownson to Noel Construction Company. Records of the United States Naval Academy. "Press Copies Relating to Building and Grounds", Book 3, P.205, as quoted in Dolkart, p.3.

building material no doubt stems from his known familiarity with French architecture and construction practices of the time. The French were early developers and pioneers of reinforced concrete for use in everything from tubs and flowerpots to bridges and buildings⁶⁵.

It is interesting that reinforced concrete, a still-developing technology, was selected for the hospital, while steel and wood framing seem to have been favored in the later buildings constructed on the site. It is possible that the specific benefits of reinforced concrete systems appealed to the hospital designers. Such benefits included concrete's inherent fire resistance, its stiffness, and its durability. Reinforced concrete provided an additional advantage of virtual airtightness. The original ventilation system in the hospital building consisted of exhaust fans in the end walls which created negative pressures in the attic. The resulting suction drew air up through vehicle shafts from the ward rooms into the attic above. This original ventilation system would be most efficient if the attic construction was virtually airtight--easily accomplished with monolithic poured concrete construction, but difficult to achieve with wood.

Construction of the Washington hospital began on May 22, 1904 after a congressional appropriation of \$125,000 the previous year.⁶⁶ The following year, only part of the hospital was completed before money ran out. Another appropriation of \$20,000 was required to build the southeast ward.⁶⁷ At this time the Washington architectural firm of Wood, Donn and Deming were awarded the contract for Flagg's third ward and a new fourth one, replacing him as architect. Coincidentally, Wood, Donn and Deming had just won in competition the commission for the Naval Hospital at Norfolk, Virginia.⁶⁸ It was not until October 1, 1906 that the first patients were admitted to the hospital; and even then, construction was not complete.⁶⁹ Officially named "the Naval Medical School Hospital,"⁷⁰ its purpose at the time was described as "...to receive and care for the sick among those of the Navy stationed in and about Washington, both officers and enlisted personnel...."⁷¹

⁶⁵Wang and Salmon. Reinforce Concrete Design, p.4.

⁶⁶Herman. A Hilltop in Foggy Bottom, p. 71.

⁶⁷"As originally planned, the new hospital was of sufficient capacity, but it could not be so completed under the appropriations made. The original appropriation proving insufficient, an additional sum was requested to complete the hospital, but of this sum only one-third was appropriated at the last session of Congress. The omission from the plans of one pavilion and of an isolation ward was consequently made necessary" Bureau of Medicine and Surgery. "Naval hospital, Washington, D.C.," Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1905), p. 22.

⁶⁸"Wards A and B, and the operating pavilion were constructed in 1903 from plans and specifications prepared by Ernest Flagg, Architect. Wards C and D were constructed in 1907 from plans and specifications prepared by Wood, Donn and Deming, Architects." 6 March 1935 Memorandum to Mr. Southworth from Ben Moreell and B.W. Fink, Jr., File NH6/N9. Washington Hospital, Box 1469, Volume 3, General Correspondence 1925-1942, RG71, Bureau of Yards and Docks.

Indexes at the National Archives indicate that the Brennan Construction Company was responsible for the contract of the two additional wards by Wood, Donn and Deming. See RG 52, Records of the Bureau of Medicine and Surgery. "Headquarters Records Correspondence," Index to General Correspondence, 1896-1925. "Washington D.C. Hospital (New) - Whirlpool Manufacturing."

⁶⁹"The new hospital structure appropriated for by the Fifty-seventh Congress and erected on an admirable site in the grounds of the Naval Medical School has been completed and will be opened for the reception of patients on October 1, 1906." Bureau of Medicine and Surgery. "The Naval Medical School Hospital, Washington, D.C.," Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1906), p. 45.

⁷⁰Bureau of Medicine and Surgery. "The Naval Medical School hospital, Washington, D.C.," Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1906), p. 45.

"In February 1911 the old Naval Hospital was "discontinued for the care of the sick." Office of Naval Records and Library. Subject File U.S. Navy 1775-1910, "History of all Naval Hospitals in the city including the Navy yard and Marine barracks." RG 45, Box 554, Folder 8, p. 4.

⁷¹Bureau of Medicine and Surgery. "Washington, D.C.," Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1907), p. 85.

With increasing knowledge regarding the transmittance of contagious diseases, the proper control, isolation and care for such patients became a priority for hospitals.⁷² The Navy found it "desirable to have buildings in which these cases can be properly cared for, as well as isolation wards to control those cases having doubtful or undetermined diagnosis."⁷³ Contagious hospitals were planned according to the belief that contagious diseases

...are transmitted by contact and are not air-borne, as was formerly supposed. The contact may be direct or indirect--direct when there is actual contact with the patient and indirect when there is contact with a contaminated carrier. Anything that comes in contact with a patient, directly or indirectly, is contaminated and should be considered dangerous. In order that time and labor may be saved when caring for these patients, it is necessary to divide them into units. A unit is an area which represents a separate and distinct infection. It may comprise a single bed or an entire room. In caring for these different units it is necessary to use aseptic technique⁷⁴, the object being to confine the infection to one unit.⁷⁵

The Main Hospital Building and the later Contagious Disease Building were equipped with unique ventilation and heating systems. In the Hospital gauze filters purified incoming air, while a water air-washing system cleansed the air of the Contagious Building.⁷⁶

The Hospital Complex

By the end of 1908, construction of new buildings was well under way. To the southwest of the Main Hospital Building, a steam laundry, stable, and greenhouse were built beside the power plant.⁷⁷ Concrete walks crossed the compound.⁷⁸ The same year, the Bureau of Yards and Docks proceeded with plans and specifications for "sick officers' quarters, quarters for female nurses, quarters for male nurses, and quarters for medical staff."⁷⁹ The foundations were laid for the buildings at the end of 1908, and construction progressed.⁸⁰ By 1910, the Contagious Disease Building and the Hospital Corps Buildings were completed, and the Quarters for

⁷²"Nineteenth-century scientific advances, real breakthroughs to understanding the causes of disease, were not fully understood in their time and only in the twentieth century were they translated into changes in hospital design." See Thompson and Goldin, p. 187.

⁷³R.K. Joslin, "Contagious Hospitals", U.S. Naval Medical Bulletin, (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., 1918), p. 21.

⁷⁴"Lord Lister's taught surgeons that clean operative wounds were possible by employing "antiseptis." The asepsis of to-day is Lister's "antiseptis," without the antiseptic spray to sterilize the air. Asepsis will do for the medical care of patients suffering from infectious disease what it has done for surgery." R.K. Joslin, "Contagious Hospitals," U.S. Naval Medical Bulletin, (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., 1918), p. 21.

⁷⁵Lucile A. Butler and Virginia Rau, "The Hospital Care of Contagious Diseases," U.S. Naval Medical Bulletin, (Washington, D.C.: Bureau of Medicine and Surgery, G.P.O., 1918), p. 27.

⁷⁶Herman, A Hilltop in Foggy Bottom, p. 71.

⁷⁷These were designed by the Bureau of Medicine and Surgery and are no longer extant. Bureau of Medicine and Surgery, "Naval Medical School Hospital, Washington, D.C.," Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1908), pp. 59-60.

⁷⁸Herman, A Hilltop in Foggy Bottom, p. 73.

⁷⁹"These plans are in course of preparation, and it is designed to provide for these buildings out of the hospital fund." Bureau of Medicine and Surgery, "Naval Medical School Hospital, Washington, D.C.," Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1908), p. 60.

⁸⁰Bureau of Medicine and Surgery, "Naval Medical School Hospital, Washington, D.C.," Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1909), p. 80.

Medical Officers, the Sick Officers' Quarters⁸¹ and the Female Nurses' Quarters were approaching completion.⁸² By 1911, all the buildings were ready for occupancy including housing for the Commanding Officer and other assigned medical officers.⁸³

It is clear from the uniformity of architectural design, and the careful placement of the buildings that much consideration was given to the overall appearance of the hospital complex to create a campus-like setting. This is noted in the relationships of the hospital buildings to each other, and the initial respect paid to the prominence of the old Observatory Building. While the scale of the new hospital buildings undoubtedly was dictated by their programmatic requirements, it was similar to that of the original building and complemented it. Stylistically, the naval architects for the new buildings followed Ernest Flagg's lead. The buildings are a rather conservative Georgian Revival, domestic in scale, classical in composition, materials and ornamentation. The complex is characterized by two-and-one-half story, buff- and yellow-colored brick buildings with hipped or gabled roofs. Windows are multi-pane double-hung sash. Ornamental features include classical porte-cocheres and entrance porticos; cupolas, roof cornices, dormers and balustrades; keystones, quoins and columns. Most of the buildings were equipped with two-story, porches opening to the south.

The Female Nurses' Quarters (Building #1) was a two-and-one-half story brick building with a hipped roof and a classical balustraded portico supported by Tuscan columns. An addition, which more than doubled the size of the building, was constructed on the south end in 1926. The addition continued the architectural detail and materials without the sense of balance and symmetry. The other buildings shared the same characteristics of height, materials, composition and roof shape. The Sick Officers' Quarters (Building #5) was T-shaped; its most impressive feature being the colossal portico on the north facade. The Contagious Diseases Hospital (Building #6) was characterized by double porticos with Tuscan columns on both the north and south facades. The Hospital Corps' Quarters (Building #7) had a semi-elliptical arch framing the main entry into the portico and an arched entry onto the portico roof.

The Observatory Building was the symbolic center of the site; it was the first building and it housed the Medical School. The arrangement of the new hospital buildings strengthened the sense of unity, while respecting a certain hierarchy of use. Ernest Flagg's hospital building was placed directly behind the Medical School and was situated on the same north-south axis. The officers' residences were located toward the front of the site on either side of the Medical School, but set back from it. The Sick Officers' Quarters faced north, and was set behind the residence on the east side of the site. The remaining buildings were set behind the others. The Naval Hospital and Medical School was recognized as a significant location for naval history as early as 1904. A sculpture of Dr. Benjamin Rush, known as the father of American medicine, was installed in front of the Medical School. The choice of this site as the location for the sculpture

⁸¹"The tunnel connecting the Sick Officers' Quarters with the hospital has been completed and makes it possible to transfer patients for operation without exposing them to the weather." Bureau of Medicine and Surgery. "Naval Hospital, Washington, D.C.," Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1912), p. 21.

⁸²Bureau of Medicine and Surgery. "Hospitals." Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1910), p. 98.

⁸³Bureau of Medicine and Surgery. "Naval hospital, Washington, D.C.," Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1911), p. 32.

of Rush probably was also probably due to the influence of Surgeon General of the Navy Presley M. Rixey, who headed the site selection committee.⁸⁴

When the Naval hospital began its construction campaigns in the first decade of the twentieth century, extensive alterations were made to the site. It appears that the 19th-century landscape was designed by the Philadelphia architect, William Strickland, and much of this work remained at the front of the old Observatory Building.⁸⁵ However, the landscape design and plantings remaining from the previous century could not entirely survive the construction of so many new buildings. However, much of the northern section of the landscape, in front of the Medical School was left open. In 1901, the total area of the site was reduced by a transfer of five acres on the west side.⁸⁶ In 1905, a granite approach was constructed at the entrance to the grounds (this is no longer standing) and a macadam roadway leading to the hospital building was installed.⁸⁷ In 1908-1909 new concrete paths, roadways, grading and retaining walls were completed. By 1911, a new drive on the east side of the site had been installed supplementing the main drive which had historically served the observatory. During the ensuing years additional roads, concrete paths, retaining walls and features such as lighting, fire hydrants and call boxes and fences were added. By 1918, auto parking made its first encroachments and it continued steadily throughout the twentieth century.

World War One

At the time of completion, the total patient treatment capacity for the hospital was one hundred thirty beds. Seventy-eight beds were in the Hospital Building, twenty-two beds in the Sick Officers' Quarters, and thirty beds in the Contagious Disease Hospital. Expansion to one hundred seventy-five total beds was possible. And by reconfiguring the Corpsmen's Quarters capacity could reach two hundred forty beds.⁸⁸

A 1910 report on the hospital described the status of its use:

The accommodations for enlisted patients is ample for this station and apparently there will be no expansion of the hospital necessary so long as the enlisted force is not increased much beyond its present strength. The number admitted is, indeed, higher than ordinary demand....a large proportion of [officers] have been received from ships in commission at sea.⁸⁹

A 1915 report on the status of all naval hospitals reviewed the Washington Naval Hospital's activity. The receipt of a significant number of patients with mental disorders was noted,

⁸⁴Herman. A Hilltop in Foggy Bottom, p. 75.

⁸⁵The development of the landscape is more fully discussed in the HSR for Building 2.

⁸⁶"Federal Owned Real Estate--Navy Department..." p. 78. attached to Building Evaluation Report. Potomac Annex Buildings; June 22, 1960.

⁸⁷Report of the Surgeon General. US Navy. 1905, p. 13.

⁸⁸Herman. A Hilltop in Foggy Bottom, p. 73.

⁸⁹Bureau of Medicine and Surgery. "Hospitals." Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1910), p. 103.

particularly those suffering from *paralytic dementia*, many cases of which were thought to be the result of syphilis.⁹⁰ In 1916, six hundred seventy-nine patients were treated at the hospital.⁹¹

However, the Naval Hospital was unprepared for the consequences of American entry into World War One on April 6, 1917. As large numbers of wounded men returned from the battlefields of France, the Hospital was forced to construct emergency facilities, including a tent storage building, a substantial addition to the mess hall and kitchen, and eight temporary wooden structures.⁹² The war years saw a tremendous increase in patients at the hospital. While in 1912, there had been only five hundred and eight admissions, in 1918, at the height of American involvement in the war, two thousand patients were admitted. After the Armistice, the admission of war veterans strained the resources of the hospital, as did the great influenza epidemics, which began in 1918.

This hospital received its first case of influenza on September 1, 1918, and pandemic proportions were assumed very rapidly. The admission rate soon arose to twenty-five and thirty cases daily....From its first appearance in this hospital the disease was of an unusually severe type.⁹³

The Medical School was also effected by the war. It became necessary to add laboratory technician courses, and other new forms of instruction dealing with the treatment of victims of gas warfare, electrocardiography, and analytic chemistry. Plans for two additions to the Medical School building (the old observatory) for additional instruction space were approved in 1918.⁹⁴ Five mobile laboratory units were also equipped to prepare for potential emergencies at various naval stations or camps, with five to thirteen men trained to accompany them.⁹⁵ The school became the headquarters for training epidemiological and sanitary units that were deployed to the western front.⁹⁶

The war ended in 1918, and the hospital buildings, were beginning to show the physical evidence of excessive use.⁹⁷ In 1920, the Annual Report of the Surgeon General noted that the accommodations for the sick officers were inadequate, since the patient load was double what the building had been designed to handle.⁹⁸ The staff at the hospital for that year consisted of

⁹⁰Bureau of Medicine and Surgery, "Washington, D.C.," Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1915), p. 26.

⁹¹Bureau of Medicine and Surgery, "Washington, D.C.," Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1917), p. 57.

⁹²Herman, A Hilltop in Foggy Bottom, p. 76

⁹³Washington, D.C. File, "Sanitary and Other Reports Annual Sanitary Reports for 1907-1916, 1919 and 1927", Box 4, p. 10, RG 52, Records of the Bureau of Medicine And Surgery, Headquarters Records, National Archives.

⁹⁴Plans for additions were approved 28 January 1918 (west) and 8 November 1918 (east). (See drawings "Emergency Hospital Buildings, Laboratory Building" (east) and "Addition to Medical School", Bureau of Yards and Docks, 531-31-21 and 531-31-1, illustrated in the HSR for Building 2).

⁹⁵Bureau of Medicine and Surgery, "The United States Naval Medical School." Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1918), p. 36.

⁹⁶Herman, A Hilltop in Foggy Bottom, p. 76.

⁹⁷Herman, A Hilltop in Foggy Bottom, p. 76.

⁹⁸"The present building is entirely too small for the accommodation of sick officers at this hospital. It is recommended that it be extended to the south. During the past year it has been frequently necessary to put two officers in a room." Bureau of Medicine and Surgery, "Washington, D.C.," Annual Report of the Surgeon General. (Washington, D.C.: G.P.O., 1920), p. 132.

sixteen medical officers, three pharmacists, twenty-six female nurses, thirty-three hospital corpsmen, and ninety civilian employees. There were 2,044 admissions with 1,916 for disease and 128 for injuries, 309 "psychopathic" patients, with no war wounded remaining.⁹⁹

By 1920, course work at the Medical School was increasingly adapted toward specialization. Cooperative programs in surgery were sponsored with the Mayo Clinic; internal medicine at the Phipps Institute and Pepper Laboratory at the University of Pennsylvania; ophthalmology and otology at the New York Eye and Ear Infirmary and Washington University, St. Louis; and general medicine at Harvard Medical School.¹⁰⁰ And, in 1923, course work covered

...surgery, tropical and preventive medicine, medical diagnosis, cardiovascular diseases, naval hygiene and sanitation, field sanitation and hygiene, epidemiology, ophthalmology, laryngology, otology, genitourinary diseases, psychiatry, neurology, aviation medicine, Medical Department duties and administration, defense in chemical warfare, pathology, medical zoology, bacteriology, serology, hematology, endocrinology, chemistry, operative dentistry, oral hygiene, dental anesthesia, minor oral surgery, dental radiology, dental prosthesis, and metallurgy.¹⁰¹

During the same year a portion of the west addition (1918) to the Medical School was remodeled and equipped for instruction in aviation medicine.¹⁰² A dental school was established as a department of the Naval Medical School on February 3, 1923, providing several postgraduate specialties and serving as the Hospital's dental department. By 1927, aviation medicine was expanded to include training for "flight surgeons."¹⁰³ The next year a special course in chemical warfare was given, and the aviation program further expanded.¹⁰⁴

In 1932, the Medical School redefined its mission as being:

...to give instruction to Medical Department personnel in subjects of a medico-military character that are not taught in civilian institutions. These subjects include aviation medicine; naval hygiene and sanitation; field sanitation and

⁹⁹Bureau of Medicine and Surgery, "Washington, D.C.," Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1921), pp. 46-47.

¹⁰⁰Herman, A Hilltop in Foggy Bottom, p. 76.

¹⁰¹Bureau of Medicine and Surgery, "Instruction at the United States Naval Medical School, Washington, D.C.," Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1923), p. 8.

¹⁰²In 1924, an aviation department was established to prepare naval medical officers "as to the physical examination necessary preliminary to flying.," Bureau of Medicine and Surgery, "Instruction at the United States Naval Medical School, Washington, D.C.," Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1923), p. 9, and Bureau of Medicine and Surgery, "Instruction at the United States Naval Medical School, Washington, D.C.," Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1924), p. 8.

¹⁰³Bureau of Medicine and Surgery, "United States Naval Medical School, Washington, D.C.," Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1927), pp. 9-10.

¹⁰⁴Bureau of Medicine and Surgery, "United States Naval Medical School, Washington, D.C.," Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1928), pp. 11-12.

hygiene; and the medical aspects of deep-sea diving, submarine service, and chemical warfare.¹⁰⁵

Plans for a New Facility

By 1929, the Navy recognized the need for a new and modern medical center. Planners were contemplating replacing the existing Hospital and Medical School complex with a single facility. In January 1930, the Surgeon General of the Navy, the Chief of the Bureau of Yards and Docks and a representative of the Veteran's Bureau inspected the site. They noted widespread problems. The compound's layout was judged inefficient. Food prepared in the Hospital Building had to be carried to patients in the temporary wards at the bottom of the hill. Furthermore, patients had to be transported back and forth between temporary buildings and the main hospital. More than half of the four hundred thirty five beds in the entire hospital complex were located in temporary buildings. Basement spaces that had been originally intended for storage--with little ventilation or light--had been converted into spaces for special treatment, exams, and the eye, ear and throat department. More importantly, the Hospital only had room for ninety six beds, while the Sick Officers' Quarters were constantly overcrowded. Melvin J. Maas of the Veterans' Bureau was shocked by the poor condition.

...[I think it] a disgrace to house our men in shacks that would be condemned and discontinued by any municipality in this country. Those temporary buildings...are the worst set of fire traps imaginable....¹⁰⁶

The committee found that conditions were deplorable and recommended that everything be razed, including the original Observatory Building.¹⁰⁷ Based on recommendations made by the inspectors, a bill was introduced in the House of Representatives to authorize the Secretary of the Navy "to replace, remodel, or extend existing structures and to construct additional buildings at the United States Naval Hospital and Naval Medical School, Washington, D.C., at a cost not to exceed \$3,200,000."¹⁰⁸ A plan was designed for a hospital center atop Observatory Hill's high grounds, with a five hundred twenty-four bed capacity, expandable to seven hundred twenty-four beds in an emergency.¹⁰⁹

However, the new hospital proposal was introduced as the nation was entering the Depression, and broad government cuts were being implemented. On March 1, 1930, the Bureau of the Budget advised the Navy that the original \$3,200,000 would have to be more than halved in order to conform with President Hoover's austerity program. In a modified version of the original bill, only \$1.5 million would be available, of which \$250,000 would have to come from the Naval

¹⁰⁵Bureau of Medicine and Surgery. "United States Naval Medical School. Washington, D.C.," Annual Report of the Surgeon General, (Washington, D.C.: G.P.O., 1932.)

¹⁰⁶U.S. Cong., House. "Public Works at United States Naval Hospital. Washington, D.C.," H. Rept. 741, (Washington, D.C.: G.P.O., 24 Feb 1930), p. 3, as quoted in Herman. A Hilltop in Foggy Bottom, p. 78.

¹⁰⁷Herman . A Hilltop in Foggy Bottom, p. 78.

¹⁰⁸U.S. Cong., House. H. Rept 8866. 71st Congress. (Washington, D.C.: G.P.O., 8 Feb 1930), as quoted in Herman. A Hilltop in Foggy Bottom, p. 79.

¹⁰⁹Herman. A Hilltop in Foggy Bottom, p. 79.

Hospital Fund, a reserve needed for other hospital projects.¹¹⁰ The Navy knew that it could not build an adequate new facility with such limited funds, and recommended against passage of the legislation, hoping that adequate funding would be appropriated in a future budget.

How that new complex would fit into its context on the particular site and within the bounds of the Capital City engendered a great deal of controversy. Any new development would have to satisfy the National Capital Park and Planning Commission (NCPPC), and the Commission of Fine Arts.¹¹¹ Plans were also subject to the approval of the Public Building Commission.¹¹² A 1929 plan calling for a seven- or eight-story tower was eliminated since it would overshadow the Lincoln Memorial. The next year the Bureau of Yards and Docks submitted a new plan for a five-story building, which was also rejected.¹¹³ In November 1931, the Navy selected the Allied Architects¹¹⁴ of Washington, D.C. to draw up new plans for the site, but even as the blueprints were completed, it became increasingly obvious that Observatory Hill would be too small to accommodate a complete medical complex. A letter from the Commission of Fine Arts detailed some of the problems with such a design at the site in relation to the context of the area:

The Commission are unanimous in advising you that the buildings as planned would prove to be a serious detriment to the integrity and dominance of the dignity, power and feeling for beauty of this Nation....No other people known to history have ever achieved a more comprehensive, impressive and beautiful scheme for a National Capital....This magnificent composition now approaching completion would be ruined in appearance by the towering mass of brick buildings. Hospital construction carried out on modern hospital lines is not a thing of beauty and should not be given a dominating place in the landscape. The very attempt to provide this hospital group with a monumental entrance brings the hospital in sharp competition with the Lincoln Memorial to the detriment of both.

The two buildings are mutually antagonistic in design as well as in purpose.¹¹⁵

Frederic Delano, the Chairman of the NCPPC, suggested that a new site in the Washington suburbs might serve as a solution. In the meantime, any new buildings constructed at Observatory Hill were to be readily convertible into office space, for the future needs of the executive departments of the government.¹¹⁶

¹¹⁰Herman, A Hilltop in Foggy Bottom, p. 79.

¹¹¹The NCPPC reviewed the utilitarian and economic consequences of projects as they affected the city, while the Commission of Fine Arts made recommendations as to the harmony of design.

¹¹²Most of the information in this paragraph was taken from Herman, A Hilltop in Foggy Bottom, p. 80.

¹¹³Herman, A Hilltop in Foggy Bottom, p. 80.

¹¹⁴The Allied Architects had firms in New York, Los Angeles and Washington D.C. at the time.

¹¹⁵Letter from Charles Moor, Chairman of the Commission of Fine Arts to Rear Admiral A.E. Parsons, Chief, Navy Dept. December 22, 1931. "Structures: New Hospital Washington." Volume 1. Bureau of Yards and Docks General Correspondence, 1925-1942. RG 71, NH6(1)/N9. National Archives.

¹¹⁶Most of the information in this paragraph was taken from Herman, A Hilltop in Foggy Bottom, pp. 80-81.

A New Naval Medical Center

The 1931 Naval Act, which commissioned the Allied Architects to build a Naval Medical Center on Observatory Hill, was amended in 1937, to authorize the Secretary of the Navy

...to construct in the District of Columbia, or in the immediate vicinity thereof, on land already acquired or hereby authorized to be acquired...buildings to replace the present Naval Hospital and Naval Medical School...including facilities for the Naval Medical Center and Naval Dental School: Provided, that the total cost of the land and of construction hereby authorized shall not exceed \$4,850,000.¹¹⁷

The same year Surgeon General of the Navy Percival S. Rossiter supported a transfer of the Hospital and Medical School to a new site. An evaluation of the complex described its current occupations.

The Naval Medical Center embracing the Naval Hospital, Naval Medical School and Naval Dental School is designed to make available to the Navy the modern development of "group medicine"...Washington offers many advantages in accessible form for the postgraduate education of Medical and Dental Officers, and to the Medical Center are referred many delicate and difficult questions of diagnosis and treatment: for example, all of the insane of the Navy are brought to the Naval Medical Center for final diagnosis and many obscure cases are referred to this institution for study and determination. In addition to the above, the Naval Hospital cares regularly for the sick and disabled of all Navy and Marine Corps activities in Washington and nearby Maryland and Virginia, and for the retired personnel residing in this vicinity.¹¹⁸

The House Committee on Naval Affairs agreed that

...the facilities at the present naval hospital are entirely inadequate to fully and completely provide for the [necessary] activities and, too, the space for expansion is so limited that there is no room for the additional requirements that would be necessary in time of an emergency.¹¹⁹

Consequently, a two hundred forty-seven acre tract was acquired in Bethesda, Maryland, and the construction of the Naval Medical Center became President Franklin D. Roosevelt's personal

¹¹⁷Department of the Navy General Order 70, of 20 June 1935, established the Naval Medical Center under the Bureau of Medicine and Surgery. On 1 August 1936, the Naval Dental School was established as an independent command under the center. U.S. Cong., House, 75th Congress, H. Rept. 6547. (Washington, D.C.: G.P.O., 16 August 1937), as quoted in Herman, A Hilltop in Foggy Bottom, p. 81.

¹¹⁸Document dated 14 May 1937, RG52, Records of the Bureau of Medicine and Surgery, General Correspondence, "Headquarters Records Correspondence 1842-1951," Box 112, File NH6/A1-1, 1929-1937, National Archives.

¹¹⁹U. S. Congress, "Construction of Certain Public Works in or in the Vicinity of the District of Columbia", 75th Congress, Report No. 1039, p. 3, as quoted in Herman, A Hilltop in Foggy Bottom, p. 81.

crusade.¹²⁰ The buildings at Bethesda were completed in 1942, and President Roosevelt dedicated the new Naval Medical Center on August 31.

The NCPPC had suggested turning the old Naval Hospital grounds into a park and converting the old Observatory into a planetarium. But, with the arrival of World War Two, these plans were put aside.¹²¹ And, the fate of the old complex at Observatory Hill was secured; it had been selected for the new administrative headquarters of the Bureau of Medicine and Surgery. The former medical center was soon transformed, in a rapid overhauling of the complex into offices.¹²²

The Bureau of Medicine and Surgery (1942-1994)

In 1942, the Bureau of Medicine and Surgery (BUMED) converted the former medical complex into its national administrative headquarters. BUMED had been established in the Navy Department by an Act of Congress on August 31, 1842, as part of a major reorganization of the Navy.¹²³ Five bureaus were created at the time: Yards and Docks; Construction, Equipment and Repair; Provisions and Clothing; and Ordnance and Hydrography. The first Chief of the Bureau was William Paul Crillan Barton, appointed by President John Tyler.¹²⁴ Dr. William Maxwell Wood was the first Chief of the Bureau to bear the additional title "Surgeon General" in 1871.¹²⁵

During its first 140 years, BUMED was exclusively responsible for exercising direct control over naval hospitals, medical and dental clinics, preventative medicine units, disease vector environment and control units, medical units at non naval activities, and technical schools serving Medical Department personnel.¹²⁶ BUMED retained its basic structure over time, with the exception of minor administrative changes taking place during the World Wars.

¹²⁰Most of the information in this paragraph was taken from Herman, A Hilltop in Foggy Bottom, p. 81. Paul Cret was consulting architect for this project. See letter from Gilmore D. Clarke, Chairman of the Commission of Fine Arts 12 Aug. 1938. RG 52 Bureau of Medicine and Surgery Headquarters Records Correspondence, General Correspondence, File 1938-1939, National Archives.

¹²¹Herman. A Hilltop in Foggy Bottom, p. 81.

¹²²Herman. A Hilltop in Foggy Bottom, p. 82.

¹²³Bureau of Medicine and Surgery, Bureau of Medicine and Surgery: Guardian of Health, Souvenir Booklet. (Washington D.C., 16 October 1965), pp. 85-86.

¹²⁴See unpublished paper, "History of BUMED" from BUMED history file. Files of Jan Herman, and "Evolution of the Medical Department (An Overview)" by Jan Herman. The following is a chronology of Surgeon Generals/Chief of BUMED: William P.C. Barton (1842-1844); Thomas Harris (1844-1853); William Whelan (1853-1865); Phineas J. Horwitz (186-1869) [Title of Surgeon General Added in 1871] William Maxwell Wood (1869-1871); Jonathan M. Foltz (1871-1872); James C. Palmer (1872-1873); Joseph Beale (1873-1877); William Grier (1877-1878); J. Winthrop Taylor (1878-1879); Philip S. Wales (1879-1884); Francis M. Ginnell (1884-1888); John Mills Brown (1888-1893); James Rufus Tryon (1893-1897); Newton L. Bates (1897-1897); William J. Van Reypen (1897-1902); Presley M. Rixey (1902-1910); Charles F. Stokes (1910-1914); William C. Braisted (1914-1920); Edward R. Stitt (1920-1928); Charles E. Riggs (1928-1933); Percival S. Rossiter (1933-1938); Ross T. McIntire (1938-1946); Clifford A. Swanson (1946-1951); H. Lamont Pugh (1951-1955); Bartholomew W. Hogan (1955-1961); Edward C. Kenney (1961-1965); Robert B. Brown (1965-1969); George M. Davis (1969-1973); Donald L. Custis (1973-1976); Willard P. Arentzen (1976-1980) [BUMED becomes Naval Medical Command 1 Oct 1982; Surgeon General gets additional title of Director of Naval Medicine]; J. William Cox (1980-1983); Lewis H. Seaton (1983-1987); James A. Zimble (1987-).

¹²⁵Bureau of Medicine and Surgery, Bureau of Medicine and Surgery: Guardian of Health, Souvenir Booklet. (Washington D.C., 16 October 1965), pp. 85-86.

¹²⁶See Jan Herman paper, "Evolution of the Medical Department," BUMED library BUMED history file.

By the 1960s, BUMED defined its responsibilities as

...safeguarding the health of the Navy; for providing for the sick and injured; for the prevention of disease; for conducting the professional education and training of Medical Department personnel; for the upkeep and operation of designated naval medical facilities; for research in the sciences of medicine and dentistry; for inspection of naval facilities with respect to sanitary conditions; and for the custody and preservation of records, accounts, and properties under its cognizance.¹²⁷

BUMED continues to act as the central administrative organization of the Medical Department responsible for the health of the Navy and Marine Corps.

¹²⁷Bureau of Medicine and Surgery. Bureau of Medicine and Surgery: Guardian of Health. Souvenir Booklet. (Washington D.C., 16 October 1965). BUMED: Guardian of Health, p. 86.

STATEMENT OF SIGNIFICANCE

The Potomac Annex, overlooking the Potomac River is located on a ten-acre site in the northwest quadrant of Washington, D.C. Ten primary buildings, ranging in date from 1844 through 1908 occupy "Observatory Hill," which was the former home of the United States Naval Observatory, the United States Naval Museum of Hygiene and the Naval Hospital and Medical School.

The Potomac Annex appears to qualify as a National Register District under Criterion A (association with events that have made a contribution to the patterns of our history), and Criterion C (embodiment of distinctive characteristics of a type, period or method of construction; representation of the work of a master; representation of a significant and distinguishable entity whose components may lack individual distinction). The significance of the site is further enhanced by the presence of the old Observatory building, which is listed as a National Historic Landmark.¹²⁸

The site's association with important events (Criterion A) is established through its role in:

- 1) Important developments in astronomy during the 19th century.
- 2) The history of the U.S. Navy.
- 3) Important developments in the study of medicine and the treatment of disease during the first half of the twentieth century.
- 4) World War One.

The site's primary importance rests with the extraordinary Observatory Building, noted for both its historic and architectural merit (this has been elaborated in the HSR for Building 2). The significance of this building has been recognized by its National Historic Landmark status. Between the years 1893 and 1942, "Observatory Hill" matured into new uses with new occupants including the Naval Museum of Hygiene and, later, the Naval Medical School and Hospital. This later development enhances the significance of the site, both through the quality of the architecture, and through the important role the School and Hospital played as the Navy's medical headquarters in the Nation's Capital. The site has been continuously occupied by the U.S. Navy since 1844, when the Observatory first opened. The establishment of both the Observatory and the Medical Center on this site marked major milestones in the history of the Navy.

The Naval Medical Complex, in its forty years at Observatory Hill, evolved from an innovative attempt to address the demands of Naval medicine into a major center for the study and treatment of disease. The Medical school established a post-graduate program aimed at addressing the specific needs of naval medicine. Constantly dealing with the consequences of the international exposure of its troops and the changing technology of warfare, Naval Medicine was forced to be

¹²⁸Carolyn E. Wheat, "Potomac Annex Historic District National Register Nomination Form," August 1993.

progressive, overcoming unprecedented obstacles of foreign disease and war casualties with creative and inventive solutions.

Soon after the establishment of the Naval Medical School, the Naval Hospital was introduced to the site. Working in tandem with the school, the hospital served as a resource for the medical students, while offering treatment for the sick and wounded of the military. The Navy, at the Washington Medical complex, pioneered the study of tropical disease, chemical warfare, and aviation medicine. Naval medical staff dealt with the mundane but devastating problems of venereal diseases, and other contagious diseases, including major epidemics of influenza, tuberculosis and typhoid. Ultimately the Naval Medical Complex, like others of its kind, served as an important testing ground for medicine as it would be subsequently practiced in civilian hospitals in the United States, and around the world.

The U.S. entered World War One in 1917. As large numbers of wounded men returned from the battlefields of France, there was a tremendous increase in patients at the hospital. While in 1912, there had been only five hundred and eight admissions, in 1918, at the height of American involvement in the War, two thousand patients were admitted.

The Medical School was also effected by the War, when it became necessary to add laboratory technician courses, and other new forms of instruction dealing with the treatment of victims of gas warfare, electrocardiography, and analytic chemistry. The school became the headquarters for training epidemiological and sanitary units that were deployed to the Western Front. After 1918, the hospital continued to play a role in the treatment of war veterans and many victims of the great influenza epidemics.

Potomac Annex also appears eligible for listing in the National Register under Criterion C. The site's embodiment of distinctive characteristics of a type, period or method of construction; representation of the work of a master; representation of a significant and distinguishable entity whose components may lack individual distinction is established through:

- 1) The unusual juxtaposition of characteristic examples of two distinctive building types--the Observatory (Building 2), the Hospital Buildings 1,3,4,5,6 &7, and Residences A,B &C. (Although the residences are not subject to this HSR, their association with the Hospital is integral to the importance of the site.)
- 2) The method of construction of the Hospital Building--early use of reinforced concrete.
- 3) The representation of the work of the renowned architect, Ernest Flagg.
- 4) The representation of the campus-like setting established by the relationships of the buildings to each other and to the landscape.

While the old Observatory Building is the symbolic center of the site, the substance and quality of the early 20th-century hospital buildings establish the context. In 1903, the renowned New York architect, Ernest Flagg, was commissioned to design the Hospital Building. Flagg's

relationship with the Navy had been established at the end of the previous century; and in 1895, he had won the commission to design the new campus for the Naval Academy in Annapolis, Maryland. Ernest Flagg was one of America's premier hospital architects in the late 19th and early 20th centuries. While the architectural expression of the hospital is conservative, and the spatial planning represented the contemporary thinking in American hospital design, the structural system was a significant and innovative development for its time.

Ernest Flagg is known for his experimentation in the use of reinforced concrete, and this building is an early example of such use in this country. The benefits of reinforced concrete included its inherent fire resistance, its stiffness, and its durability. Reinforced concrete provided an additional advantage of virtual airtightness. The original ventilation system in the hospital building consisted of exhaust fans in the end walls which created negative pressures in the attic. The resulting suction drew air up through vehicle shafts from the ward rooms into the attic above. This original ventilation system would be most efficient if the attic construction was virtually airtight--easily accomplished with monolithic poured concrete construction, but difficult to achieve with wood.

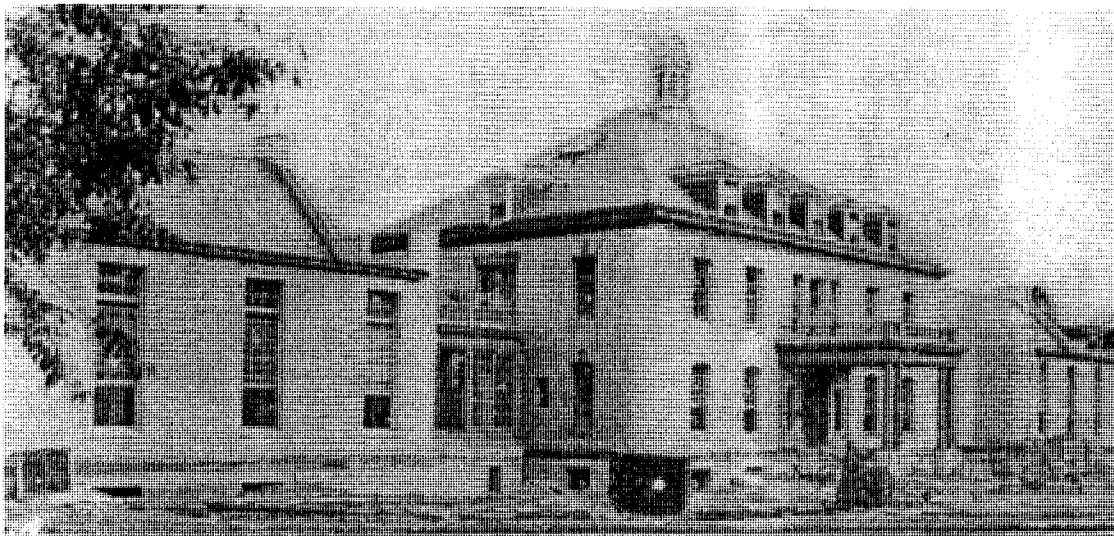
Ernest Flagg's building also set the architectural tone for the subsequent hospital buildings, which were designed and constructed by the Naval Bureau of Yards and Docks under the direction of architect, F. W. Southworth, then Chief of the Bureau. Stylistically, the architects for the new buildings followed Flagg's lead, which is a rather conservative Georgian Revival, domestic in scale, composition, materials and ornamentation. The complex is characterized by two-and-one-half story, buff-colored brick buildings with hipped or gabled roofs. Windows are multi-pane double-hung sash. Ornamental features include classical porte-cocheres and entrance porticos; cupolas, roof cornices, dormers and balustrades; keystones, quoins and columns. Most of the buildings were equipped with two-story porches opening to the south.

It is clear from the uniformity of architectural design, and the careful placement of the buildings that much consideration was given to the overall appearance of the hospital complex to create a campus-like setting. This is noted in the relationships of the hospital buildings to each other, and the initial respect paid to the prominence of the old Observatory Building. While the scale of the new hospital buildings undoubtedly was dictated by their programmatic requirements, it was similar to that of the original building and complemented it.

It appears that the 19th-century landscape was designed by the Philadelphia architect, William Strickland. However, when the Naval hospital began its construction campaigns in the first decade of the twentieth century, extensive alterations were made to the site. The 19th-century landscape and plantings could not survive the construction of so many buildings, paved roads and parking lots. However, although much altered, the northern section of the landscape, in front of the old Observatory, does retain some vestiges of its 19th-century appearance and it should be considered significant.

Potomac Annex is clearly an important landmark, significant for both its history and its architectural quality, and it certainly merits preservation. The open landscape setting and the unity of appearance and the domestic scale of the buildings sets this site apart from the

surrounding neighborhood. The quality of design and construction, as well as the historic purposes of the site, render it a significant contribution to American architecture. The attention and respect paid to the original design intent during subsequent construction, makes the whole a comprehensive and pleasing architectural composition.



The New Naval Hospital adjoining the Medical School.

Figure 2-1
The New Naval Hospital Adjoining the Medical School
BUILDINGS 3 & 4
BUMED Archives



Figure 2-2

HOSPITAL COMPLEX

“Portion of hospital reservation, viewed from the west”, 1912.

Bureau of Medicine and Surgery, A.W. Dunbar, “ A Description of Recent Hospital Construction in the United States Navy”, U.S. Naval Medical Bulletin, No.4 (Oct.. 1912).



Figure 2-3
HOSPITAL (BUILDING 3)
North and west elevations of administrative building, ca., early 1940's
BUMED Archives

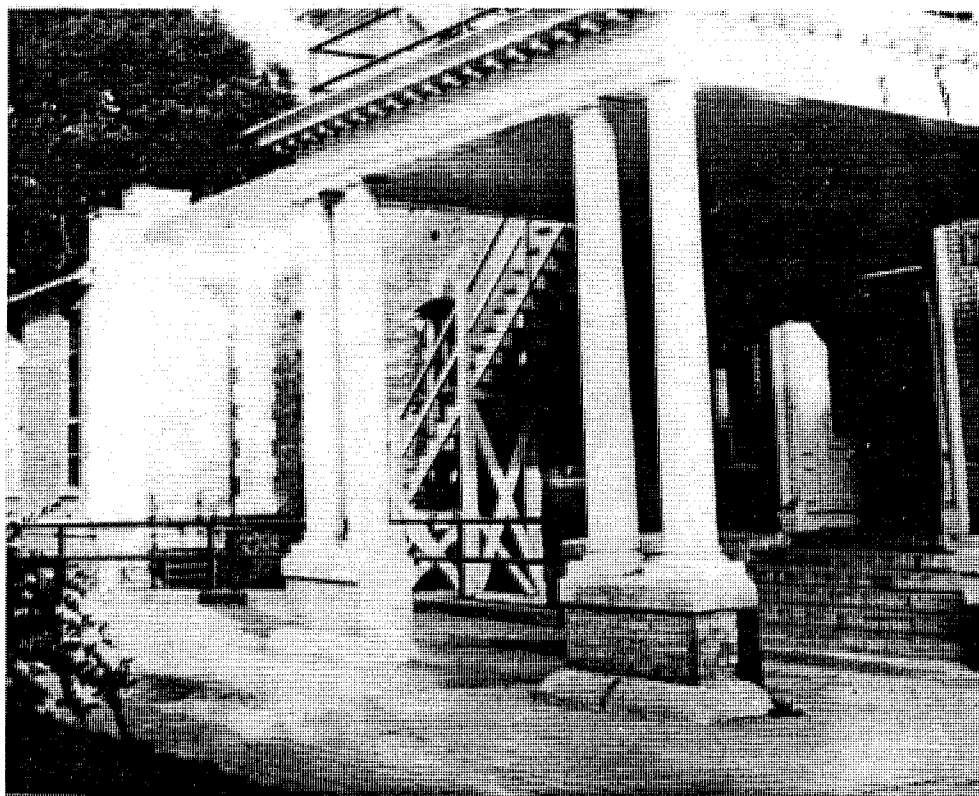


Figure 2-4
HOSPITAL (BUILDING 3)
Detail of ambulatory porch of hospital, north elevation (no date).
BUMED Archives

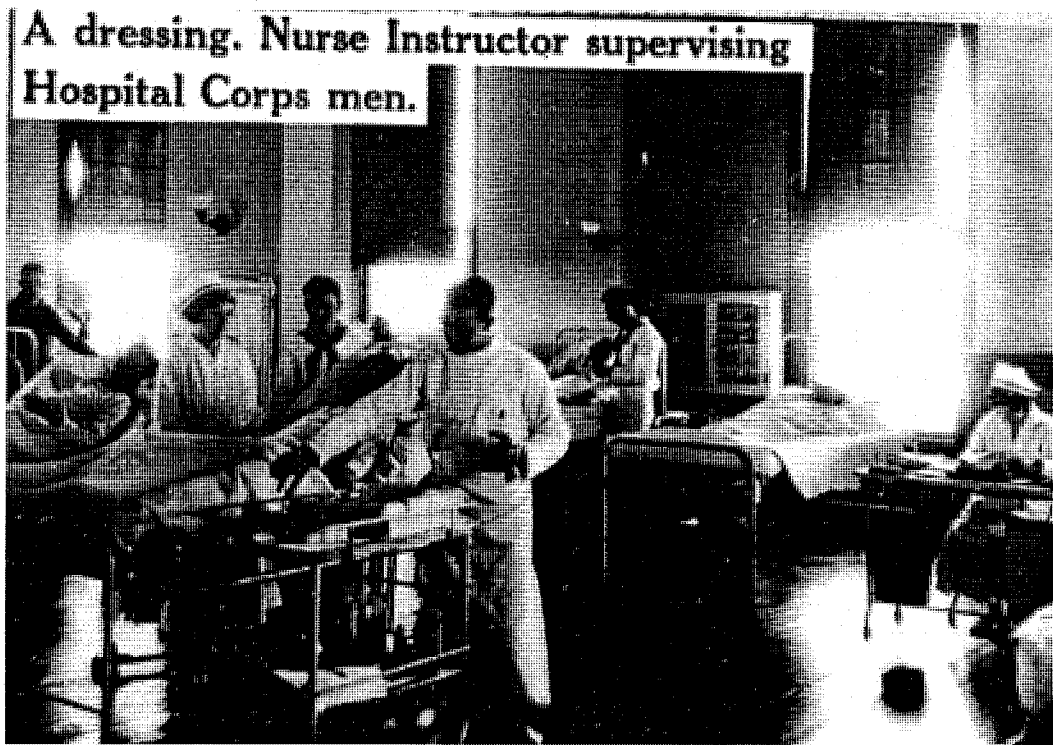


Figure 2-5
HOSPITAL OR CONTAGIOUS WARD (BUILDINGS 3 & 4, 6)
Interior "A dressing. Nurse instructor supervising Hospital Corpsmen.", ca. 1920's
BUMED Archives

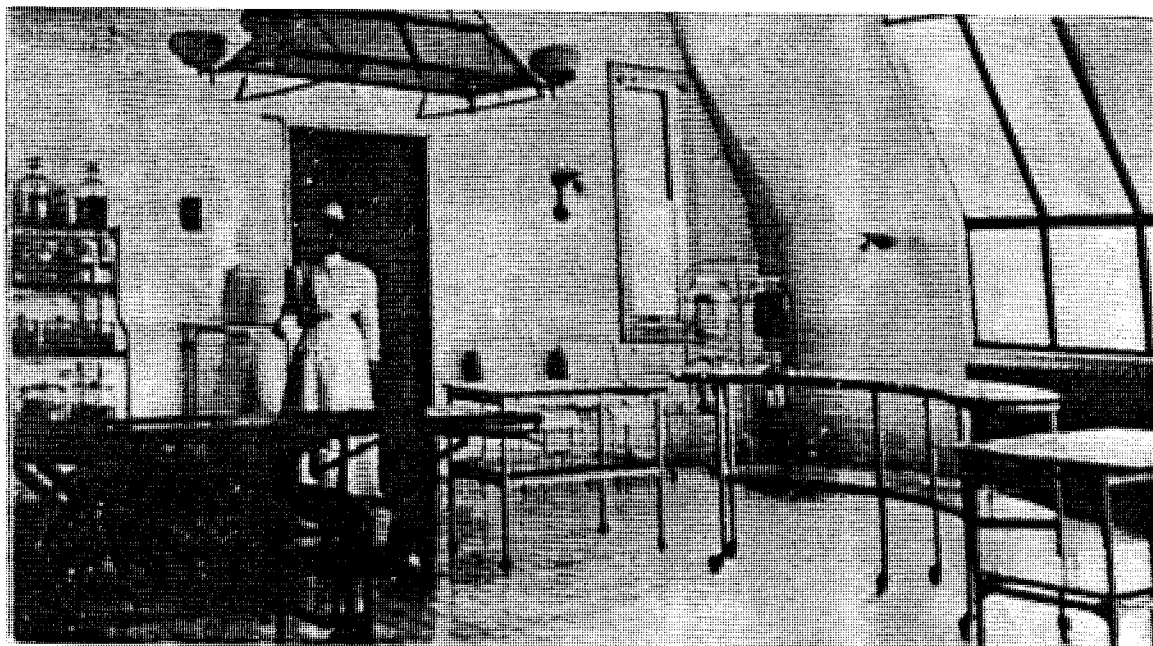


Figure 2-6

HOSPITAL (BUILDING 4)

Interior, Operating Room, 1912.

Bureau of Medicine and Surgery, A.W. Dunbar, "A Description of Recent Hospital Construction in the United States Navy", U.S. Naval Medical Bulletin, No. 4 (Oct. 1912)

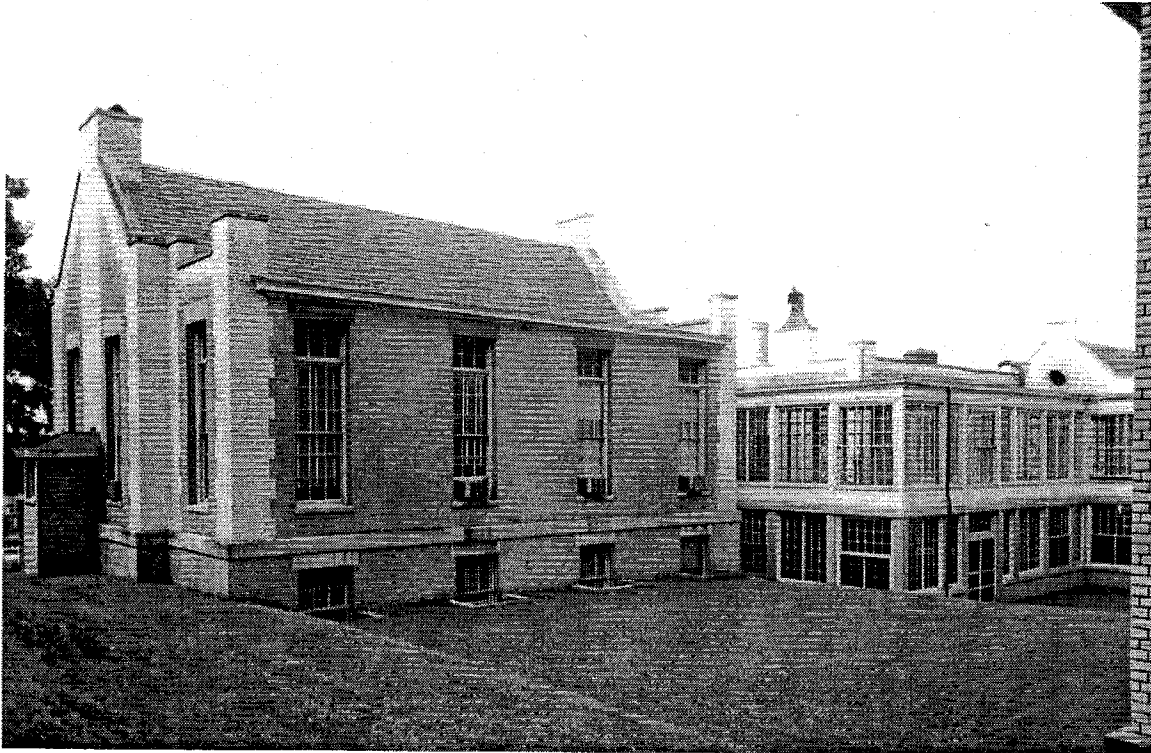


Figure 2-17
POTOMAC ANNEX BUILDINGS 3 & 4
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files



POTOMAC ANNEX BUILDING NO. 5

Figure 2-18
POTOMAC ANNEX BUILDINGS 3 & 4
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files

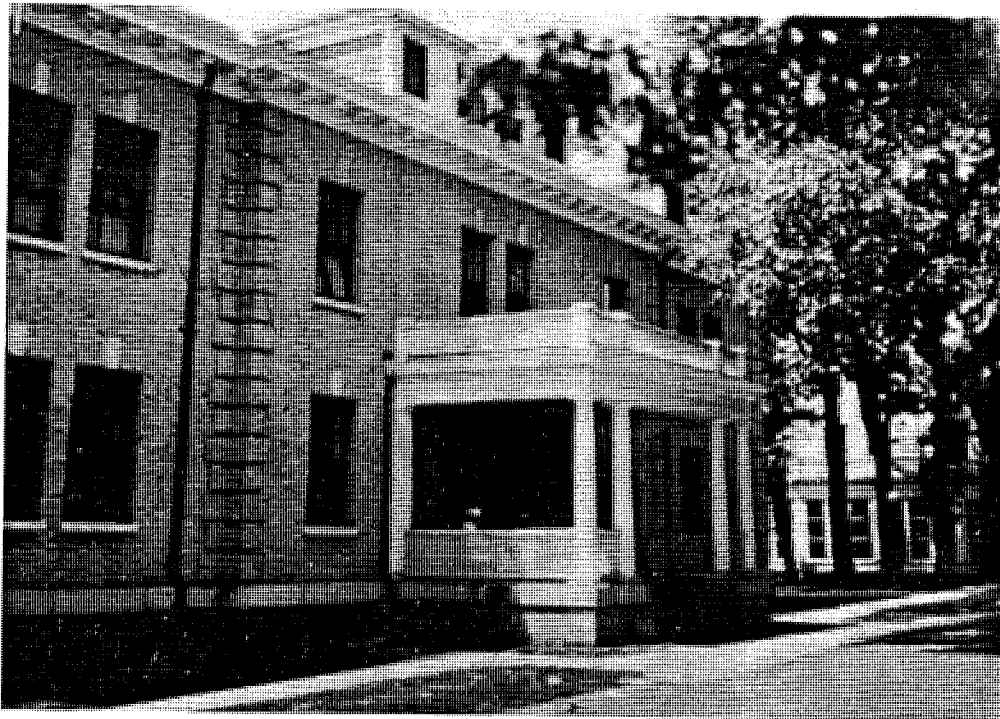


Figure 2-9
NURSES' QUARTERS (BUILDING 1)
East elevation, ca. 1921
BUMED Archives



Figure 2-10
NURSES' QUARTERS (BUILDING 1)
Interior, Nurses' Dining Room, ca. 1925.
BUMED Archives

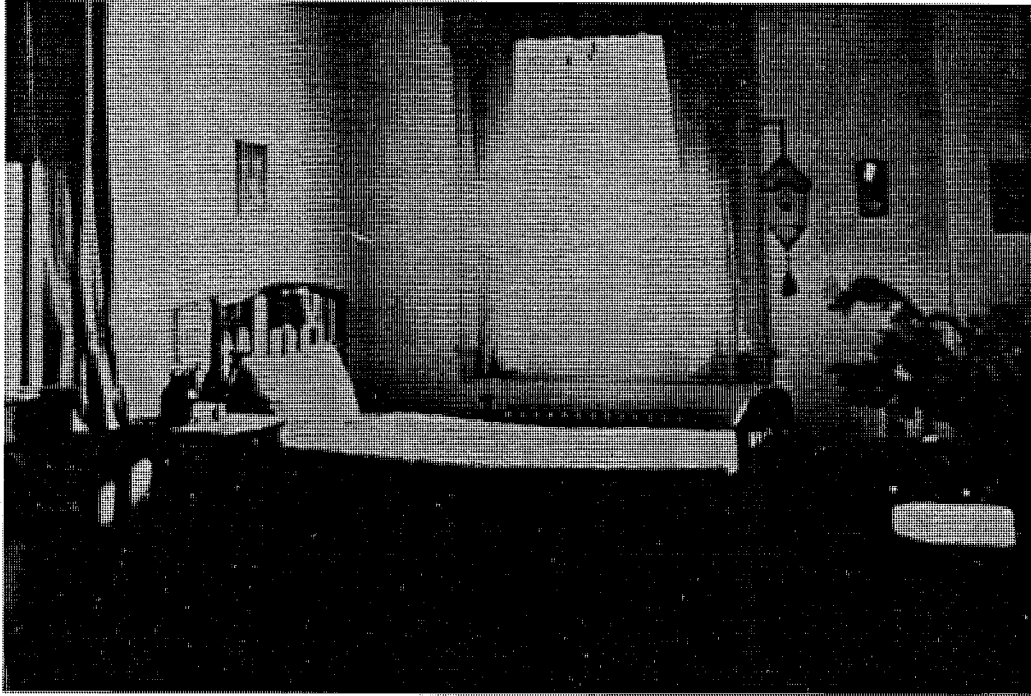
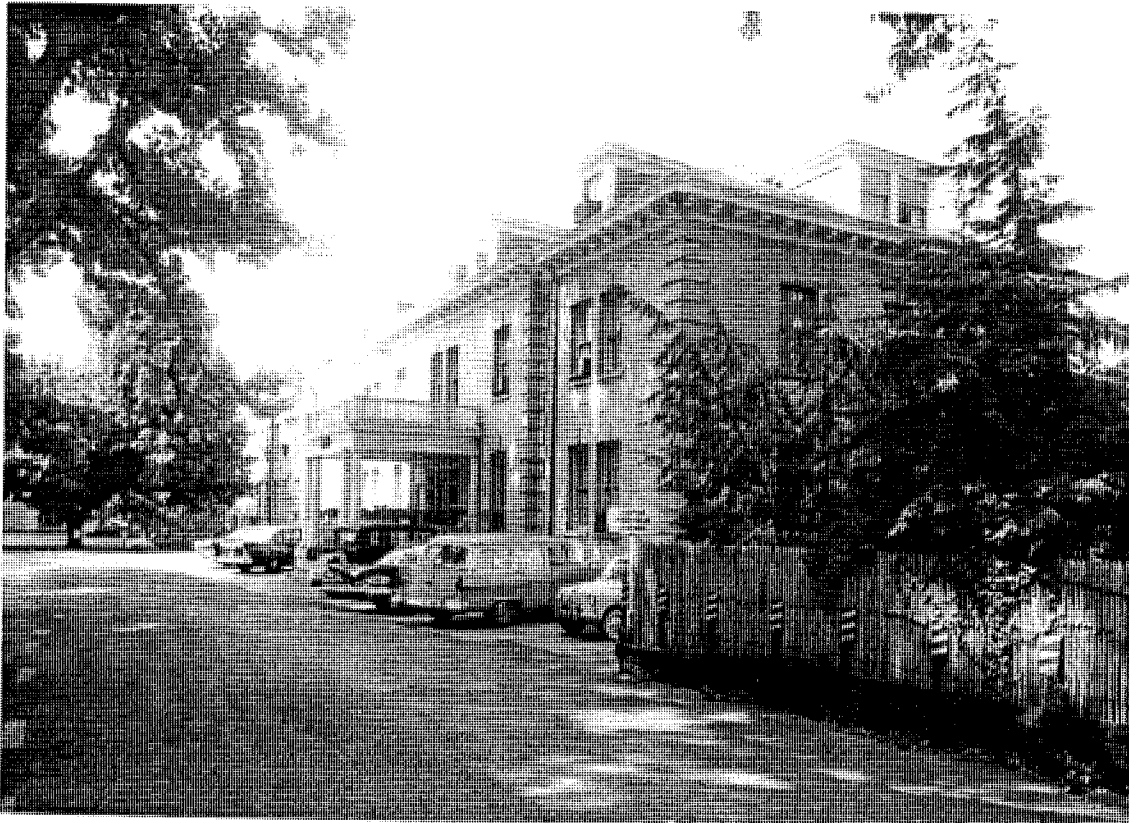
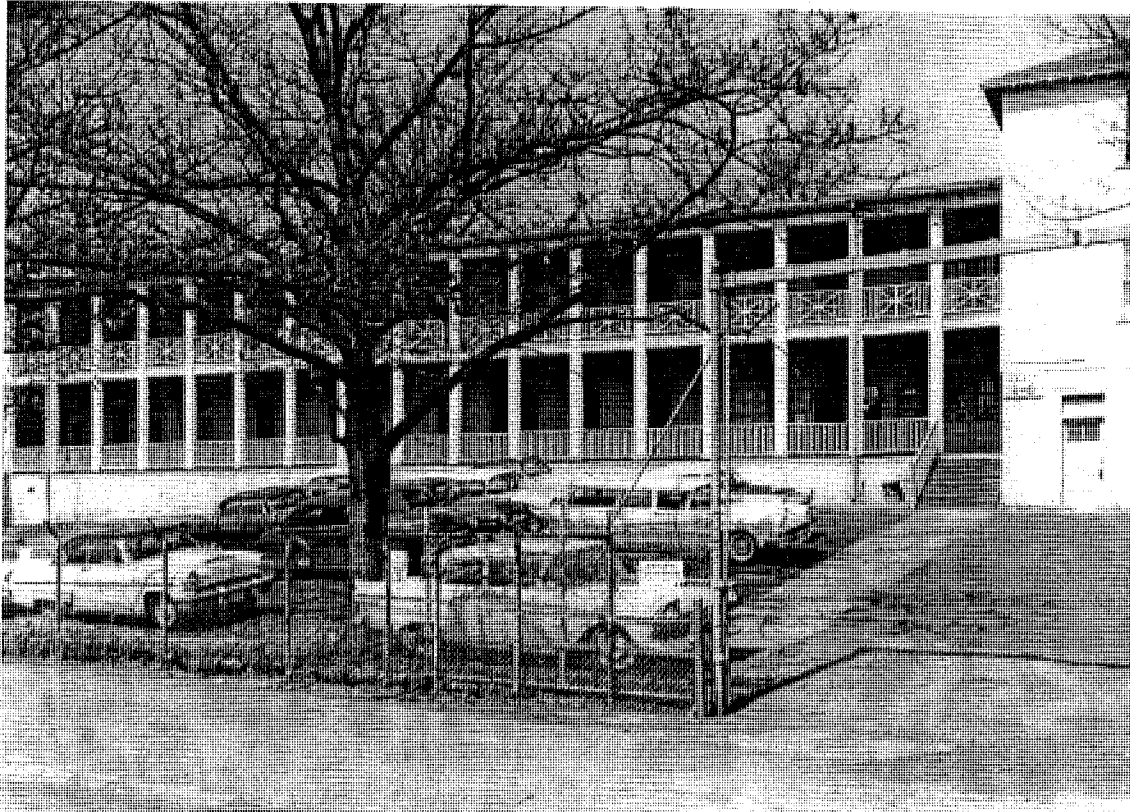


Figure 2-11
NURSES' QUARTERS (BUILDING 1)
Interior, Nurse's Room, ca. Late 1920's - early 1930's
BUMED Archives



POTOMAC ANNEX BUILDING NO. 1

Figure 2-12
POTOMAC ANNEX BUILDING 1
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files

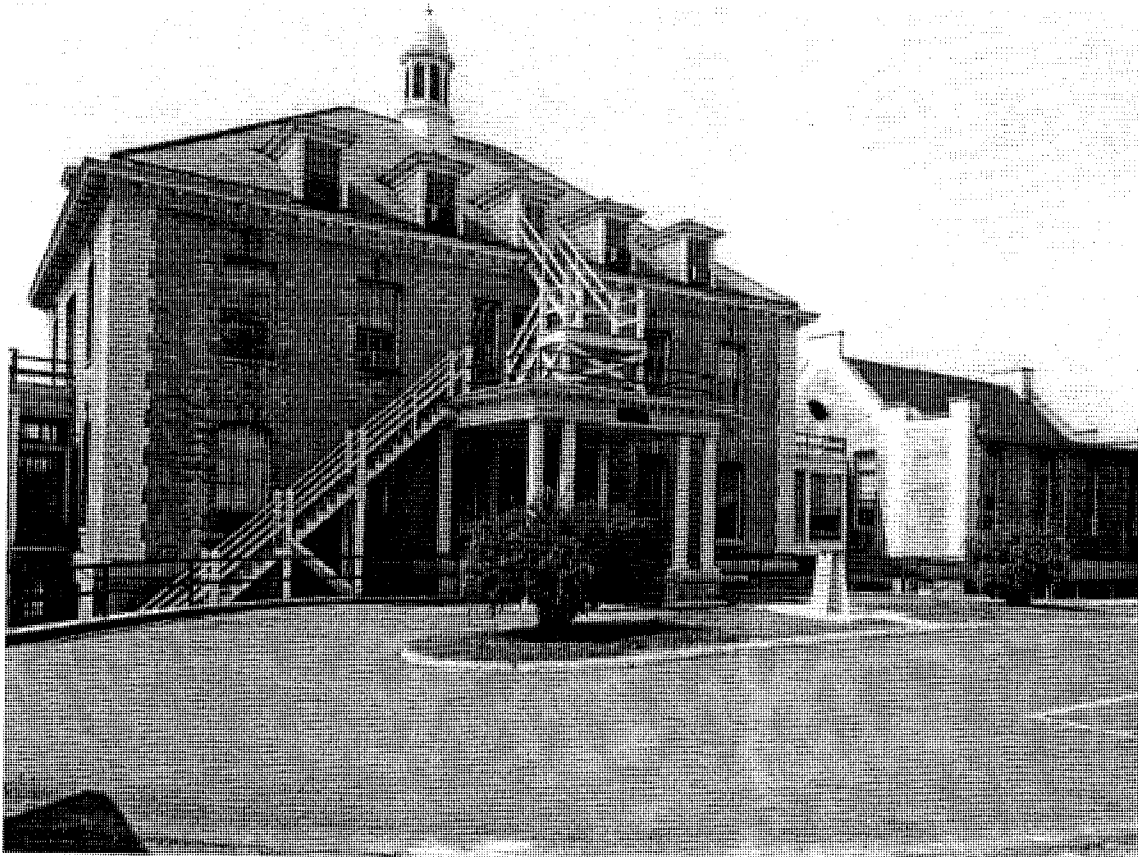


POTOMAC ANNEX BUILDING NO. 14

Figure 2-13
POTOMAC ANNEX BUILDING 14
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files



Figure 2-14
POTOMAC ANNEX BUILDINGS 3 & 4
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files



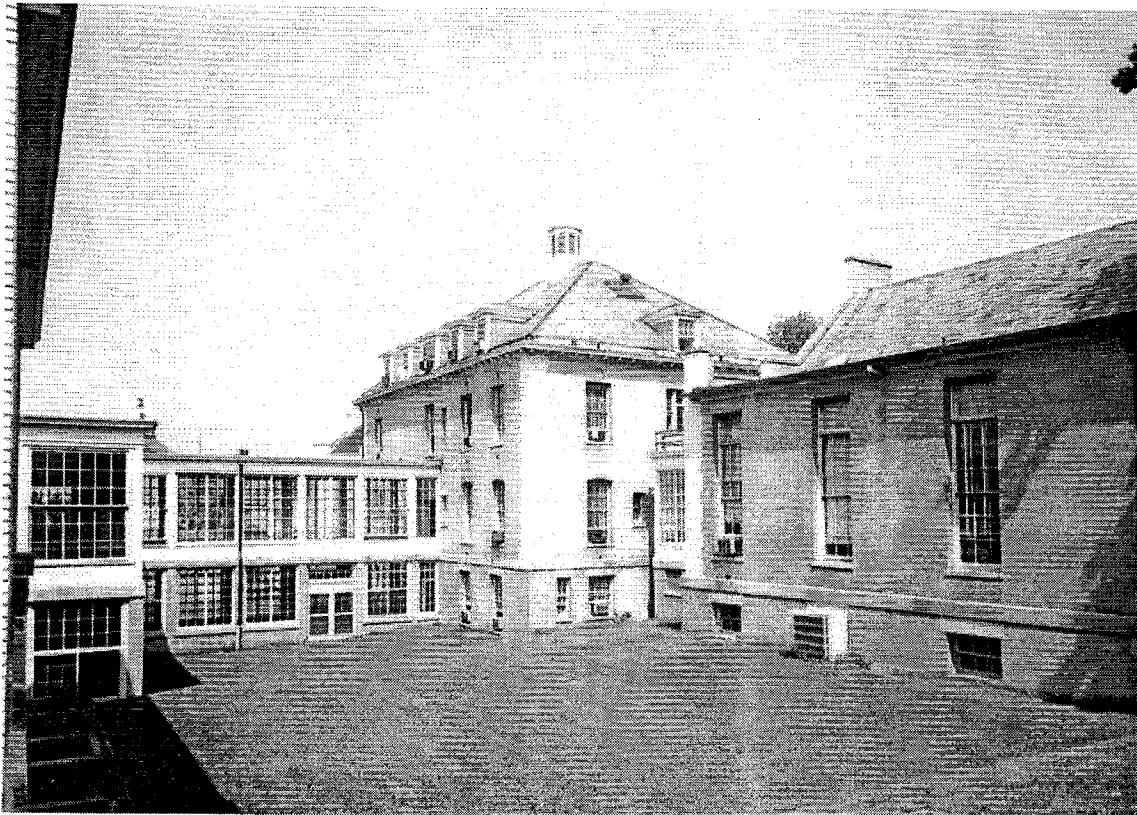
POTOMAC ANNEX BUILDINGS NO. 3 & 4

Figure 2-15
POTOMAC ANNEX BUILDINGS 3 & 4
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files



POTOMAC ANNEX BUILDINGS NO. 3 & 4

Figure 2-16
POTOMAC ANNEX BUILDINGS 3 & 4
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files



POTOMAC ANNEX BUILDINGS NO. 3 & 4

Figure 2-19
POTOMAC ANNEX BUILDINGS 3 & 4
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files



POTOMAC ANNEX BUILDING NO. 5

Figure 2-20
POTOMAC ANNEX BUILDING 5
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files



Figure 2-7

SICK OFFICERS' QUARTERS (BUILDING 5)

North elevation, 1912.

Bureau of Medicine and Surgery, A.W. Dunbar, "A Description of Recent Hospital Construction in the United States Navy." U.S. Naval Medical Bulletin, No. 4, (Oct. 1912)

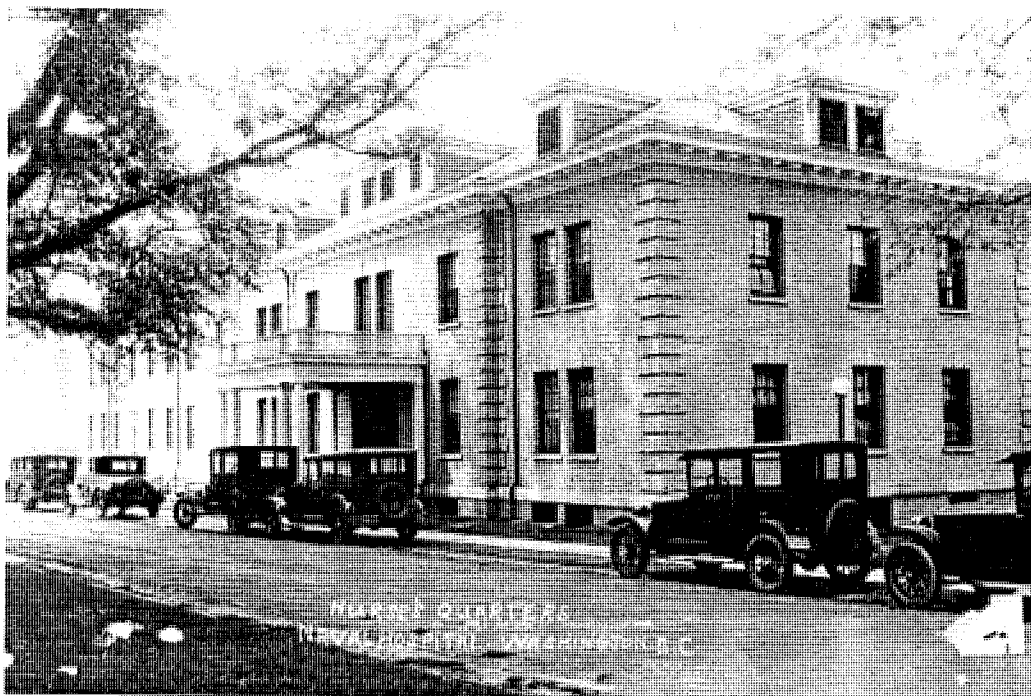


Figure 2-8
NURSES' QUARTERS (BUILDING 1)
East and North elevations, ca. 1929.
BUMED Archives



POTOMAC ANNEX BUILDING NO. 6

Figure 2-21
POTOMAC ANNEX BUILDING 6
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files

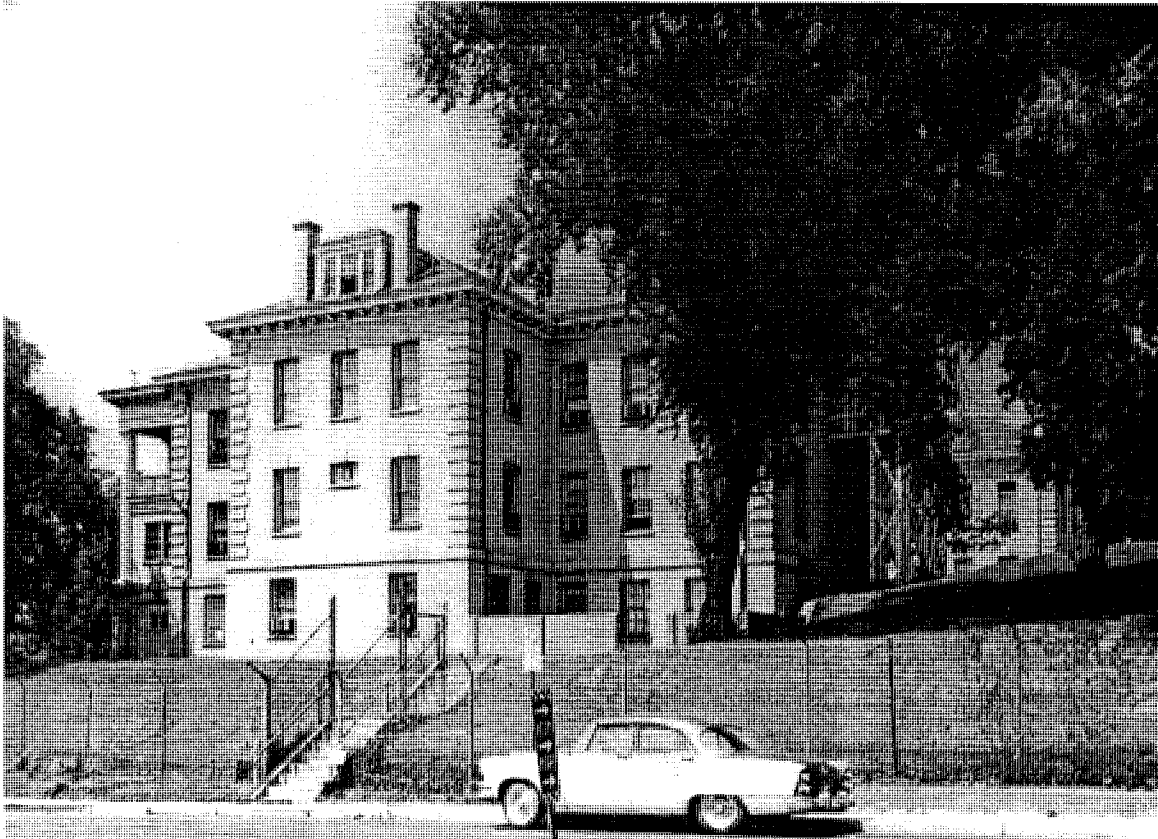
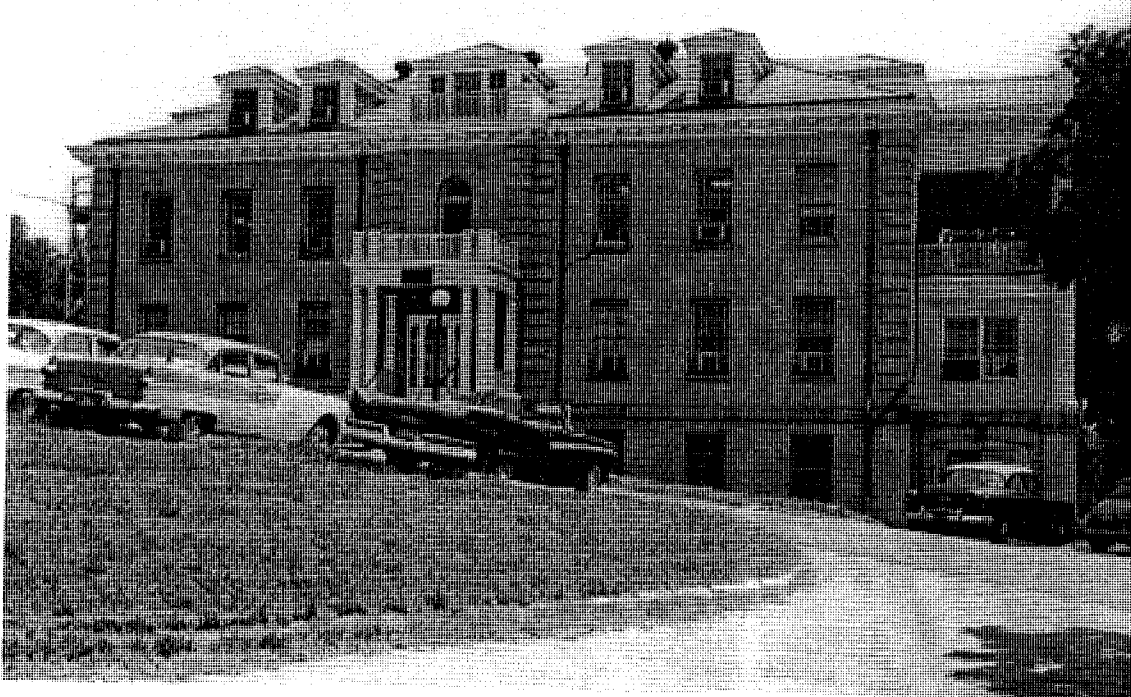
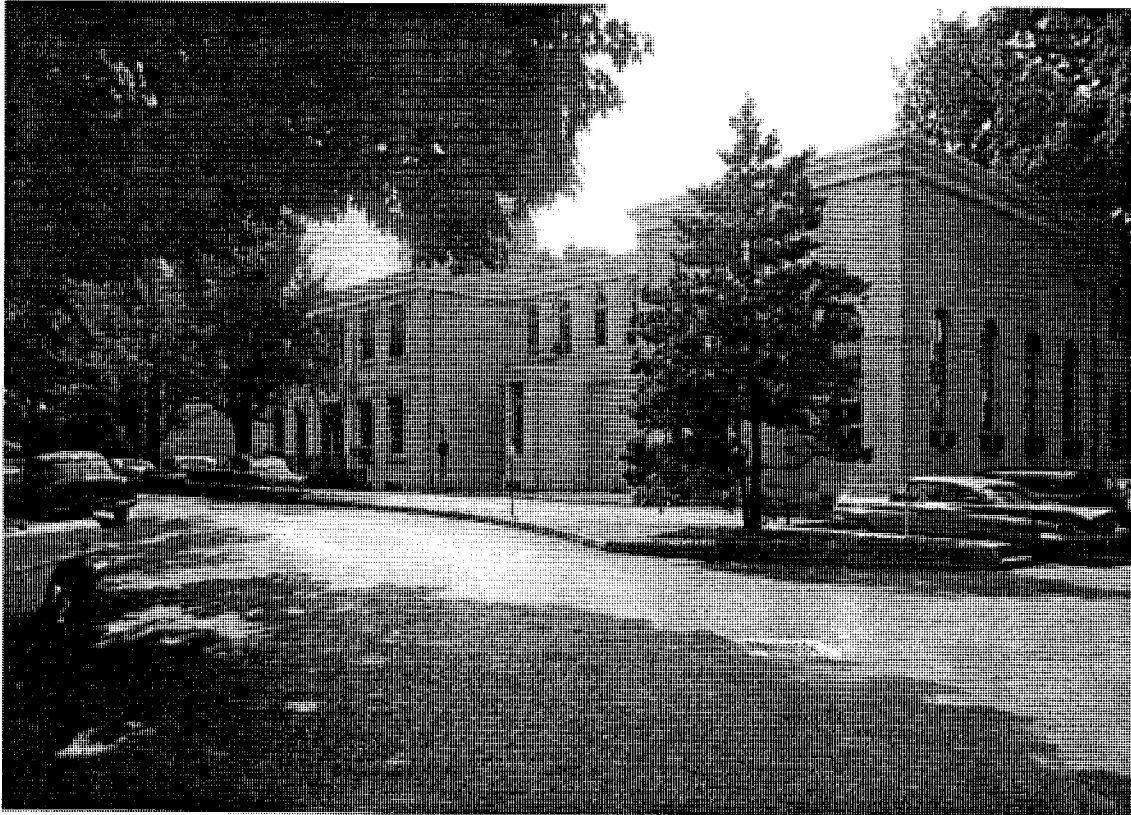


Figure 2-22
POTOMAC ANNEX BUILDING 7
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files



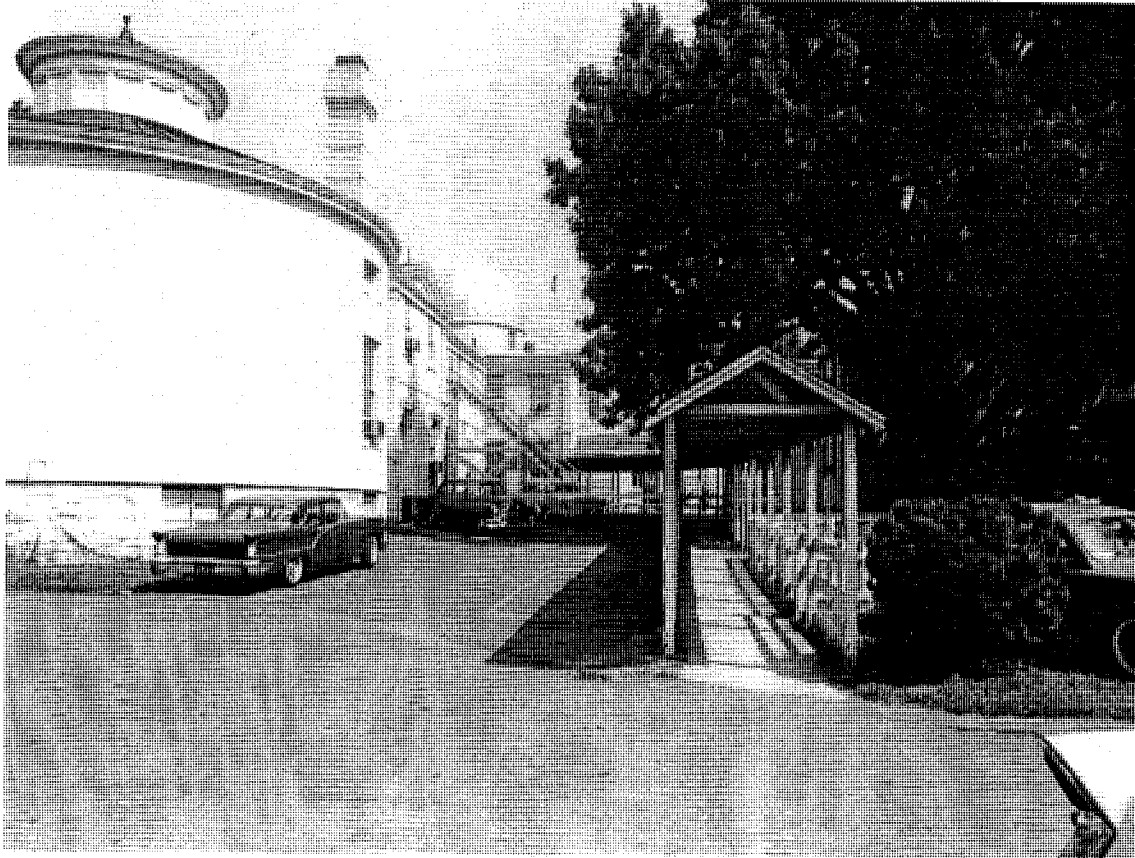
POTOMAC ANNEX BUILDING NO. 7

Figure 2-23
POTOMAC ANNEX BUILDING 7
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files



POTOMAC ANNEX BUILDING NO. 2

Figure 2-24
POTOMAC ANNEX BUILDING 2
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files



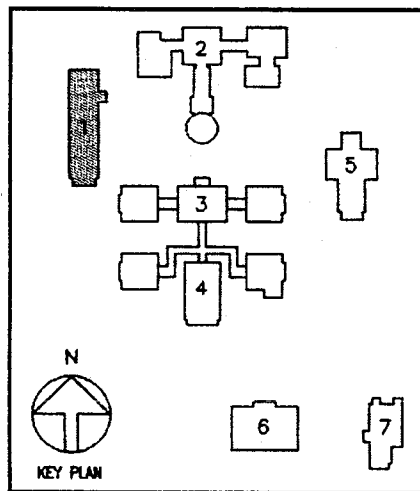
POTOMAC ANNEX BUILDING NO. 2

Figure 2-25
POTOMAC ANNEX BUILDING 2
ca. Mid-1950's
GSA-NCR, Portfolio Management Division Files

INTRODUCTION

The following descriptions are based on historic photographs, the original architectural drawings, some contemporary written documentation (particularly for Buildings 3 & 4) and visual inspection of the buildings. Copies of the original architectural drawings are included in this chapter. The photographs are located at the end of Chapter II. The drawings were located on microfilm at National Archives, Cartographic Division, College Park, Maryland. Record Group 71: Reels 542 and 543. Discussion of the structural and mechanical systems are provided in the existing conditions survey in Chapter IV.

Buildings 1, 3, 4, 5, 6 and 7 were constructed between 1903 and 1911. Because their massing, architectural detailing and materials are similar, they present a unified appearance. "Observatory Hill" is clearly enhanced architecturally by the campus-like environment created by the hospital complex. The old Observatory Building (Building 2) is the symbolic center of the site; but it is the 20th-century hospital buildings that establish the context. The architectural style of the buildings is a rather conservative Georgian Revival, domestic in scale, composition, materials and ornamentation.

Building 1: Female Nurses' Quarters (1908-1911, addition 1925-26)*Original Section (1908-11)*Exterior

Building 1 was originally constructed as the Female Nurses' Quarters, and was used as a dormitory (Figures III-1 – III-6) & III-18—III-19). It was located on the west side of the site. Like most of the buildings on the site, it was a two-and-one-half story brick Georgian Revival structure. It had a hipped roof and a classical balustraded portico, supported by Tuscan columns. The massing was symmetrical except for the sun porch on the south end. The body of the building was constructed of yellow brick laid up in Flemish bond with granite keystones, window sills, and water table. The windows were painted dark green and the other wood trim was white.

The front elevation was oriented to the east. It was designed to be seven bays wide with a central entrance portico. The two end bays on both sides were paired lending an aa-b-b-b-aa rhythm to the facade. The body of the building was articulated by a slightly projecting center pavilion and brick quoins defining its edges and the corners. The original design for the central entrance bay was dominated by a two-story balustraded classical portico with Tuscan columns; however, as shown in historic photographs, it was constructed with only one story. It was served by a flight of concrete steps. The entry door was a single-leaf six-panel door set into an elliptical fan-lighted architrave with leaded side lights. The windows were six-over-six double-hung wood

sash with brackets on the meeting rail of the top sash. The window openings were defined by lintels composed of brick voussoirs with granite keystones and sills. Copper leaders and down spouts were attached to the masonry adjacent to the brick quoins.

The south elevation was characterized by an open three-story sun porch defined by two-story Tuscan columns of wood set onto brick piers at the basement level. Wood balusters ran between the columns on the first, second, and roof levels. The porches were entered through french doors. The basement level of the portico was un-excavated and was enclosed by lattice. The brick and granite detailing was the same as the east elevation including brick quoins defining the corners.

The north and west elevations were designed to be simpler in expression but they retained the symmetrical quality of the more prominent facades. They were defined by the same brick and stone detailing and fenestration pattern. The roof was designed to be hipped and covered with slate. Five roof dormers were designed for the west facades but only three were built. The entire roof is finished by a wood modillioned cornice with an integral copper-lined gutter.

Interior

On the interior, the original structure was laid out on a bi-axial plan with crossing corridors. The first floor was organized around the entry and stair hall, which was crossed by a north-south corridor. The original floor plans indicate that the stairs were wood. Offices, the living and dining rooms, and the superintendent's quarters opened onto the corridor. The living room featured a fireplace against the north wall with a classically-inspired mantel shelf and brick fire-box surround. Pocket doors separated the living and dining rooms.

The second floor contained the nurse's private bedrooms and shared baths and toilets. In the basement, the kitchen was located in the southwest corner; toilets, the coal bin and storage spaces were assigned, and other large rooms were left open. The third-floor plan was not located, but the floor was probably used for additional bedroom spaces.

In general, the finishes were quite simple. The floors were wood, except in the basement where they were concrete, sometimes covered by red quarry tile. Walls and ceilings were typically plaster painted creamy white, with a 7" wood base board throughout. The window and door frames were painted wood; a flat casing with raised edges, square in profile. A cross-section through the building shows that most of the interior doors were single-leaf with five panels (typical throughout the complex). The doors were hung by two hinges, and fitted with brass door knobs and locksets. Generally, the doors in the original 1908 section had rounded panel moldings, a detail also found on doors in other buildings. Some doors were constructed with glazed panels in the upper section. Doors entering corridors were typically surmounted by glazed transoms.

*Addition to Building 1 (1925-26)*Exterior

In 1925-26, a substantial addition was constructed at the south end, more than doubling the size of the building (Figures III-7—III-17) The addition echoed the architectural detail and materials of the original structure but without the sense of balance and symmetry. A new entrance for the original building was proposed, but was not constructed. Like the original building, the addition was constructed of yellow brick laid up in Flemish bond. The brick color, however, is more uniform than that on the original structure, less variegated; therefore, the body of the addition appears a little flat in comparison. The elevation drawings for the addition indicate granite for the keystones and window sills; however, cast stone was used with dark and light aggregates approximating the appearance of granite on the rear of the addition. The trim was painted to match the original.

The west elevation of the addition was designed to be eight bays wide with the entrance being located in the fourth bay from the south. That entrance was designed to have a one-story Tuscan-order portico served by a flight of concrete steps. The existing condition and historic photographs indicate that the south portico was not constructed. The 1926 windows were identical in configuration but not in detail to the originals; they lack the brackets on the top sash. The west elevation retained the massing and masonry detailing of the east side. The fenestration pattern on the west elevation reflected the placement of stairs and toilets on the interior.

The sun porch on the south elevation of the original building was removed to accommodate the new addition. A new south porch was constructed, similar to the original. The new sun porch was glazed providing additional interior space. The north end of the new hip roof was built over the south of the original structure. The new roof was covered with slate and was defined by five dormers on the east and west sides and one on the south. Two brick chimneys pierced the roof on the west side. An areaway was created around the building to provide light and air and access to the basement spaces.

Interior

The new construction provided more bedrooms and created new living and dining rooms. (The work also involved redesigning the original living and dining rooms to accommodate more bedrooms.) The first floor of the addition included a new, centrally located entry and stair hall. The new stair was a wood structure with oak treads and handrail with painted balusters and a turned newel post. To the north of the entry stair hall were a reception room, toilet, linen room and four bedrooms. To the south was a living room, which occupied the entire south end of the building and opened onto the glazed sun porch. The living room was decorated with a dropped-beam ceiling supported by pilasters. A fireplace was located at the west end of the room. It was characterized by a classically-inspired mantel shelf supported by fluted pilasters, and a brick fire-box surround. A paneled over-mantel was illuminated by two wall sconces. Paint analysis indicates that the original finishes for this room included a light brown color for the walls with white woodwork and ceiling.

The second and third floors were characterized by double-loaded corridors running north-south with nurses' bedrooms (Figure 2-11, Chap. 2) and toilets opening onto them. At the south end of the second-floor corridor was a door opening onto the glazed sun porch. The basement level accommodated a new kitchen and pantry on the north side of the stair hall. The south side was entirely occupied by the dining room, situated directly under the living room on the floor above. Stylistically, the dining room was similar to the living room; it, too, was defined by dropped cross beams and a fire place on the north wall. The historic photograph from 1925 (Figure 2-10, Chap. 2) shows little architectural detail in the dining room, but gives a good detail of the suspended lighting fixtures.

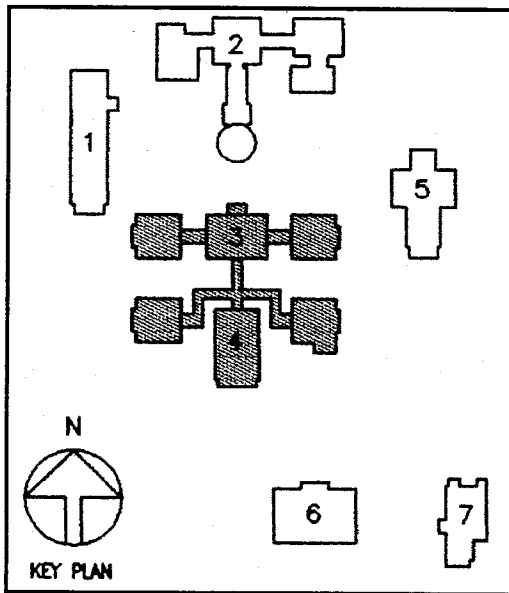
As in the original section of the building, the finishes were quite simple. The floors of the upper floors were wood. In the basement they were concrete, sometimes covered with red quarry tile. Walls and ceilings were typically plaster painted creamy white, with a 7" wood base board. Existing conditions indicate a chair rail and picture molding in the first-floor corridor, and picture molding in the second- and third-floor corridors. It is not certain, but these may be original features. The window and door frames were painted wood; a flat casing with raised edges, square in profile. A cross-section through the building shows that many of the interior doors were glazed single-leaf or double-leaf french doors. These were mostly used for public spaces. On the upper floors, doors were typically single leaf with five horizontal panels, hung by two hinges, and fitted with brass door knobs and locksets. Where the doors in the original 1908 section had rounded panel moldings, moldings in the 1926 addition have a more complex profile.

The structure of the building included load-bearing masonry walls with wood floor framing. Steel and wood were used in the 1926 addition. The foundations, footings and basement floors were concrete. The roof structure was entirely of wood.

Building 1 - Siting and Landscape

A general discussion of the historic landscape is located at the end of this chapter, however, a few site specific details regarding this building are noted here. The plot plan for this building dated 1925 indicates concrete and gravel walks at the front (west) of the building. The 1929 historic photograph of this building (Figure 2- 8) shows a drive and sidewalk running parallel to the building. It appears that a small lawn acted as a buffer between the drive and the building foundations. No other plantings are apparent. This represents a change from the conditions shown in the 1921 photograph (Figure2- 9), which shows paths, but no drive. Also, more mature trees are evident in the 1921 photograph. One cast iron light pole with a globe lamp appears at the north end of the building in 1929.

The Naval Hospital (Buildings 3 and 4)—Introduction



In 1903, the renowned architect, Ernest Flagg, was commissioned to design the new hospital building for the Naval Medical Complex in Washington. In plan, the building represented the current thinking of American hospital design, of which Flagg was a well-known practitioner. Like many of Flagg's hospital designs, the building plan was based on the European pavilion scheme; it included two main cores, with three one-story pavilion wards connected by glass-enclosed solaria. Flagg described his design in a letter accompanying his drawings sent to the Navy in September 1902.¹ The building plan originated from two main cores, one for administration (north) and one for the operating room and related facilities (south).

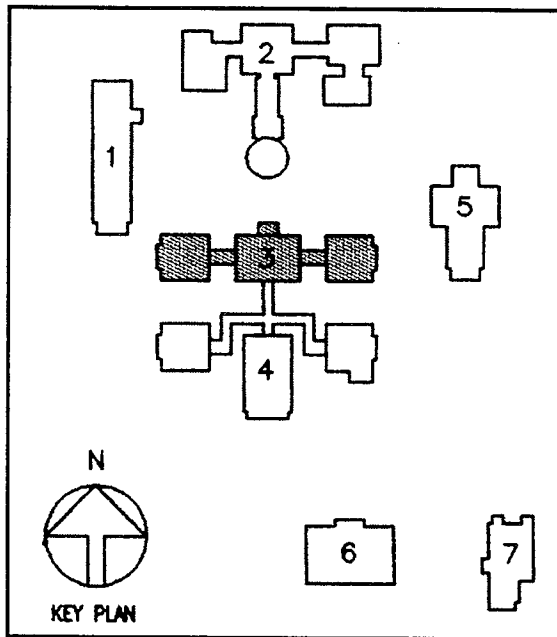
Radiating from the cores were to be three one-story pavilion wards connected by glass-enclosed solaria. A fourth ward was outlined in a drawing, but no evidence suggested that this was meant to be implemented in the future. Flagg's first floor plan illustrates a ghost outline where a fourth ward to the southwest could be placed. It can only be speculated that Flagg was working with the intent that the hospital would grow, since only limited funding was available at the time. In fact, only two of the three wards designed by Flagg were built before money ran out. Design and construction for the third and fourth wards were instead undertaken by the Washington, DC architectural firm, Wood, Donn and Deming. Wood, Donn and Deming made at least one significant departure from Flagg's 1903 drawings. Flagg's drawings show that the solaria connecting the pavilions made a straight run from the central cores; however, as constructed, the south solaria actually form right angles leading to the pavilions.

While the architectural expression of the hospital is conservative, and the spatial planning represented the contemporary thinking in American hospital design, the structural system was a significant and innovative development for its time. Ernest Flagg is known for his experimentation in the use of reinforced concrete, and this building is an early example of such use in this country.

The original ventilation system in the hospital building consisted of exhaust fans in the end walls which created negative pressures in the attic. The resulting suction drew air up through vehicle shafts from the ward rooms into the attic above. This original ventilation system would be most efficient if the attic construction was virtually airtight--easily accomplished with monolithic poured concrete construction, but difficult to achieve with wood.

¹The only architectural drawings for Buildings 3 and 4 executed by Ernest Flagg's office were located at the National Archives. These plans are dated 1903.

Building 3: Hospital Administration Building (1903-1906)

Exterior

The Administration Building was originally constructed to house the offices of the hospital (Figures III-20—III-25). Although it is connected to the Operating Pavilion and wards by the glazed solarium, it reads as a separate structure. It was designed as two-and-one-half stories set on a raised basement with a hipped roof. The body of the building was constructed of buff-colored brick laid up in English bond with limestone keystones, window sills, and water table. The front elevation was oriented to the north.

It was designed to be five bays wide with a central entrance portico. White glazed brick quoins defined the corners of the building. The central entrance bay

was dominated by a one-story balustraded classical portico with Tuscan columns served by a flight of granite steps. The entry door was a double-leaf, two-panel door, set into an architrave surmounted by a glass transom. The entry was flanked by two small four-over-four sash windows. On the second floor, french doors opened onto the balcony, which was created by the portico below. This door was also flanked by two small four-over-four sash windows.

The windows throughout the building were six-over-six double-hung wood sash. The window openings were defined by segmental arches on the first floor, and by lintels composed of brick voussoirs on the second floor; both had limestone keystones and sills. Copper leaders and down spouts were attached to the masonry adjacent to the glazed brick quoins. The windows were painted dark green and the other wood trim was painted white. Small copper vents were located under many of the windows on the facades of Buildings 3 and 4. These appear to have been associated with the ventilation system. Building 6, the Contagious Hospital had a similar feature.

The east and west elevations were three bays wide. The one-story solarium abutted these facades at the center of the first floor; and doors at the second-floor level opened onto a roof terrace above them. The south elevation was detailed in the same manner as the north, but the fenestration reflected the presence of stairs and toilets on the interior. A glazed solarium abutted the center of this facade connecting it to the Operating Pavilion to the south.

The roof was designed to be hipped and covered with slate. There were five roof dormers on the north and south sides; and the east and west sides had one dormer each. There were skylights situated on the east and west slopes of the roof. An octagonal cupola, with louvered openings crowned the roof ridge; it was probably a major feature of the ventilation system. The entire roof was finished by a wood denticulated cornice with an integral copper-lined gutter. The building

was surrounded on all sides by a concrete area-way. This gave access, light and air to the basement spaces.

Interior

The Administration Building was laid out on a bi-axial plan: the north-south axis dominated by the entrance and stair halls; the east-west axis by the corridor. Flagg intended that the first floor contain offices, an examining room, a reception room, and dispensary, two dining rooms, and a doctor's "living room." The 1903 floor plan suggests that in addition to the corridors and halls, seven rooms were to be constructed. On the second floor were eight rooms for sick officers, a room for use as a parlor or dining room, and kitchen, nurse and store rooms. The third floor was to contain nurses' rooms. The basement was used for storage, kitchens, mess halls and other ancillary uses. When the Sick Officers' Quarters was constructed in 1908, a tunnel was constructed to connect that building to the Hospital.

The entrance and stair hall, on the first floor, was designed as a formal space, and was more ornate than the lobbies designed for the other buildings. Based on extant material, which appears to be original, the ceiling in the entrance hall was ornamented by dropped beams supported by piers with decorative brackets. While the interiors of the other buildings on the site would be painted white, the entrance lobby here was painted a terra cotta color with a white ceiling and brackets. Doors and door frames in the first-floor corridor were varnished.

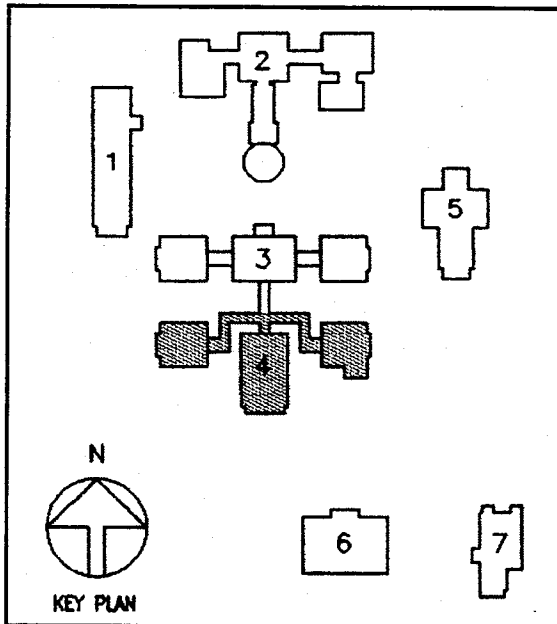
The central dog-leg stair ran through the building from the basement to the top floor in an open well. The simplicity and elegance of its design is evidenced by the proportion of the elements and the diminution of the newell side of the stair treads as they corner the posts at the landings. Iron handrails and balusters served the open side of the stair and newell posts; there was no handrail on the closed side of the stair. Paint analysis shows that the iron was originally painted a glossy black and the handrail was varnished. Like the entry lobby, the walls were painted a terra cotta color, and the window frame and sash were varnished. The elevator opening was flanked by iron neo-classical pilasters supporting a projecting entablature; paint analysis shows that the iron elements were painted glossy black.

The finishes in the secondary office spaces were simple and utilitarian. The floors on the upper floors were wood. In the basement they were concrete, usually covered with red quarry tile. The ceilings and walls were painted plaster with a 7" or 5" wood baseboard. Paint analysis indicates that the wall finish was a light green in many spaces. Walls in the basement were brick.

The window and door frames in first-floor office spaces were painted wood with a raised cyma molding on the outer edge. On the upper floors the frames were flat with rounded edges. In the basement, the window frames were fit into the masonry openings without casings.

There appears to be some conflict between the original drawings and the existing condition regarding doors. Many doors existing in the building appear to be original, but they do not correspond to the drawings. It is possible that there were several configurations of doors originally. On the first floor, the typical door had four panels with one large glazing panel in the top half. Doors on the second floor were wood, typically single leaf with five horizontal panels, hung by two hinges, and fitted with brass door knobs and locksets. All doors entering corridors were typically surmounted by glazed transoms. On the third floor, there were painted wood flush doors. Doors in the basement corridors were set into segmentally arched openings with wood frames flush with the face of the brick walls and rectangular transoms.

NB: Because Buildings 3 and 4 are so closely connected, the discussion of the features and spaces they shared in common, the ward pavilions, the solarium corridors and the landscape are handled together after the discussion of Building 4.

Building 4: Operating Pavilion (1903-1906)Exterior

The Operating Pavilion (Building 4) to the south was, by comparison with the more formal Administration Building, extremely utilitarian in appearance. (Figures III-26 – III-32) The building was two stories in height, including only the basement and first floor. While the building maintained the same masonry detailing as the north building, the facades were very simple. The masonry included brick, glazed brick and limestone, to match the hospital building. The fenestration was composed of three nine-over-nine double-hung wood sash windows on the east and west elevations on the first floor and a variety of masonry openings on the basement level. There were two windows on the north elevation flanking

the entrance into the glazed solarium connecting the Operating Pavilion to the Administration Building. As elsewhere on the site, the windows were painted dark green, and other wood trim was white.

The south elevation was dominated by a sloping skylight for the operating room and a small room projecting from the basement. The roof was finished with brick gables, rather than a cornice, as was found in the other buildings on the site. The original roofing material is unknown, although it is likely to have been copper.

Interior

On the interior, the first floor was dominated by the operating room, which faced south and was noted for being extremely hot during the summer. The floors and wainscot were finished in white ceramic tile and the walls were enameled. The ceiling was pressed metal. Connected to the operating room was a doctors' room, instrument room, nurses' and sterilizing room, and an etherizing room. Painted wood door and window frames were flat with no moldings. The door leading from the operating room to the ante room was a double-leaf wood-and-glass door. The configurations of the other doors in this building are unknown.

Building 4 - 1917 Addition

As originally constructed, the basement consisted of the kitchen and its dependencies, the mess and two serving rooms. In 1917, a one-story, flat-roofed, brick addition was made to the south facade of the Operating Pavilion for a larger mess hall. This was undertaken to accommodate the resultant increase in personnel and patients due to American entry into World War I.

Exterior

At that time, the south exterior wall and projecting basement room were taken down and the mess hall extended 40' to the south. The masonry and windows in the east and west elevations matched the original construction. The new south elevation was a colonnaded porch consisting of eight wood columns in the Composite Order supporting a denticulated cornice with a blank frieze. The east and west ends of the colonnade were terminated by brick segmental arches, where granite steps led up from grade. The structure was surmounted by a wood balustrade with turned balusters. The entry was centered behind the colonnade and consisted of a wood-framed glass door with transom and side lights. This was flanked by two large wood sash windows. A Colonial Revival light fixture, which is suspended from the ceiling of the porch currently, may be an original, but certainly an early feature.

A loading dock was constructed on the east side of the building as part of the addition and alterations made in 1917. It spanned the distance between the north edge of the building to the north edge of the second window from the south. It was a concrete structure including platform, piers and steps (which rose from the south end). The platform was covered by a metal roof supported by scrolled iron brackets, and struts tied back to the parapet. Although this roof does not appear on the original drawings; the existing roof appears to be contemporary with the loading dock construction. The loading dock entry was served by a double-leaf wood door.

Interior

The interior spaces of the basement were arranged on a double-loaded corridor and included a large mess hall, smaller messes, a new kitchen, a scullery and storage rooms. Fragments of original finishes include white glazed ceramic tile on the walls and quarry tile on the floors.

Ward Pavilions (Buildings 3 and 4)

The four ward pavilions were so similar in original design that all four of them are treated together. The northeast and northwest pavilions are currently considered part of Building 3 and the southeast and southwest pavilions are considered part of Building 4.

Exterior

The masonry treatment of the ward pavilions matched that of the Administration Building and the Operating Pavilion (Figures III-21 – III-32). The wards were two stories and constructed of brick with limestone lintels and sills. They had parapet gables ornamented with glazed terra cotta quoins. The east and west elevations (the gable ends) were ornamented with a stepped pattern in glazed terra cotta. Each of the pavilions had a chimney clad in the white glazed brick on the outward-facing elevation. The inward facing elevations had false chimneys to balance the design. The inward-facing elevations also had oculus windows at the apex for fan exhausts. Each chimney elevation was fitted with a small brick structure with a hipped metal roof. These were air intakes for the original heating system. The original building sections show these structures to be shafts open to a basement space designated as "heating apparatus" directly under the fireplace in each pavilion. Each structure had an opening with a limestone sill and lintel. The openings were probably fitted with metal screens.

The form of the pavilion roofs was a simple center gable flanked by a flat roof on the north and south sides. Like the rest of the buildings on the site, the gable on each pavilion was originally roofed with grey slate tiles. The flat sections were probably roofed in copper. Each of the roofs was fitted with a square vent in one corner of the gable roof. There were wood cornices on the north and south sides of the pavilions with integral copper-lined gutters. These were painted white.

The pavilions were simply fenestrated on the north and south elevations (as well as the outward facing elevations) with four nine-over-nine wood sash windows with six-light transoms. The windows were probably painted dark green to match the windows throughout the site. Interior access to the pavilions was through the solarium corridors. The exterior entries to the north pavilions, which were below grade, had bluestone steps and wood-and-glass single-leaf doors.

Interiors

The 1903 floor plans indicate that the wards were intended to accommodate sixteen beds each. The southeast ward was to be an isolation ward. Dependencies within the wards contained a quiet room, a kitchen and a toilet room. Basements were probably used for storage.

The wards were two-story spaces served by four vertical ventilating ducts fitted with metal vents at the top and bottom. The ducts opened into the attic where fans pulled the air up from the lower spaces. All four pavilions were fitted with fireplaces on the exterior wall facing away from the complex. They had simple painted wood mantel shelves and brick fire box surrounds and hearths, similar in appearance to those in used in the Sick Officers' Quarters.

Like the other rooms throughout the site, the finishes in these rooms were quite simple. The floors were wood on the first floor, and concrete below. The walls were painted plaster with wood baseboards; in the basement, they were exposed brick. The window and door frames were painted wood, flat with rounded edges. In the basement, the frames were fit into the openings, with no casings. The doors were mostly the single-leaf five-panel door with brass hardware, similar to those found elsewhere on the site. The doors in the basement of the northeast pavilion corridor were similar to those found in the basement under the Administration Building. They were fit into segmentally arched brick openings. The frames were set within the openings without casings. They are mostly double-leaf doors with glazed panels in the upper half. The toilet rooms had lavatories, toilets and slop sinks; and they were finished with 4"x6" white ceramic tiles with mosaic tile floors.

Solarium Corridors (Buildings 3 and 4)

Exterior

There were five solarium corridors connecting the Administration Building to the Operating Pavilion and to the four ward pavilions (Figures III-21 – III-32). The solarium corridors were two stories in height. The first floor was composed of a glazed wall set on a wood-paneled dado. Mullions separated eighteen-over-eighteen operable sash from paired vertical eighteen-light fixed sash. There were painted wood cornices with a blank frieze. The basement walls were brick to match the brick of the Hospital, with a limestone belt course separating the base from the wood-framed glazed wall above. The basement lintels and sills were also limestone.

The solaria had flat roofs with access from the pavilions and central cores. The intent was to use the outdoor spaces on the north solarium corridors as roof gardens; whether this idea was executed is not known. Original drawings and historic photographs show that the solarium corridors on the north side of the building were originally finished with a balustrade with turned balusters.

The two solaria on the north, and the center solarium running between the two main buildings, were straight in plan, providing a direct route from one core or pavilion to the other. The two solarium corridors at the south began at a 90 degree angle east and west from the central solarium and then turned another 90 degrees to the south before turning again into their respective pavilions. The facades of the two north solaria were recessed at their junctures with the Administration Building and with the flanking pavilions. The recessed areas adjacent to the pavilions had transoms over their twelve-light fixed sash windows. The recessed areas adjacent to Building 3 had openings in the transom space. It appears that this open area was a plenum connected to a duct leading into rooms on either side.

The primary access to the solarium corridors was through the interior; the exterior entries were located in the basements. They were comprised of wood-and -glass double leaf doors.

It is possible that the solarium corridors maintained the color scheme of white trim and dark green windows. However, paint analysis was inconclusive regarding the original paint colors, since it appears that paint has been stripped. The first paint layer on windows, frames and cornices is white. However, the windows on all the other hospital buildings on the site, including Buildings 3 and 4, were originally painted dark green, so it is possible that this was the case with the solarium corridors as well.

Interiors

The first-floor of the solarium corridors provided circulation from one building to the other. They also were probably used by patients for taking sun and fresh air. The spaces entering into the pavilions were designated on the floor plans as sun rooms. The south corridors were closed by sets of double doors where they turned into the southeast and southwest pavilions.

All of the corridors were fully glazed. The wood-framed window walls were set over a low plaster dado on the first floor. The wall surfaces were brick in the basements, and the window frames were recessed in the masonry openings. Paint analysis indicates that originally, the windows, frames and baseboards were stained dark and varnished. The plaster was painted, probably light green, and the brick was left bare. The floors were wood on the first floor and concrete with quarry tile in the basement.

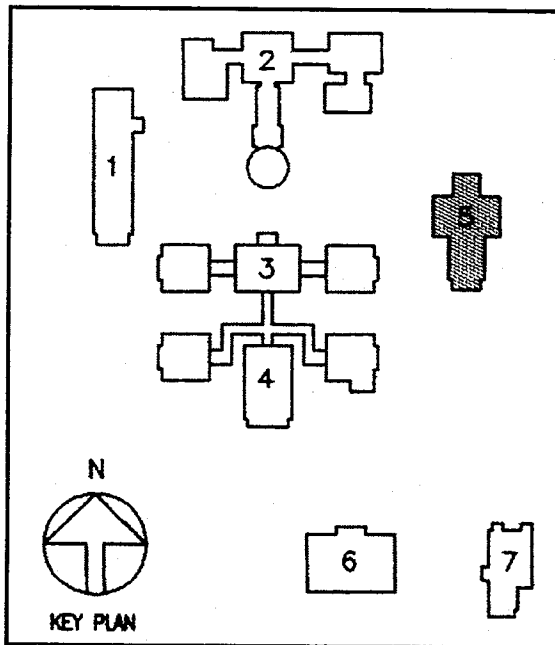
In each of the solarium corridors, open stairs rose from the basement to the first floor. On the wall side, the banister was composed of a wood handrail and square-sectioned balusters, three to a stair. Paint analysis shows that the riser and balusters were originally dark stained and varnished. The plaster on the basement wall was painted light green.

Buildings 3 & 4 - Landscape

Because Buildings 3 and 4 are so closely linked, the particulars of the original siting for both buildings are addressed here. A general discussion of the landscape for the entire site is located at the end of this chapter.

It is noted that while some planning was given to circulation on the site, little attention was paid to landscaping around the buildings. A bird's eye view of the site dated 1912 (Figure 2-2, Chap. 2) shows the land around the hospital building to have been severely sloped and probably covered with grass. A few meandering paths, probably concrete, connect the buildings to each other and to the other buildings on the site. Mature trees seem to be located in a haphazard fashion; it is likely that they are survivors from the earlier landscape. A photograph from the 1940s (Figure 2-3, Chap. 2) shows a brick path cutting across the drive in front of Building 3. A brick swale with a pipe rail runs parallel to the drive.

Building 5: Sick Officers' Quarters (1908-1910)

Exterior

The Sick Officers' Quarters (Building #5) was constructed as hospital space, which presumably allowed officers to recover in separate quarters from enlisted men (Figures III-33 – III-44). It was constructed as a T-shaped brick building situated on the east side of the site. Like most of the buildings on the site, it was two-and-one-half stories set on a raised basement with a hipped roof. With the exception of the sun porch on the south end and the colossal double-story porte-cochere on the north, the massing was symmetrical; however, the facades on the east and west present asymmetrical configurations. The body of the building was constructed of yellow brick laid up in Flemish bond with granite keystones, window sills, and water table. The windows were painted dark green and the remaining wood trim was painted white.

The front elevation was oriented to the north. It was designed to be seven bays wide with a central entry. The central entrance bay was dominated by a colossal two-story balustraded classical portico with Tuscan columns, which was extended to include the porte-cochere. The entire projecting structure was covered with a hipped roof. The entry was served by a flight of granite steps leading directly from the porte-cochere. The door was a glazed, double-leaf, three-panel door set into an architrave with an elliptical leaded-glass fan light. On the second floor, a door opened onto the balcony. The windows were six-over-six double-hung wood sash. The window openings were defined by lintels composed of brick voussoirs with granite keystones and sills. Copper leaders and down spouts were attached to the masonry adjacent to the brick quoins.

The south elevation was characterized by an open two-story sun porch defined by Tuscan columns of wood set on a granite curb at grade. The basement under the sun porch was not excavated. The first-, second-, and roof-levels of the sun porch had wood balustrades. The first-floor entry to the porch was identical to that on the north side. The brick and granite detailing was the same as the north elevation, including the brick quoins defining the corners.

The west elevation was defined by the projecting short stem of the "T" at the north end and the longer stem to the south creating a right angle into which was situated a secondary entry. The projection at the north end was three bays wide and otherwise detailed in the same manner as the rest of the building. The long stem to the south was designed to be five bays wide including the entry bay. A one-story, classically-inspired, portico with a short flight of granite steps served the

entry on this side. The east elevation was a close mirror image of the west except for the areaway configuration.

The slate-covered roof was designed to be hipped with a cross hip over the north stem of the "T." There were ten roof dormers and a skylight, which was situated on the west side. A slate-covered elevator bulkhead pierced the roof on the west side. Brick chimneys flanked the dormers on the east and west sides. Copper flashing was used throughout and the entire roof was finished by a wood modillioned cornice with an integral copper-lined gutter. The building had a concrete areaway and open patio space on the north end of the east side. The other basement windows were served by window wells.

Interior

On the interior, the spaces were arranged around a T-shaped, central, double-loaded corridor with a stair and elevator placed just off center of the building. The first floor accommodated bedrooms, toilets, offices, a library, a dining room and a diet kitchen. The second floor accommodated bedrooms. No third-floor plan was located, but it is likely that space also accommodated bedrooms. Because this building was originally used as a hospital, there were originally many bathrooms, which were fitted with tubs, toilets and sinks. The basement accommodated a large recreation space, which occupied the entire south side. The north side was mostly sub-divided for storage space. On the southwest corner of the basement was a tunnel, which connected the Sick Officers' Quarters to the Hospital Building.

The stair was centrally located in the floor plan and rose from the basement through the third floor. The painted iron stair structure had an open stringer and stone treads. The bottom two steps curved out around the structural column, which also served as the newel. A continuous run of square-sectioned steel balusters was attached to the oak hand rail at the top and a flat steel base at the bottom. The entire banister was then attached to the exterior stringer by a curved steel armature. The detailing of this stair was similar, but not identical to the main stair in the Hospital Building. Paint analysis indicates that the stair was originally painted glossy black and the oak handrail was varnished. The elevator was located adjacent to the stair, but nothing is known of its original finishes.

Based on visual inspection, the interior finishes were quite simple. Floors on the upper stories were wood; those in the basement were concrete. Walls and ceilings were plaster, painted a creamy white; basement walls were exposed brick. Door and window frames were painted wood, flat with no moldings. Many of the first- and second-floor rooms were fitted with brick fire places with painted wood mantels shelves.

The configuration of the original doors is not certain. Existing doors are wood, typically single leaf, with five horizontal panels, hung by two hinges, and fitted with brass door knobs and locksets. Unlike the doors in other buildings on the site, the panel molding on these doors is not rounded. They are similar to the 1926 doors in Building 1. This may indicate that floor plan changes included replacing the doors at an early date. Some early doors have fewer than five

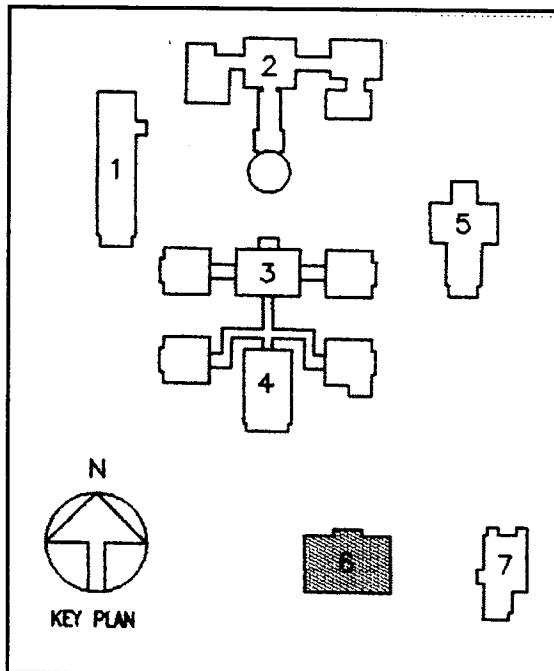
panels and have glazed upper panels; some are flush. Some corridor doors are surmounted by glazed transoms.

Building 5 - Site and Landscape

A general discussion of the landscape for the entire site is located at the end of this chapter; however, a few site specific details regarding this building are noted here.

Historic photographs show that the landscaping around the Sick Officers' Quarters was marginally better than that around the other buildings. Possibly, this was planned to reflect the hierarchy of rank within the Navy. The 1912 photograph of this building (Figure 2-7, Chap. 2) shows the drive in front of the building with a small lawn buffer curving in front of the porte cochere. A larger lawn planted with a few low shrubs probably separated the site of the Sick Officers' Quarters from the residence to the north. A cast iron light pole with a globe lamp had also been installed at the edge of the lawn. A path, probably concrete, bordered the lawn to the west. Larger trees are noted at the edges of the photograph; these must pre-date construction of this building.

Building 6: Contagious Hospital Building (1908-1910)

Exterior

The Contagious Disease Hospital was constructed to isolate patients with contagious diseases from others recovering in the main Hospital Building. It was constructed as a rectangular brick building situated at the south side of the site (Figures III-45 – III-54). Like most of the buildings on the site, it was two-and-one-half stories set on a raised basement with a hipped roof. While the massing was symmetrical, this building differed from the others in that it did not have a sun porch.

The body of the building was constructed of yellow brick laid up in Flemish bond with brick quoins defining the corners of the building. Granite was used for keystones, window sills, and water table. The windows were painted dark green and the

remaining wood trim was painted white. Small vents were located under many of the windows on the facades of this building. These appear to have been associated with the ventilation system. The Hospital Building had a similar feature.

The front elevation was oriented to the north. It was designed with a central two-story balustraded classically-inspired entry portico with Tuscan columns. The portico was flanked by three window bays on either side. The central entry was recessed from the facade plane and set into a wood partition wall. The elevation drawings do not show the details of the original door, and the existing condition is most certainly not original; therefore, the original details are not known. The second-floor balcony was treated in a similar manner.

The windows were six-over-six double-hung wood sash with three-light transoms above. The center windows on both sides of the building were slightly shorter than the ones on the ends, which created a very subtle visual centering. The window openings were defined by lintels composed of brick voussoirs with granite keystones and sills. Copper leaders and down spouts were attached to the masonry adjacent to the brick quoins.

The south elevation was characterized by projecting side pavilions flanking a central recessed section. While the window detailing was the same as the north facade, the fenestration pattern paired the windows across the facade. A one-story brick porte-cochere, with segmentally-arched window openings, projected from the facade at the basement level. The brick and granite detailing was the same as the west elevation including brick quoins defining the corners. The east and west elevation drawings were not located; however, the existing condition is undoubtedly reflective of the original design. Both facades were flat and seven window bays wide with a variety of masonry openings on the basement level.

The hipped roofs over the east and west sections were connected by a flat section in the center. Unlike the other buildings of the hospital complex, there were no dormers. Copper flashing was used throughout. A brick chimney pierced the west side of the roof; there was a skylight situated over the stair; and an elevator bulkhead pierced the central section. The entire roof was finished by a wood modillioned cornice with an integral copper-lined gutter. The north side of the building had an areaway to provide light and air to the basement spaces. The site slopes to the south, which allowed the raised basement to be exposed on the other facades.

Interior

The interior, on both the first and second floors, was occupied by an unusually wide central corridor, referred to as the gallery, which accommodated the stair and elevator. Presumably, the great width was necessary to provide as much ventilation as possible. On both floors, six-bed wards were located on the south side of the building. These were complemented by ancillary rooms such as offices, toilets, quiet rooms and kitchens. No basement- or third-floor plan was located. There was a central stair and elevator running from the basement to the second floor.

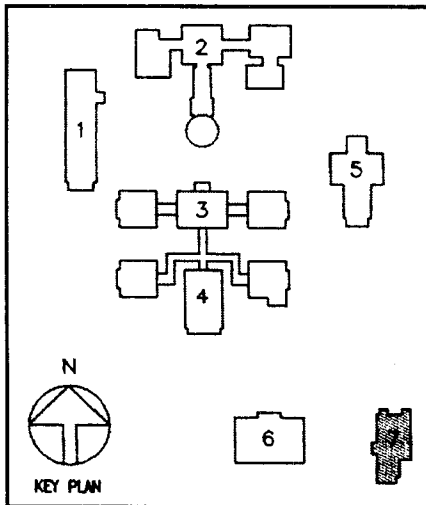
Based on visual inspection, the interior finishes were quite simple and utilitarian. The original building sections show all the floors to be poured concrete slabs. They also show the partition walls to be very thin, and some of them were noted as wood. The perimeter walls and ceilings were painted plaster on the upper floors, exposed brick in the basement. The window frames, were painted wood, flat with a curved edge. Presumably, the door frames were similar, although none remain. The original drawings show the historic doors to have been five-panel wood doors similar to ones found throughout the site, or wood-and-glass.

The structure of the building included load-bearing masonry walls with either steel or concrete floor framing. The foundations and footings were probably concrete and the roof structure was entirely of wood.

Building 6 - Site and Landscape

A general discussion of the landscape for the entire site is located at the end of this chapter; however, a few site specific details regarding this building are noted here.

A bird's eye view of the site dated 1912 (Figure 2-2, Chap. 2) shows the land around this building to have been severely sloped and probably covered with grass. Mature trees seem to be located in a haphazard fashion; it is likely that they are much earlier than the construction of the buildings.

Building 7: Hospital Corps' Quarters (1908-1910)Exterior

Situated at the southeast corner of the site, Building 7 was originally constructed as the Hospital Corps' (Male Nurses) Quarters, and was used as a dormitory. It was constructed as a T-shaped brick building with wood and steel framing (Figures III-55 – III-64). Like most of the buildings on the site, it was two-and-one-half stories set on a raised basement with a hipped roof. The massing was symmetrical except for the sun porch on the south end. The body of the building was constructed yellow brick laid up in Flemish bond with granite keystones, window sills, and water table. The windows were painted dark green and the trim was painted white.

The front elevation was oriented to the west. It was designed to be seven bays wide with a central entrance portico. The body of the building was articulated by a slightly projecting center pavilion and brick quoins defining its edges and the corners of the building. The central entrance bay was dominated by a one-story balustraded classical portico with Tuscan columns served by a flight of granite steps. The entry door was an unglazed, double-leaf, three-panel door set into an elliptical fan-lighted architrave with leaded side lights. On the second floor, french doors opened onto the balcony, which was created by the portico below.

The windows were six-over-six double-hung wood sash. The window openings were defined by lintels composed of brick voussoirs with granite keystones and sills. Copper leaders and down spouts were attached to the masonry adjacent to the brick quoins.

The south elevation was characterized by an open three-story sun porch defined by two-story Tuscan columns of wood, which were set onto brick piers at the basement level. The first-, second-, and roof-levels were defined by wood balustrades. The porches were entered through french doors. The basement level of the portico was open to the exterior, but it had windows rather than doors. The brick and granite detailing was the same as the west elevation including brick quoins defining the corners.

The north and east elevations were designed to be simpler in expression but they retained the symmetrical quality of the more prominent facades and were defined by the same brick and stone detailing and fenestration pattern. The east elevation projected to form a "T" in plan; this feature accommodated large dormitory and lounge rooms on the interior. The slate-covered roof was designed to be hipped with a cross hip over the east stem of the "T." There were five roof dormers on the west side (the central one served by a balustrade), one each on the north and south sides, and a large dormer on the center of the stem of the "T" flanked by two others. There was a skylight situated on the south slope of the cross hip. Three copper ventilators were set into

the roof ridge, and copper flashing was used. The entire roof was finished by a wood modillioned cornice with an integral copper-lined gutter. The building was surrounded on all sides by a concrete area-way, which gave access, light and air to the basement spaces.

Interior

On the interior, the spaces were arranged around a central, double-loaded corridor with a stair placed at the center of the building. The principal and largest rooms were designated as dormitories housing anywhere from six to twelve nurses each. Stewards roomed together in pairs in smaller rooms on both the first and second floors. The principal spaces on the first floor included a lecture room and offices. Secondary spaces on the upper floors represented toilets and storage rooms. Mess hall, kitchens, lounge and laundry rooms occupied the basement. Uses for the third floor were not designated.

The open stair was centrally located in the floor plan and rose from the basement through the third floor. The painted wood stair structure included an open stringer, with wood risers and treads and a painted plaster soffit. The run from the first floor to the basement was enclosed and somewhat narrower than those to the upper floors.

Based on visual inspection, the interior finishes were quite simple. The floors on the upper floors were wood; those in the basement were concrete. The ceilings and walls on the upper floors were plaster, painted white, with 7" painted wood baseboards. The walls in the basement were exposed brick. Door and window frames are painted wood, flat with no moldings. The doors were typically the five-panel single-leaf doors with two hinges and brass hardware found throughout the site. Doors entering into corridors typically were surmounted by glazed transoms.

The structure of the building included load-bearing masonry walls with wood and steel floor framing. The foundations and footings were probably concrete and the roof structure was entirely of wood.

Building 7 - Site and Landscape

Virtually nothing is known of the early landscaping of this building. Based on the existing conditions, it is likely that the site was extremely sloped to the east, and that a small lawn buffer surrounded the site. A concrete walk was planned to border the perimeter of the building and enter the areaway. Based on what little is known of the settings for the other buildings, the plantings here were undoubtedly minimal.

Potomac Annex Buildings 1, 3-7: Site and Surroundings

The appearance of the Potomac Annex site has its genesis in its topography. The hill overlooking the Potomac River initially made it a good choice for the construction of the Naval Observatory in the 1840s. In 1844, William Strickland, a prominent Philadelphia architect who had a long-standing relationship with the Navy, was commissioned to landscape Observatory Hill. The early design history of the site is addressed more fully in the Historic Structure Report for Building 2 (GS-11P91EGD0136).

Building 2 -- the 19th century Observatory Building -- is the central focus of the site. Its presence in conjunction with the circular drive on the north portion of the site, and the terracing of the topography, are what remain of the 19th century landscape. (Figures III-65-67)

When the Naval hospital began its construction campaigns in the first decade of the twentieth century, extensive alterations were made to the site. In 1901, the area of the site was reduced by a transfer of five acres on the west side of the site.² This decade also saw the construction of the major hospital buildings, which contribute to the campus-like setting of the site today. In 1905, a granite approach was constructed at the entrance to the grounds (this is no longer standing) and a macadam roadway leading to the hospital building was installed.³ In 1908-1909 new concrete paths, roadways, grading and retaining walls were completed.

A site plan dated June 1911 done by the Bureau of Yards and Docks (Figure III-68) shows the site after the construction of the major hospital buildings. This plan shows the five-acre lot to the west separated from the Hospital Grounds--it is noted as "Property of US Marine Hospital Service."

This plan shows no plantings, gardens or trees. However, it is clear that the new hospital buildings stand in the places of the old gardens, barns and outbuildings. Aside from the extant hospital buildings, others include the stable, conservatory, power plant and laundry were constructed in the southwest quadrant--all but the power plant have been demolished.

In the 1911 plan, the circular drive, and the connecting drive entering from the southeast gate were still intact, but the southwest drive had been eliminated since most of it was located in the five acres deaccessioned in 1901. A new drive on the east side of the site had been installed. It traveled roughly parallel to 23rd Street, curving to the west between the Sick Officers' Quarters (Building 5) and the Hospital Corps Quarters (Building 7); one fork terminated behind the Hospital Building and the other curved behind the Contagious Hospital (Building 6) toward the

²This refers to acreage to the west of the current site, now occupied by the CIA. All of the buildings existing on that site, including the brick neo-classical building and the granite 1930s buildings, were constructed after the transfer of property. "Federal Owned Real Estate--Navy Department..." p. 78. attached to Building Evaluation Report, Potomac Annex Buildings; June 22, 1960.

³Report of the Surgeon General, US Navy, 1905, p. 13.

laundry and stable. On the north side of the site, a grand stair entered the site from E Street. The stair led to the walkway bisecting the circular drive as before, but two circular structures were located in the center of the walk. While they were not indicated on the plan they were probably the sculpture of Benjamin Rush.. There were additional walkways throughout the site connecting the buildings to each other and to the drives. While it does appear that a retaining wall existed along the east side of the site, the plan does not clearly show a wall along the north side.

A topographic site plan (Figure III-69) post-dating 1918⁴ is substantially the same as the 1911 plan; however, it also shows trees, planting beds and grade changes. Materials noted include the cement retaining walls on the east and north boundaries; cement walks; and bitulithic drives with cement curbs and brick gutters. Also, by 1918, auto parking made its first encroachments at the west side of the Observatory Building.

Topographic maps from 1925 (Figure III-70) and 1946 (Figure III-72) show electric lights, fire hydrants and fire call boxes. Some of the features that exist today may date to this period, i.e. the fire call boxes near the Observatory Building. Some of the iron light poles may date to as early as 1912, since at least one appears in a photograph of that date. Further parking on the southwest of the Observatory Building and adjacent to the drive between the Sick Officer's Quarters and the Hospital Building. Fences are indicated adjacent to parking areas and at the curve in the drive behind the Sick Officers' Quarters. The 1946 plan shows a parking area south of the southern boundary of the site. It is designated as parking for Naval Officers.

A site plan attached to the National Register Nomination Form for Building 2 (ca. 1964) shows that E Street had been widened by that date (Figure III-73). The gate to the site, which historically had been situated at the corner of 23rd and E Streets had been removed and a new one constructed to the east. This gate is oriented to face directly onto 23rd Street, rather than the corner. The circular drive was straightened on the north side, taking up roughly one third of the landscaped center. The walk on axis with the Observatory entry was shortened and the locations of the Benjamin Rush sculpture and the flag staff were reversed so that Benjamin Rush was closer to and facing the Observatory Building. The drive was widened somewhat on the south side.

⁴ The plan is not dated but it shows the stucco additions to Building 2, which were constructed in 1918.

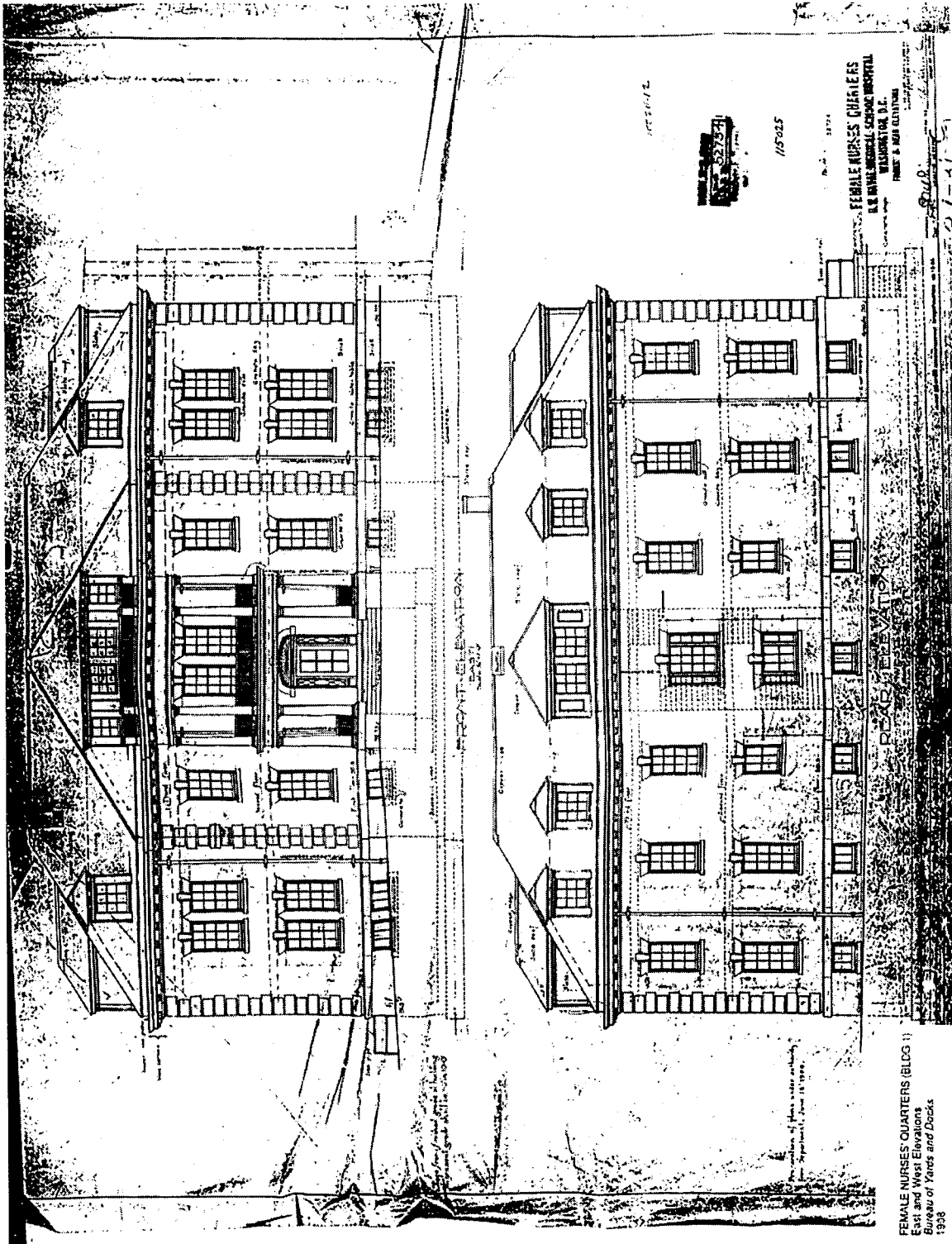


Figure III-1: Female Nurses' Quarters (BLDG 1), East and West Elevations
Bureau of Yards and Docks, 1908

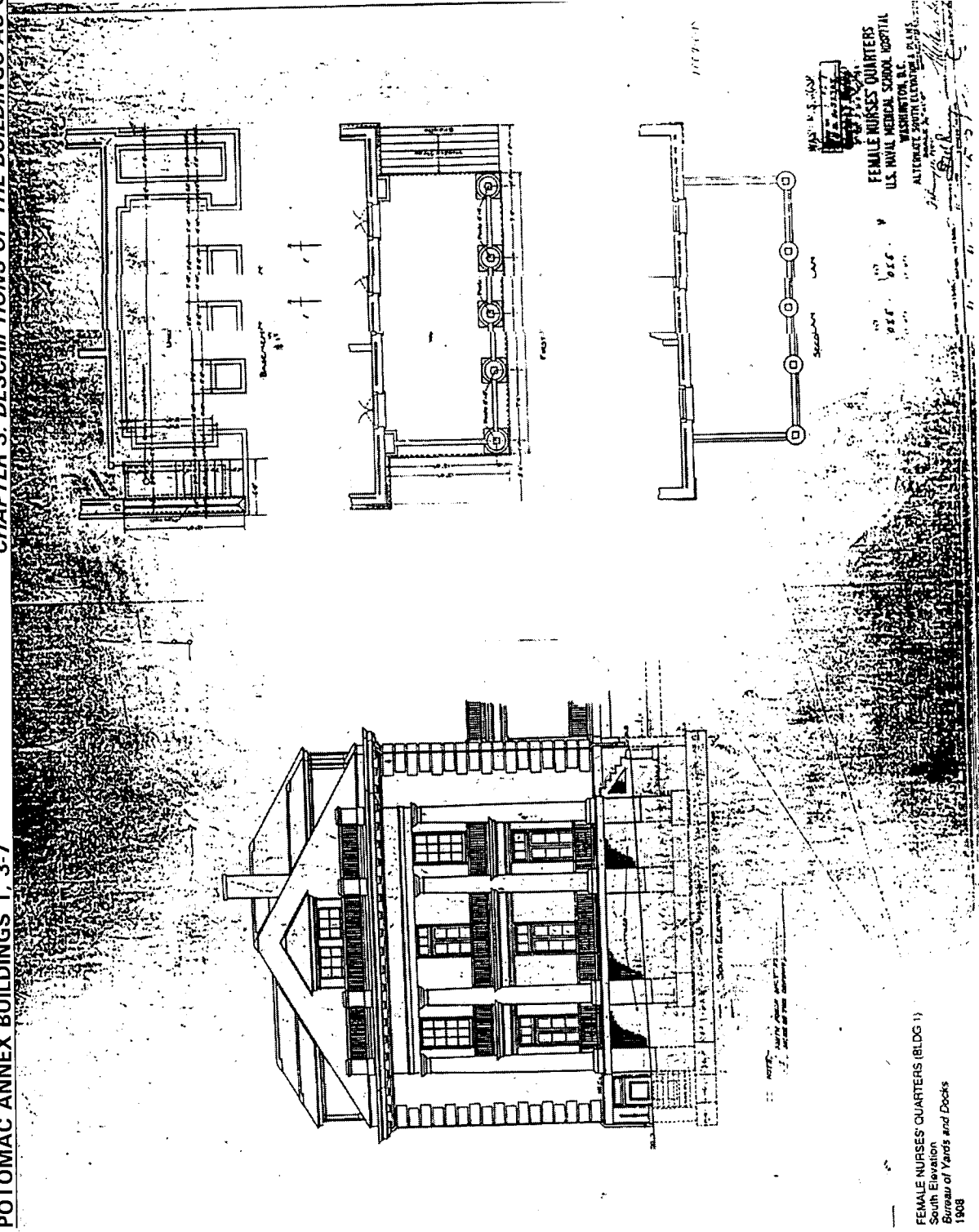


Figure III-2: Female Nurses' Quarters (BLDG 1), South Elevation
Bureau of Yards and Docks, 1908

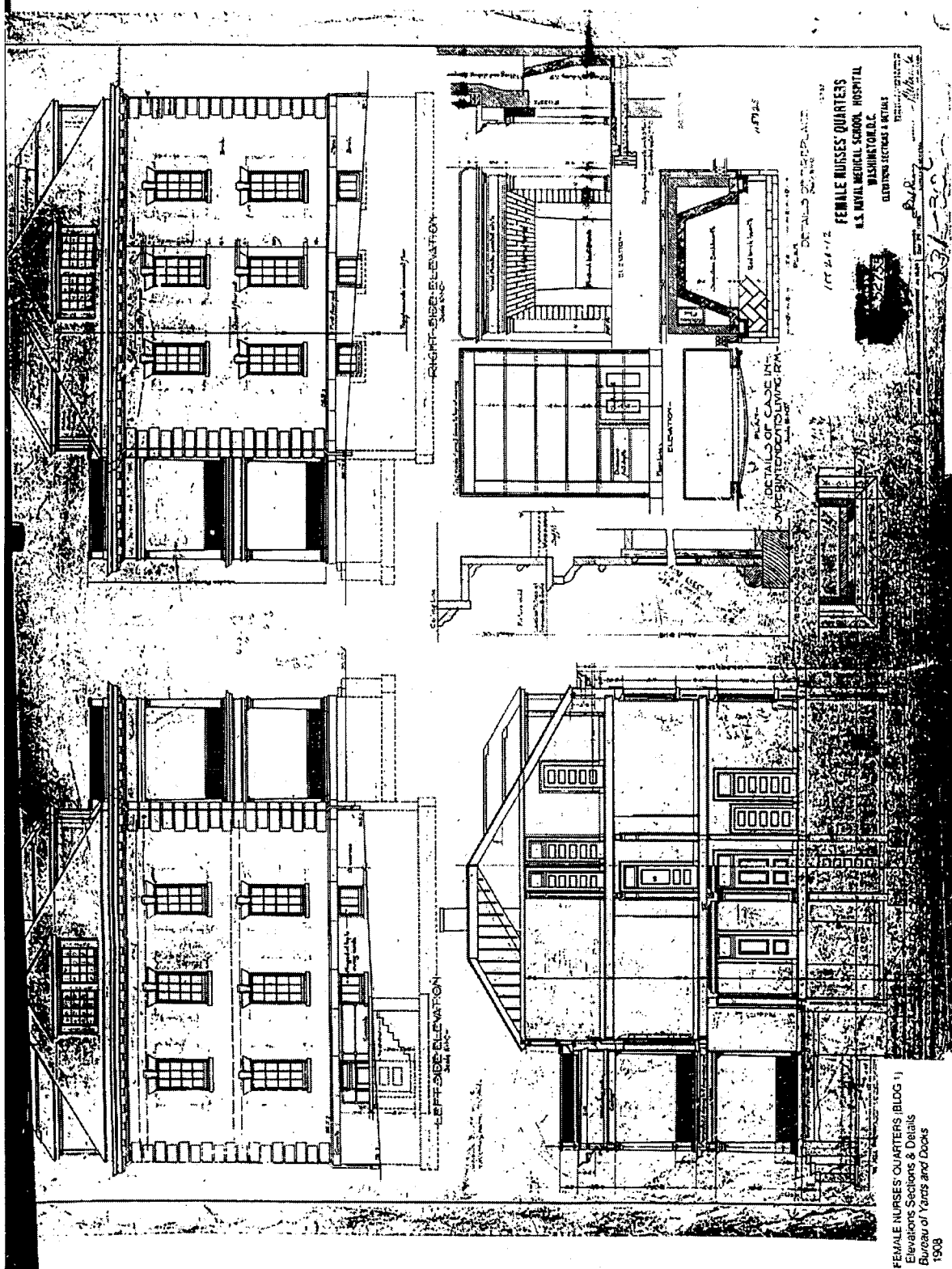
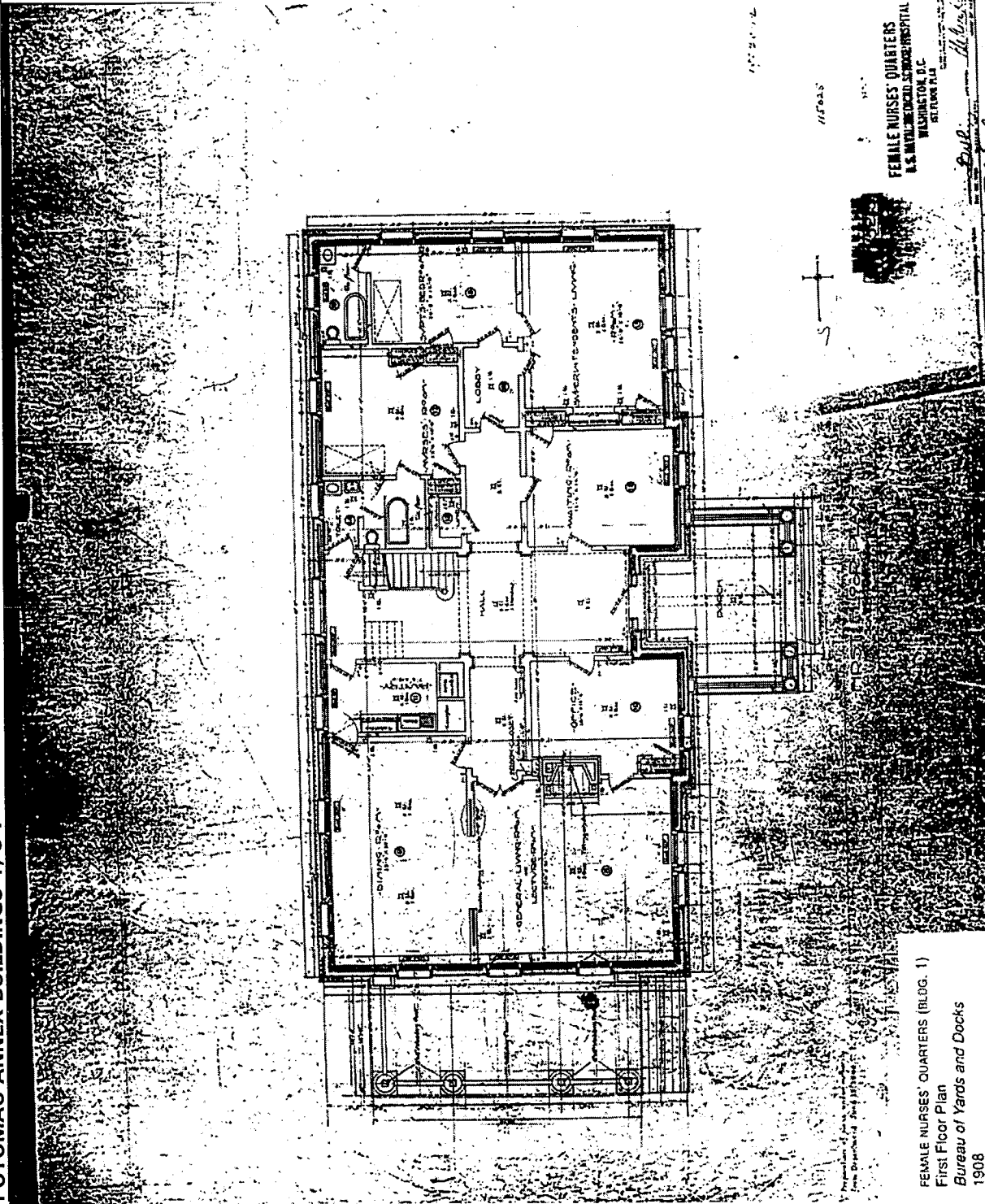
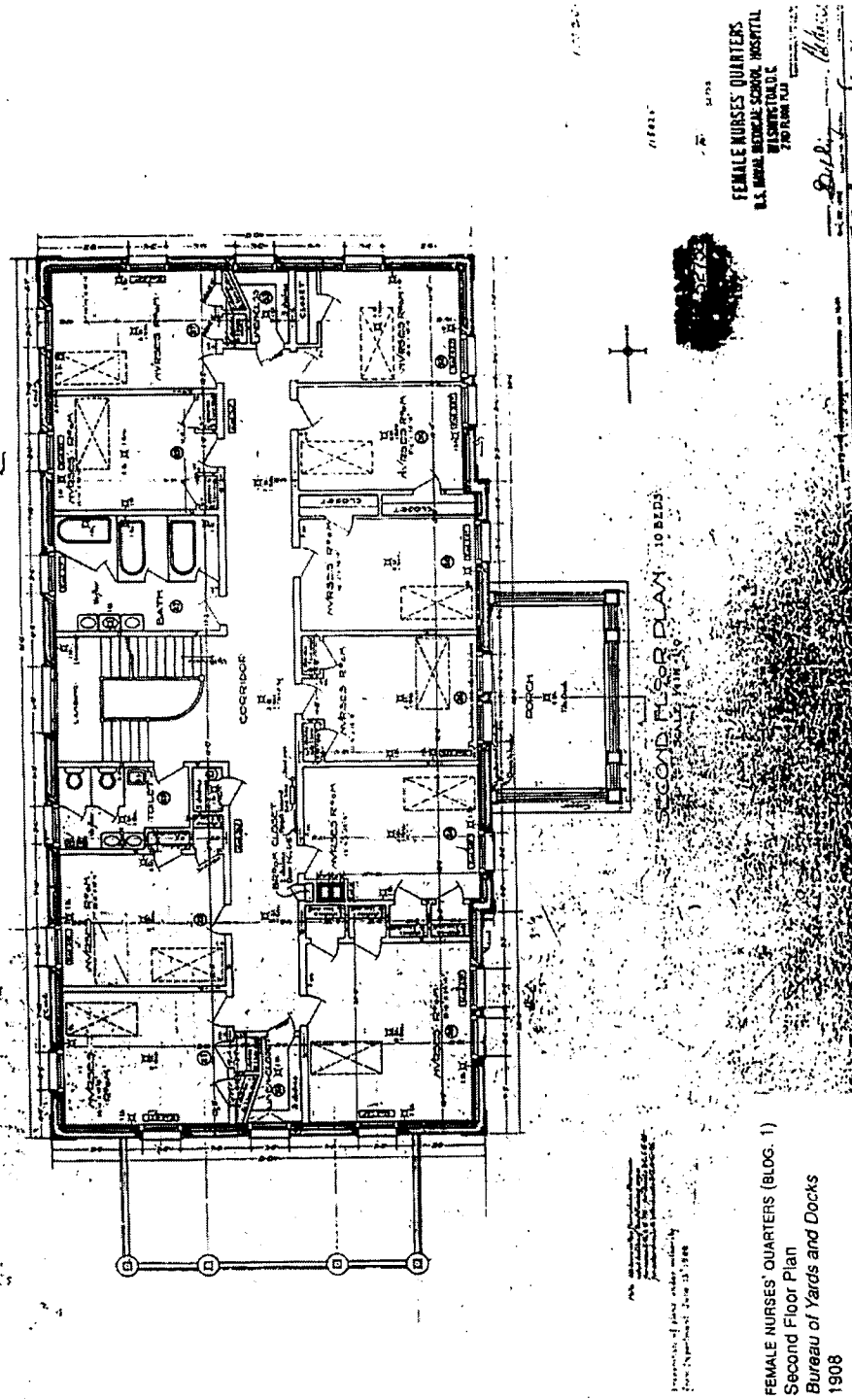


Figure III-3: Female Nurses' Quarters (BLDG 1), Elevations, Sections, and Details Bureau of Yards and Docks, 1908



FEMALE NURSES' QUARTERS (BLDG. 1)
 First Floor Plan
 Bureau of Yards and Docks
 1908

Figure III-5: Female Nurses' Quarters (BLDG 1), First Floor Plan
 Bureau of Yards and Docks, 1908

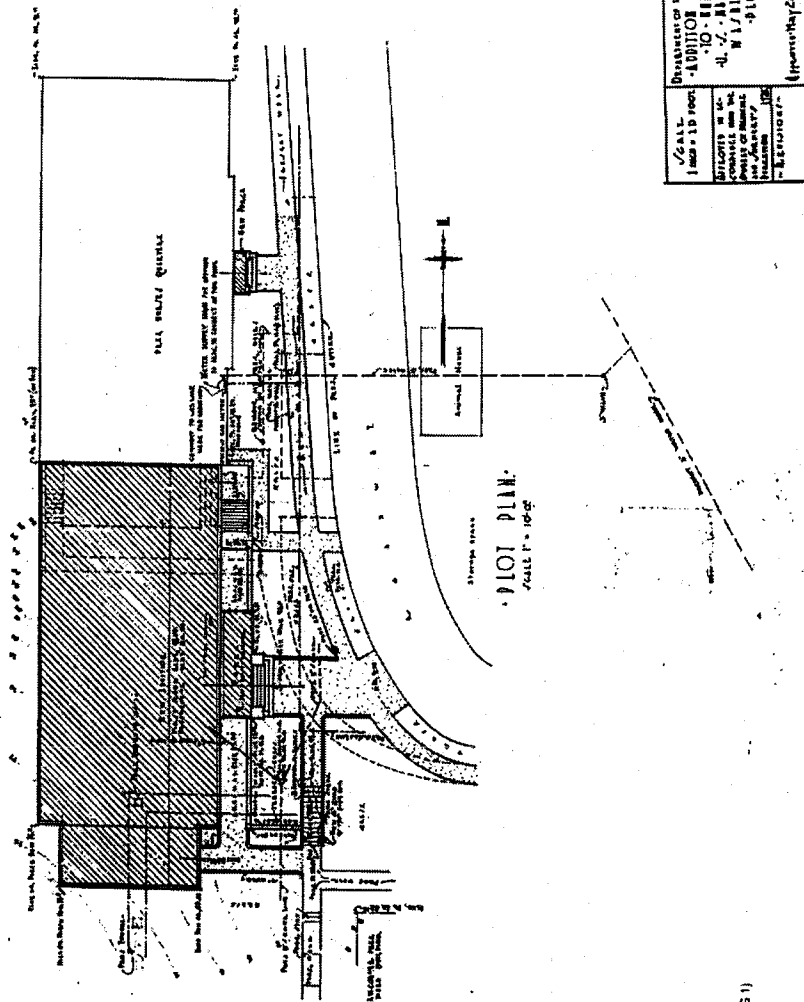


FEMALE NURSES' QUARTERS (BLDG. 1)
Second Floor Plan
Bureau of Yards and Docks
1908

Figure III-6: Female Nurses' Quarters (BLDG 1), Second Floor Plan
Bureau of Yards and Docks, 1908

POTOMAC ANNEX BUILDINGS 1, 3-7

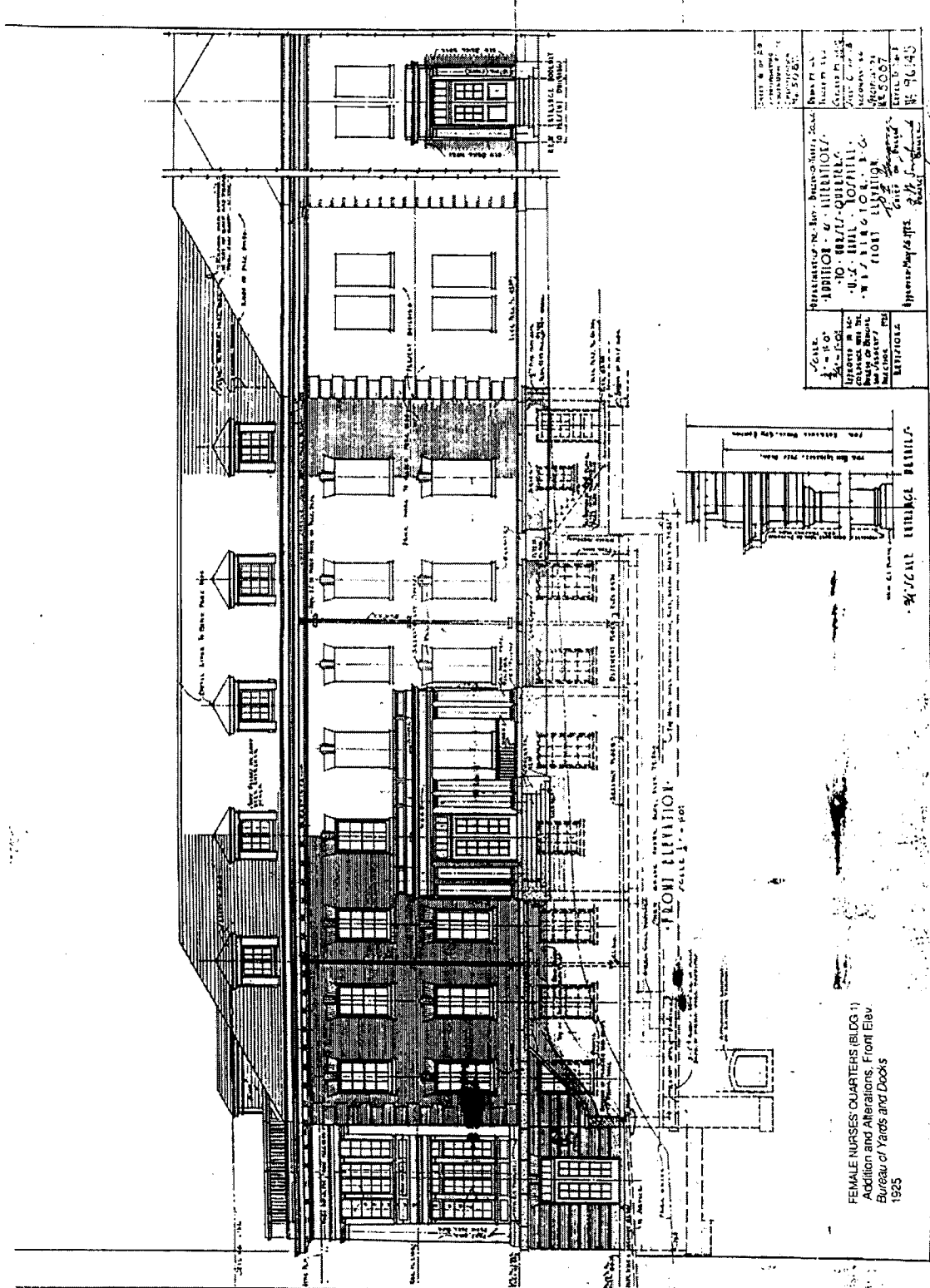
CHAPTER 3. DESCRIPTIONS OF THE BUILDINGS AS ORIGINALLY BUILT



FEMALE NURSES' QUARTERS (BLDG 1)
Addition & Alterations, Plot Plan
Bureau of Yards and Docks
1925

Figure III-7: Female Nurses' Quarters (BLDG 1), Addition and Alterations, Plot Plan
Bureau of Yards and Docks, 1925

<p>SCALE 1" = 10'-0"</p> <p>DESIGNED BY ARCHITECTS AND ENGINEERS</p> <p>DATE 1925</p>	<p>DESIGNATION OF THE BUILDING FEMALE NURSES' QUARTERS (BLDG 1) ADDITION & ALTERATIONS WASHINGTON, D.C.</p> <p>DESIGNED BY ARCHITECTS AND ENGINEERS WASHINGTON, D.C.</p> <p>DATE 1925</p>	<p>DATE 1925</p> <p>NO. 3087</p> <p>SCALE 1" = 10'-0"</p> <p>DESIGNED BY ARCHITECTS AND ENGINEERS</p> <p>DATE 1925</p>
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FEMALE NURSES' QUARTERS (BLDG 1)
Addition and Alterations, Front Elev.
Bureau of Yards and Docks
1925

Figure III-8: Female Nurses' Quarters (BLDG 1), Addition and Alterations, Front Elevation
Bureau of Yards and Docks, 1925

SCALE 1/4" = 1'-0"	DATE APR 20 1925
DESIGNED BY W. H. HARRIS	APPROVED BY W. H. HARRIS
CONSTRUCTION BY W. H. HARRIS	REVISIONS None
PROJECT NO. 100-10000-10000	BLDG NO. 100-10000-10000
LOCATION BUREAU OF YARDS AND DOCKS	DATE OF DRAWING APR 20 1925
BY W. H. HARRIS	CHECKED BY W. H. HARRIS
DATE APR 20 1925	SCALE 1/4" = 1'-0"

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CHAPTER 3. DESCRIPTIONS OF THE BUILDINGS AS ORIGINALLY BUILT

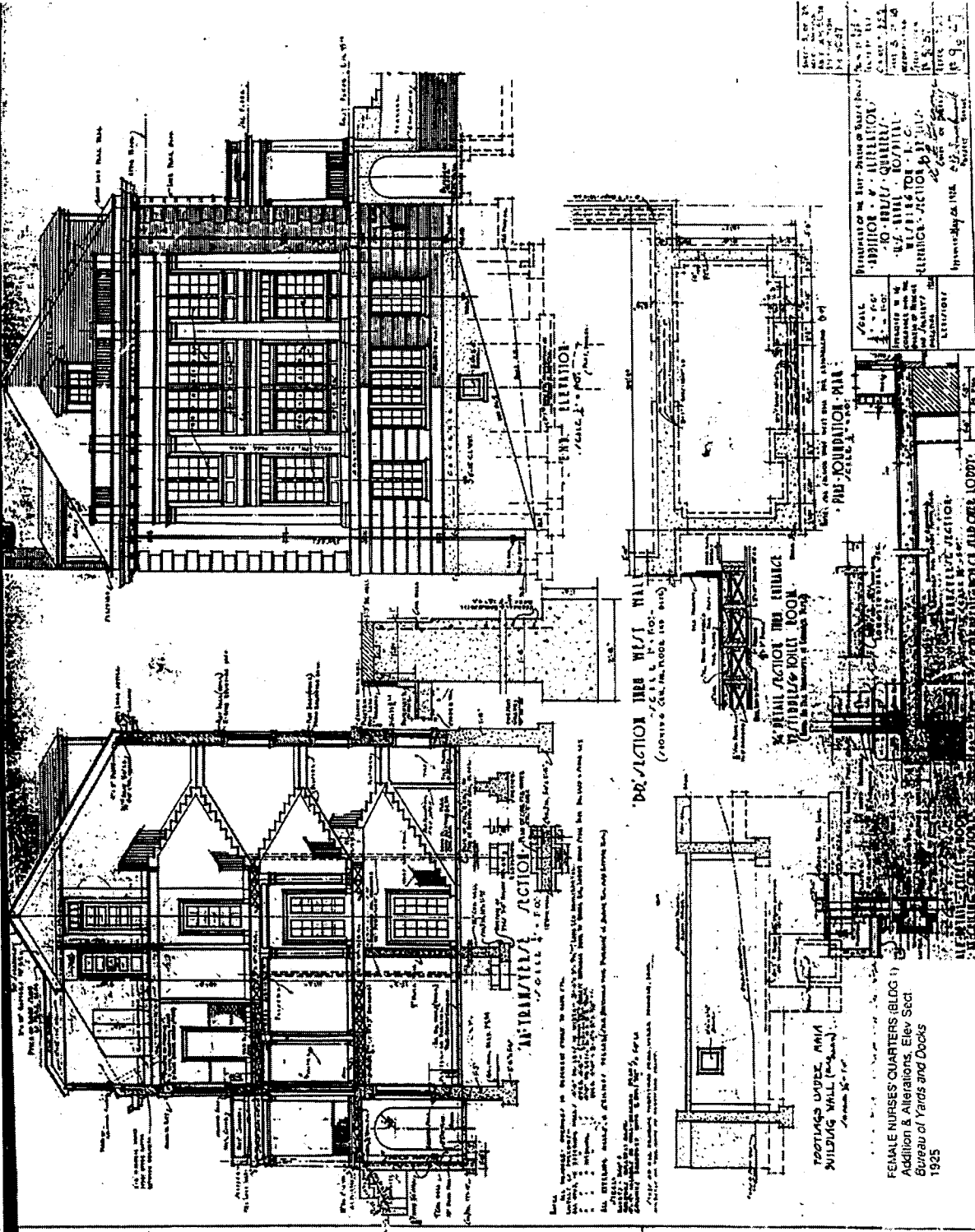


Figure III-9: Female Nurses' Quarters (BLDG 1), Addition and Alterations, Elev. and Sect. Bureau of Yards and Docks, 1925

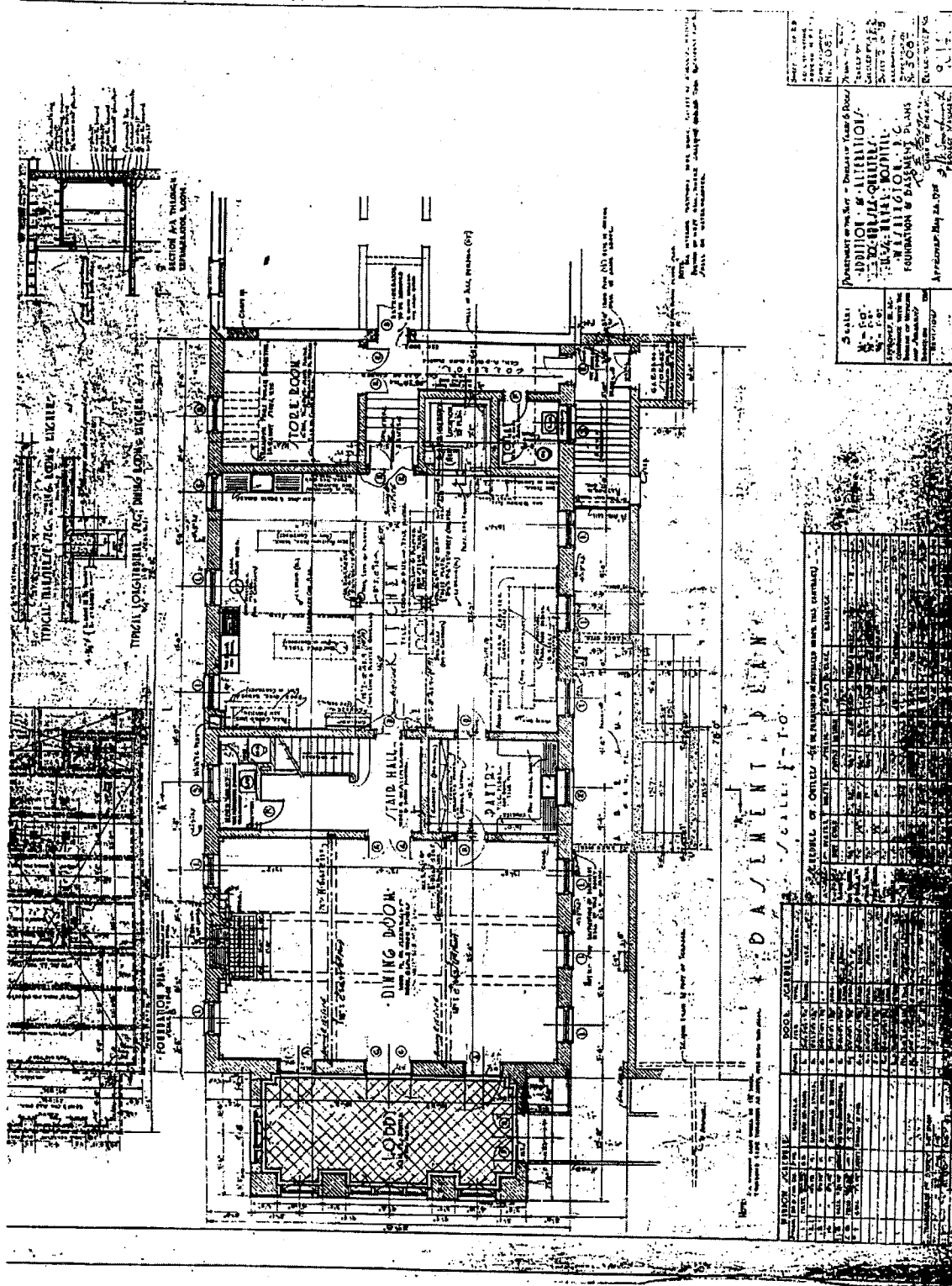


Figure III-11: Female Nurses' Quarters (BLDG 1), Addition and Alterations, Cellar Plan
Bureau of Yards and Docks, 1925

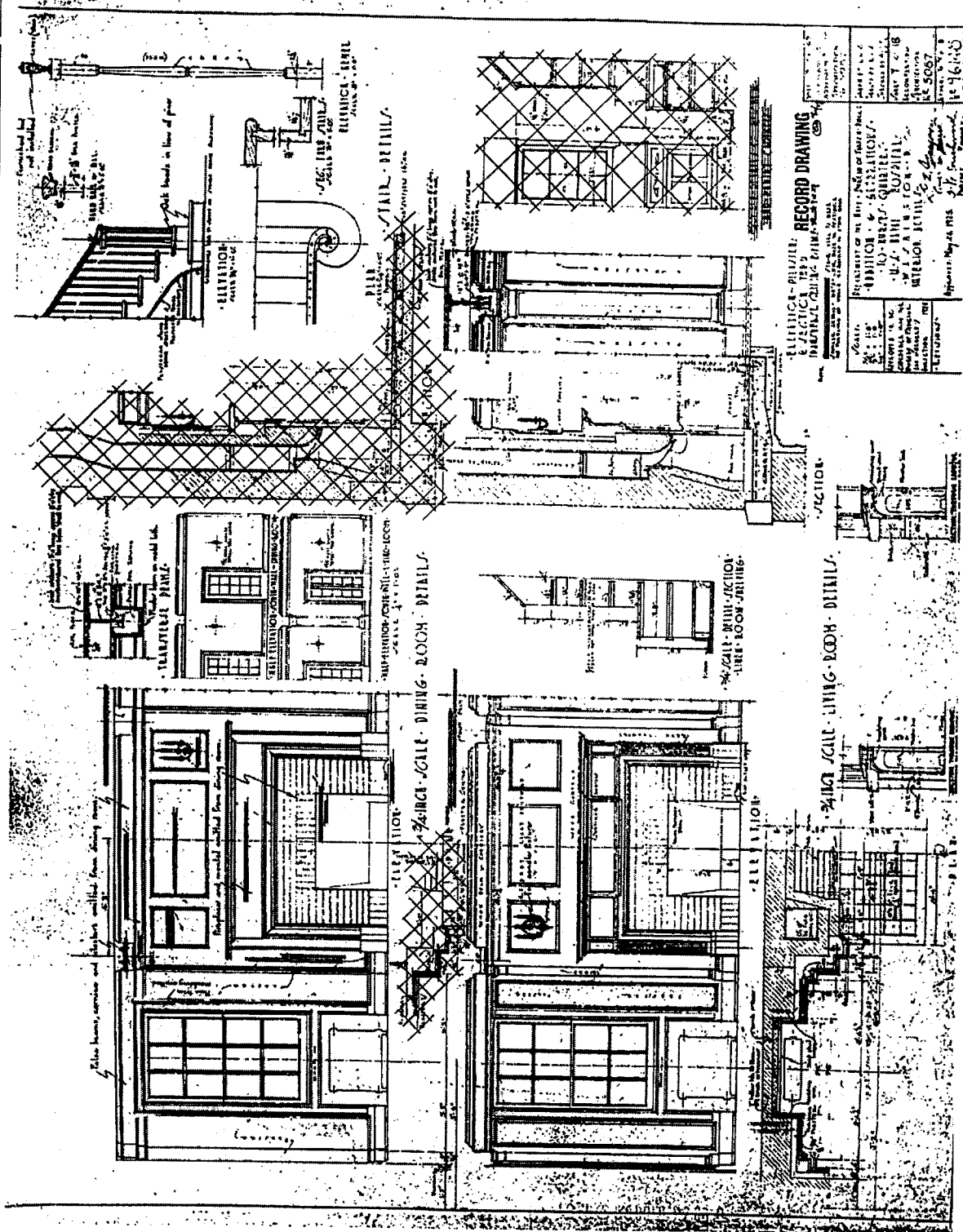


Figure III-15: Female Nurses' Quarters (BLDG 1), Addition and Alterations, Interior Details
Bureau of Yards and Docks, 1925

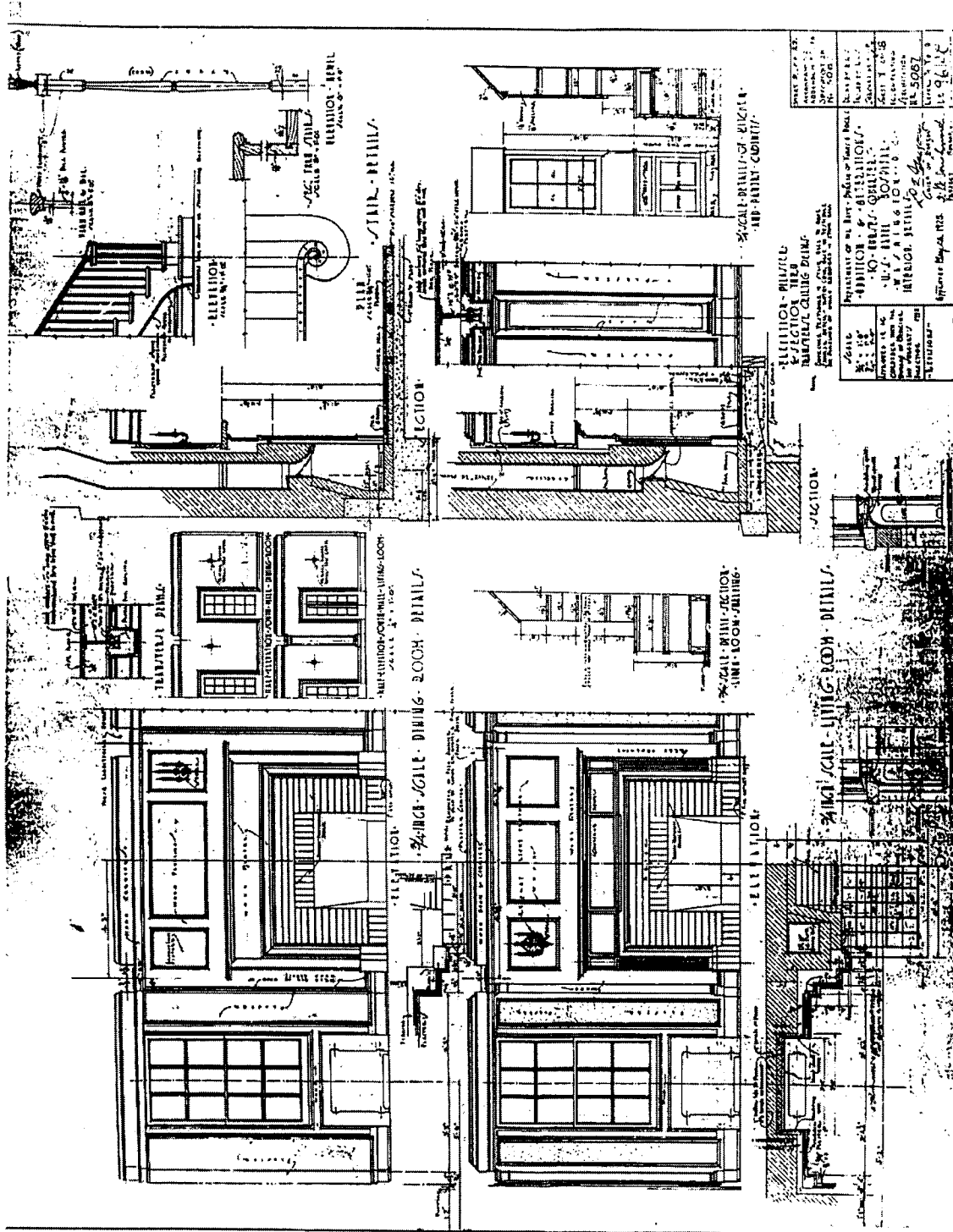


Figure III-16: Female Nurses' Quarters (BLDG 1), Addition and Alterations, Interior Details
Bureau of Yards and Docks, 1925

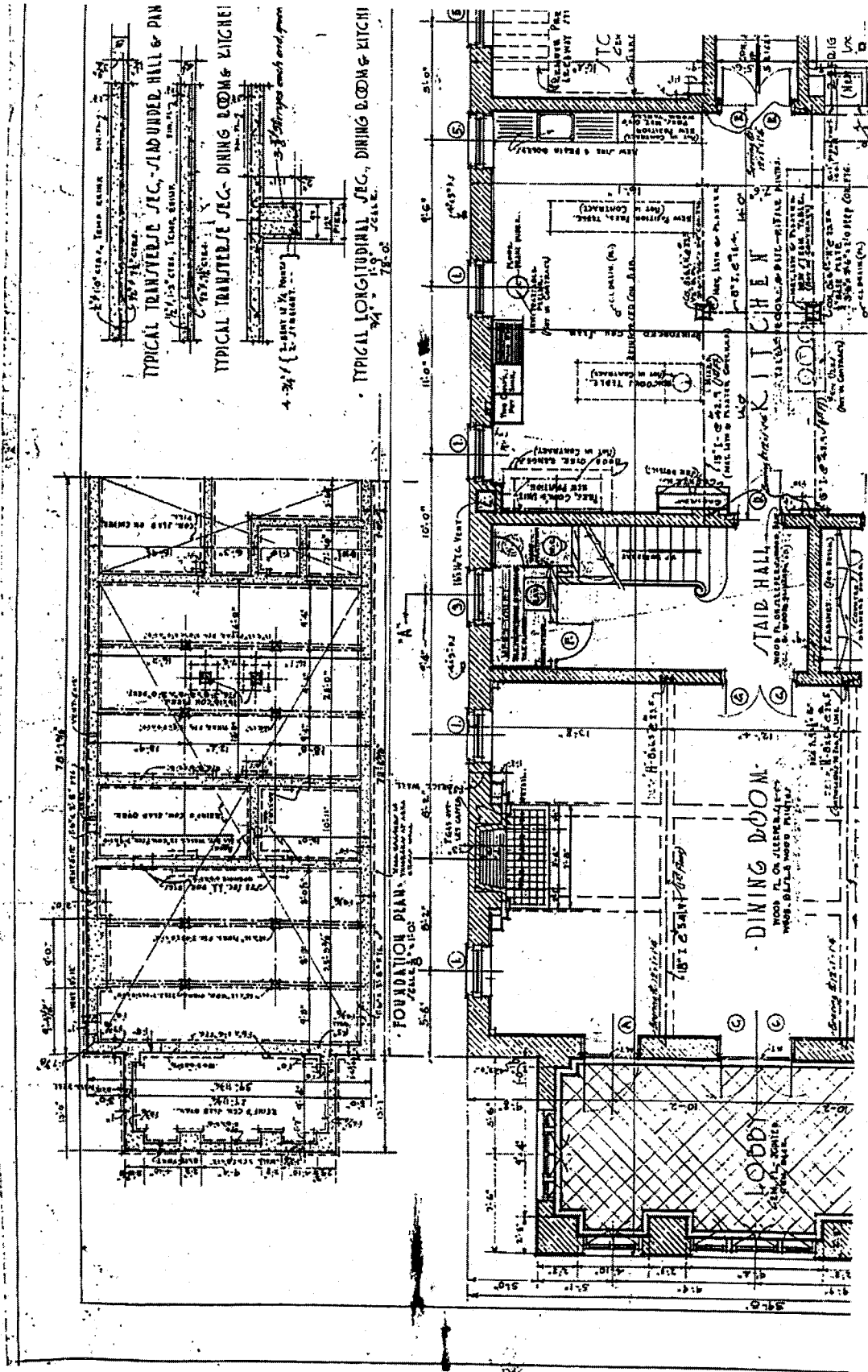


Figure III-17: Female Nurses' Quarters (BLDG 1), Additions and Alterations, Foundation Plan
Bureau of Yards and Docks, 1925

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CHAPTER 3. DESCRIPTIONS OF THE BUILDINGS AS ORIGINALLY BUILT

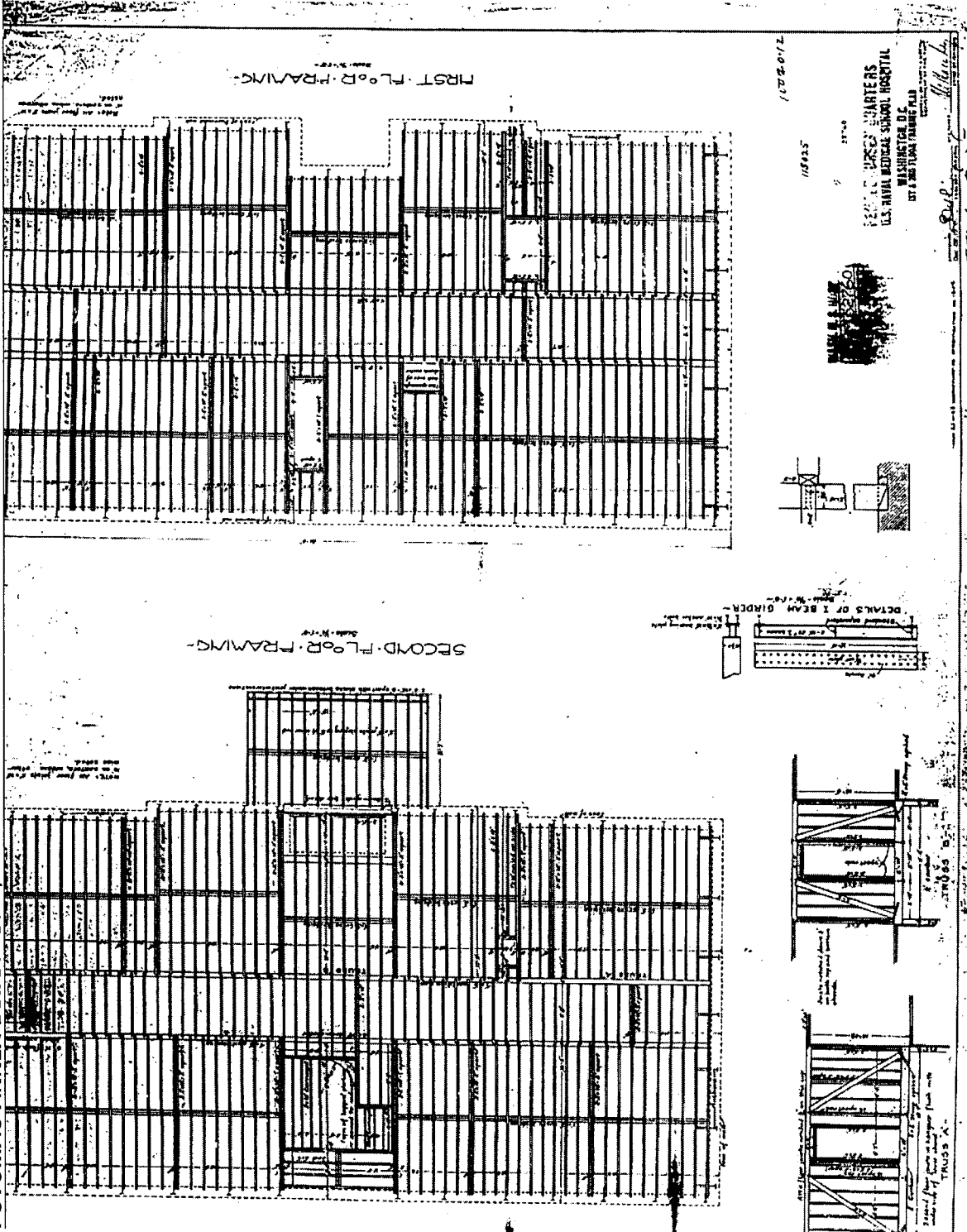


Figure III-18: Female Nurses' Quarters (BLDG 1), First and Second Floor Framing Plan

Bureau of Yards and Docks, 1908

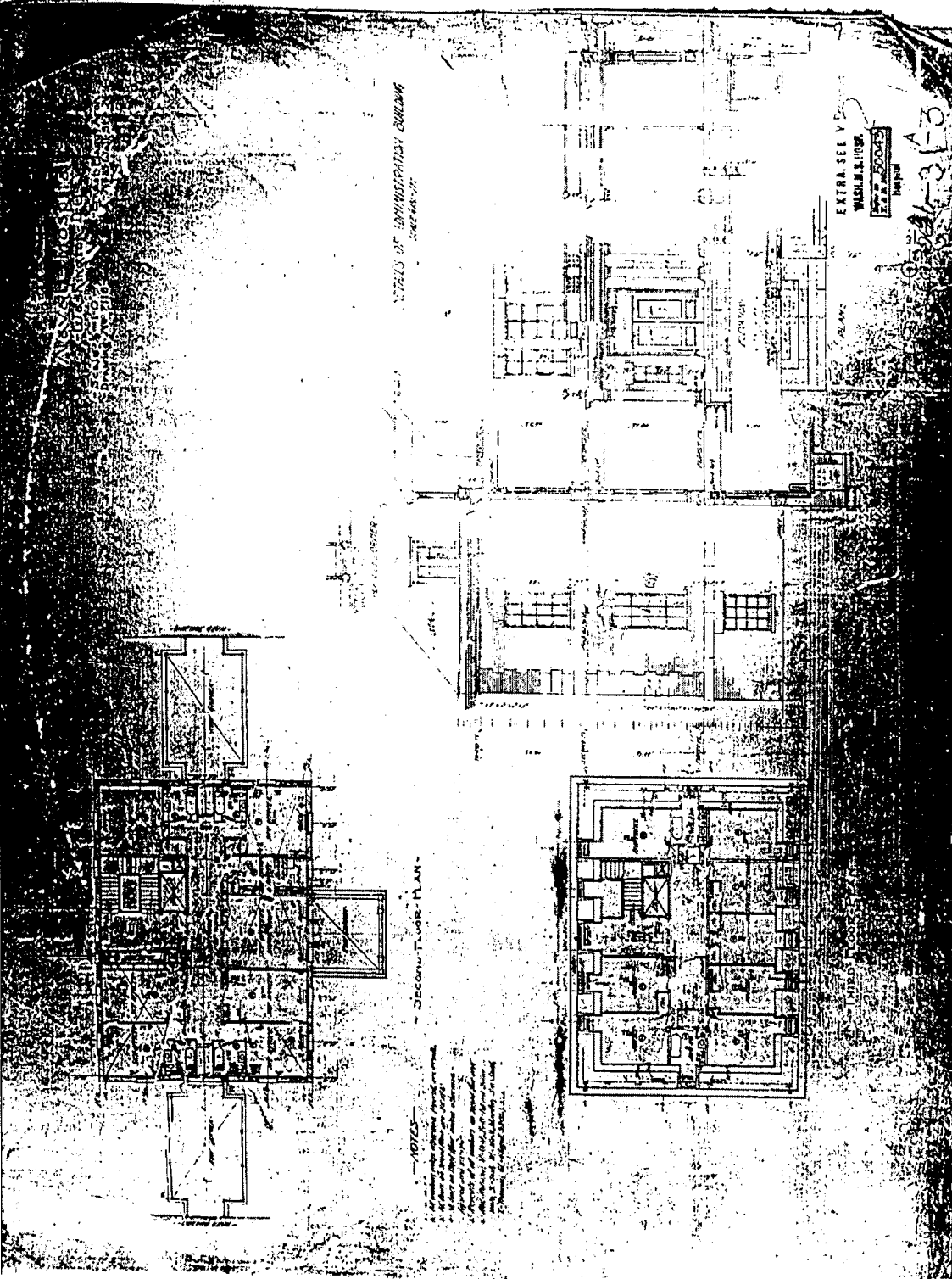


Figure III-20: Hospital (BLDG 3), Administration Building
Ernest Flagg, Arch., 1903

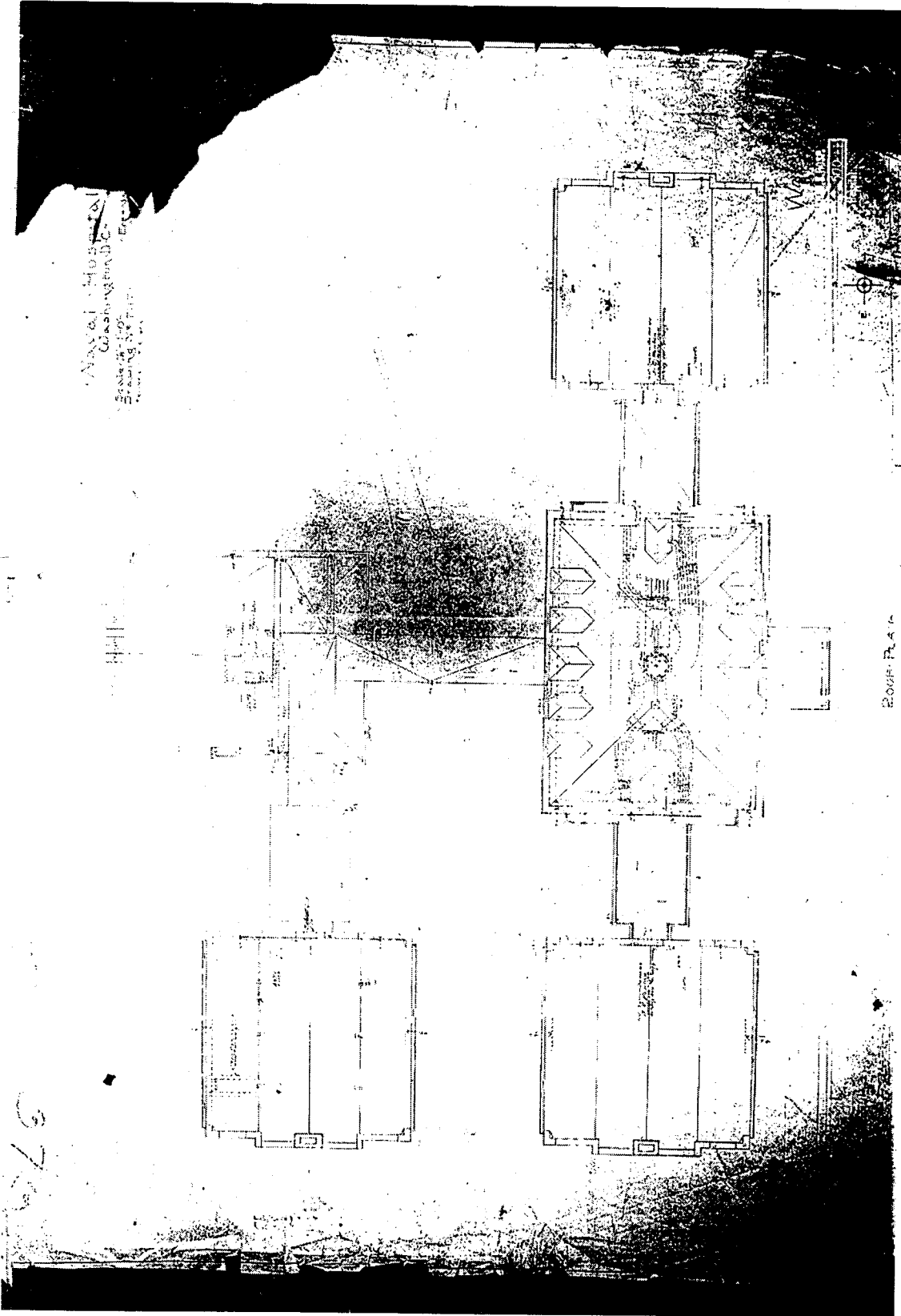


Figure III-21: Hospital (BLDG 3), Roof Plan
Ernest Flagg, Arch., 1903

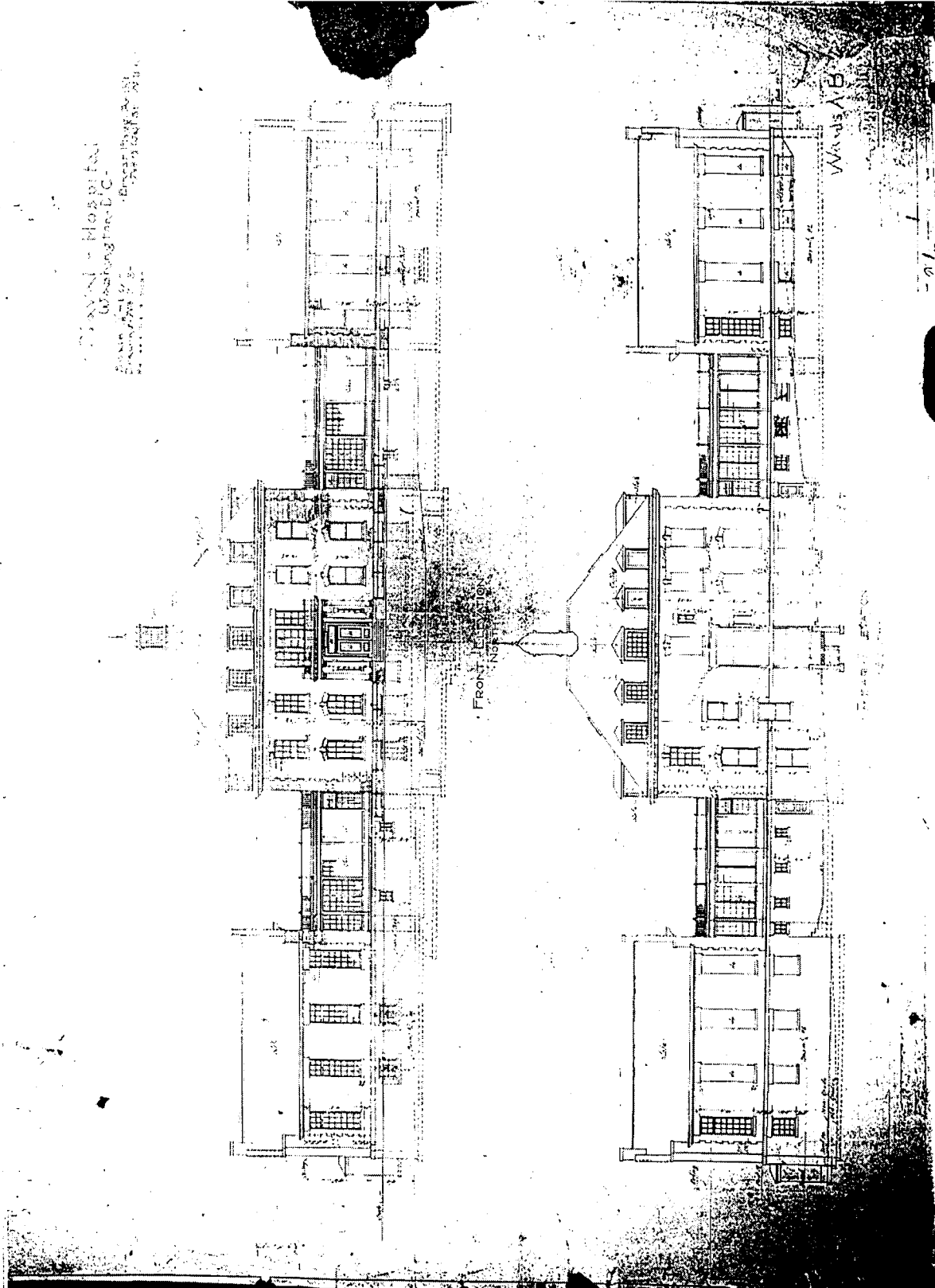


Figure III-22: Hospital (BLDG 3), Front and Rear Elevations Ernest Flagg, Arch., 1903

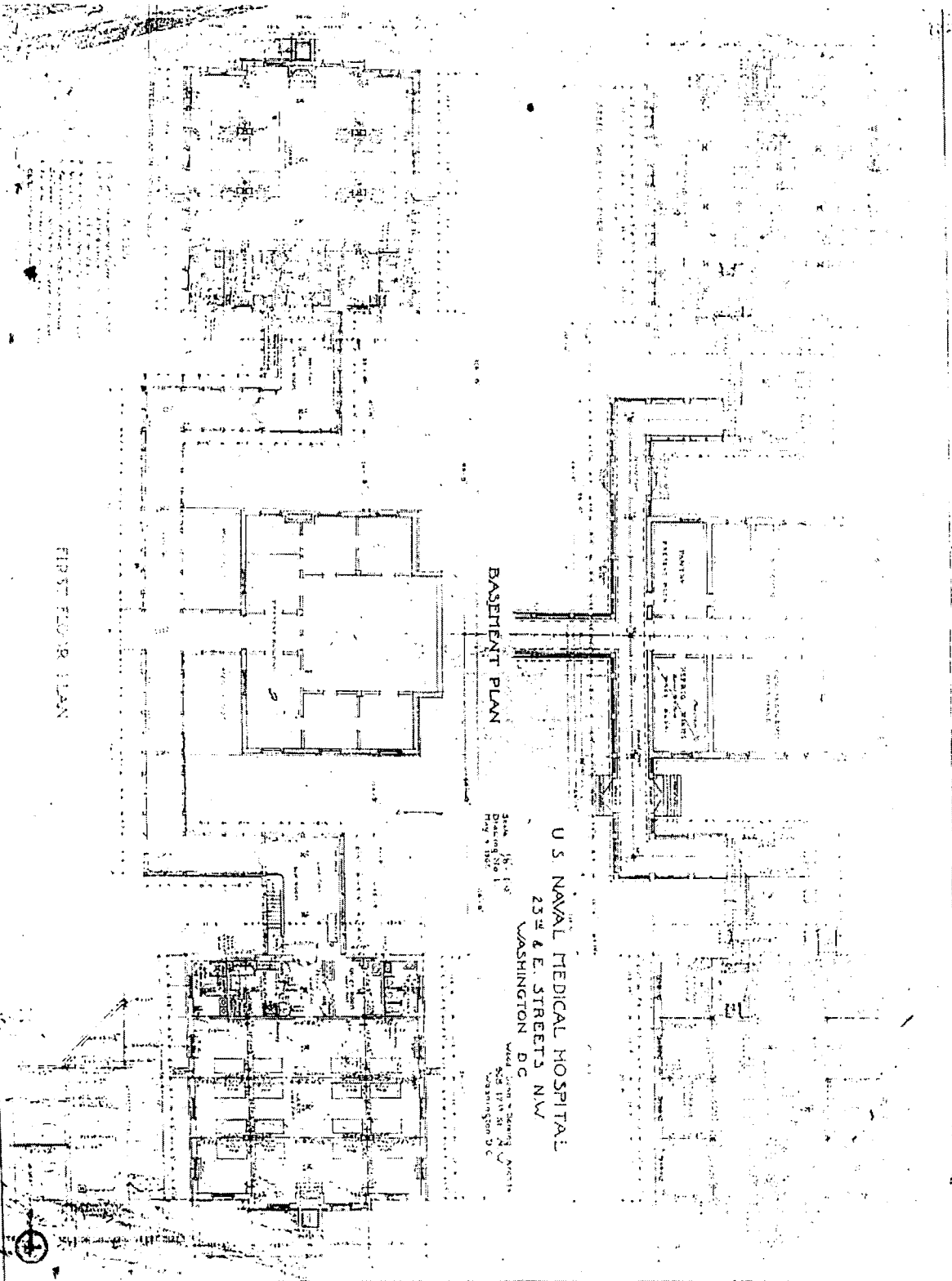


Figure III-27: Hospital (BLDG 4), Basement and 1st Floor Plans
Wood, Donn & Demmings, Archts., 1907

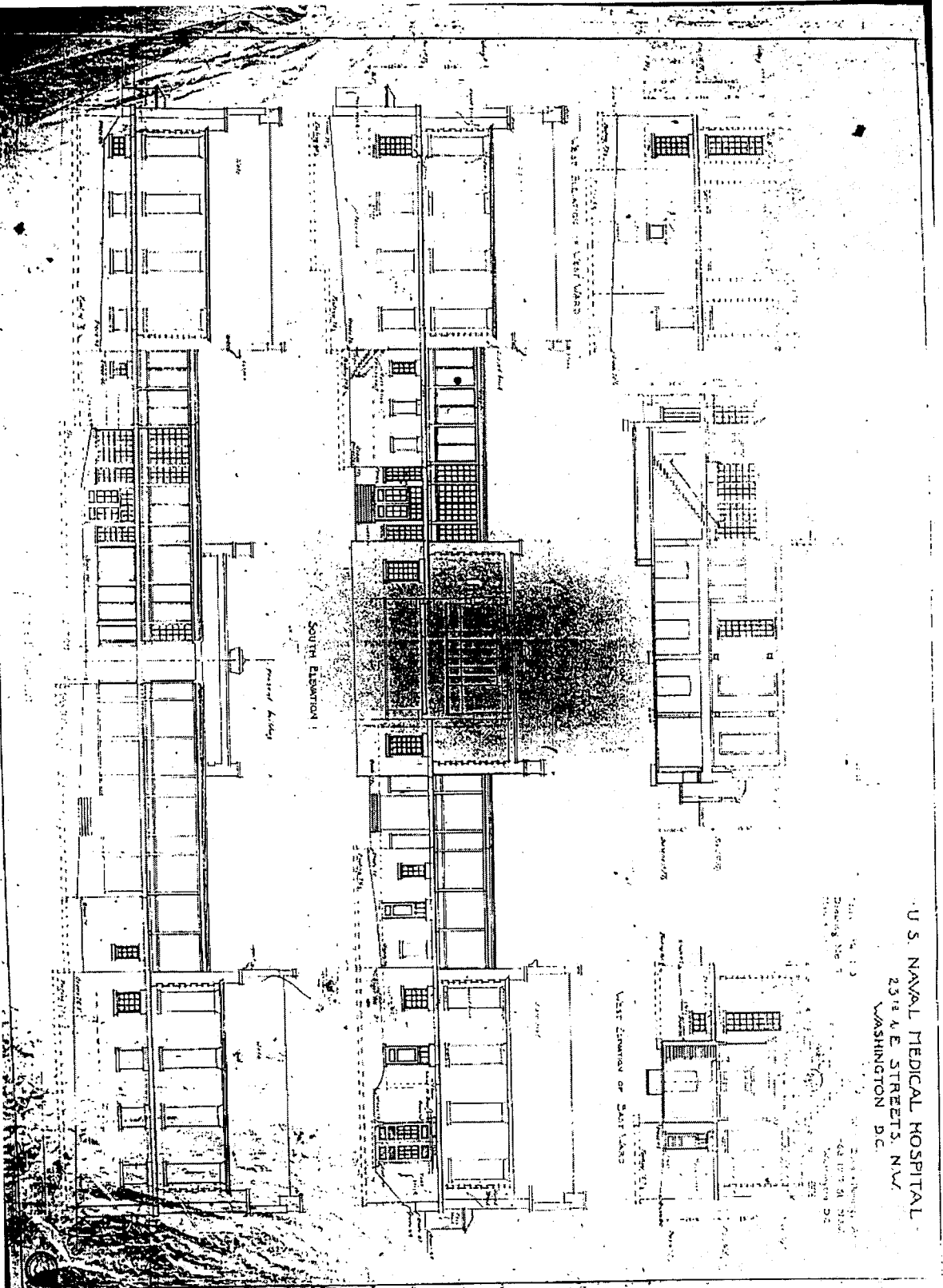


Figure III-26: Hospital (BLDG 4), Elevations
Wood, Donn & Demmings, Archts., 1907

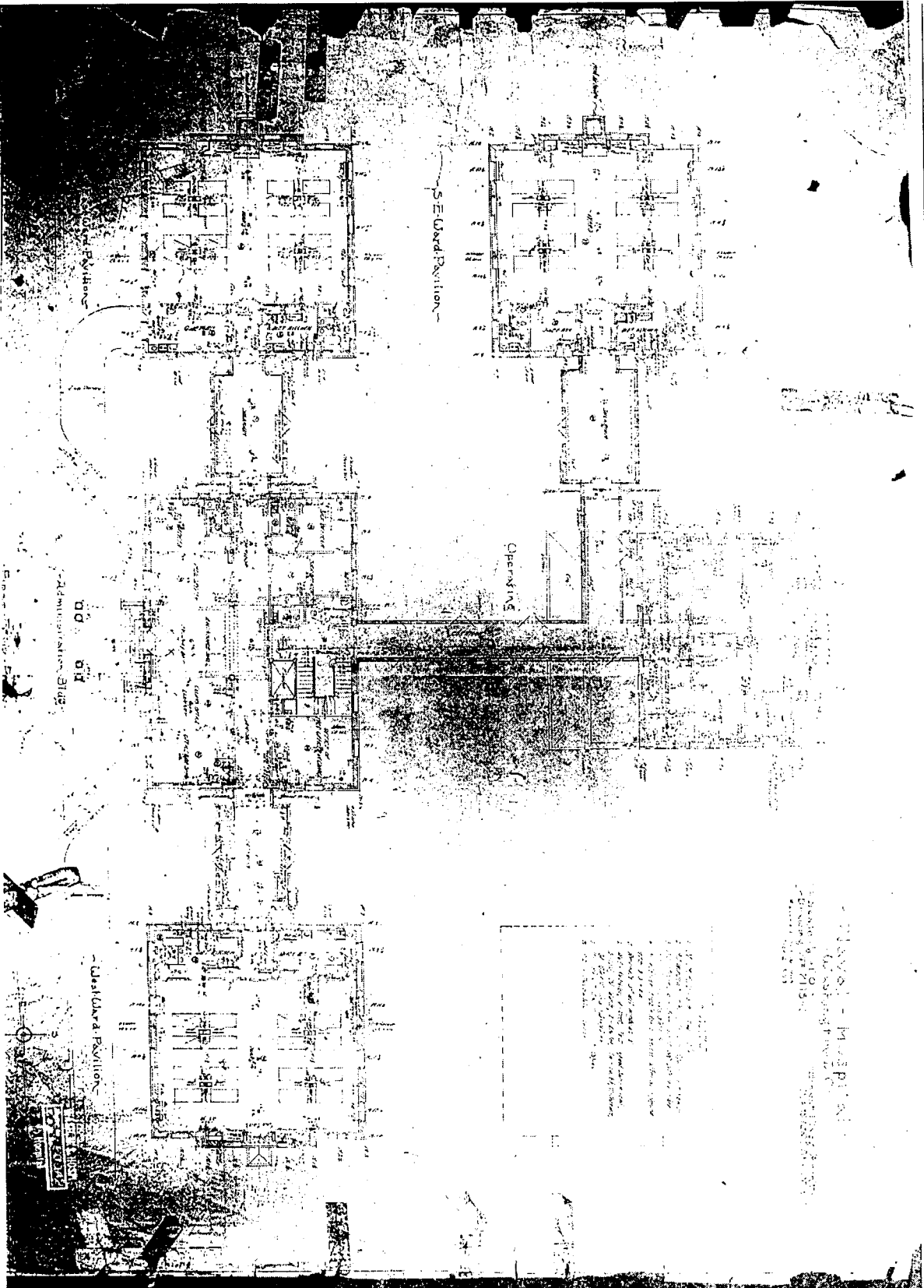


Figure III-25: Hospital (BLDG 3), First Floor Plan
Ernest Flagg, Arch., 1903

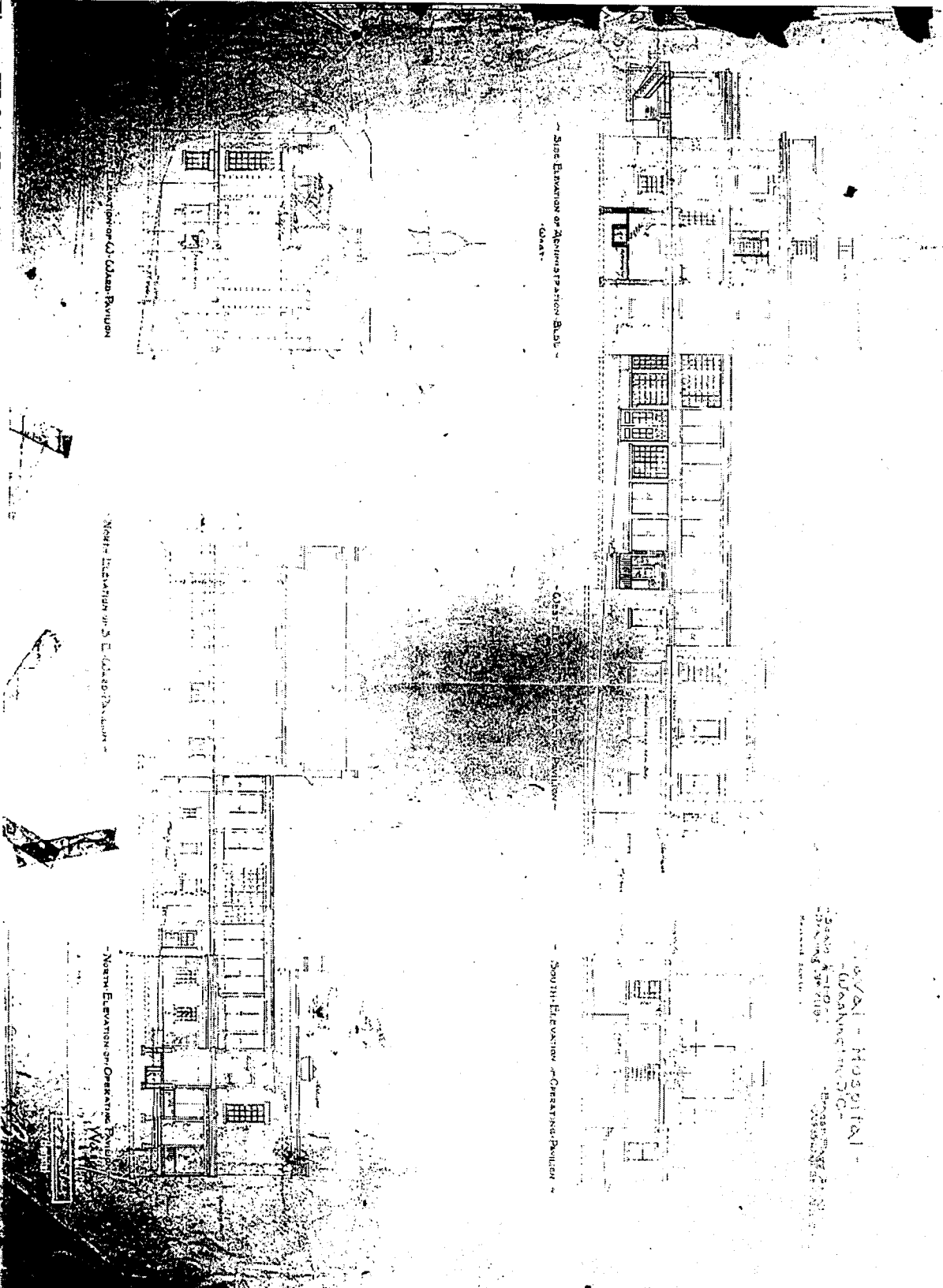


Figure III-24: Hospital (BLDG 3), Operating Pavillion Ernest Flagg, Arch., 1903

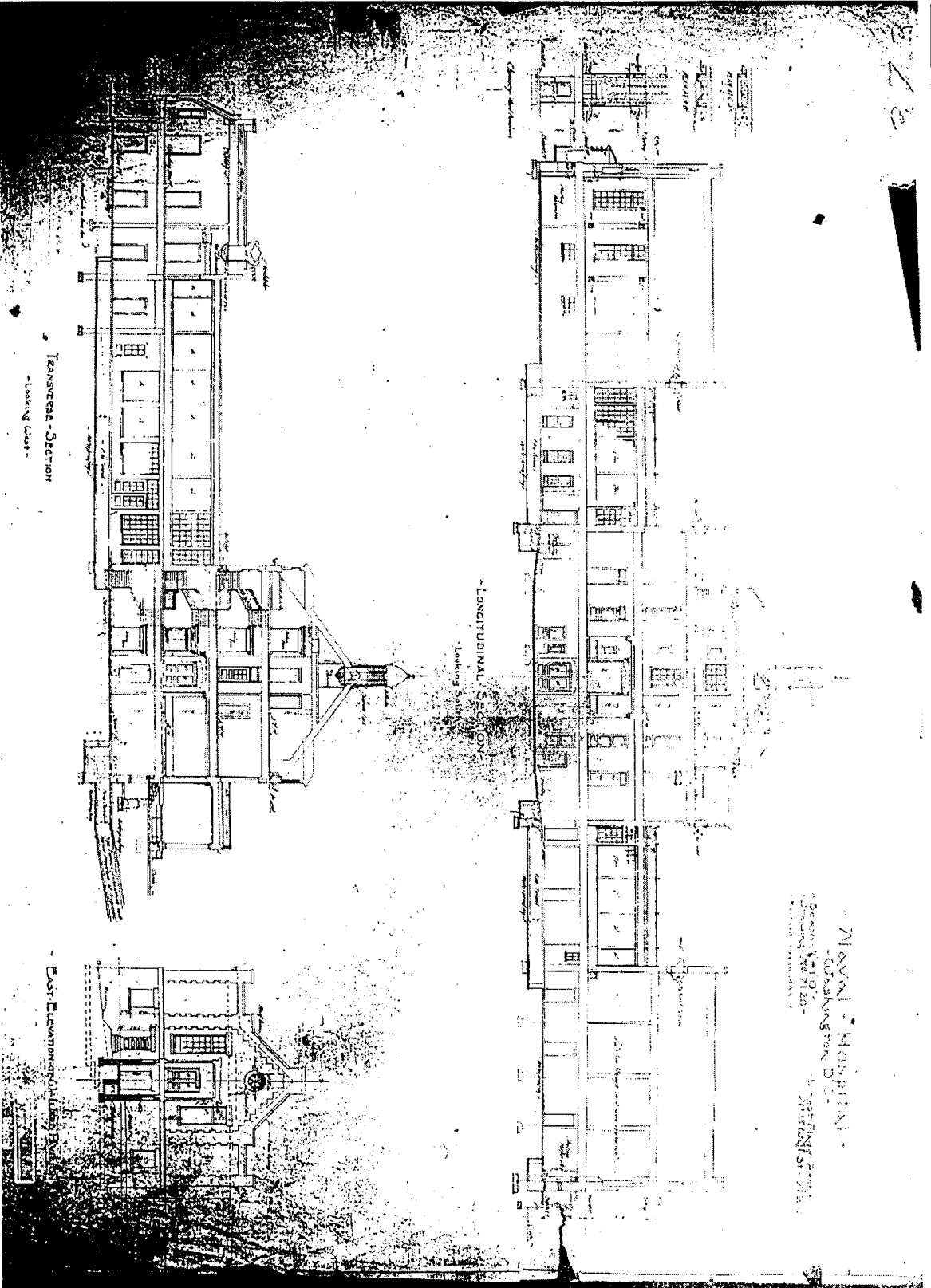


Figure III-23: Hospital (BLDG 3), Sections
Ernest Flagg, Arch., 1903

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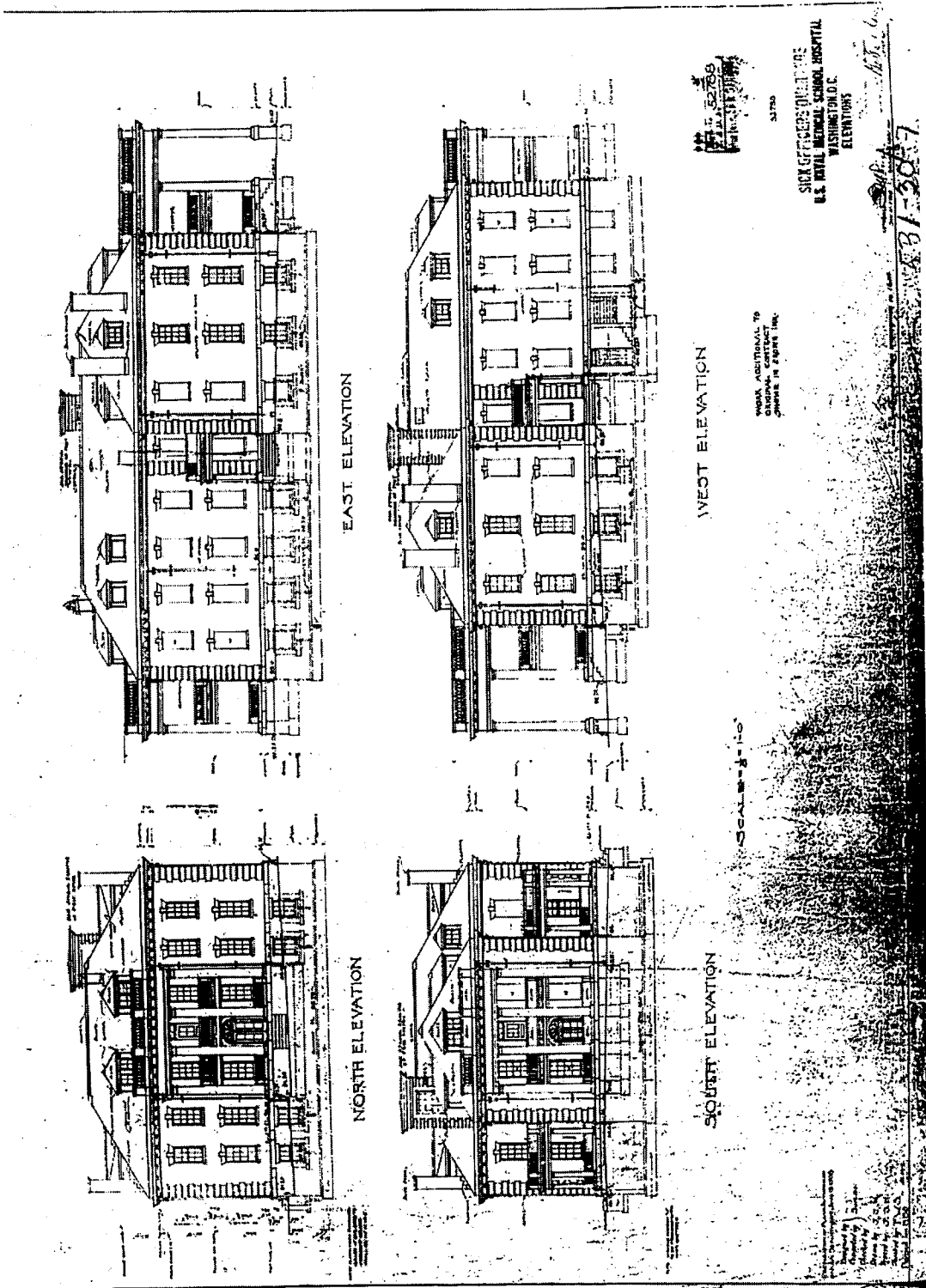


Figure III-33: Sick Officers' Quarters (BLDG 5), Elevations
Bureau of Yards and Docks, 1908

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CHAPTER 3 DESCRIPTION OF THE BUILDINGS AS ORIGINALLY BUILT

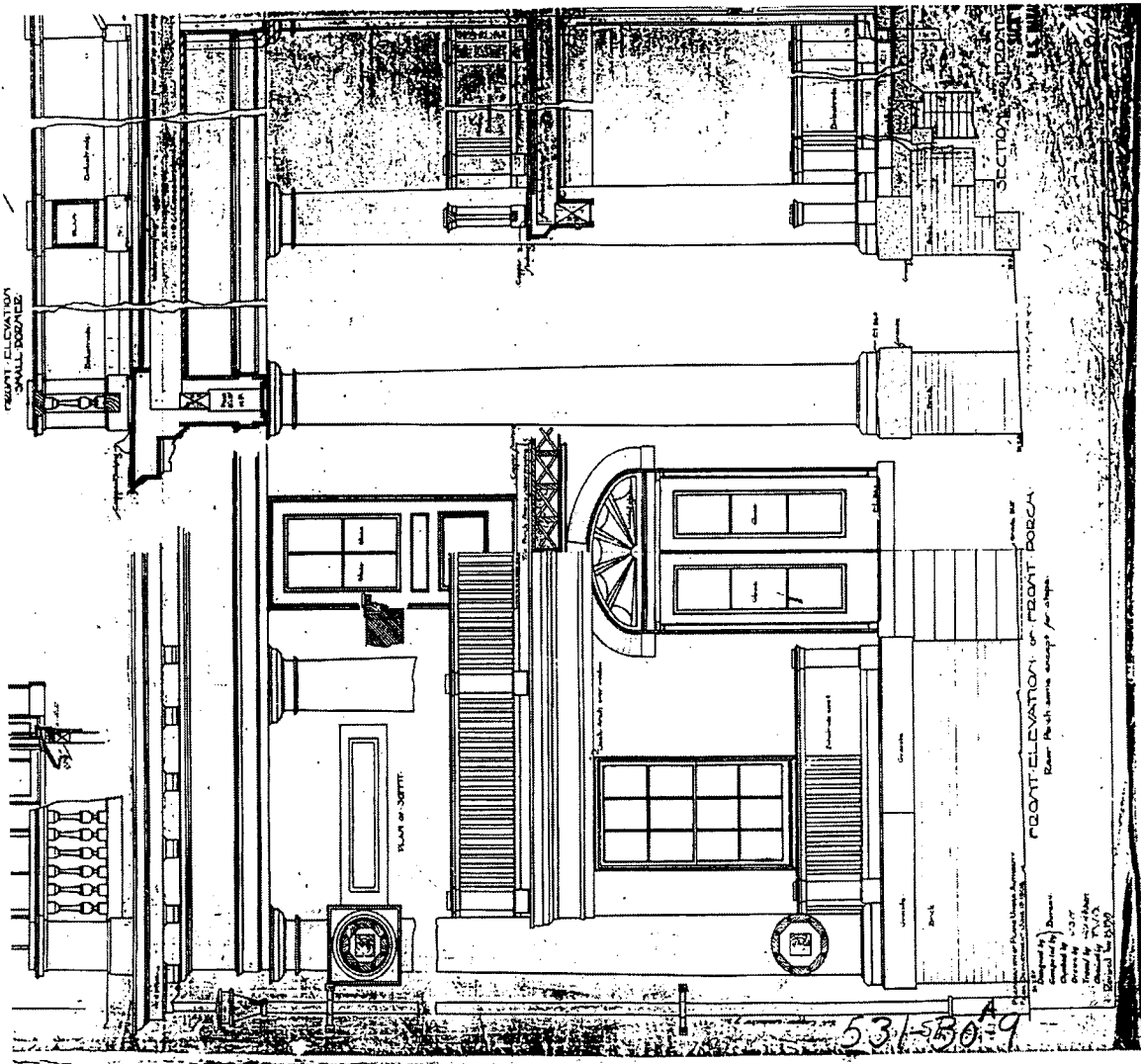


Figure III-34: Sick Officers' Quarters (BLDG 5), Section through Front Porch
Bureau of Yards and Docks, 1909

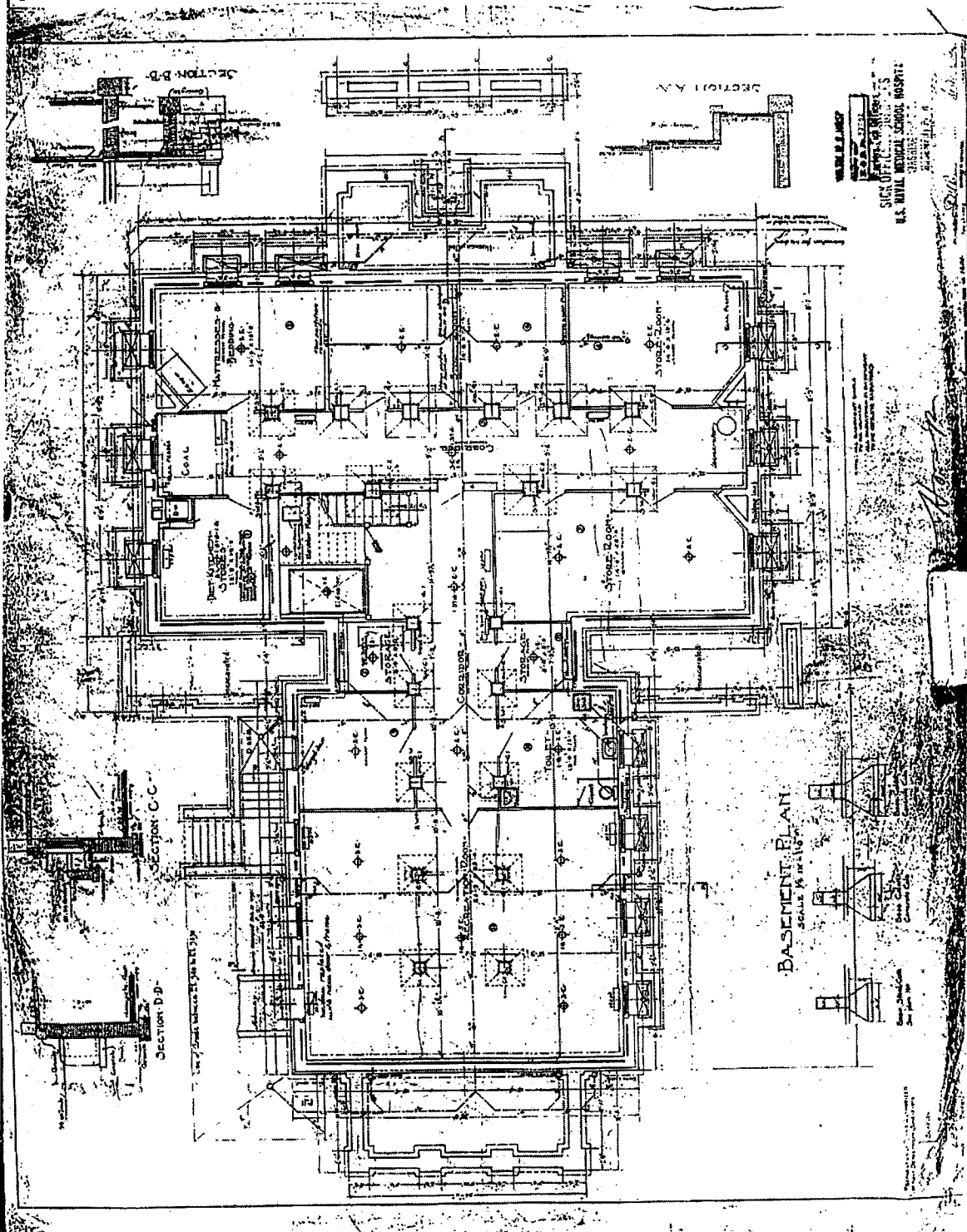


Figure III-35: Sick Officers' Quarters (BLDG 5), Basement Plan
Bureau of Yards and Docks, 1908

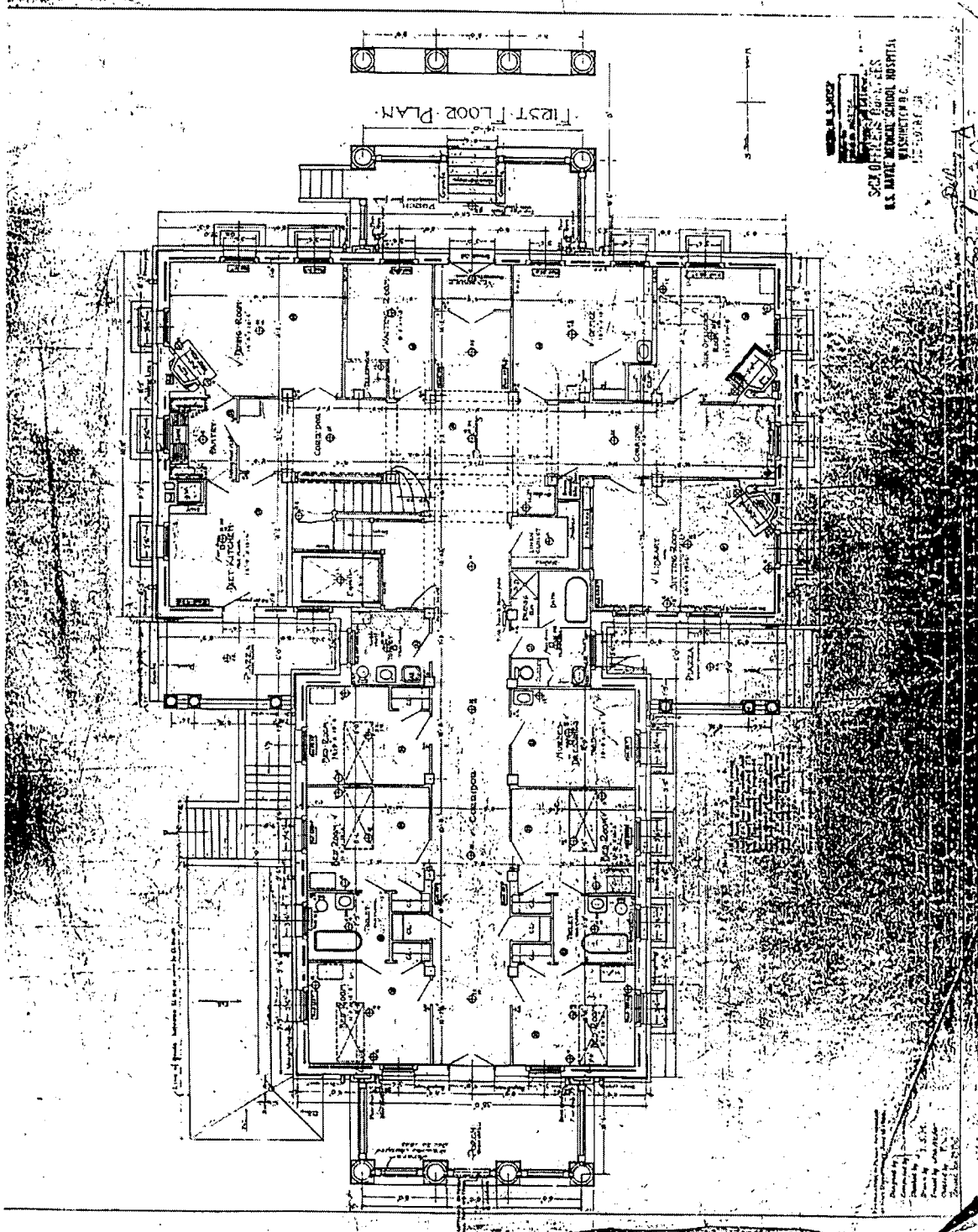


Figure III-36: Sick Officers' Quarters (BLDG 5), First Floor Plan
Bureau of Yards and Docks, 1908

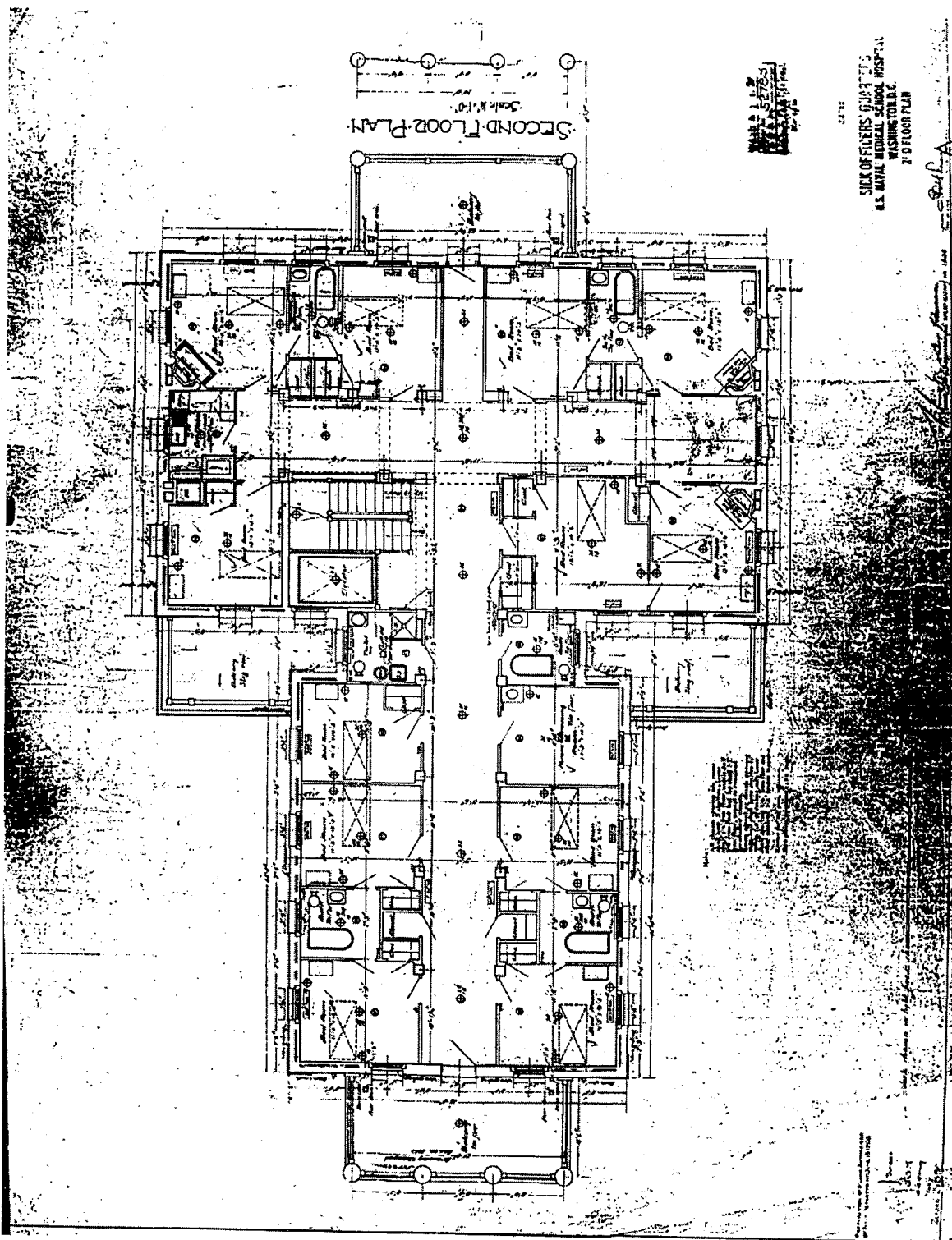


Figure III-37: Sick Officers' Quarters (BLDG 5), Second Floor Plan
Bureau of Yards and Docks, 1908

POTOMAC ANNEX BUILDINGS 1, 3-7

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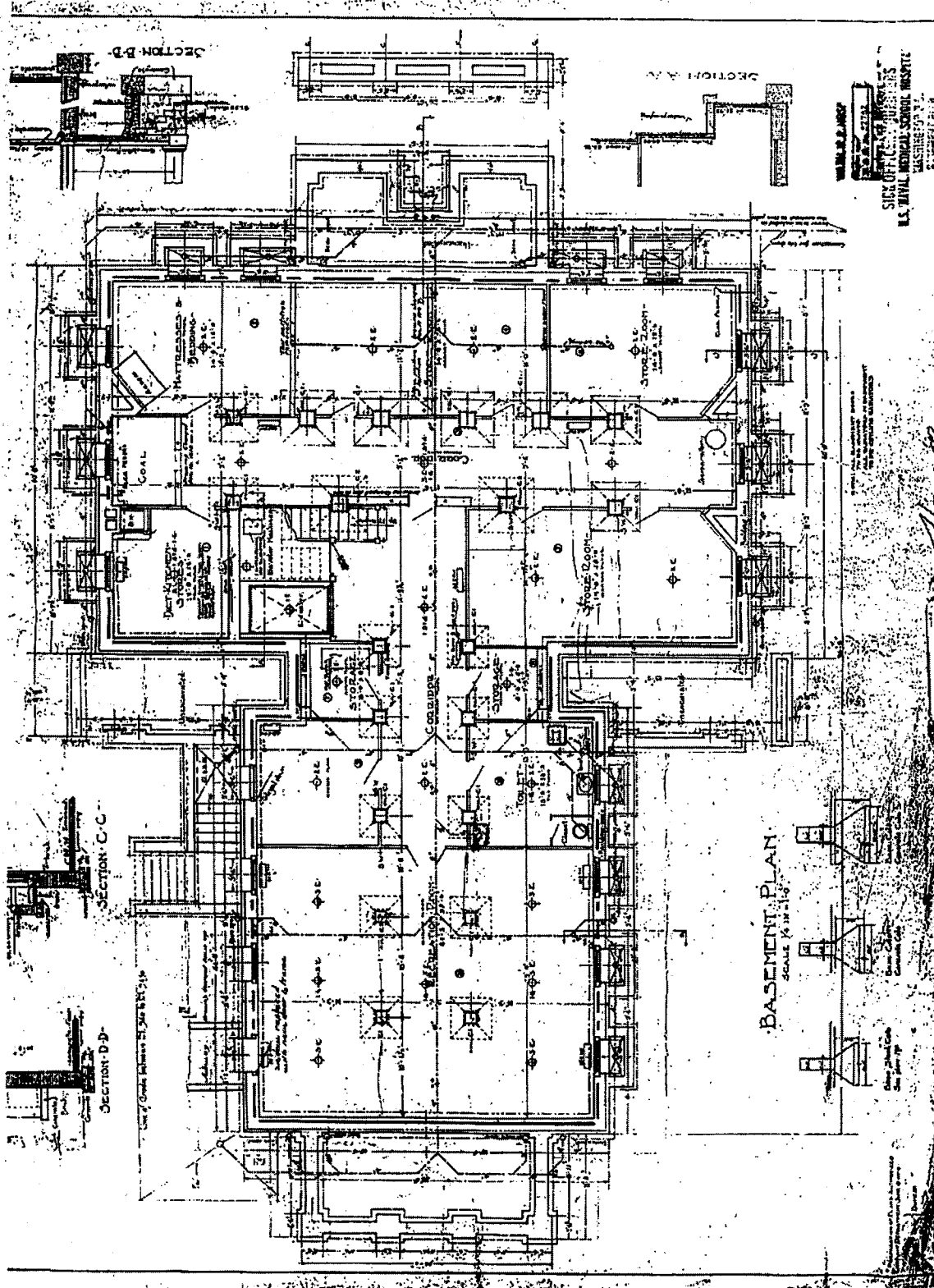


Figure III-39: Sick Officers' Quarters (BLDG 5), Foundation (Basement Plan)
Bureau of Yards and Docks, 1908

POTOMAC ANNEX BUILDINGS 1, 3-7

CHAPTER 3 DESCRIPTION OF THE BUILDINGS AS ORIGINALLY BUILT

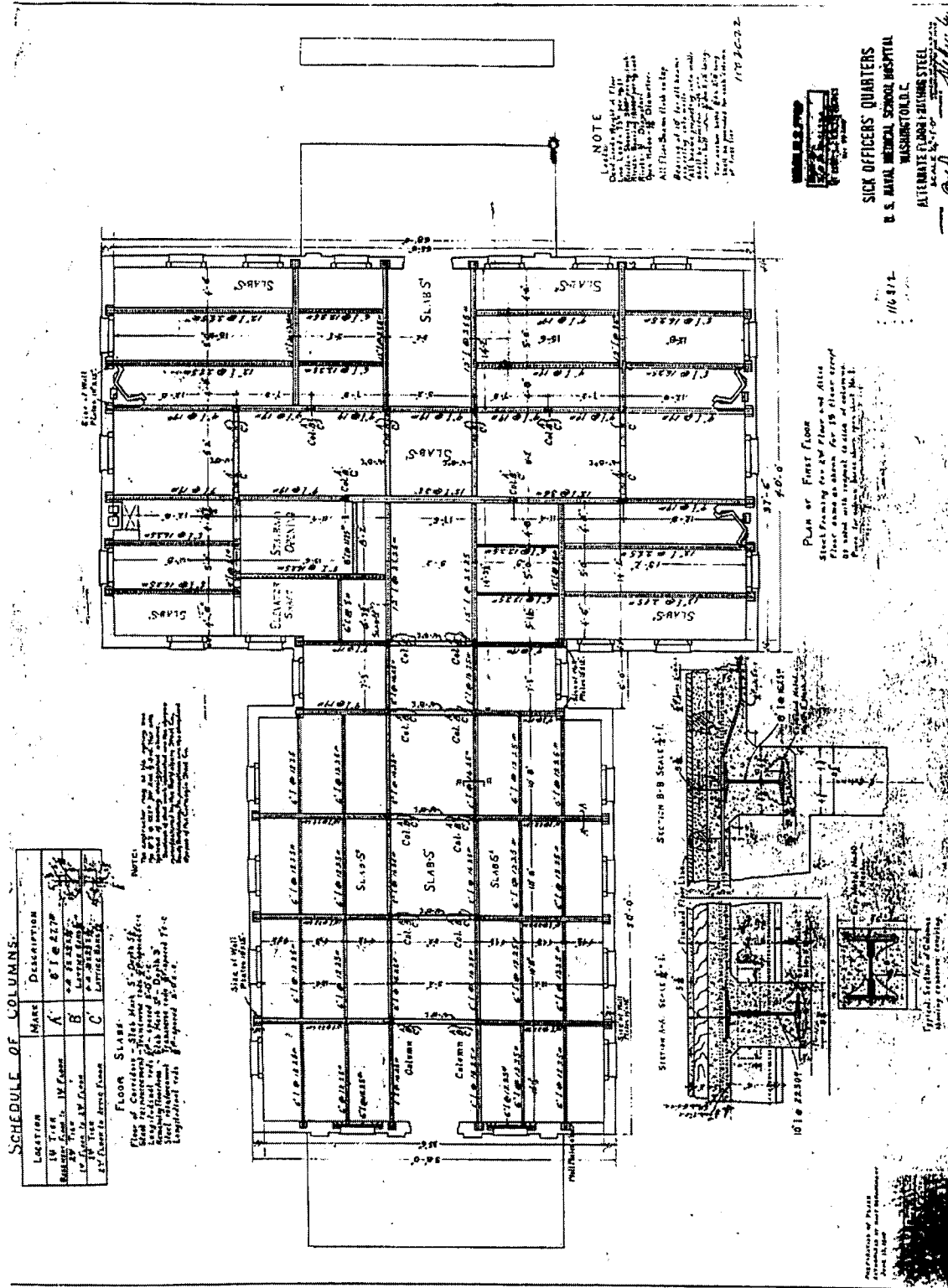


Figure III-40: Sick Officers' Quarters (BLDG 5), First Floor Plan, Scheme 1
Bureau of Yards and Docks, 1909

POTOMAC ANNEX BUILDINGS 1, 3-7

CHAPTER 3 DESCRIPTION OF THE BUILDINGS AS ORIGINALLY BUILT

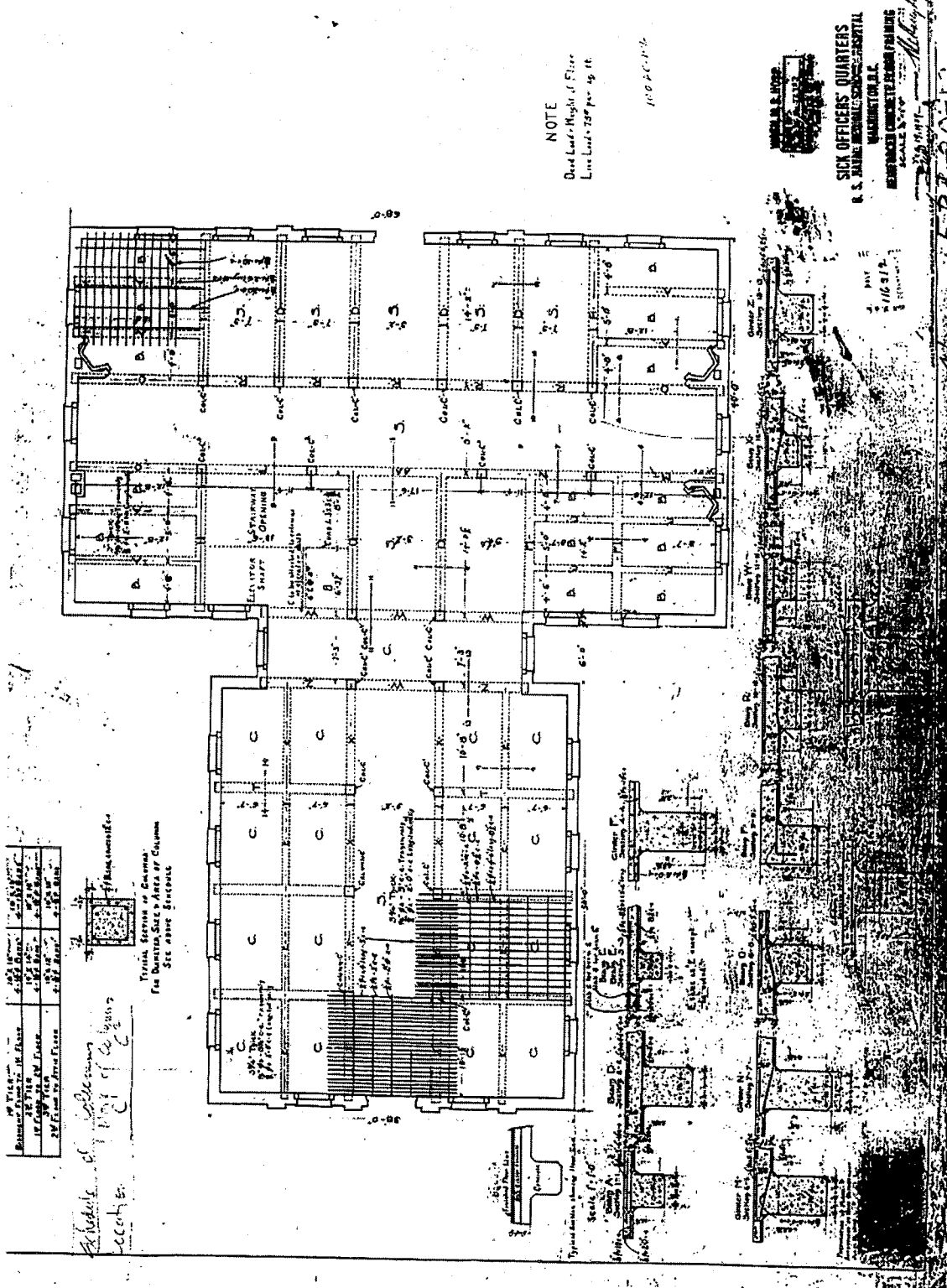


Figure III-41: Sick Officers' Quarters (BLDG 5), First Floor Plan, Scheme 2
Bureau of Yards and Docks, 1909

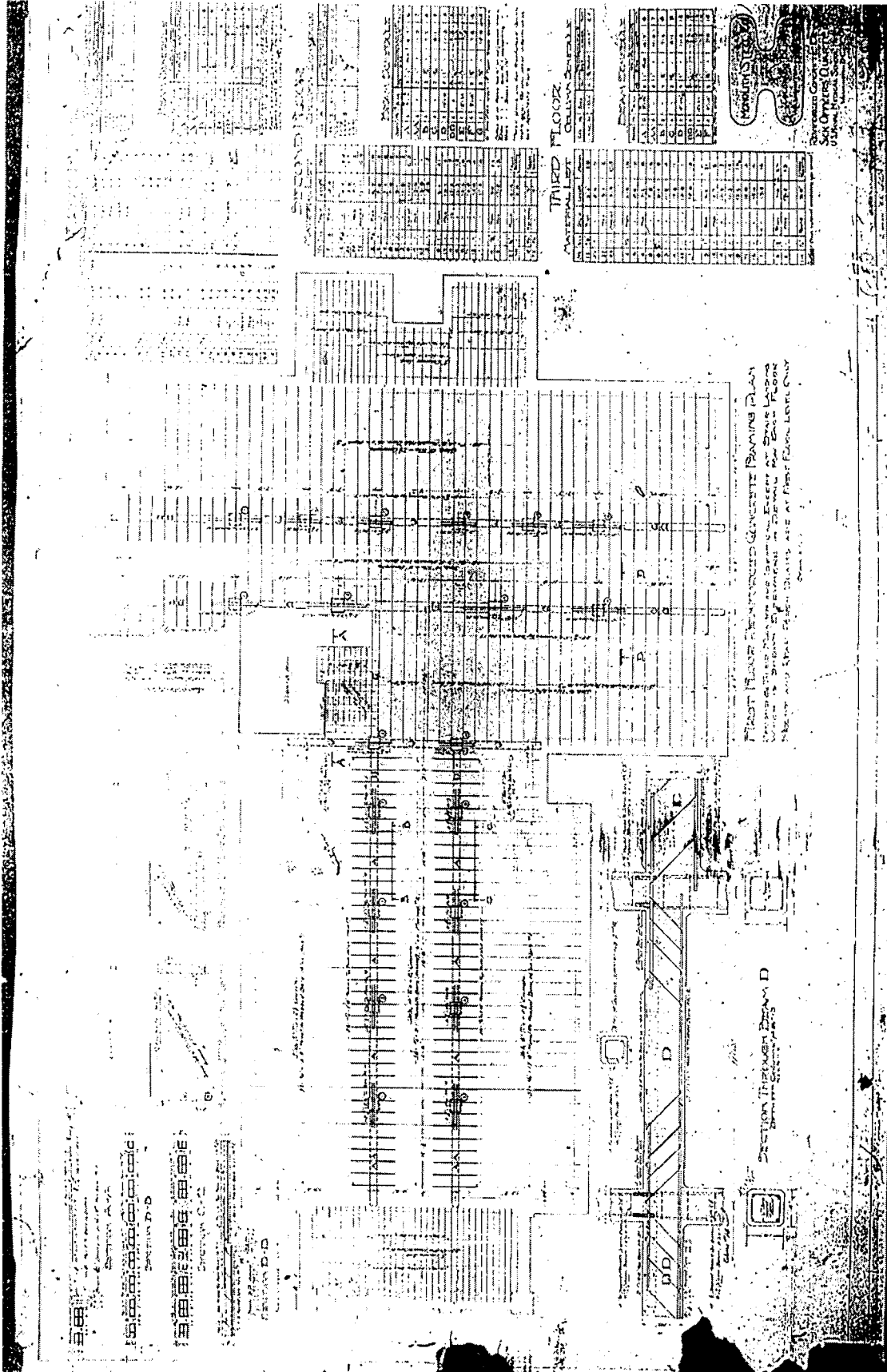


Figure III-42: Sick Officers' Quarters (BLDG 5), First Floor Plan, Scheme 3
Bureau of Yards and Docks, 1909

POTOMAC ANNEX BUILDINGS 1, 3-7

CHAPTER 3 DESCRIPTION OF THE BUILDINGS AS ORIGINALLY BUILT

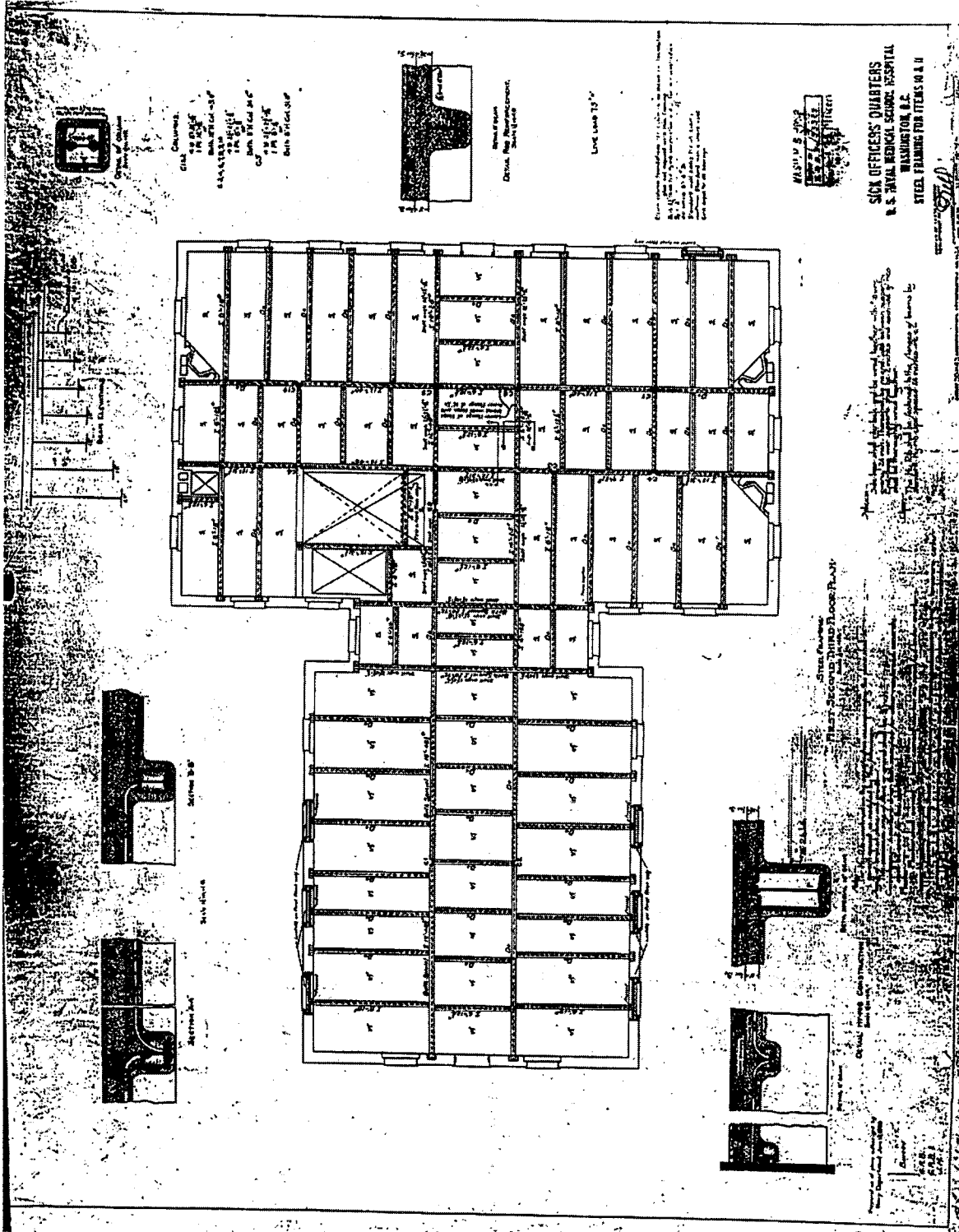


Figure III-43: Sick Officers' Quarters (BLDG 5), 1st, 2nd, & 3rd Floor Plan, Scheme 4
Bureau of Yards and Docks, 1909

POTOMAC ANNEX BUILDINGS 1. 3-7

CHAPTER 3 DESCRIPTION OF THE BUILDINGS AS ORIGINALLY BUILT

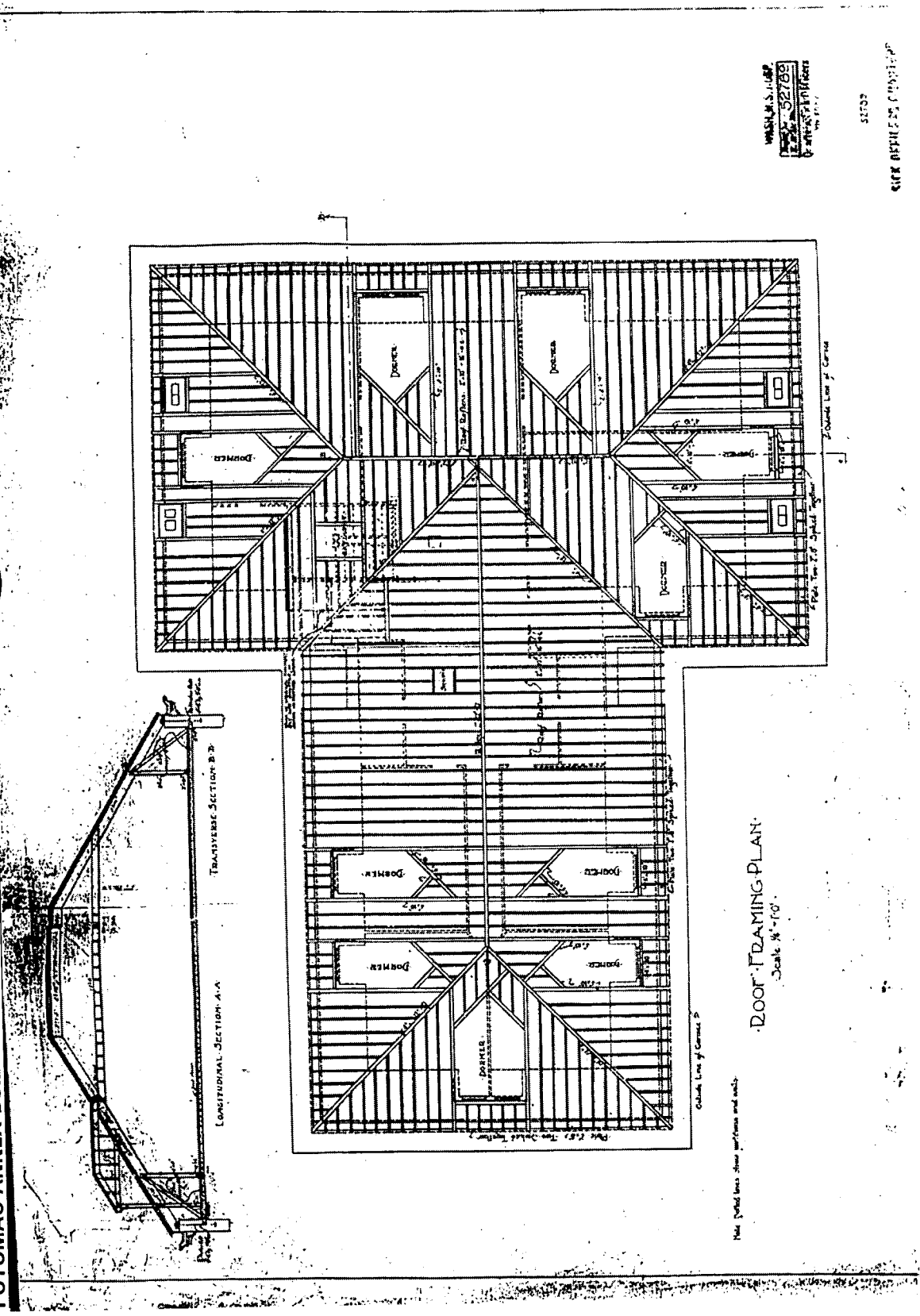
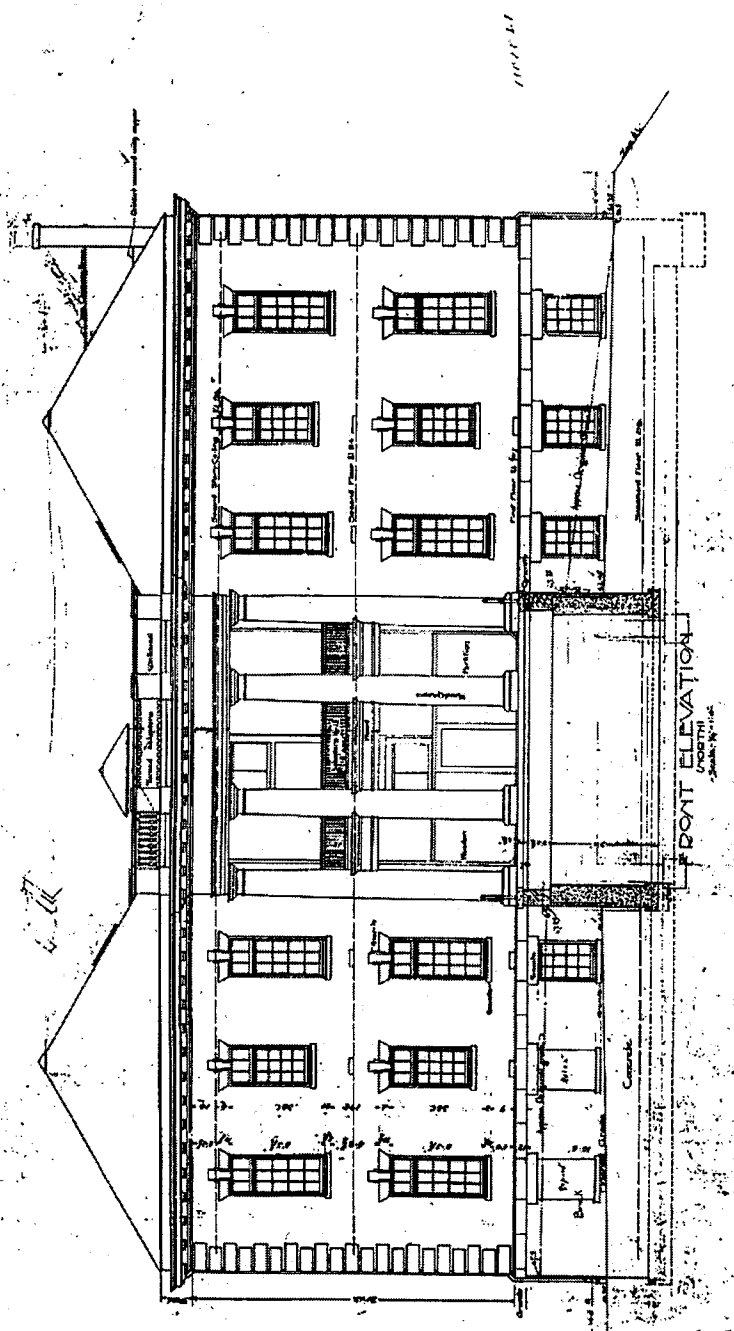


Figure III-44: Sick Officers' Quarters (BLDG 5), Roof Framing Plan
Bureau of Yards and Docks, 1909

POTOMAC ANNEX BUILDINGS 1, 3-7

CHAPTER 3 DESCRIPTION OF THE BUILDINGS AS ORIGINALLY BUILT



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 CONTIGUOUS WARD BUILDING
 U. S. NAVAL YARDS, BALTIMORE, MARYLAND
 ARCHITECT
 U. S. NAVAL ARCHITECTURE
 BALTIMORE, MARYLAND

Figure III-45: Contiguous Ward Building (BLDG 6), Front Elevation
 Bureau of Yards and Docks, 1908

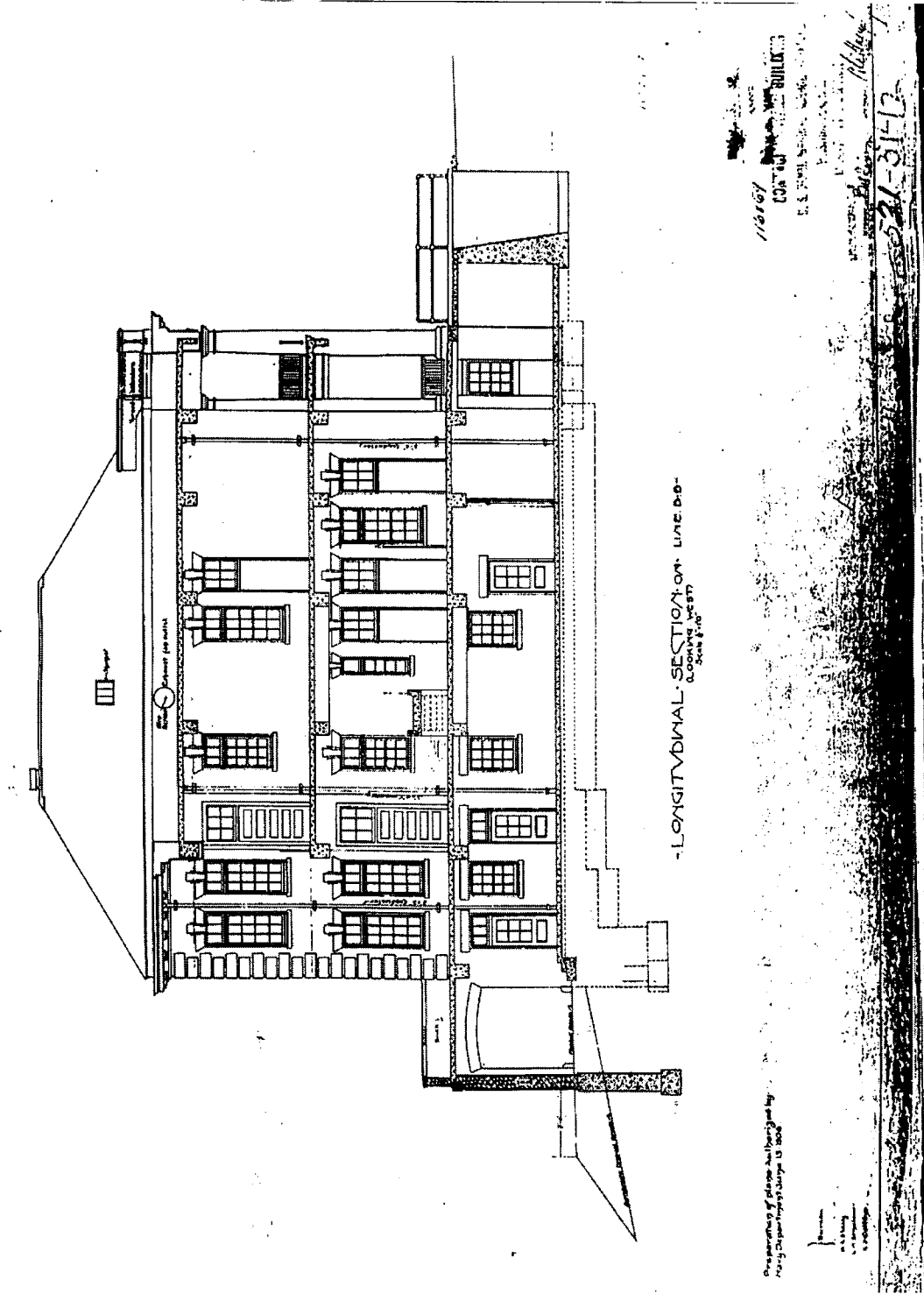


Figure III-46: Contiguous Ward Building (BLDG 6), Long Section, Looking West
Bureau of Yards and Docks, 1908

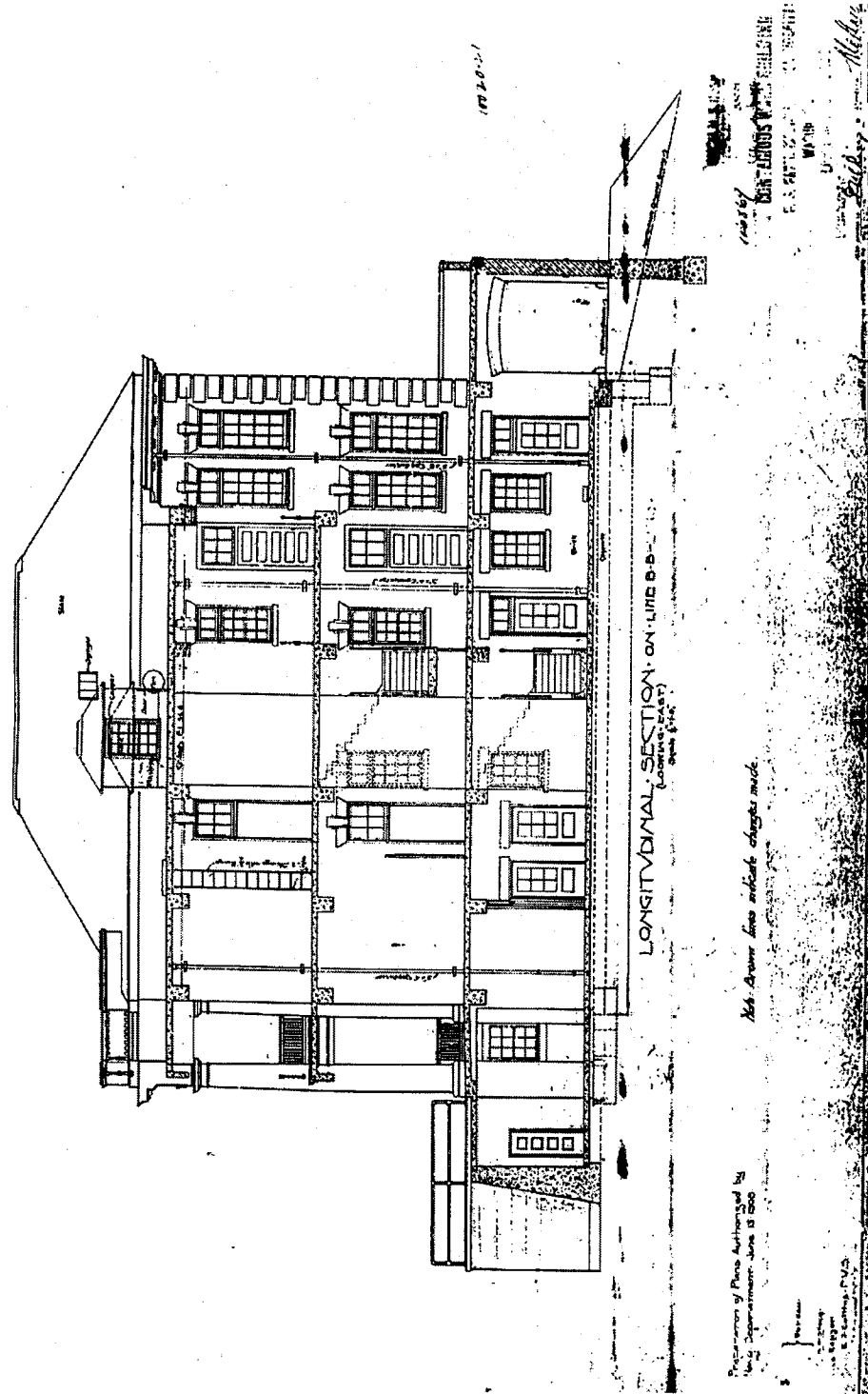


Figure III-47: Contiguous Ward Building (BLDG 6), Long Section, Looking East
Bureau of Yards and Docks, 1908

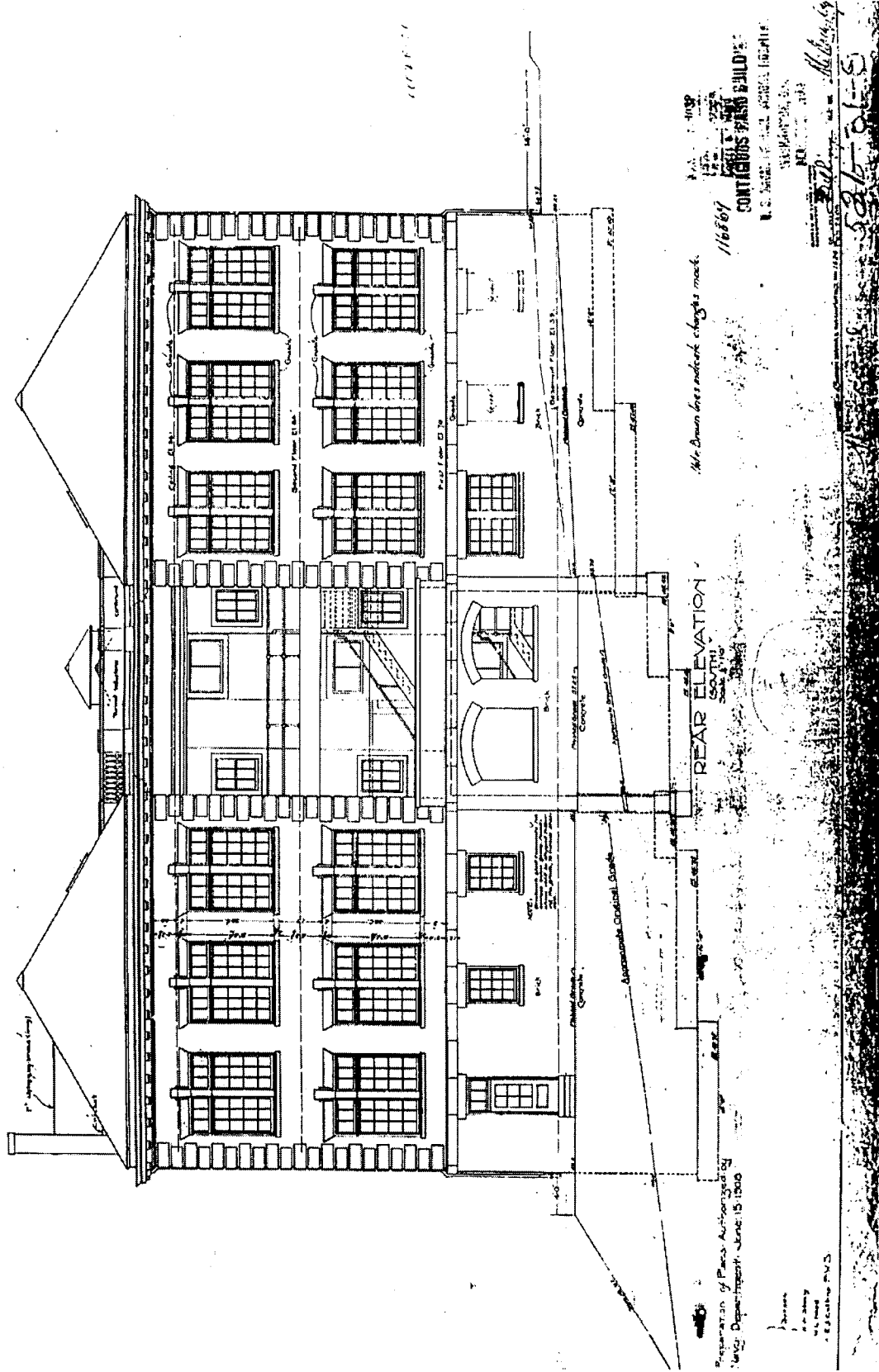


Figure III-48: Contagious Ward Building (BLDG 6), Rear Elevation
Bureau of Yards and Docks, 1908

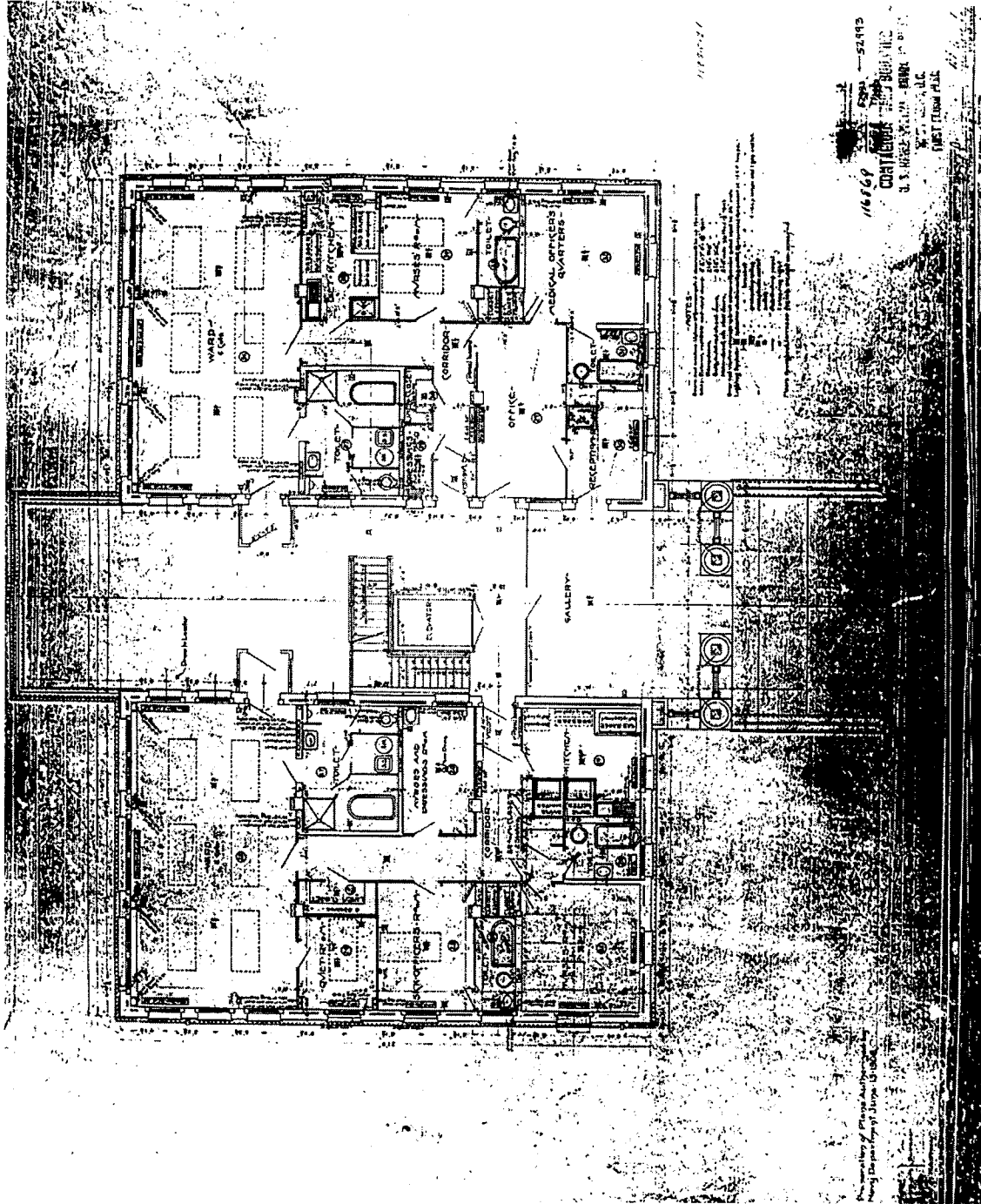


Figure III-49: Contagious Ward Building (BLDG 6), First Floor Plan
Bureau of Yards and Docks, 1908

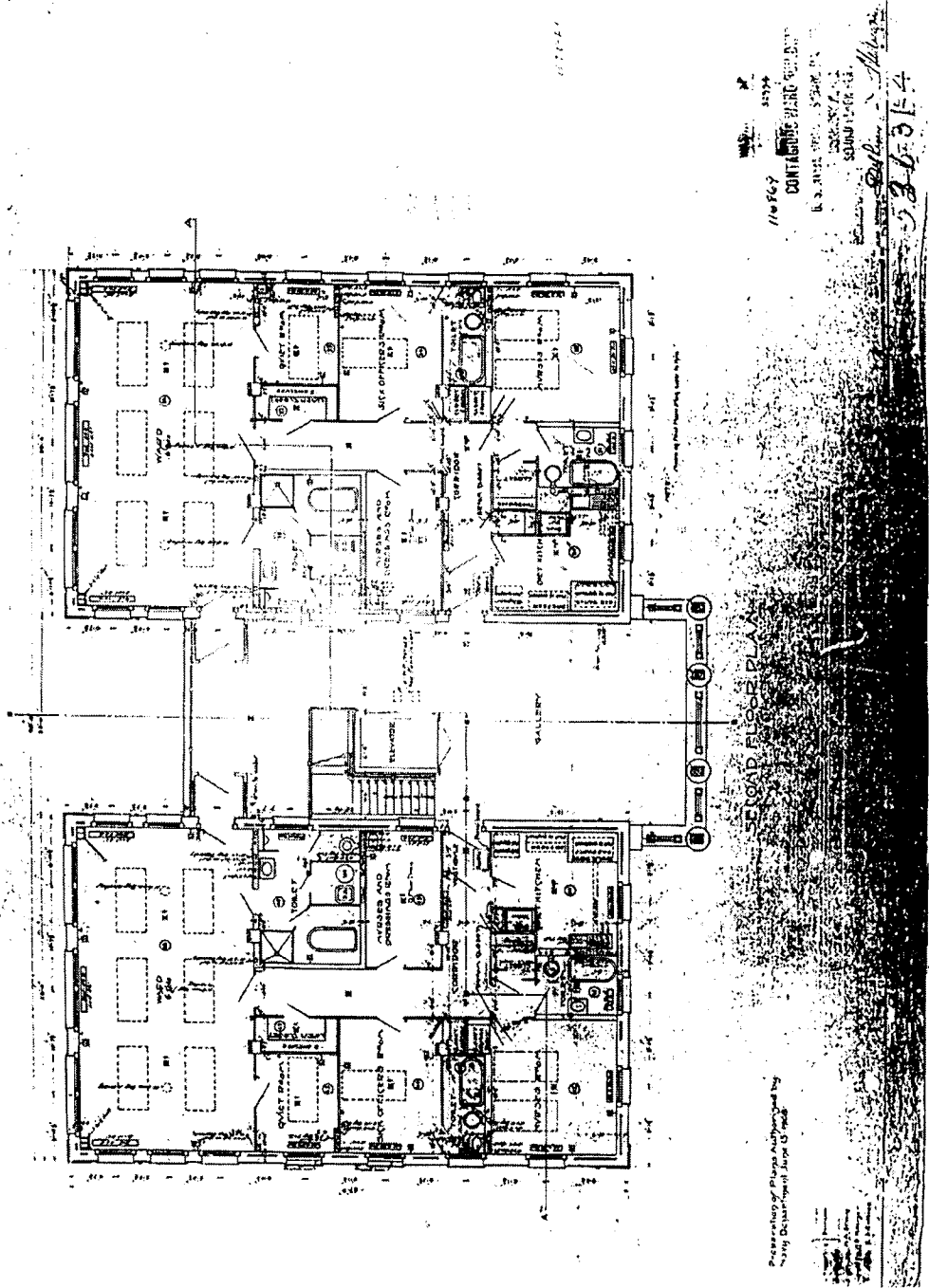


Figure III-50: Contagious Ward Building (BLDG 6), Second Floor Plan
Bureau of Yards and Docks, 1908

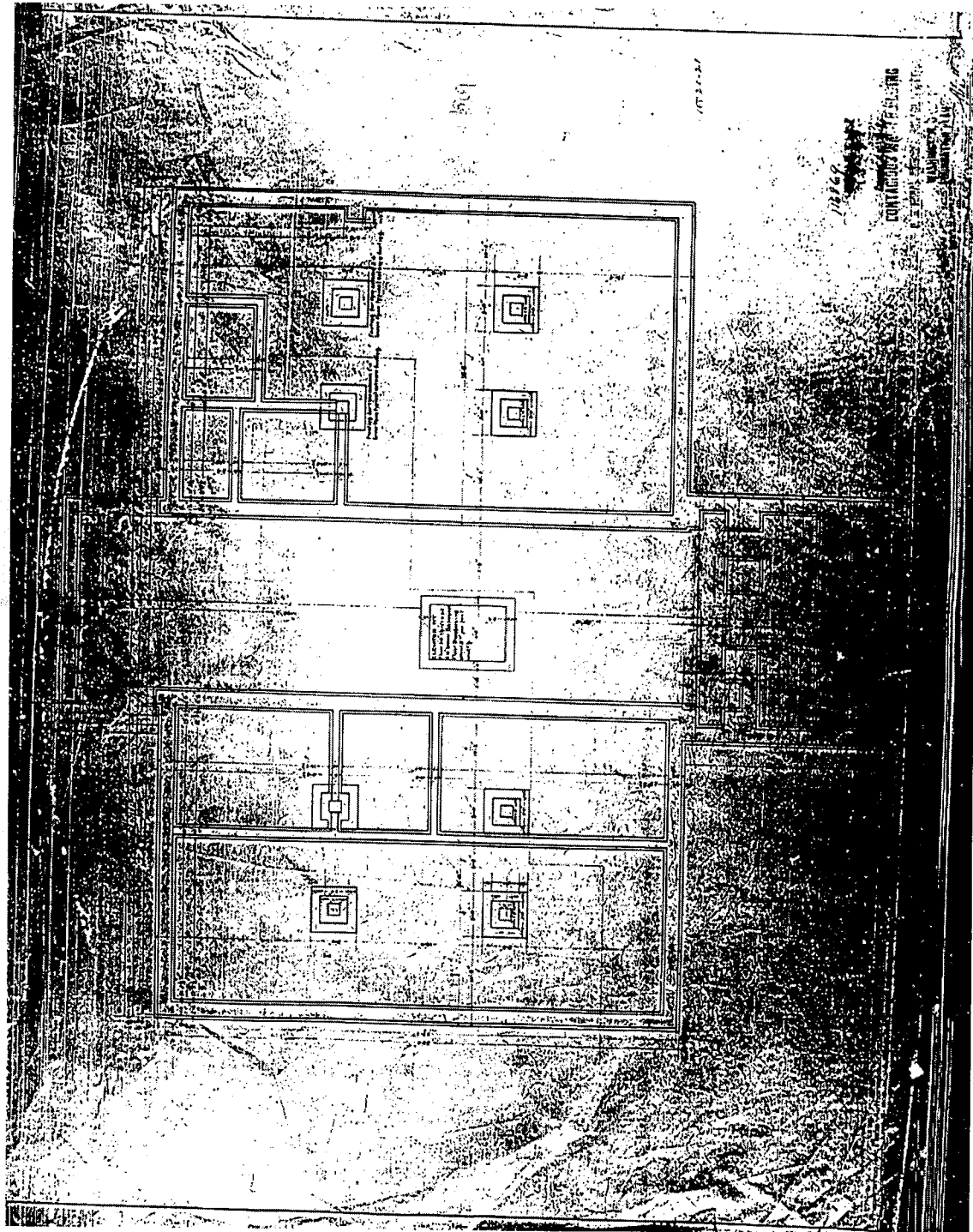
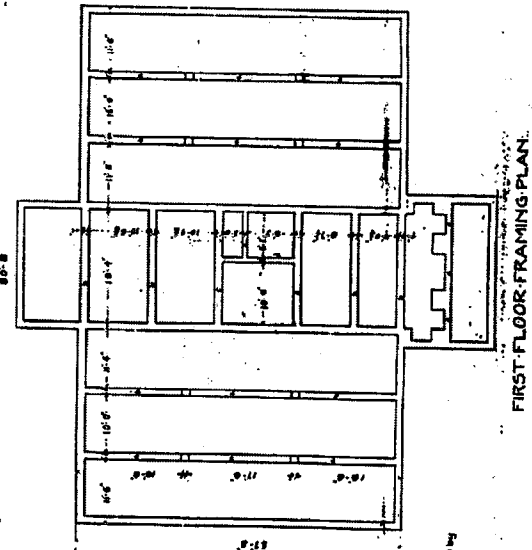
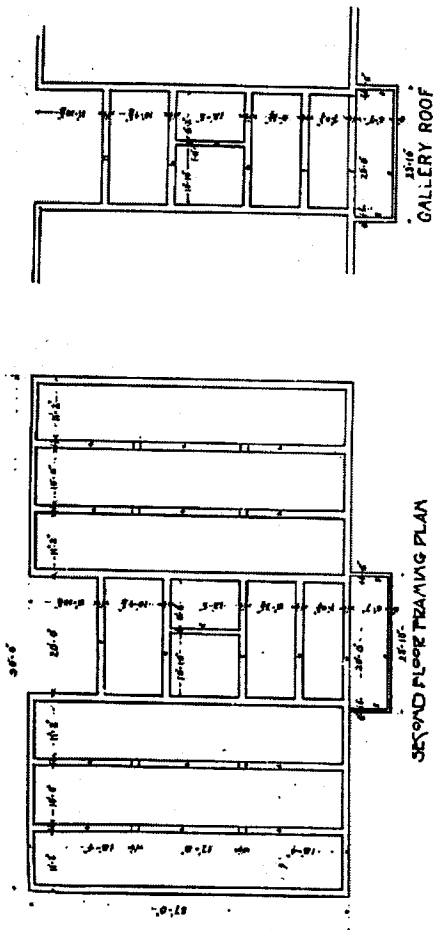


Figure III-51: Contagious Ward Building (BLDG 6), Foundation Plan
Bureau of Yards and Docks, 1909



SECTION	SECTION NUMBER	AREA OF FLOOR	PERCENTAGE OF TOTAL FLOOR AREA
A	15.142	414.40 SQ. FT.	10.17%
B	15.142	329.00 SQ. FT.	8.15%
C	15.142	329.00 SQ. FT.	8.15%
D	15.142	329.00 SQ. FT.	8.15%
E	15.142	329.00 SQ. FT.	8.15%
F	15.142	329.00 SQ. FT.	8.15%
G	15.142	329.00 SQ. FT.	8.15%
H	15.142	329.00 SQ. FT.	8.15%
I	15.142	329.00 SQ. FT.	8.15%
J	15.142	329.00 SQ. FT.	8.15%
K	15.142	329.00 SQ. FT.	8.15%
L	15.142	329.00 SQ. FT.	8.15%
M	15.142	329.00 SQ. FT.	8.15%
N	15.142	329.00 SQ. FT.	8.15%
O	15.142	329.00 SQ. FT.	8.15%
P	15.142	329.00 SQ. FT.	8.15%
Q	15.142	329.00 SQ. FT.	8.15%
R	15.142	329.00 SQ. FT.	8.15%
S	15.142	329.00 SQ. FT.	8.15%
T	15.142	329.00 SQ. FT.	8.15%
U	15.142	329.00 SQ. FT.	8.15%
V	15.142	329.00 SQ. FT.	8.15%
W	15.142	329.00 SQ. FT.	8.15%
X	15.142	329.00 SQ. FT.	8.15%
Y	15.142	329.00 SQ. FT.	8.15%
Z	15.142	329.00 SQ. FT.	8.15%
TOTAL		4074.00 SQ. FT.	100.00%

Preparation of Plans Authorized by
 Navy - Espionage Group 15 (AE)
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 3. 11/19/44
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Figure III-53: Contiguous Ward Building (BLDG 6), 1st, 2nd Floor and Roof Framing Plans, Reinforced Concrete System
 Bureau of Yards and Docks, 1909

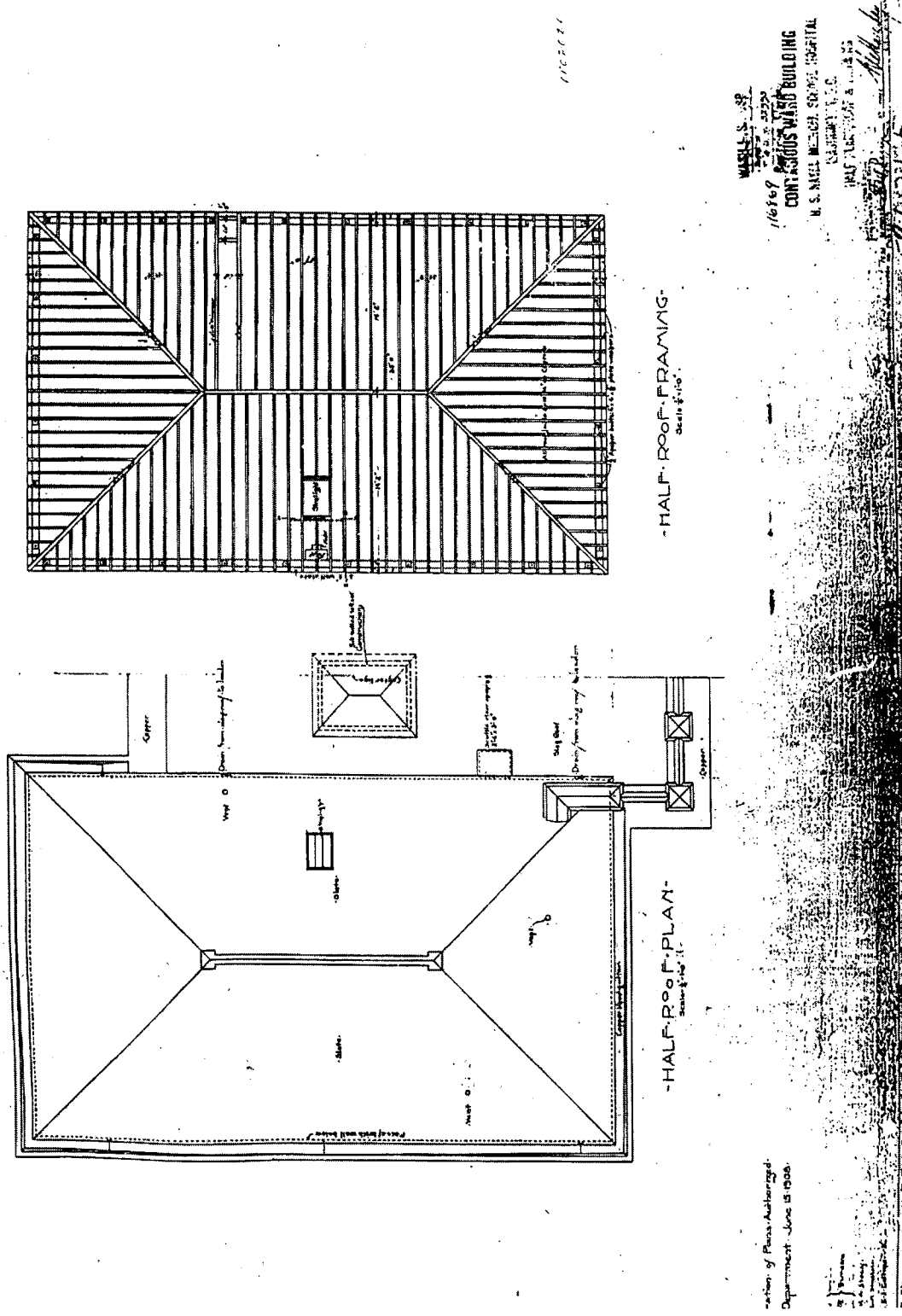


Figure III-54: Contagious Ward Building (BLDG 6), Roof Framing Plan
Bureau of Yards and Docks, 1909

POTOMAC ANNEX BUILDINGS 1, 3-7

CHAPTER 3 DESCRIPTION OF THE BUILDINGS AS ORIGINALLY BUILT

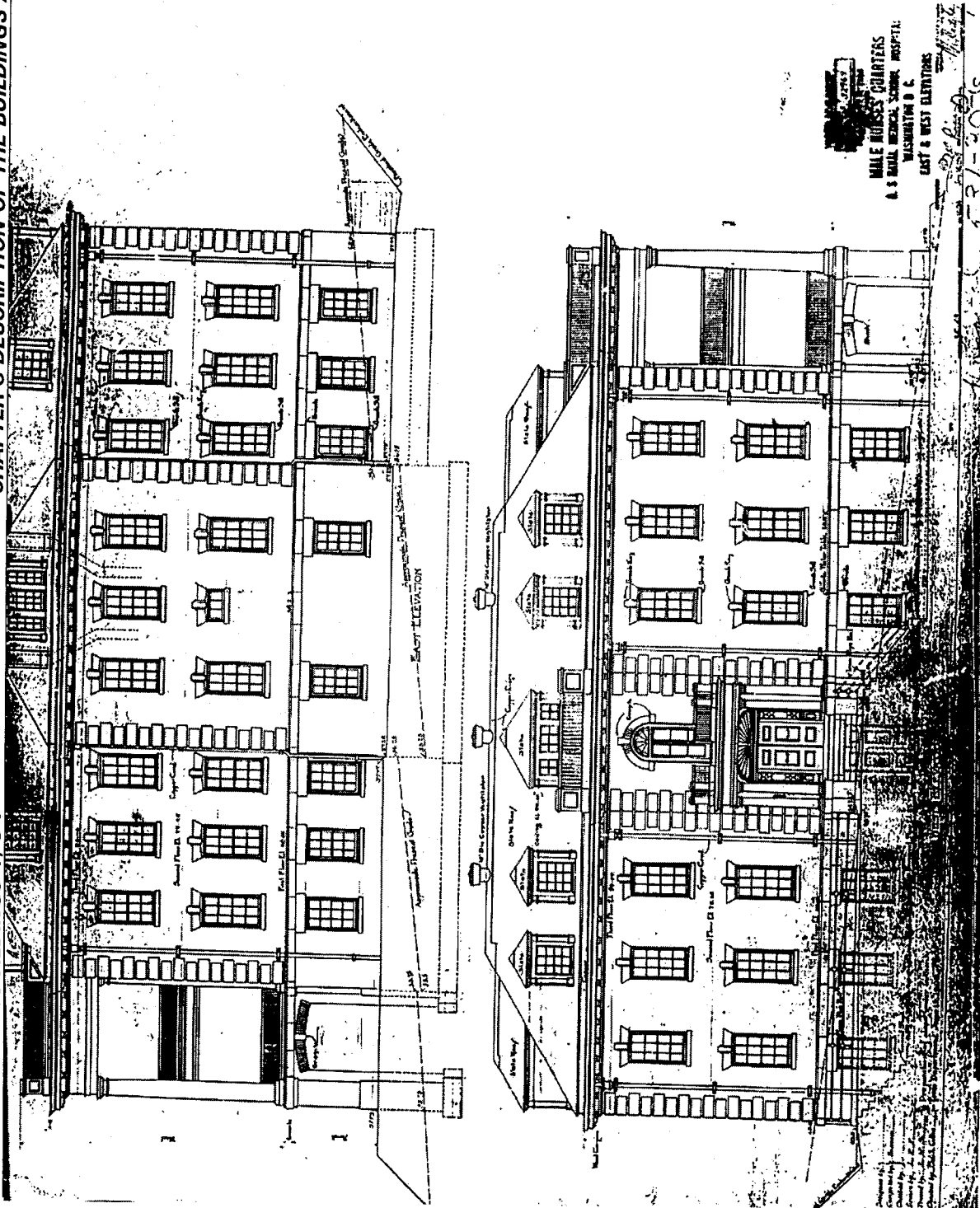


Figure III-55: Hospital Corp's Quarters (BLDG 7), East and West Elevations
Bureau of Yards and Docks, 1909

POTOMAC ANNEX BUILDINGS 1, 3-7

CHAPTER 3 DESCRIPTION OF THE BUILDINGS AS ORIGINALLY BUILT

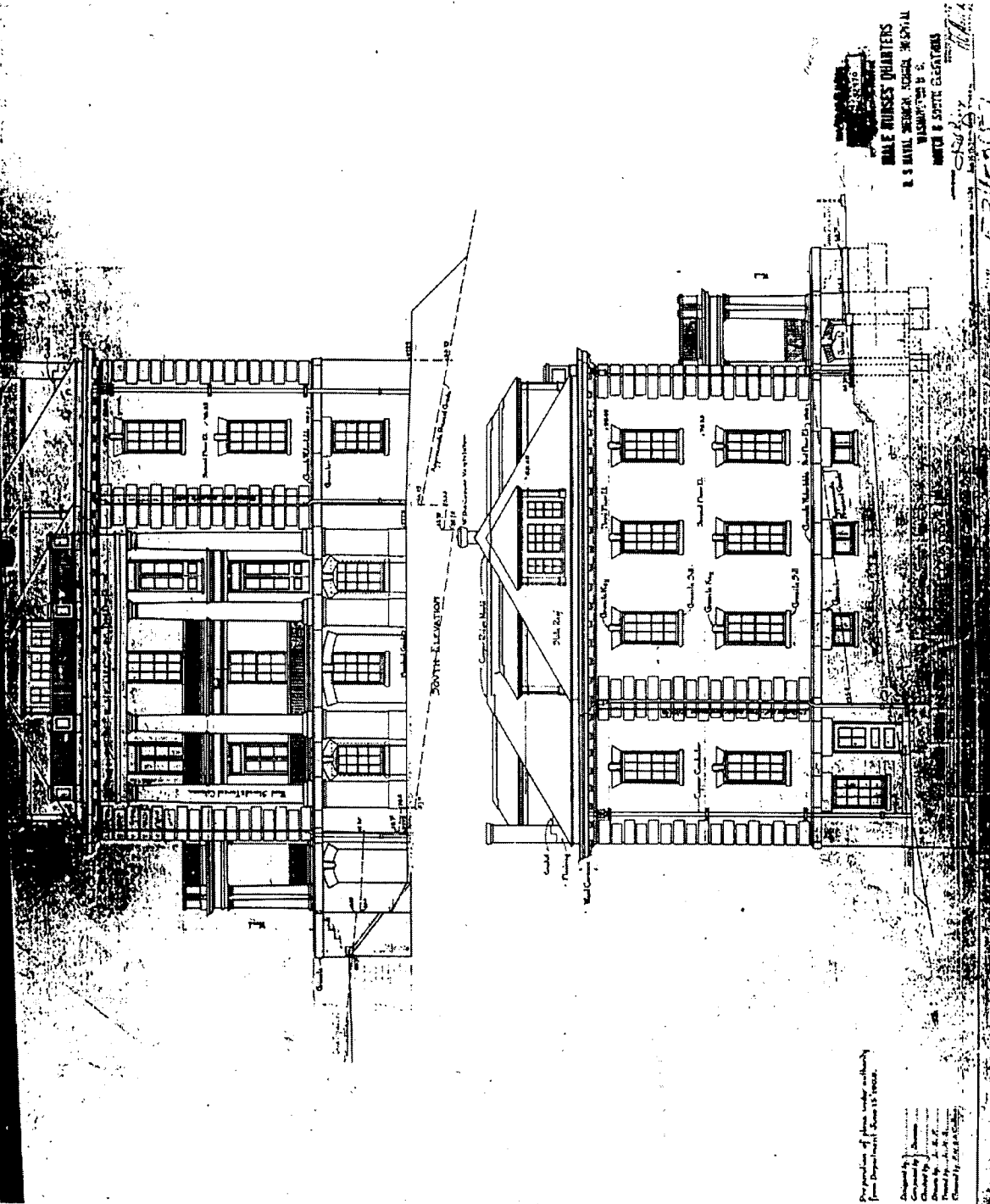
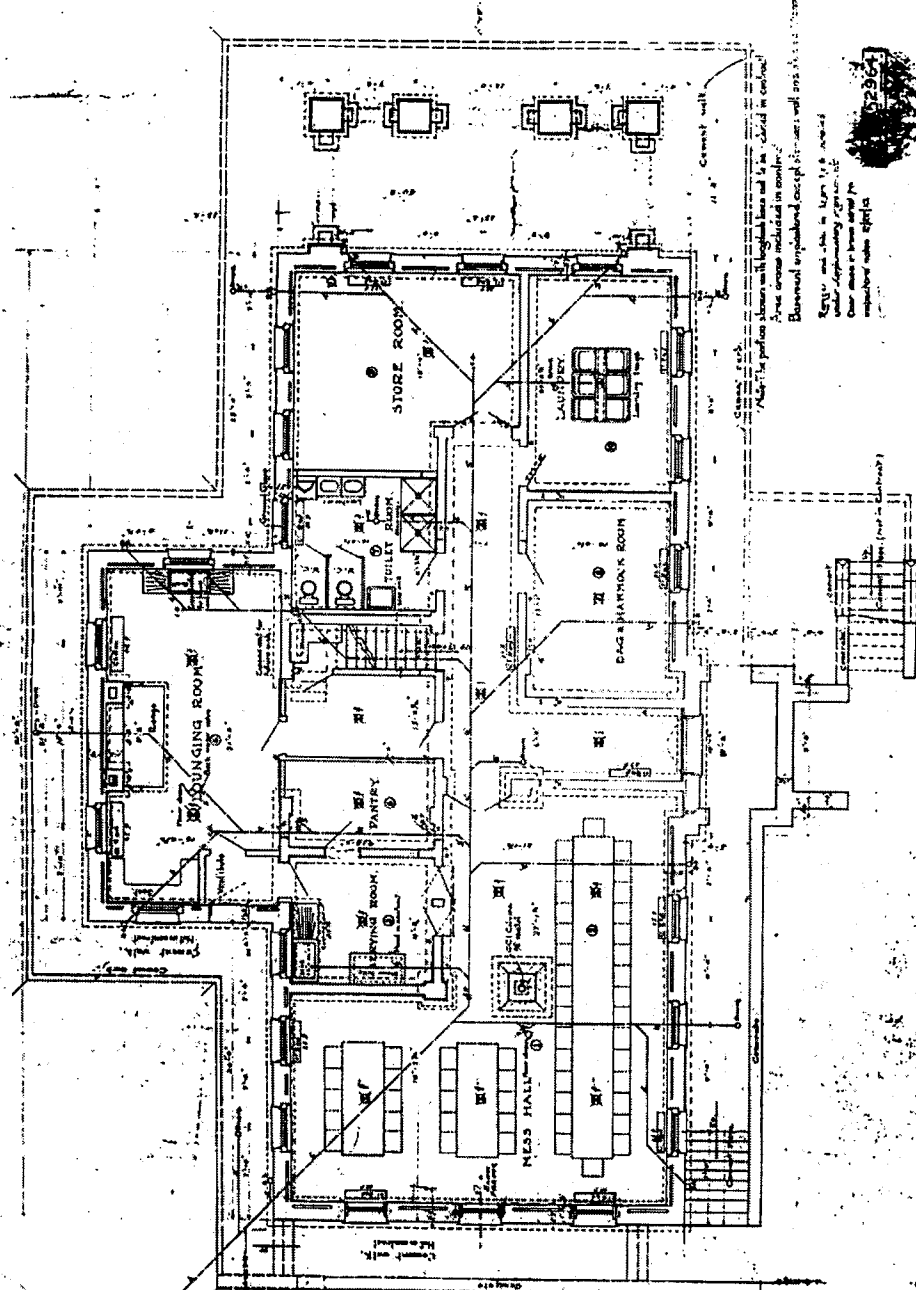


Figure III-56: Hospital Corp's Quarters (BLDG 7), North and South Elevations
Bureau of Yards and Docks, 1909



PLAN OF BASEMENT & FOUNDATIONS

MALE NURSES QUARTERS
 U. S. NAVY, MEDICAL SCHOOL, WASH. D. C.
 BASEMENT & FOUNDATION

Preparation of these working drawings
 from the particular plan 11-13-1908.

Designed by
 Prepared by
 Checked by
 Drawn by
 Engr. J. H. G. P. A.
 Engr. J. H. G. P. A.
 Engr. J. H. G. P. A.

Figure III-57; Hospital Corp's Quarters (BLDG 7), Basement and Foundation
 Bureau of Yards and Docks, 1909

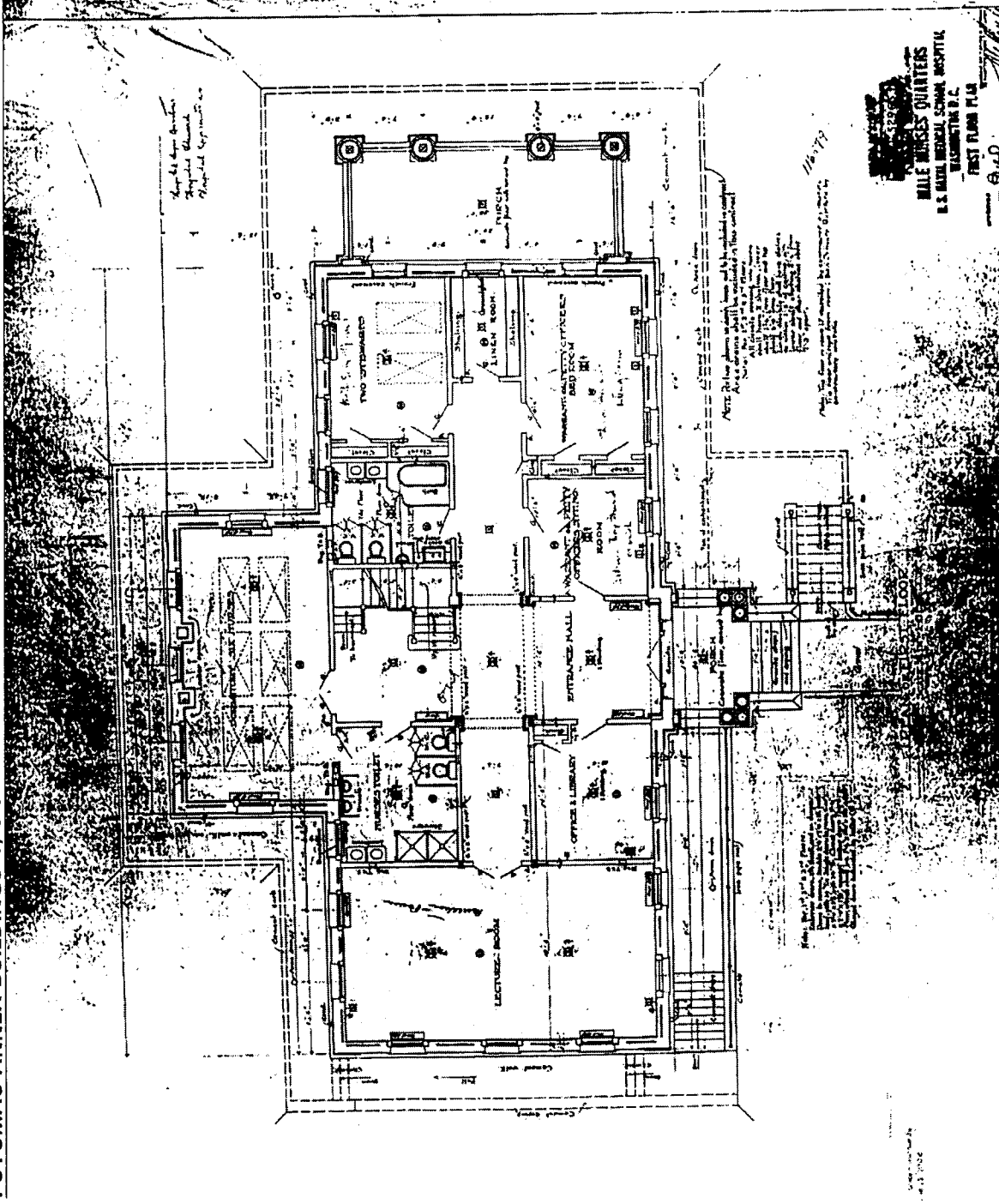


Figure III-58: Hospital Corp's Quarters (BLDG 7), First Floor Plan
Bureau of Yards and Docks, 1909

POTOMAC ANNEX BUILDINGS 1, 3-7

CHAPTER 3 DESCRIPTION OF THE BUILDINGS AS ORIGINALLY BUILT

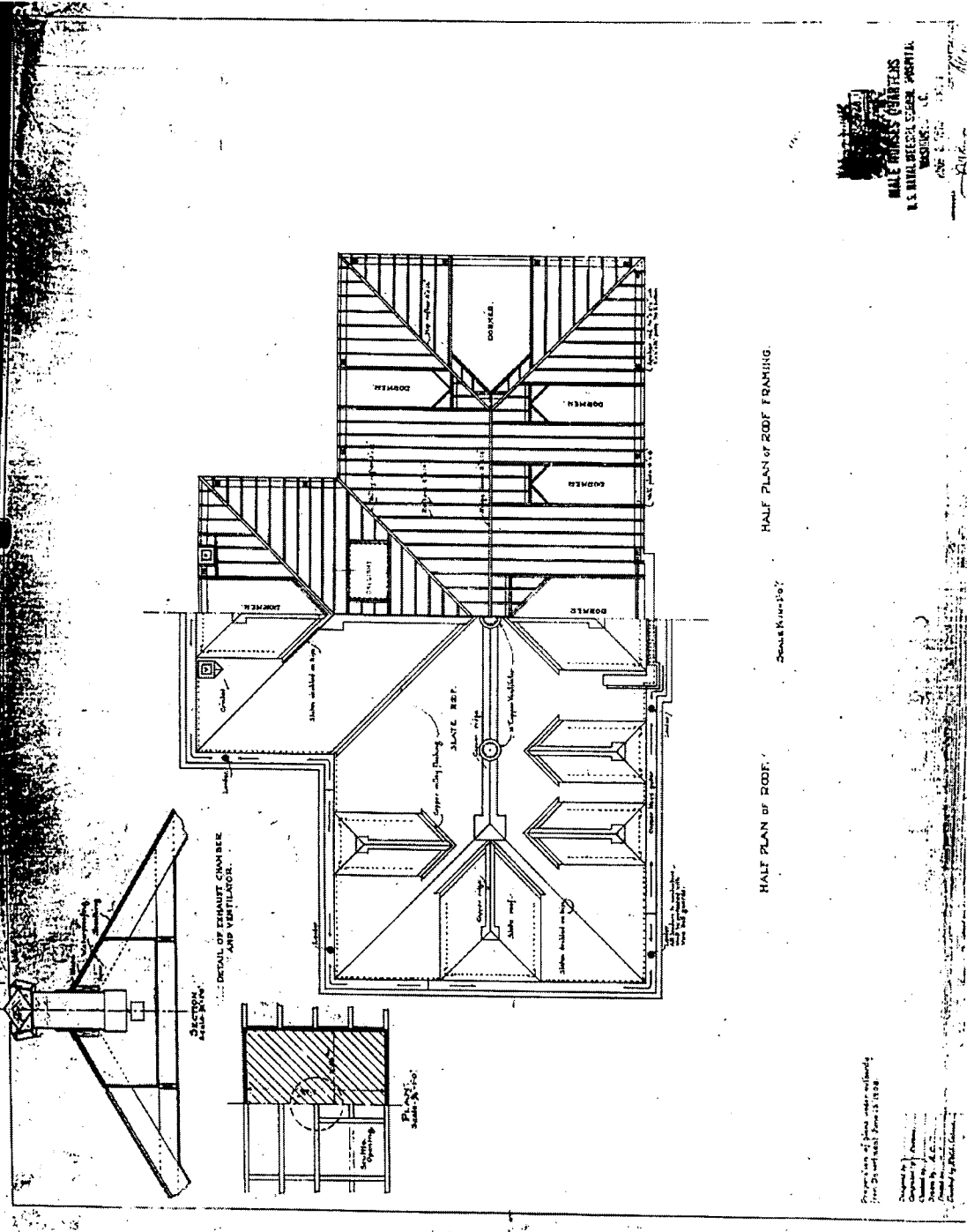


Figure III-60: Hospital Corp's Quarters (BLDG 7), Roof and Roof Framing Bureau of Yards and Docks, 1909

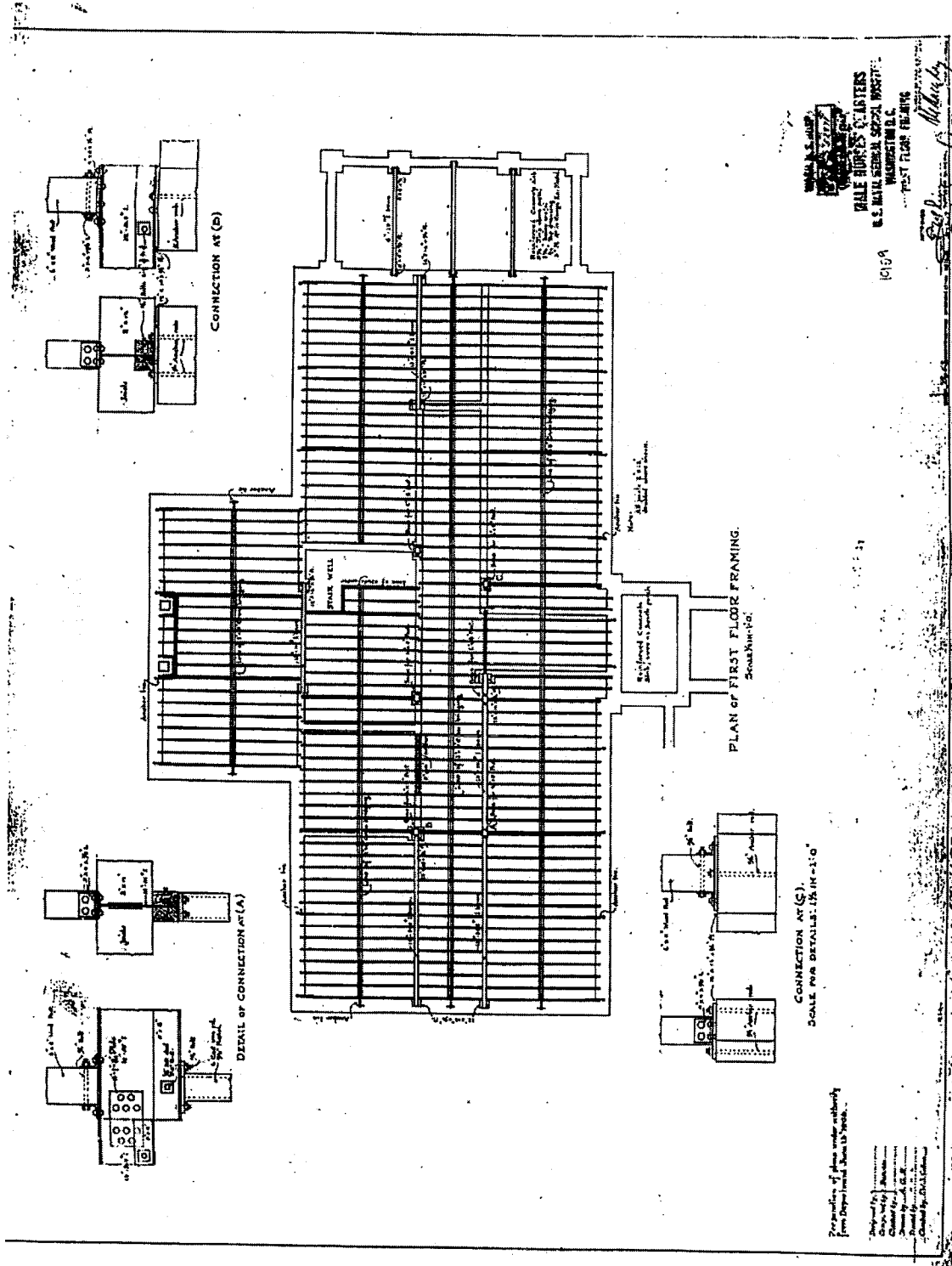
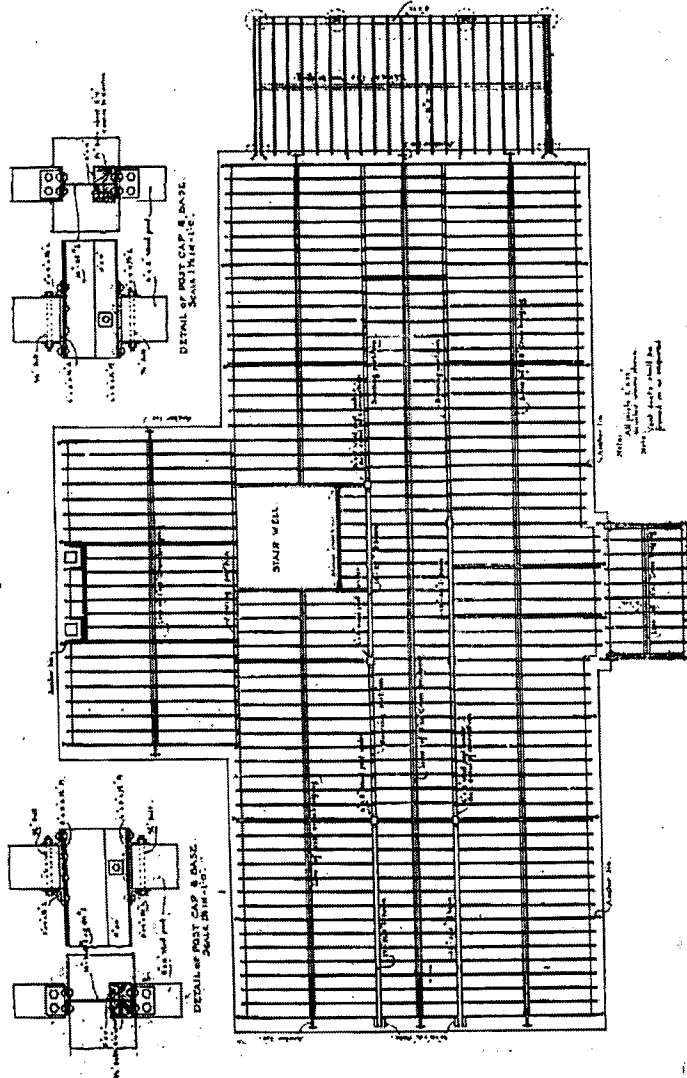


Figure III-61: Hospital Corp's Quarters (BLDG 7), 1st Floor Framing Plan
Bureau of Yards and Docks, 1909

POTOMAC ANNEX BUILDINGS 1, 3-7

CHAPTER 3 DESCRIPTION OF THE BUILDINGS AS ORIGINALLY BUILT



PLAN OF SECOND FLOOR FRAMING
Scale 1/8\"



 H. B. ROSS & CO. INC.
 ARCHITECTS
 1100 K STREET, N.W.
 WASHINGTON, D.C.

Prepared by: [Name]
 Checked by: [Name]
 Drawn by: [Name]
 Title: [Name]

Approved by: [Signature]
 Date: [Date]

131-00-57
 11

Figure III-62: Hospital Corp's Quarters (BLDG 7), 2nd Floor Framing Plan
 Bureau of Yards and Docks, 1909

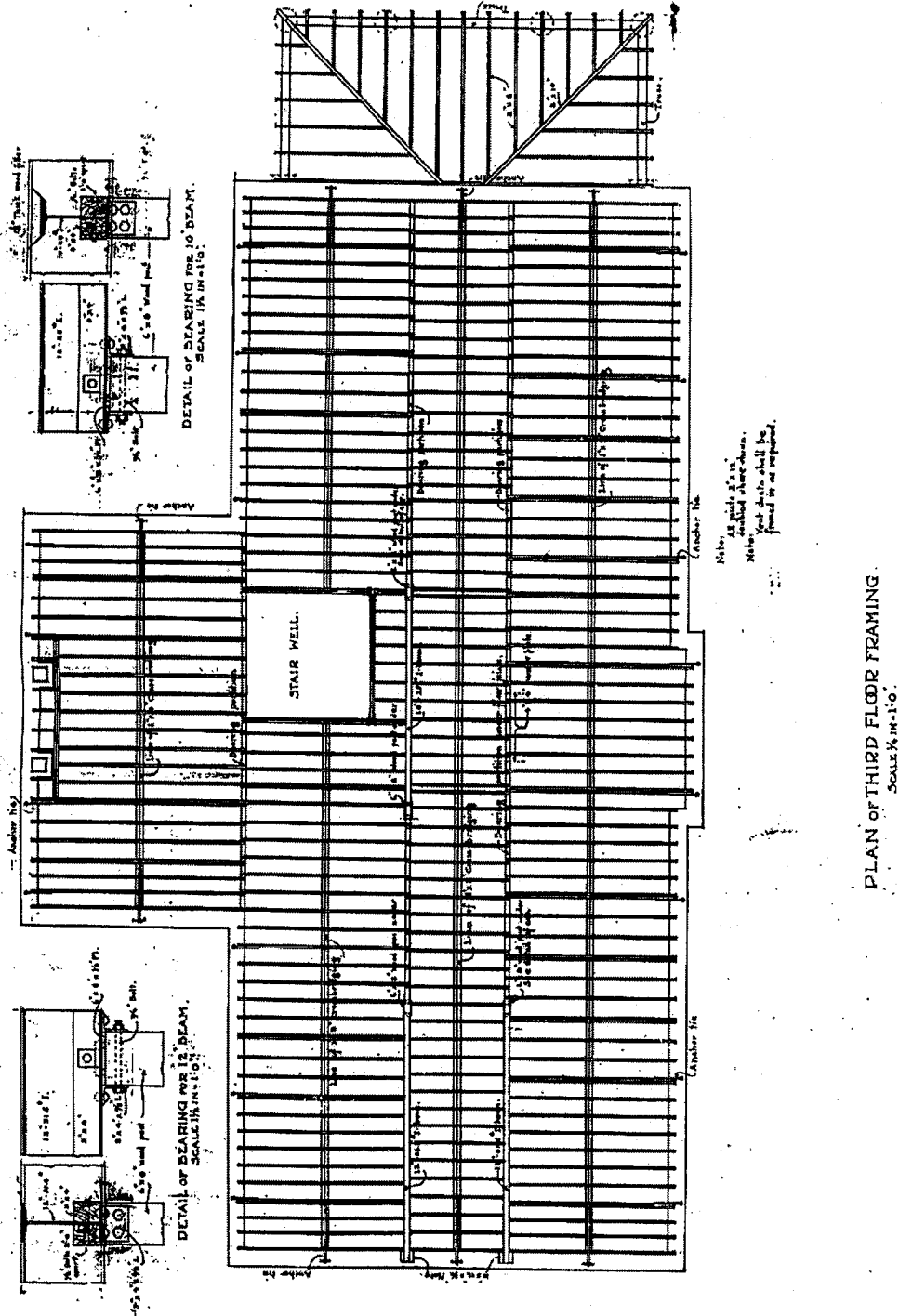


Figure III-63: Hospital Corp's Quarters (BLDG 7), 3rd Floor Framing Plan
Bureau of Yards and Docks, 1909

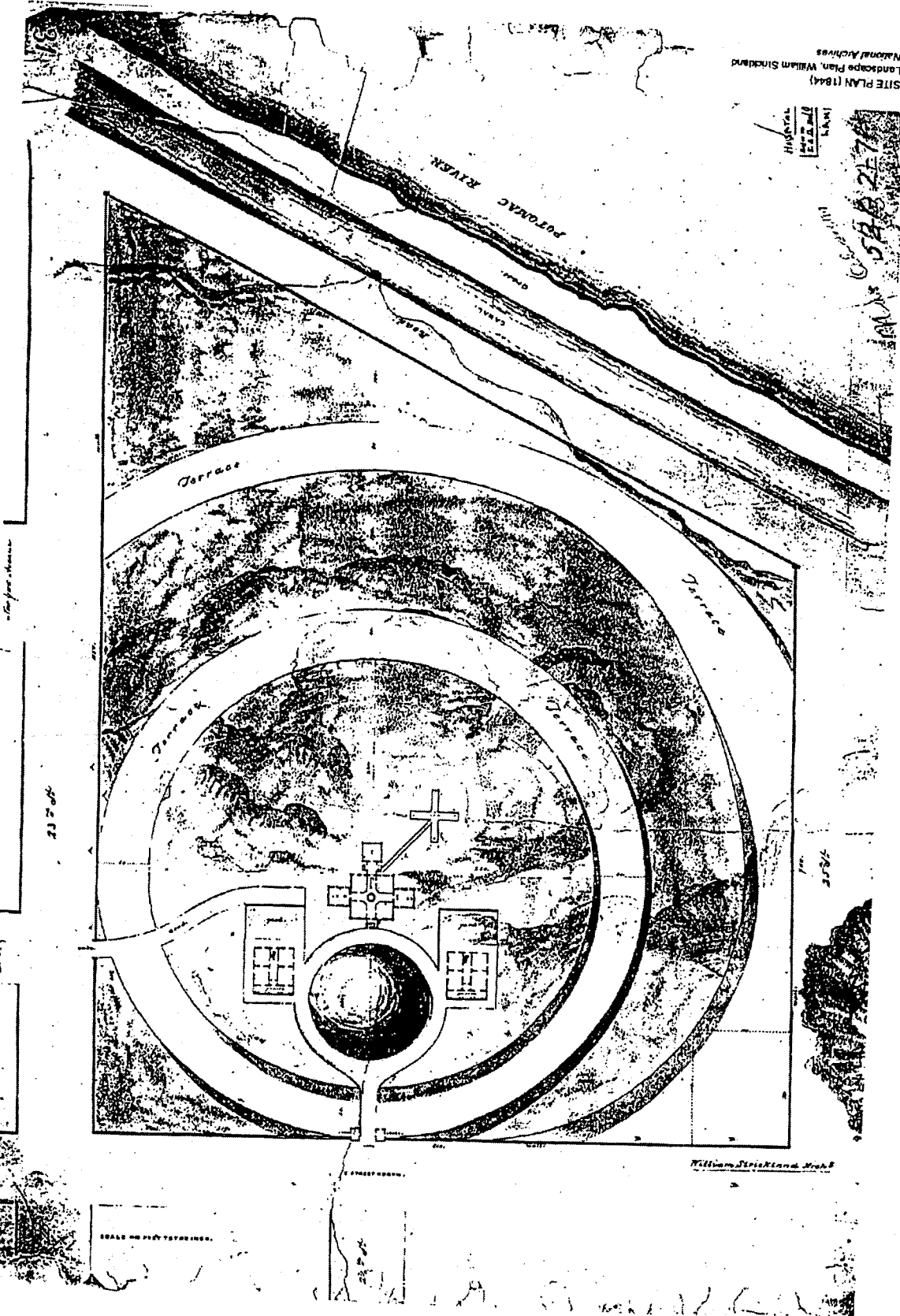


Figure III-65: Site Plan (1844), Landscape Plan
William Strickland, *National Archives*

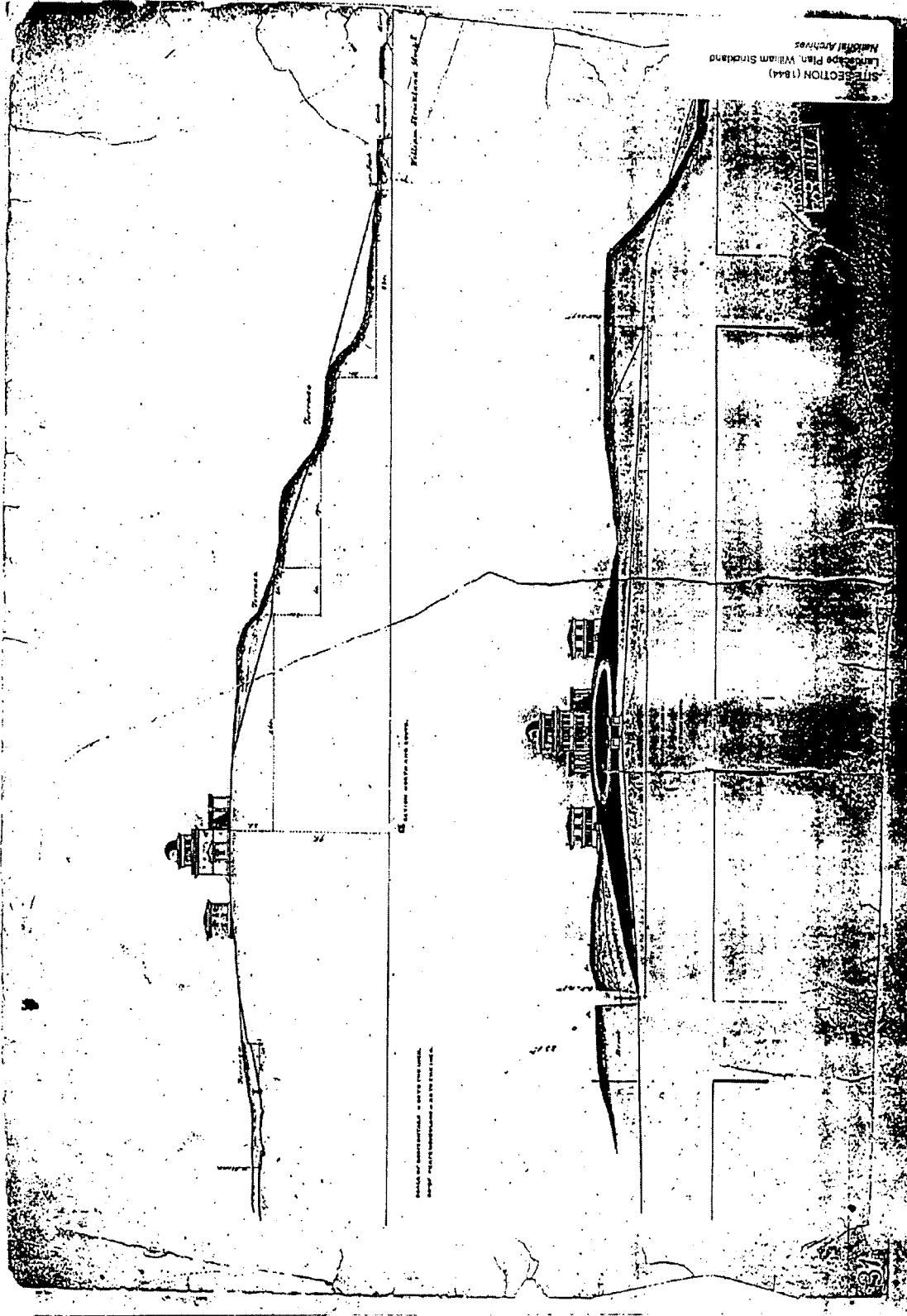


Figure III-66: Site Plan (1844), Landscape Plan, William Strickland National Archives

POTOMAC ANNEX BUILDINGS 1, 3-7

CHAPTER 3. DESCRIPTIONS OF THE BUILDINGS AS ORIGINALLY BUILT

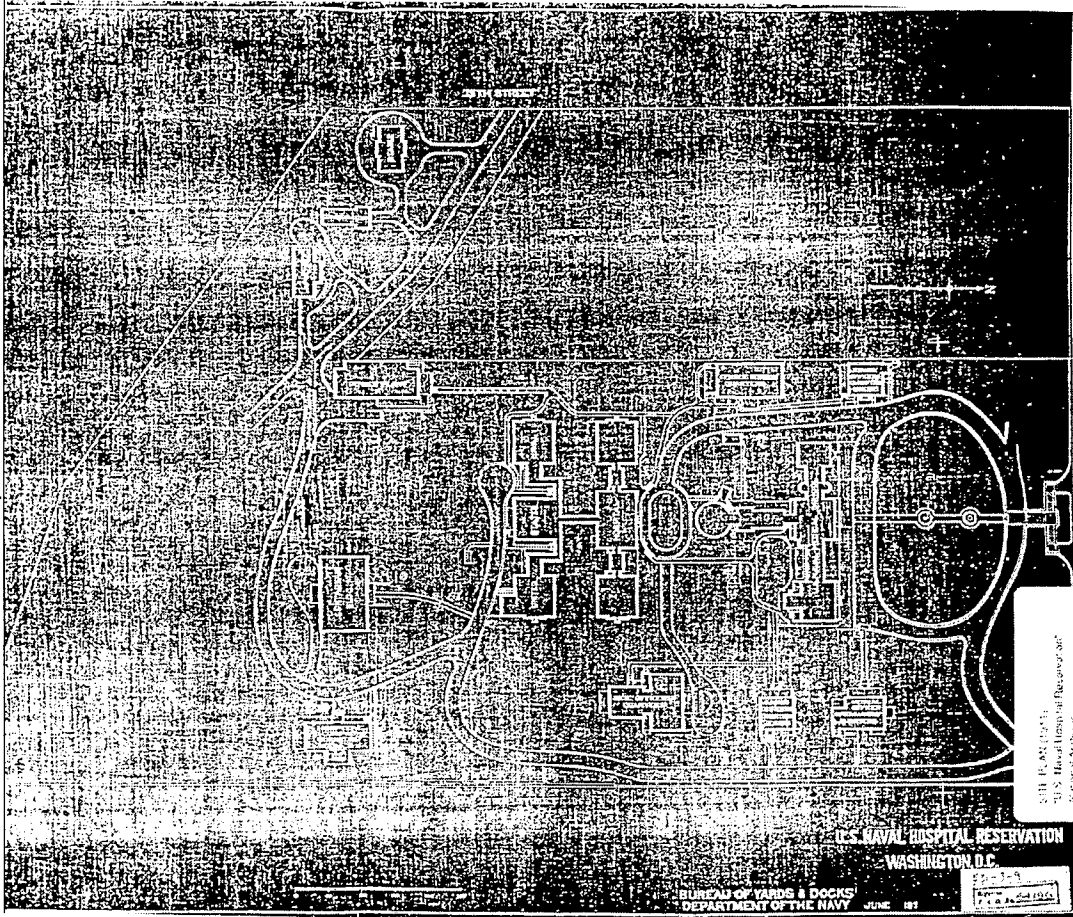


Figure III-68: Site Plan (1911), "U.S. Naval Hospital Reservation"
National Archives

POTOMAC ANNEX BUILDINGS 1, 3-7

CHAPTER 3. DESCRIPTIONS OF THE BUILDINGS AS ORIGINALLY BUILT

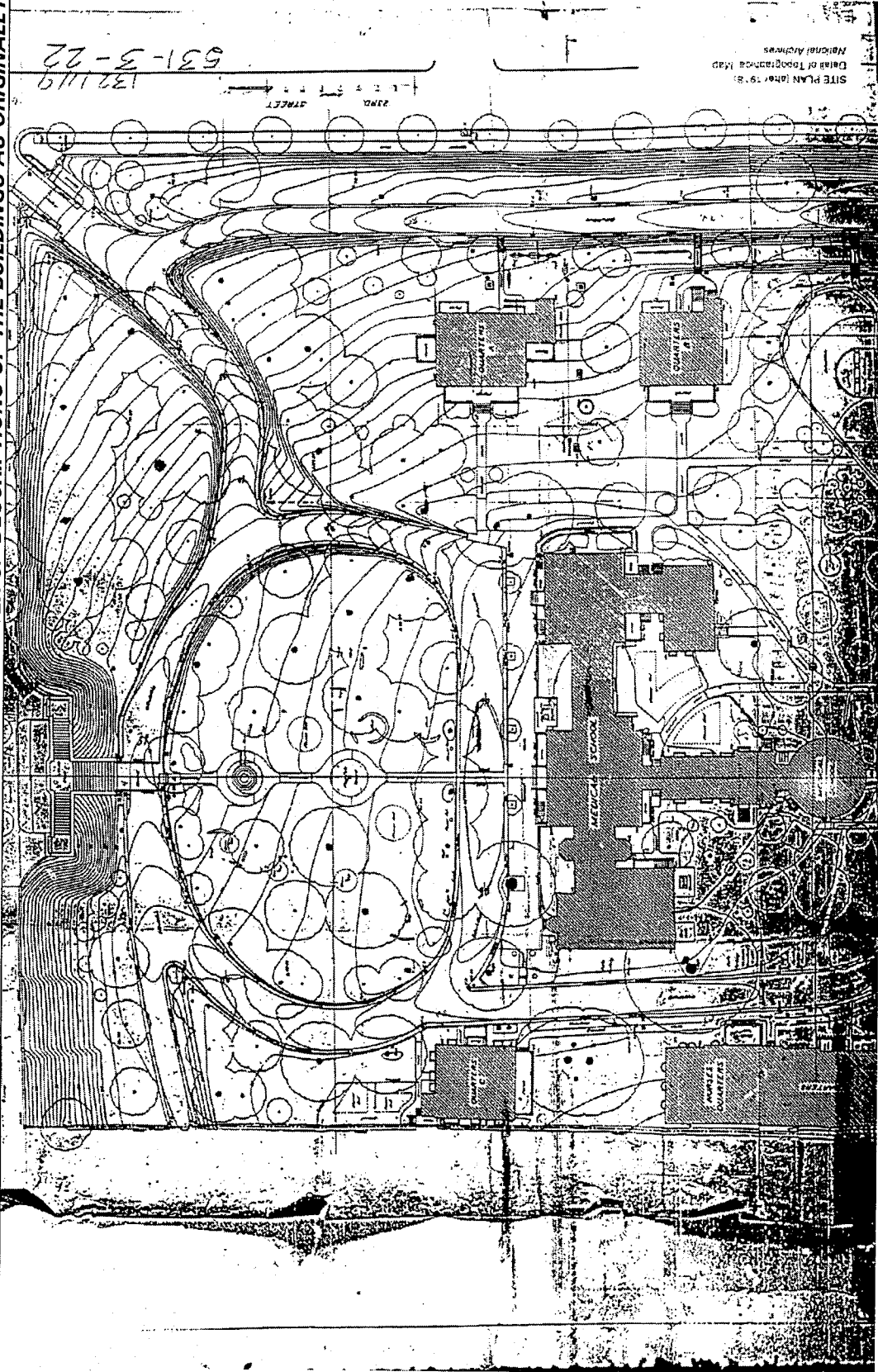


Figure III-69: Site Plan (after 1918), Detail of Topographical Map
National Archives

POTOMAC ANNEX BUILDINGS 1, 3-7

CHAPTER 3. DESCRIPTIONS OF THE BUILDINGS AS ORIGINALLY BUILT

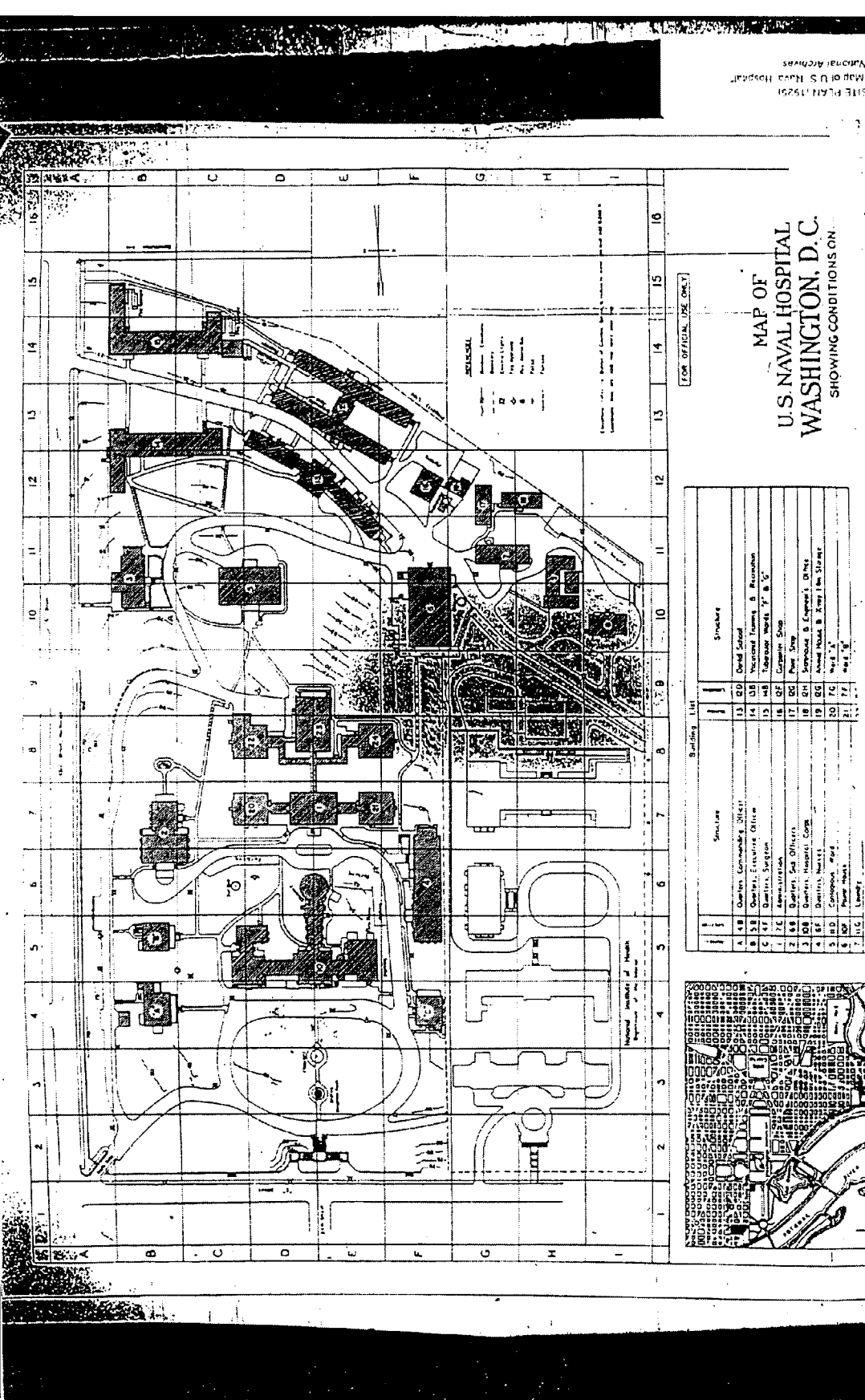


Figure III-70: Site Plan (1925), "Map of the U.S. Naval Hospital" National Archive

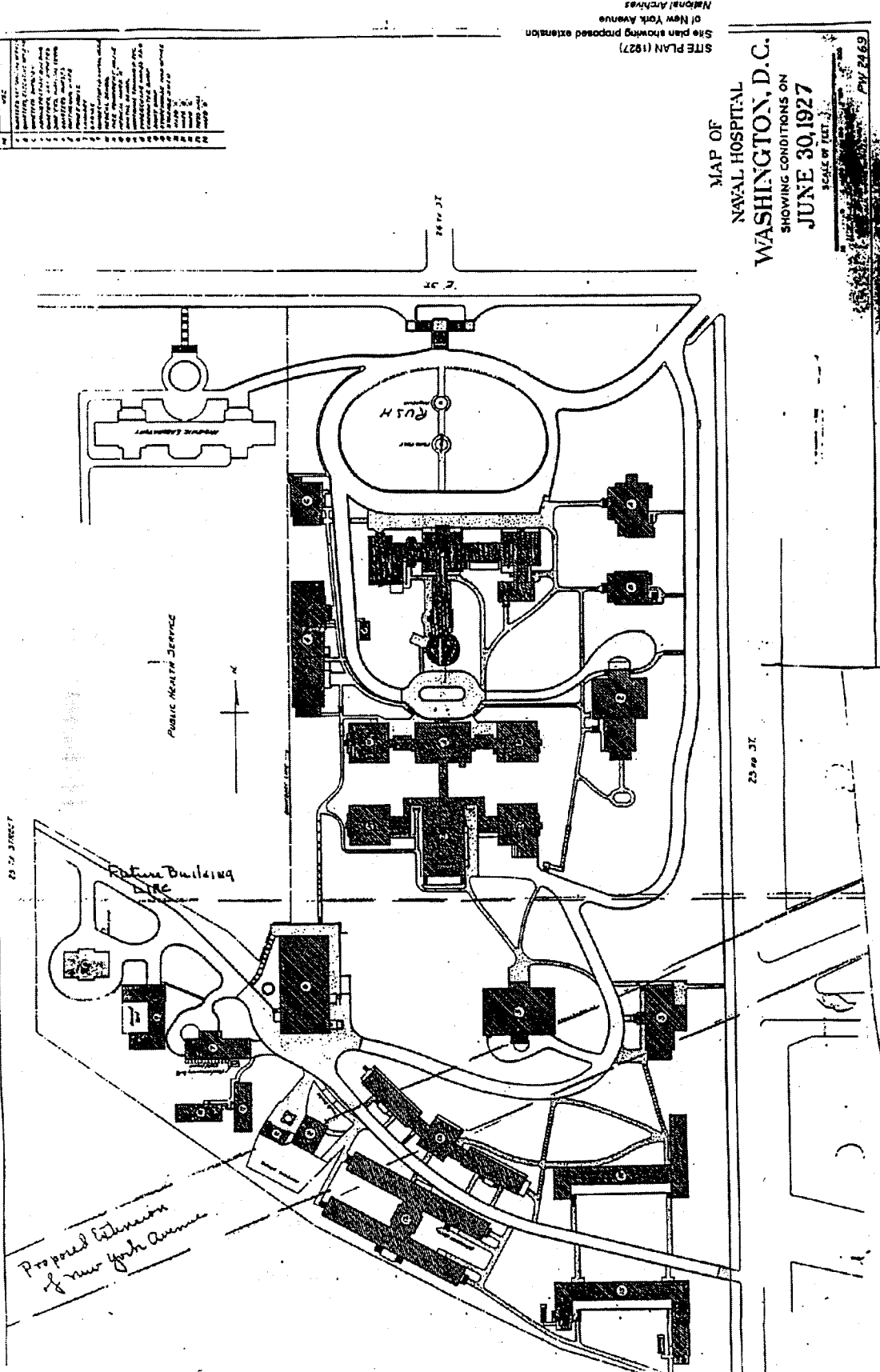


Figure III-71: Site Plan (1927), Site plan showing proposed extension of New York Avenue
National Archives

POTOMAC ANNEX BUILDINGS 1, 3-7

CHAPTER 3. DESCRIPTIONS OF THE BUILDINGS AS ORIGINALLY BUILT

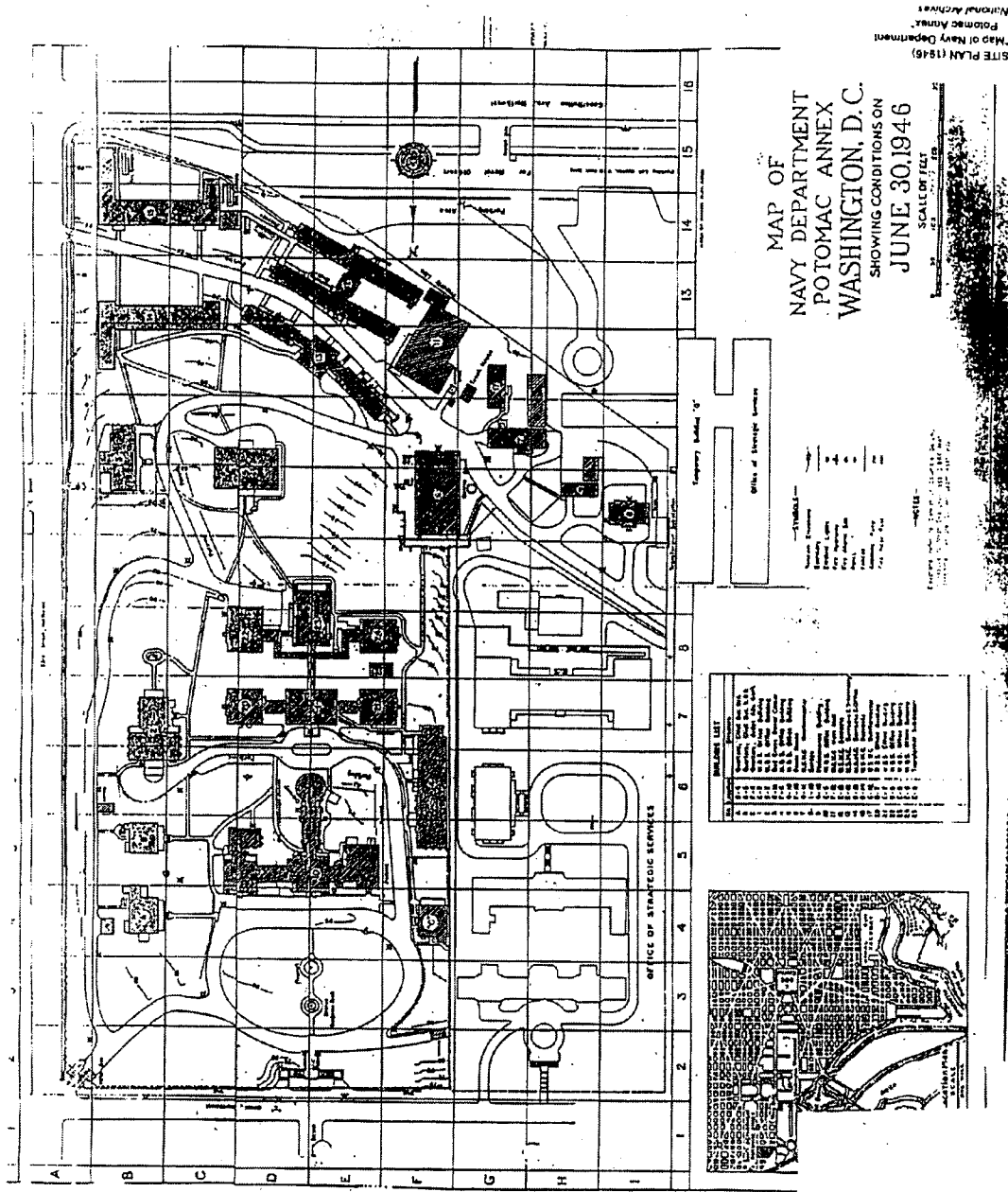


Figure III-72: Site Plan (1946), "Map of Navy Department Potomac Annex" National Archives

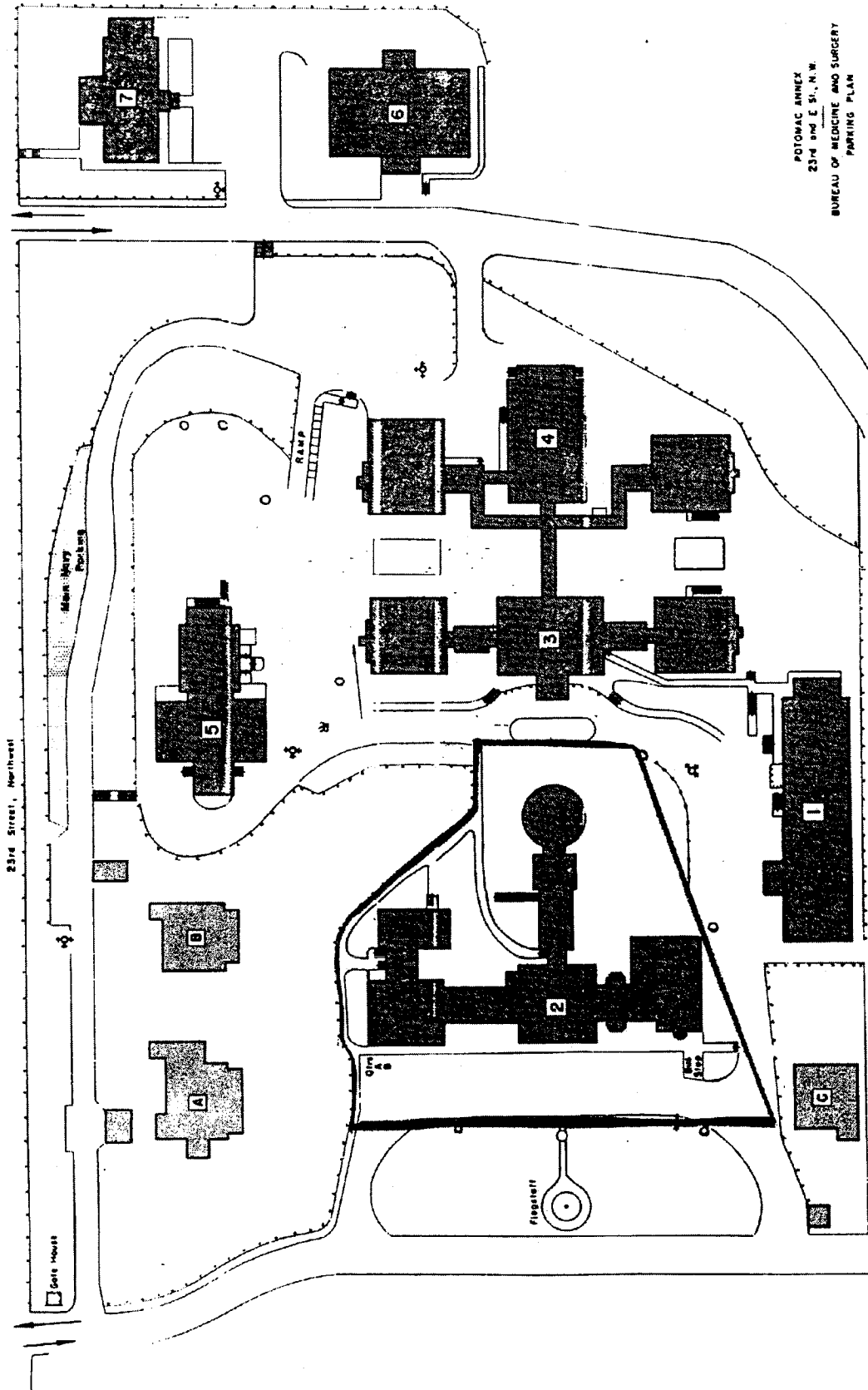


Figure III-73: Site Plan (1964)
Bureau of Medicine and Surgery

INTRODUCTION

The existing conditions survey was undertaken during Fall 1994, by Swanke, Hayden, Connell, Architects; Higgins & Quasebarth, historic preservation consultants; Hankins and Anderson, consulting engineers; Janet Foster, Acroterion (paint analysis); and George Wheeler (materials conservation). The buildings were visually inspected; no probes or tests were undertaken, except those done for the paint and materials analyses. Field notes and photographs of the existing conditions were taken and compared to the historic documentation to assess the integrity of the structure, spaces and features. Evaluation of the general conditions is made in this chapter, while specific conditions are outlined in the chapters dealing with materials conservation.

A note on the structural analysis: Original structural drawings were obtained from the microfilm collection of the National Archives, Cartographic Division, College Park, Maryland which proved useful in identifying existing structural systems and materials in various buildings. In some buildings however, original drawings are not available; in other buildings, the drawings themselves are not conclusive as several different floor framing schemes have been presented as alternates. Destructive inspections to remove finishes and verify the structural systems are not permitted by the government; therefore the drawings, together with observation in the few areas where the structure is exposed, are the only means available to identify the existing structural elements. A variety of structural systems was used throughout the complex. Wood, structural steel, and reinforced concrete floor framing systems are all present in the various buildings. Most roof construction is wood. However, Buildings 3 and 4, which are reinforced concrete structures, have concrete roof systems.

A note on the roof surveys: The discussions on roof conditions are based on visual inspection only. For more detailed analyses, please refer to the Water Leakage Study (RDC-24102) dated December 7, 1993.

The six hospital buildings range in date from 1904 through 1911. All were designed in the Georgian Revival style with classical details typical of the period. Individually, the buildings are quite conservative in their architectural expression; it is their grouping within the landscaped setting of the old Naval Observatory (Building 2) that imparts a unusual sense of cohesiveness and special quality. This visual unity, created by the unique combination of the site overlooking the Potomac River, the landscape, and the stylistic and physical relationship between the buildings, enhances the historic significance of the Potomac Annex.

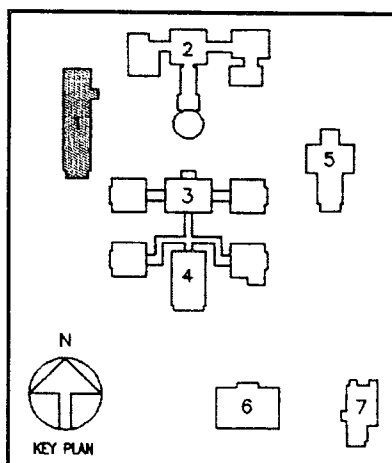
Buildings 3 and 4, the first to be constructed, set the standard for those to follow. They were designed by the renowned New York architect, Ernest Flagg. The others were built shortly thereafter; but, they were designed by staff architects in the Bureau of Yards and Docks. The buildings are constructed of light-colored brick with granite trim; they are two-and-one-half stories in height; they have hipped roofs with gables; and most are graced with classical porches or portes cocheres.

The exteriors are, for the most part, in good condition, and they retain a high degree of integrity. While the entries and sun porches on the buildings have been altered unsympathetically, the

buildings have not had significant irreversible additions made to them. Furthermore, they retain their original windows and, generally, the masonry has not been coated, painted or inappropriately cleaned. The interiors, however, have been heavily altered over time. Most of the interior changes have been undertaken to convert the buildings to office use. While, for the most part, the original floor plans are still distinguishable, the quality of most alterations does not in any way add to the significance of the buildings; rather, it tends to detract from the architectural character. The nature of the interior alterations includes adding and removing partitions; enclosing stair cases and corridors for fire-rating; installing acoustic tile ceilings; and replacing doors.

Because the floor plans are not complex, and the building materials are so uniform, the discussion of interior spaces and features is outlined by space type rather than on a room by room basis. This method avoids unnecessary repetition, while still calling out particular features or materials, which are unique. Material should be considered original unless otherwise noted.

Building 1: Female Nurses' Quarters (1908-1911, addition 1925-26)



Exterior Existing Conditions

Situated on the west side of the site, Building 1 was originally constructed as the Female Nurses' Quarters; it was used as a dormitory, and for dining and recreation. It currently functions as the office of the Surgeon General of the Navy and as other administrative offices. Like most of the hospital buildings, it is a rectangular brick building with a hipped roof, two-and-one-half stories set on a raised basement. The body of the building is constructed of yellow brick laid up in Flemish bond with corner quoins and granite keystones, window sills, and water table. An addition, which more than doubled the size of the building, was constructed on the south end in 1925-26. The addition echoes

the architectural detail and materials of the original, but without the sense of balance and symmetry.

The front elevation (Figure 1-1) is oriented to the east. The original section (on the right in the photograph) is seven bays wide. The body of the building is articulated by a slightly projecting center pavilion; brick quoins define its edges and the corners of the building. A classical balustraded portico supported by Tuscan columns (Figure 1-2) projects from the center. The portico protects the building's primary entrance. This entrance was originally recessed; the original doors have been removed and the entire entry has been enclosed by a glass and aluminum infill to create an interior vestibule. The entry is served by a flight of concrete steps with a concrete slab porch.

The addition (to the left in Figure 1-1) is eight window bays wide. These windows are six-over-six double-hung wood sash. The window openings are defined by flat arches composed of brick

voussoirs with granite (or cast stone in the addition) keystones and sills. Copper leaders and down spouts are attached to the masonry adjacent to the brick quoins.

The south elevation (Figure 1-4) is characterized by a three-story sun porch defined by two-story Tuscan columns in wood set onto a brick basement. This sun porch is part of the 1925-26 construction. While it is similar in design to sun porches on the other buildings, it differs in that the infill is integral to the original design, the intention being to use this as interior space. The north and west elevations are simpler in expression but they are defined by the same brick and stone detailing and fenestration pattern of the east facade.

The entire roof (Figures 1-1 and 1-7) is covered with grey slate and finished by a painted wood modillioned cornice with an integral copper-lined gutter. Eight dormers punctuate the roof on the east side, ten on the west with one on each of the north and south sides. Two brick chimneys pierce the roof on the west side of the 1926 addition.

The elevated floor framing for the original section of this building is wood supported by the exterior and interior bearing walls. There is an unusual truss system spanning the original open spaces on the first floor. The structure for the 1926 addition includes a reinforced concrete structural basement floor and wood and steel on the upper floors.

Roof

The hipped roof (Figures 1-1 and 1-7) is covered with slate tiles of varying colors. The slate on the original section of the building is a uniform dark grey; the slate on the addition is variegated shades of grey. In general, the roof appears to be in only fair condition, with apparent replacement of tiles in many places. There is also evidence of water penetration on the east side of the third floor ceiling. Roof and dormer ridges and edges are flashed with copper. The gutters and down spouts are also copper. The roof is fitted with several vents and antennae. Twenty dormer openings (Figure 1-7) are the characterizing roof elements. A large dormer centered over the original entry on the east is flanked by a smaller dormer on each side. The 1925-26 addition has five dormers on the east and west elevations. There is a single dormer on each of the north and south elevations. The dormers have wood trim and slate siding. The small dormer windows are wood six-over-six double hung sash. The large dormers include paired double hung six-over-six windows flanked by a double hung four-over-four window on either side. All the dormers show a great deal of peeling paint, and many of them are fitted with window A/C units. Two brick chimneys are located at the rear of the building. The sun porch roof is surfaced with flat roll roofing. The roof of the entry portico is flat roll roofing.

Cornice

The roof is finished with a painted wood modillioned cornice (Figures 1-1, 1-4, 1-5, 1-6, 1-7, 1-13). The cornice is generally in good condition; however, minor moisture staining and peeling paint in a few locations indicate water leakage from gutters and flashing. This is particularly evident at the set-back corner on the north side of the east facade, where some of the modillions

are separating from the cornice. The cornice is painted white, which is consistent with the historic trim noted on the building.

Masonry

Brick

The body of the original section of the building is constructed of variegated yellow brick laid up in Flemish bond (Figure 1-8). The bricks measure 8" x 3-7/8" x 2-3/8". The brickwork features quoins at the building corners and edges and voussoirs over the windows on the first and second floors. Mortar joints have a rodged profile. Horizontal joints are approximately 1/2" wide; vertical joints are approximately 1/4" (a little wider on the rear of the addition). The brick color on the rear of the addition (Figure 1-8) is more uniform than that on the front; it appears less variegated and flat in comparison to the original brickwork.

The brick is generally in excellent condition with limited areas of settlement cracking (and a few cracked bricks). Mortar loss is noted in only a few areas. Some of these areas have been repaired inappropriately and ineffectively with hard mortar. In addition, the joint between the bricks in the original section and the 1925-26 addition on the rear is open (Figure 1-10). This occurs at the basement level only, no joint is evident above the belt course, or on the front of the building. Electrical conduit has been attached to the brick in several locations.

Granite

Granite elements (Figure 1-8) include the water table belt course and most arch keystones and window sills. The granite is generally in good condition, but it is soiled and exhibits some staining due to condensate from window A/C units. The mortar between granite units in the water table belt course has occasional sections where mortar is missing or has lost its bond with the adjacent brick. Biological growth is noted on the step on the north entry.

Cast Stone

Cast stone elements (Figure 1-9) include the water table belt course, keystones and window sills on the west elevation of the 1925-26 addition. The cast stone has a light colored matrix with a very dark aggregate approximating the color and texture of the original granite. These elements are in good condition.

Concrete

The foundations on the west and south elevations (Figures 1-4, 1-5) are exposed poured concrete, the surface of which is in fair to good condition. Electric cables are attached and run through the wall on the south and west sides.

Entry Portico

The central entrance bay on the east side of the original building is dominated by a one-story balustraded portico with Tuscan columns (Figures 1-1, 1-2). The original design called for a two-story portico; however, as shown in historic photographs, the second story was never constructed. A concrete slab porch and stairs serve the entry. The original plans call for cement, so it is possible that the existing material is original. The concrete has been painted grey and appears to have been extensively patched and painted.

Four wood Tuscan columns are set on a granite base. The ceiling is painted wood boards with tongue and groove joints. The recessed entry has been enclosed by a glass and aluminum infill to create an interior vestibule. This infill visually detracts from the original composition. The portico was repaired and the balustrade rebuilt in the summer of 1994. However, there is a step crack on either side of the portico stair indicating settlement.

Sun Porch

The three-story sun porch on the south (Figures 1-4, 1-13) is defined by two-story Tuscan columns in wood set onto a brick basement. This sun porch is part of the 1925-26 construction. While it is similar in design to sun porches on the other buildings on the site, it differs in that the infill is integral to the original design, the intention being to use this as interior space. The sun porch appears to be in good condition. Painted elements on the sun porch (including the windows) are white, which is consistent with its 1926 appearance.

Secondary Entries

A separate entry for the Surgeon General's office, probably not original, (Figure 1-3) exists in the third bay from the south on the east facade. It is served by a brick and concrete stoop with iron pipe rails and simple metal balustrade. A metal awning covers the door opening. This entry is in well-maintained condition. The window to the north of this entry appears to have been a door originally; the lintel is wider and the brick infill is recessed slightly from the plane of the facade, indicating that the original entry for the addition was located here. This is further supported by interior evidence; the opening lines up with the interior stair and a wide opening on the middle partition wall (Figure 1-22).

Another entry on the north end (Figure 1-6), is a later alteration of a window opening. This entry is served by a concrete stoop set on brick piers with a metal stair and railing. The original drawings and historic photographs show that the opening was originally a window. While the alteration of the window opening was done sensitively, the stoop and stairs are rather crudely built, and not in keeping with the quality of the building. Ghosts of a different stoop and railing configuration exist in the brick.

A third entry, which appears to be original to the addition, is located at basement level of the sun porch. A covered walkway (Figure 1-13) connects this entry to Building 3. There are two additional entries to the basement in the areaway of the addition on the east elevation.

Doors

The original door, fanlight and sidelights have been removed from the main entry, and the arch has been crudely infilled. The existing door (Figure 1-2) is an inappropriate double leaf door in aluminum and glass.

The doors to the secondary entries are probably original to their openings, which post-date 1929 (See Figure 8 in Chapter III). These include the door to the Surgeon General's office (Figures 1-3 and 1-18) and the north entry door (Figure 1--6); they are wood with a single square panel beneath six clear glass panes. Both are fitted with wood screen doors.

All the exterior doors appear to be in good to fair condition, with some signs of impact damage, scuffing and paint failure.

Windows

Most of the windows appear to be the original six-over-six double hung sash. The wood frames are recessed from the plane of the facade and the muntins are thick and rounded in profile. (This detail is noted on the interior.) The top sash of the windows in the original section have molded brackets on the bottom of the meeting rail; those in the addition do not. These windows are painted white, although paint analysis shows that they were originally dark green.

The windows in the sun porch are inward-swinging casements. They, too, are painted white. As noted earlier, the windows in the sun porch were originally painted white.

Generally, the windows appear to be sound on initial inspection; although, most are painted shut, and there is severe paint loss noted throughout the building. A number of window openings have A/C units; the bottom sash are raised to accommodate the units, which are then flanked by plastic side panels. One of the casement windows in the sun porch at the basement level has been cut at the bottom to accommodate the A/C unit.

Fire Escapes

There are no fire escapes on this building.

Lighting

There is one light fixture located at the entry under the stoop (Figure 1-11), which may be original. Stylistically, it appears to be an early feature; however, no other similar light fixtures were found elsewhere on the site. The installation is a little awkward, so it is possible that it was salvaged from another location and installed after construction. The other, non-original, fixtures include flood lights attached at cornice level with conduits running across the face of the building, and brass light fixtures in a vaguely classical style mounted to the masonry or

suspended from the porch ceiling. All light fixtures could be replaced by fixtures more compatible with the design of the building.

Foundation and Areaways

The foundation walls on the original structure are clad in brick; they are poured concrete on the 1925-26 addition. The foundation walls are above grade on the north, south and west sides. Window wells serve the basement windows on the east and north sides of the original structure. The basement level on the east side of the 1925-26 addition is served by a concrete areaway; access is gained at grade on the south end and by means of concrete steps on the north. The areaway retaining walls are bowing and several cracks are evident (Figure 1-12). Simple pipe rails surmount the retaining walls; they appear to be in good condition. Mechanical equipment is situated on concrete pads on the west side of the sun porch; conduit runs across the face of the foundation wall and enters the building at the same point.

Site and Landscape

Landscaping around this building is minimal. The north, east and south sides are surrounded by parking lot; the asphalt runs directly to the base of the building except on the south end where there exists a thin border of lawn and plantings (Figures 1-3, 1-13). There is a 5' wood fence separating the site of Building 1 from the garden of the residence to the north. On the southeast corner, a covered walkway connects Building 1 to Building 3. The walkway paving is concrete, and the wood structure is covered by a simple pitched roof covered with asphalt shingles. The west face of the building is approximately four feet from a concrete retaining wall surmounted by an iron picket fence (Figure 1-5). The site drops dramatically behind the retaining wall, which also marks the property line. The retaining wall has extensive cracking.

Building 1 - Interior Existing Conditions

Please note that the survey for this building was undertaken in the Summer of 1994. On a return visit in the Autumn of 1995, extensive work was observed, which entailed removal of partition walls and renumbering of rooms. The following survey reflects the conditions found in 1994, and utilizes room numbers that were in place at that time.

Floor plans

The floor plan alterations noted in this building are relatively minor, indicating the ease with which a dormitory building can be adapted to office use. The spaces are arranged along a central, double-loaded corridor. The main stair is located at the center of the original 1908 section of the building; its structure is probably original, but it has been heavily altered. A secondary stair is located at the center of the 1926 addition.

The principal and largest rooms in the 1908 section included a dining room, a kitchen, and undesignated spaces in the basement; and a living room was noted on the first floor. In 1926, the living room, dining room and kitchen were relocated to the addition; then the original spaces were subdivided for secondary uses. Dormitory rooms for the nurses, and bathrooms, linen closets, and other ancillary spaces were mostly located on the second and third floors.

Condition/Integrity: The basement floor plan, as it exists today, retains much of its integrity; the original finishes throughout the basement, however, are highly compromised. The double-loaded corridor that was evident in the original construction, and in the 1926 addition, still exists. The greatest departure is the subdivision of the 1926 dining room on the south side of the building into three separate rooms (now 1018, 1019, 1017). The original kitchen space was divided into rooms 1009 and 1008; this was probably done in 1926 when the kitchen was relocated. Later, the 1926 kitchen was divided into Rooms 1015, 1013, 1014, and 1012 with a corridor running through the center.

The first floor plan, too, retains much of its appearance from the 1926 alteration. At that time the living room was moved into the new addition (now used as the Surgeon General's office--Rooms 1119, 1120, 1121) and the larger spaces and offices originally designed for the building were reduced in size to accommodate additional dormitory rooms. The major subsequent alteration to the first floor plan is the reconfiguration of the secondary stair hall in the 1926 addition. It originally crossed the center corridor in an east-west direction and was entered from the porch through a small vestibule. As noted in the discussion of the exterior, the entry configuration has been altered. Probably associated with that change, the stair hall was incorporated into the center corridor, and the small vestibule was converted for office use.

Most of the doors, door and window frames and partition walls are original in the 1926 addition. The finishes have been highly compromised in the original section by the installation of thin veneer wood paneling and changes to the original stair. In addition, a fireplace, originally located in Room 1106 is no longer extant. With the exception of minor partition alterations, the floor plans of the second and third floors are very similar to the original.

Offices and other spaces:

Basement (Rooms 1001, 1002, 1003, 1004, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1014, 1015, 1016, 1019A, 1019B)

Walls throughout the basement are typically painted plaster or painted brick. Plaster and brick walls are original; other materials, as noted below generally indicate later alterations. Interior partitions are mostly plaster or gypsum board; although, concrete block was used to separate 1013-1015 from the corridor. The plaster walls in Room 1016 are partially covered with painted, perforated fiberboard.

There are several baseboard types noted: Rooms 1001, 1002, 1003, 1004 and 1011 have a 3"-4" wood base; Rooms 1007 and 1009 have a 4" vinyl base. There are also differences within the rooms themselves; sometimes there will exist both wood and concrete bases depending on the

construction of the wall itself. Rooms 1012, 1014, 1016, 1018 and 1019B, which were originally part of the kitchen, pantry and dining room, have a painted 4" x 6" bullnose quarry tile base. The 1925 drawings identify tile floor and base in the pantry, so it is possible that these are remnants of the original finish treatment. Typically, the tile base is along the exterior wall and original partitions; other base materials in these rooms, usually wood, identify later partitions. Flat wood window frames are typical throughout, although some of the windows, particularly on the west side have been blocked in with gypsum board. The floors are concrete although few are exposed; they are mostly covered by blue wall-to-wall carpeting or vinyl tile. Red quarry tile (6" x 6") flooring exists in Room 1014 and in the stair hall at the south end (this appears to be original). Most ceilings are painted plaster, although in Rooms 1001, 1002, 1003, and 1004, a 1' x 1' acoustic tile has been installed, and a 2' x 4' suspended acoustic tile ceiling has been installed in Rooms 1007, 1009, 1013 and 1015.

First floor (Rooms 1100, 1101, 1102, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1116, 1118, 1118A)

The spaces occupied by Rooms 1100, 1101, 1102, 1004, 1105, 1106, 1107 and 1108 are part of the original 1908 construction. As noted above, the original living and dining rooms were divided into smaller spaces to accommodate dormitory rooms in 1926. It appears that a few of the partitions were subsequently removed. Rooms 1106 and 1108, and Rooms 1105 and 1107 occupy these spaces currently. The other rooms are part of the 1926 addition. Room 1118 was created from the stair hall on the south end, and the wide door frame, which lines up with the original exterior entry and the stair is still visible in the partition (Figure 1- 22). Room 1111 was created from part of the original toilet

Walls are typically painted plaster with a 7" wood base board throughout. Vinyl wall covering, which has been overpainted was installed on the south wall of Room 1112. A painted gypsum board wall with a 7" vinyl base divides Rooms 1111 and 1113. The ceilings typically are 2' x 4' suspended acoustic tile, although some closets retain their full-height painted plaster ceilings. The floors are wood throughout, but they are covered with carpeting. Room 1113 has a stained wood parquet flooring. The window and door frames are painted wood; a flat panel with raised edges, square in profile.

Surgeon General's Office (Rooms 1119, 1120, 1121)

In configuration and finish, the Surgeon General's Office (Figures 1-18, 1-19) is most reminiscent of the 1926 condition. In conjunction with the corridor spaces, this is the most important historic space remaining intact in Building 1. The space was originally designed as the nurses' living room. It occupies the entire southern end of the first floor and opens onto the glazed sun porch. It is decorated with a dropped-beam ceiling visually supported by pilasters.

A fireplace is located at the west end of the room. It is characterized by a classically-inspired mantel shelf supported by fluted pilasters, and a brick fire box surround. The paneled over-mantel is covered by a painting; and the originally intended sconces are not extant. The flanking closets (one is a toilet with shower) with flush doors and unarticulated door frames are recent

additions. The walls are painted plaster with a 10" painted wood base board. The window frames and door frames are similar to those in other parts of the building. The floor is stained oak planks. The north window in the east wall was converted to a door.

Paint analysis indicates that the original finishes for this room included a light brown color for the walls with white woodwork and ceiling.

Second floor (Rooms 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1219, 1220, 1221, 1223).

Third floor (Rooms 1301, 1302, 1303, 1304, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1318)

The office spaces on these two floors largely conform to the original floor plan, with the exception of the removal or addition of a few partition walls. This is particularly noted in Room 1318, which was created from several smaller rooms. The rooms are extremely simple in architectural expression, and have been altered little over time.

On both floors, the partition walls are typically painted plaster with a 7" painted wood base, all of which appear to be original. There are also picture molding in Rooms 1301, 1302, 1303, 1304, 1306-1308, 1307, 1309, 1310 and 1311. Painted fiberboard panels with wood battens were nailed to the plaster wall in room 1318. A partial height partition separates Rooms 1309 and 1311.

Ceilings are typically painted plaster. 1' x 1' acoustic tile was installed in Rooms 1212, 1214, 1216 and 1318 (Figure 1-25); suspended 2' x 4' acoustic tile was installed in Rooms 1200, 1201, 1202, 1203, 1223. The suspended ceilings interfere with the tops of the window frames, and have a visually detract from the character of the rooms.

The floors are wood but all are covered with blue wall-to-wall carpeting or vinyl tile; the wood is exposed in some closets. Window and door frames are simple painted wood with raised edges. There are many different door types, ranging from original five-panel wood doors to hollow core metal doors.

Sun Porches

Like the other buildings on the site, Building 1 was originally designed with a southern sun porch. In 1926, the original sun porch was demolished for the construction of the new addition. The new addition also included a sun porch, however, it was designed to be glazed and the spaces utilized as interior spaces.

Rooms 1020 and 1021 are basement spaces under the sun porch. They are finished similarly to other rooms on the basement level. There is exterior access to Room 1020 through a double-leaf door on the east.

Room 1122 (Figure 1-20), adjacent to the Surgeon General's office is now used as a conference room. The spatial configuration, the interior surface of the Tuscan columns and the casement windows are the remaining visible historic fabric in this space. Non-original thin wood veneer paneling covers most of the walls; the floor is covered with carpet; and the ceiling is covered by 1' x 1' fiberboard tile. Access is gained from the Surgeon General's office through three doors. The existing doors appear to be the original glazed French doors, which have been modified by the lamination of flush wood panels.

Room 1222 is used as a conference room. The north wall is painted exposed brick; the others are clad with painted tongue-and-groove boards. The floor is covered with carpeting. The ceiling is 2' x 4' suspended acoustic tile, which is water stained in some areas.

Condition/Integrity: The sun porch offices retain their original spatial configuration. The wood paneling in Room 1122 is not original and is somewhat intrusive, as is the suspended ceiling in Room 1222. The rooms are generally in good condition.

Corridors

The central circulation core on each floor is comprised of the double-loaded corridor, entry hall and stairs at the north and south ends of the building (Figures 1-14, 1-17, 1-21, 1-24). Most spaces in the building on each floor open directly onto the corridor. Different wall materials in the basement (brick, plaster, and concrete block) identify different building campaigns. The exposed brick walls at the north end are original; the plaster and concrete block are later alterations reconfiguring larger spaces to smaller ones. The ceiling in the basement corridor consists of the exposed floor joists, or plaster.

Typically, above the basement level, the walls are plaster with a 7" wood base. There is a chair rail and picture molding in the first-floor corridor, and picture molding in the second- and third-floor corridors. The original ceilings on the upper floors are plaster; however, on the first floor a 1' x 1' acoustic tile ceiling has been added. The second and third floor ceilings are painted plaster, which is probably original. The third-floor ceiling has a trap door to the attic crawl space and small 8" framed screen vents.

Condition/Integrity: The corridors are generally in their original configurations except as noted above. The introduction of flush, varnished wood doors is a minor detraction from the original appearance.

Entry Lobby

The lobby vestibule is a recessed portion of the facade (Figure 1-14). It has a concrete floor covered with matting inscribed with the Navy seal. The glazed aluminum entry system visible on the exterior continues into this space, visually detracting from the character of the space. The vestibule enters into the lobby, which also serves as the stair hall. The floor is wood parquet, which is probably not the original treatment.

Condition/Integrity: The character of the lobby space has been compromised by the introduction of a thin wood veneer paneling, suspended acoustic tile ceiling, and a wood-grained plastic laminate reception counter. The character of the space is further impacted by unsympathetic alterations to the stair.

Paint analysis shows that the original finishes were creamy white; the existing conditions are consistent with that intent.

Stairs

North stair

There are two stairs in the building, which run from the basement to the third floor. The first (Figures 1- 14 and 1-15) is located in the original 1908 section of the building. The banister has been replaced or covered by a gypsum board parapet with a painted wood hand rail with metal edging. The wall is plaster with a wood base. Ceilings and soffits are painted plaster. The risers, treads and landings are wood and fully surfaced with vinyl. The top landing is carpeted. The basement stair hall is fully enclosed, and the third-floor landing (Figure 1- 16) is separated from the corridor by a gypsum board partition. Windows are located at the landings and have frames similar in detail to others in the building.

Condition/Integrity: The condition of the stair is generally good. The vinyl was replaced in 1995. The stair structure is probably original, but it was severely compromised by the alterations enclosing the handrail and the third-floor landing. Probes are necessary to determine what, if any, original fabric remains.

South stair

The second stair (Figure 1- 17) is located in the 1926 addition. It is a wood structure with varnished oak treads. The hand rail is also varnished oak; the balusters and turned newel posts are painted. The treads are surfaced with vinyl anti-skid surfacing. The basement stair hall is floored with 6" x 6" red quarry tile. The landings are covered with vinyl tile. The walls, ceilings and soffits are painted plaster. The walls have painted wood baseboards. Windows are located at the landings and have frames similar in detail to others in the building.

Condition/Integrity: The condition is very good. The vinyl anti-skid treads are somewhat incompatible, but reversible. While the original open stair hall would be more commodious, the stair enclosure does function as part of the connecting corridors and does not detract seriously from the original intention.

Toilets (1017, 1010, 1005, 1103, 1115, 1207, 1219, 1305)

Most of the toilets are in original toilet locations. Because this was a dormitory building, there were originally many toilets and showers, many of which were converted to offices. In the basement, the ceilings and walls are painted plaster; most have applied vinyl base board. The

floors are vinyl tile except in 1017, which has its original 1" x 1" ceramic tile. The toilets on the first floor have been rehabilitated recently: they have ceramic tile floors and walls and 2' x 4' suspended acoustic tile ceilings and new fixtures. The second- and third-floor toilets have a combination of original and replacement materials: vinyl tile partially covers original 1" x 1" ceramic tile; 1207 has a portion of ceramic base. Painted plaster walls and ceilings are typical. There are early, but probably not original, painted wood partitions in 1010, 1017, 1207, 1219 and 1305. Wood paneled doors exist in 1010, 1017 and 1219 and wood louvered doors in 1207 and 1305 (Figure 1-29). A few of the toilets have non-original shower stall enclosures. Windows in the toilets have similar details to others in the building. Many of them have had fans and ventilators installed.

Condition/Integrity: The floors, walls, ceilings, fixtures and partitions are generally in fair to good condition. Deficiencies exist throughout. While some of the toilets are in original locations most fixtures post-date the original construction.

Finishes

Walls

In the basement, the walls are painted brick, plaster, or concrete block with a variety of baseboards. (Figures 1-21, 1-23, 1-24) On the upper three floors, the walls are typically painted plaster with a 7" painted wood base. Non-original partitions are typically gypsum board. Corridors and some offices have chair rails and picture moldings.

Condition/Integrity: Original walls are either brick or plaster. Gypsum board and concrete block partitions with miscellaneous finishes are non-original. Some basement walls exhibit minor peeling paint. The exception is Room 1016, which has fiberboard laminated to the plaster walls; here impact damage and serious paint peeling is evident. The walls on the first floor are in excellent condition. The second- and third floor walls are generally in good condition with minor exceptions.

Ceilings

The ceilings are typically painted plaster, which have been covered or obscured by applied or suspended acoustic tiles (Figures 1-14, 1-15, 1-18, 1-19, 1-20, 1-23, 1-24, 1-25). The dropped beam ceiling in the Surgeon General's office is unusual in the building and on the site.

Condition/Integrity: Visible plaster ceilings appear to be in good condition, with some minor paint failure. The installation of acoustic tile, particularly the suspended ceilings has a negative impact on the appearance of the rooms. This is particularly noticeable in the offices in the north end of the second floor where the ceiling interferes with the tops of the window frames (Figure 1-23) and in the main entry lobby (Figure 1-14). Most of the non-original ceilings appear to be in good condition. There is very minor staining in a few locations.

Floors

The basement floors are concrete slabs; those above are wood. Mostly, the floors are covered with wall-to-wall carpeting or vinyl tile. The toilet floors are generally ceramic tile, sometimes covered by vinyl tile. Room 1316, used for storage has an elevated concrete floor with a masonite surface. The basement has a few isolated areas of what is probably original 6" x 6" quarry tile.

Condition/Integrity: The carpeting is typically in good condition. The bathroom floors, with the exception of those in Rooms 1103 and 1115, are in fair to poor condition; vinyl tile covers original ceramic, both materials are cracked and missing pieces. In the Surgeon General's office, the varnish on the wood floors is worn. The toilet is missing floor boards. The parquet floors are scuffed and scratched, but otherwise in good condition.

Doors

Painted wood window and door frames are flat with raised edges. Original doors are wood, typically single leaf with five horizontal panels, hung by two hinges, and fitted with brass door knobs and locksets. (Figures 1-23, 1-26) Generally, the doors in the original 1908 section have rounded panel molding, a detail found on doors in other buildings. Doors in the 1926 addition have a panel molding with a molded profile. Some doors have fewer than five panels; these are probably not original or are reconfigured. (Figures 1-16, 1-18, 1-19, 1-22) Some original doors were constructed with glazed panels in the upper section. Doors entering corridors are typically surmounted by glazed transoms. There are also some two-panel doors with chamfered panel edges. (Figure 1-27) Others have been noted in other buildings on the site; they are likely to be later additions. Replacement doors include a variety of flush hollow-core wood and metal doors.

Condition/Integrity: The doors are generally in good condition. However, most of the replacement doors are flush varnished wood and have a negative impact on the integrity of the spaces.

The following list indicates locations of original interior doors:

Five-panel: 1006A, 1009A, 1010A, 1011A, 2 double-leaf corridor doors, 1 single-leaf corridor door (in basement), 1100C, 1102A, 1102B, 1105B, 1106A, 1106B, 1107A, 1108A, 1108B, 1108C, 1109A, 1109B, 1109C, 1109D, 1111A, 1111B, 1113A, 1113B, 1115, 1118C, 1118D, 1200A, 1201A, 1202B, 1204B, 1205A, 1205B, 1206B, 1208A, 1208B, 1209A, 1209B, 1209C, 1209D, 1210B, 1212A, 1218C, 1219, 1221A, 1305B, 1306C, 1308A, 1310B.

Four-panel: 1 single-leaf corridor in basement, 1211A, 1214A, 1216A, 1218A, 1220, 1223.

Three-panel: 1007A, 1005A, 1014B, 1202A, 1210A, 1301, 1302A, 1303, 1304, 1305A, 1306B, 1307A, 1307B, 1310A.

Two-panel: 1 single-leaf corridor in basement, 1009B, 1009C.1, 1101B, 1103, 1204A, 1213A, 1217A, 1218B, 1302B, 1309A, 1311, 1312B, 1314A.

French doors (wood and glass): 1020A (single leaf), 1020B (double leaf), 1122 (three double leaf doors have been modified by the lamination of flush wood panels), 1222 (single leaf).

Built-in Features

Plaster closets (probably original) are located in Rooms 1100, 1105, 1106, 1109, 1110, 1202, 1204, 1209, 1210, 1306, 1307 and 1310.

Non-original gypsum board closets are located in Rooms 1006, 1009, 1012, 1104, 1118, 1213, 1215, 1217, 1304 and 1316.

Non-original wall cabinet and shelves are located in Rooms 1213, 1215 and 1217.

Non-original kitchen fixtures, counter and cabinets were installed in Room 1009, and kitchen cabinets and counter in Room 1113.

A non-original wood-grained plastic laminate reception counter was installed in the partition wall between the main lobby and the adjacent room to the north.

There are several wall-mounted telecommunications panels throughout the building; which are later additions.

Lighting

The lighting throughout the building consists of various non-original ceiling-mounted fluorescent fixtures (Figures 1-14, 1-15, 1-18, 1-19, 1-20, 1-21, 1-24, 1-25). They appear to be in fair to good condition, but most are obsolete, and all visually detract from the character of the spaces.

Fire and Life Safety

Lighted exit signs mounted on walls and hung from ceilings at stairways and exit doors are typical. Wall-mounted emergency lights are located throughout the building. Sprinkler piping and heads are suspended from ceilings or walls throughout the building.

Strobe fire alarms are located in the following spaces: basement corridor, first-floor vestibule of the south stair, Rooms 1009, 1011, 1013, 1015, first-floor corridor, third-floor corridor and Room 1318.

Bell alarms are located in the basement corridor, the main entry hall, 1213, 1215, 1217.

Wall-mounted fire extinguishers are located in the basement corridor, Rooms 1016, 1019B, 1104, second-floor corridor and third-floor corridor.

Fire alarm pull stations and bells are located in the basement corridor, first floor entry lobby, Rooms 1100, 1101, third-floor corridor, 1318 and in both stairs.

The central fire alarm switch is located in Room 1104.

A steel fire alarm annunciation panel is located in the first-floor entry vestibule.

Structure

Building 1 was constructed in two campaigns, and two different framing systems were utilized. The following discussion analyzes each separately.

Original construction (1908-1911)

No foundation drawings are available, but concrete footings for both columns and walls were used in other buildings in the facility. Based on drawings from those buildings, it is likely that the column footings in this building are square in plan and very thick with either sloped or stepped sides. The floor slab is concrete at grade.

Unlike Buildings 3 through 6, the elevated floor framing in this building is wood. Original framing plans exist, dated 1908, which describe the wood construction. Examination of first floor framing visible from the basement confirmed that the framing consists of 2" x 10" timber joists spaced at 16", as shown on the drawings. The joists span transversely across the building, bearing on the east and west brick walls at the exterior, and both walls of the central corridor at the interior. The resulting joist spans are roughly 17 feet across the rooms and 6 feet across the corridor. At midspan of the 17 foot joists is a row of 1" x 3" cross bridging, providing additional stiffness to the floors. The wood floor is composed of 5 1/2" wide decking laid at 45 degrees to the joist spans. The framing is similar for the second and third floors.

An examination of the original (1908) first-floor architectural plan shows three locations where open spaces in the floor plan caused a termination in the wood stud bearing walls at the corridor, requiring some structural means of spanning the openings and supporting the bearing walls above. Two of the large openings in the east corridor wall occurred in the "General Living Room" at the south end of the building, and at the "Hall" at the center of the building. The openings are approximately 20 feet wide and 12 feet wide respectively. The structural members spanning the openings are full story-depth (floor-to-floor) trusses, with the bottom chord at the second floor and the top chord at the third floor. Centered in both trusses is a door opening at the second floor level. (It appears that the door openings still exists in the original locations.) The truss web members consist of two 1- inch diameter vertical steel rods (tension members), one on each side of the door opening, and two 6 x 6 wood diagonals (compression members) extending from the steel rod connection at the top chord, down to the outer corners of the bottom chord. The trusses are labeled in the second floor framing plan as "Truss A" and "Truss B", and the truss elevations are shown on the same drawing. The 20-foot opening in the original "General Living

Room" area was infilled with a continuation of the corridor wall during the 1926 alterations. This section of first floor corridor wall should be considered as a partition wall only.

Future renovations to the second floor of this building must not in any way damage the chords or web members of the trusses described above. The web members consist of the vertical steel rods and the 6" x 6" wood diagonals. The presence of these members precludes placing door openings anywhere along the truss other than in the center where currently located.

The hip roof structure is entirely wood framed with 2" x 10" rafters on 16" centers supported at the exterior by the perimeter masonry walls and at the interior by 4" x 12" hip, valley, and ridge beams.

1926 Addition

The 1926 addition is similar in size and height to the original 1908 structure, but the framing systems differ for the basement and first floor.

The basement floor is a framed-up reinforced concrete structural floor, except for the northernmost 12 feet, which is slab on grade construction. The structural floor consists of a 4-1/2" or 5" thick one-way concrete slab spanning north-south between intermediate foundation walls, or between 9" x 15" concrete beams running east-west. The concrete beams are supported by 12" x 12" concrete piers bearing on 2' - 0" x 2' - 0" x 1' - 0" concrete footings

The first floor framing consists of 2" x 10" timber joists spaced at 16" usually running east-west. In the southern portion of the building, over the original Dining Room, the wood joists are supported by exterior brick walls and two intermediate steel beams. The steel beams are 18" deep, span north-south, and divide the room into thirds. Steel "H" columns support the two beams at the north end, and extend up to, and terminate at, the second floor. In the northern portion of the building, over the original Kitchen, a similar configuration of steel beams, 15" deep, supports the wood first-floor joists. Two steel columns extend from the foundation to the first floor in this area and support the steel beams.

The second floor framing is similar to the first floor with 18" steel beams in the south end of the building supporting the wood joists and clear-spanning over the original Living Room area. In the north end, however, the second floor joists are supported by the corridor stud walls, which bear on the steel beams at the first floor. The wood joists are 2" x 10" on 16" centers, except at the center bay of the southern end. The joists spanning between the 18" steel beams there are 3" x 10" in size, in order to support the corridor bearing walls that begin at this floor and carry the third floor joists. (The corridor walls do not align with the steel beams here.)

The third-floor framing is a double-loaded corridor configuration for the entire floor with 2" x 10" floor joists supported by the exterior masonry walls, and the interior corridor bearing walls. The joist spans across the building are approximately 16 feet, 6 feet, and 17 feet.

The roof structure is wood framing similar in size and construction to the original building.

Mechanical and Electrical Equipment

HVAC

Buildings 1 through 7 of the Potomac Annex Complex are provided with GSA supplied steam through an underground distribution system that originates in a small utility building at the southern end of the property. Steam is also provided to the three buildings of the adjacent 2430 E Street complex from this utility building. Buildings 1 through 7 were originally heated by cast iron steam radiators. These radiators still provide most of the heating in all of these buildings, except Building 6. Although, the buildings had their own boilers when they were constructed; the steam distribution system was not added until a later point.¹

Cast iron radiators in the basement are suspended from the ceiling or are floor-mounted. Units on first through third floors are cast-iron floor mounted with a variety of wood and metal covers. Wall convector units are located in Rooms 1105, 1106, 1107, 1109, 1110, 1112, 1116.

A variety of HVAC modifications have been made to the buildings over the course of the years. The major change has been the addition of window air conditioning units to virtually all areas of the buildings except those air conditioned by larger packaged commercial units. Obviously, because of the age of the buildings, air conditioning was not installed during initial construction. Consequently, the air conditioning units, whether window or packaged units, are of many different ages and conditions.²

In general, environmental conditions in the buildings are poor due to the lack of control on many of the radiators and the lack of cooling capacity of the window units. Additionally, the window units are less energy efficient than the commercial packaged units or central chiller plants. In most areas, air infiltration through window cracks and door openings is the only source of ventilation.

Electrical

The interior electrical systems in Building 1 have been upgraded; and the building's lighting system has been modernized. In addition, several energy conservation measures have been incorporated; they include the use of occupancy sensors to turn the lights on and off in selected rooms and the replacement of incandescent lamps with compact fluorescent lamps. The capacity of the building's main service equipment has been increased to take care of the increased electrical loads. Additional receptacle circuits from new distribution panelboards were also installed in the buildings to serve offices and other spaces.³

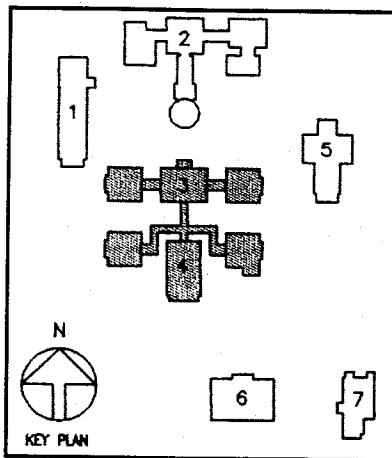
¹ "Building Evaluation Report for Potomac Annex Buildings 1-7." GSA-NCR Repair and Alterations Division. Washington D.C., December, 1991. P. IV-4-IV-5.

² Ibid.

³ Ibid. p.IV-8.

BUILDING 3: ADMINISTRATION BUILDING (1903-1906)

BUILDING 4: OPERATING PAVILION (1903-1906)



INTRODUCTION

Building 3 and Building 4 are two sections of a single building constructed between 1903 and 1906, to the design of architect, Ernest Flagg. It was the original hospital built to accompany the Naval Medical School, which had been established in the old Observatory Building only a few years before. The building plan originates from two main cores: Building 3, on the north, was built for administration; Building 4, on the south, was constructed as the operating room and related facilities. Radiating from the cores are four pavilions connected by glass-enclosed solarium corridors.

The following discussion of the existing conditions is organized to establish the relationships between the several building sections (the two main cores, the four pavilions and the glazed solarium corridors) and then to identify the separate features for each section. A brief description of the exterior of the entire structure is given here. This is followed by a feature-by-feature analysis for each building section individually. The description of Building 3's exterior is followed by its interior description; then, Building 4 exterior is followed by its interior. The ward pavilions and the glazed solarium corridors are such distinct units within the complex that they will be treated separately.

It should be noted at the outset that, while the architectural expression of this complex is conservative, and the spatial planning represents the contemporary thinking in American hospital design, the structural system for Building 3 and Building 4 was a significant and innovative development for its time. Ernest Flagg is known for his experimentation in the use of reinforced concrete, and this building is an early example of such use in this country.

The Naval Hospital is undoubtedly a very early use of reinforced concrete in the Washington D.C. area. The first reinforced concrete building in the United States was constructed in San Francisco in 1890. Up to the early 1900's, little was published in the technical community about this new structural system because engineers considered their design and construction methods to be trade secrets⁴. (That proprietary attitude may explain the absence of structural drawings for the hospital while the architectural drawings survived. (Not until the year 1903 did the standardization and codification of reinforced concrete design begin.

It is interesting that reinforced concrete, a still developing technology, was selected for these buildings, while steel and wood framing seemed to have been favored in the later buildings constructed on the site. The specific benefits of reinforced concrete systems may have appealed to the hospital designers. Such benefits include concrete's inherent fire resistance, its stiffness,

⁴Chu-Kia Wang and Charles G. Salmon, Reinforced Concrete Design, (New York: Harper & Row, 1979), p.4.

and its durability. An additional advantage is realized in the attic spaces of the pavilions, where the original ventilation system consisted of an exhaust fan in the end wall which created negative pressures in the attic. The resulting suction drew air up vehicle shafts from the ward rooms into the attic above. This original ventilation system, seen also in Building 4, is most efficient if the attic construction is airtight--easily accomplished with monolithic poured concrete construction, but difficult to achieve with wood.

It is likely that Ernest Flagg's familiarity with the material was also a deciding factor in the selection of reinforced concrete framing. Some of the buildings that Flagg designed a few years earlier at the Naval Academy in Annapolis, Maryland were concrete structures. The Naval Academy Chapel was probably the first use of reinforced concrete structural system for a church in the United States⁵. In fact, the superintendent of the Naval Academy perhaps lacking confidence in this new structural system, wrote a letter to the chapel's building contractor in 1904 stating, "I cannot authorize you to proceed with the construction until all doubt as the ultimate stability of the building is settled."⁶ Flagg's penchant for reinforced concrete as a building material no doubt stems from his known familiarity with French architecture and construction practices of the time. The French were early developers and pioneers of reinforced concrete for use in everything from tubs and flowerpots to bridges and buildings⁷.

Building 3--The Administration Building

Building 3 is a two-and-one-half story building set on a raised basement with a hipped roof. The massing is symmetrical. The body of the building is constructed of buff-colored brick laid up in English bond with limestone keystones, window sills, and water table. (Note that, while the other buildings on the site reflect the architectural style of this building, the brick utilized on the other buildings is yellower in color and laid up in Flemish bond. The trim on the other buildings is granite, not limestone.)

The front elevation (Figure 3-1) is oriented to the north. It was designed to be situated at the center of the site behind the old Observatory Building, which was being used at that time by the Medical School. It is five bays wide with a central entrance portico. White glazed-brick quoins define the corners of the building. The central entrance bay is dominated by a one-story classical porte cochere with Tuscan columns served by a flight of granite steps. The original balustrade has been replaced by a pipe rail. The original entry door no longer exists; instead, there is a highly obtrusive glass and aluminum door leading to an interior vestibule of the same material. The entry is flanked by two small four-over-four wood sash windows. On the second floor, french doors open onto the balcony created by the porte cochere below. This door is also flanked by two small four-over-four sash windows.

The windows throughout the building appear to be the original six-over-six double-hung wood sash. The window openings are defined by segmental arches on the first floor, and by lintels

⁵Dolkart, Andrew S., "Historical Overview of the U.S. Naval Academy Chapel: Historic Building Conditions Report." (New York: Beyer Blinder Belle Architects, 1994), p.13.

⁶William H. Brownson to Noel Construction Company, Records of the United States Naval Academy, "Press Copies Relating to Building and Grounds", Book 3, P.205, as quoted in Dolkart, p.3.

⁷Wang and Salmon, Reinforce Concrete Design, p.4.

composed of brick voussoirs on the second floor; both have limestone keystones and sills. Copper leaders and down spouts are attached to the masonry at the quoins. The east and west elevations (Figures 3-5 and 3-6) are three bays wide. The solarium abuts these facades at the center of the first floor; and doors at the second-floor level open onto the roof.

The south elevation (Figure 3-5 and 3-6) is detailed in the same manner as the north, but the fenestration reflects the presence of the stair on the interior. A glazed solarium abuts the center of this facade connecting it to Building 4. The hipped roof was originally covered with slate, but it is now covered with asphalt shingles. There are five roof dormers on the north and south sides; and the east and west sides have one dormer each. There are skylights situated on the east and west slopes of the roof. An octagonal cupola with louvered openings crowns the roof ridge. The entire roof is finished by a wood denticulated cornice with an integral copper-lined gutter. (The detailing of this cornice differs from those on the other buildings.) The building is surrounded by asphalt parking on the south and a concrete area-way on the north, which gives access, light and air to the basement spaces.

Building 4--The Operating Pavilion

Building 4 is, by comparison with the more formal presentation of Building 3, extremely utilitarian in appearance (Figures 4-1, 4-4, 4-5). The building is two stories in height, consisting of only the basement and first floor. While the building maintains the same masonry detailing as the north building, the facades are very simple, with three nine-over-nine windows on the east and west elevations on the first floor and a variety of masonry openings on the basement level. There are two windows on the north elevation flanking the entrance into the glazed solarium connecting Building 4 to Building 3. On the second floor of the south elevation a sloping metal-clad roof represents the location of the former skylight for the operating room.

A one-story flat-roofed brick addition (Figures 4-4 and 4-5) extends beyond the line of the skylight to the south. The addition was constructed in 1917 when the original south exterior wall and projecting basement room were taken down and the mess hall extended 40' to the south. The east and west elevations were quite simple with a simple fenestration pattern. The south elevation at this level is dominated by a colonnaded porch (Figure 4-2) consisting of six ionic columns supporting a denticulated cornice with a blank frieze. The east and west ends of the colonnade are terminated by brick segmental arches, and the structure is surmounted by a balustrade with turned balusters. As on the front of Building 3, the original door has been replaced by a highly obtrusive aluminum and glass entry vestibule (Figure 4-3). It is flanked by two wood sash windows.

The Ward Pavilions and Solarium Corridors

The four two-story ward pavilions are constructed of brick with parapet gables and chimneys ornamented with glazed brick quoins and center panels (Figures 3-7, 3-8, 4-7, 4-8). These are simply fenestrated on the north and south elevations (as well as the outward facing elevations) with four nine-over-nine wood sash windows with six-light transoms. The east and west elevations (the gable ends) are ornamented with a stepped pattern in white glazed brick. On the

elevation facing away from the complex, each of the pavilions is fitted with a small brick structure with a metal roof. These appear to have been part of the original heating system.

The solarium corridors are two stories in height. The basement level is brick with a variety of doors and windows. The upper story is wood and fully glazed with fixed and operable eighteen-over-eighteen wood sash windows. The corridors have flat roofs with access from the pavilions and central cores. Steel fire stairs have been attached to the solaria at the rear of Building 3.

BUILDING 3: ADMINISTRATION BUILDING (1903-1906)**Exterior Existing Conditions*****Roof***

The hipped roof (Figures 3-1, 3-5, 3-6, 3-8) is covered with asphalt shingles; these replace the original slate tiles. In general, the existing roof appears to be in fair condition. Roof and dormer ridges and edges are flashed with copper. The gutters and down spouts are also copper. The dominating element on the roof is the wood cupola (Figure 3-1), which not only contributes to the architectural character of the building, but also served as a major component of the ventilating system for the hospital. The cupola is actually part of a fan chamber. The fan itself is still extant (Figure 3-30).

There are five dormers on each of the north and south sides of the roof; one on each of the east and west sides. The north, south and west dormers have six-over-six wood double hung sash windows; most of them have A/C units protruding from them. The east dormer was converted recently to a fire escape exit (Figure 3-6). The skylights on the east and west slopes of the roof are original features, with replacement hatches. Both skylights have concrete shafts (Figure 3-39), which originally opened at the roof and third-floor ceiling. They have been framed in and metal ventilators have been installed with dampers exposed in the ceilings (Figures 3-8, 3-20).

Cornice

The roof is finished with a painted wood denticulated cornice (Figures 3-1, 3-5, 3-6, 3-7). The cornice is generally in good condition; however, paint failure is noted throughout. The cornice is painted white, which is consistent with its historic condition.

Masonry**Brick**

The body of the building is constructed of buff-colored glazed bricks laid up in English bond (Figures 3-9, 3-11, 3-12). The bricks measure 8-1/2" x 4" x 2-3/8". Mortar joints have a rodged profile. Horizontal joints are approximately 1/2" wide; vertical joints are approximately 1/4".

The brick exhibits surface cracking throughout and heavy soiling including deposits of flyash and gypsum. There are also areas of settlement cracking, mortar loss and a few cracked bricks. There are some areas where bricks are chipped by physical impact. Some of these areas have been repaired inappropriately and ineffectively with hard mortar and mismatched bricks. The brick surfaces are extremely soiled and they have areas exhibiting biological growth (especially on the north facade). There is also quite a lot of water staining from the window A/C units.

There are small copper vents located under many of the windows in this building (Figure 3-12). These appear in the original sectional drawings, which indicate that they were fresh air inlets. Unfortunately, there is no evidence of them on the interior, and no historic documentation for

how they worked. These vents are important features of the facades because they reflect the historic purpose of the building. Building 6, the Contagious Hospital Building has similar vents.

Glazed Brick

The white glazed bricks forming the quoins at the corners of the building sections and the decorative patterns on the gable ends of the pavilions appear to be in good condition.

Limestone

Limestone elements (Figures 3-1, 3-5, 3-6, 3-9, 3-11) include the water table belt course and the arch keystones and window sills. The limestone is generally in good condition, but it is soiled and exhibits some staining due to condensate from window A/C units. The mortar between limestone units in the water table belt course has occasional sections of missing mortar and lost adhesion.

Granite

Five granite steps (Figures 3-2, 3-3) lead up to the main entry on the north facade. The center portion of the treads have chiseled surfaces. The metal hand rails are later additions. Aside from a minor crack on the right side and some lost adhesion of joint sealant, the steps are in excellent condition.

Porte Cochere

The central entrance bay on the north elevation is dominated by a one-story porte cochere with Tuscan columns (Figures 3-1, 3-2, 3-3, 3-4). The asphalt drive, which curves up to the building from the east and west, continues under the porte cochere between the columns and entry steps. The original design for the porte cochere called for a balustrade with turned balusters at the roof level. Historic photographs indicate that it was constructed; however, by the 1940s, it had been replaced by an unattractive pipe rail, which still exists. The cornice around the roof line is wood with modillions and a blank frieze. The granite steps are described above; they rise to a wood landing covered with vinyl (this was originally interior space). The wood columns are set on limestone and brick bases. The north base is cracked (Figure 3-4). The column bases have concrete bumpers on the outside surface at grade; the bases and cheek walls of the entry steps have metal bumpers. The ceiling is painted wood planks with tongue and groove joints.

The entry has a wood architrave ornamented by a blank tablet at the center of the lintel and crossettes at the corners; a raised cyma molding outlines the outside edge of the architrave. An inset copper or bronze plate is located in the transom area; this feature is noted on the original entry elevation but the annotation is unclear. The original doors have been replaced, and a recessed glass and metal vestibule exists in their place. This entry treatment detracts from the architectural character of the building. There is an entry to the roof of the porte cochere on the second floor.

The paint on the columns, cornice, ceiling and entry surround was partially removed with an acetylene torch during the Summer 1994. Some of the surfaces were scorched in the process, and as of Autumn 1995, none were repainted. They had been painted white, which is consistent with the historic condition.

Secondary Entries

There are secondary entries located at the basement level in the connecting solarium (please refer to that section below).

Doors

The original wood and glass double-leaf entry door was removed from the main entry, and the space was crudely infilled with an aluminum and glass vestibule (Figure 3-2). The vestibule is recessed so that the entry door is behind the plane of the facade. The door is flanked by aluminum and glass panels set at right angles to it. The existing door is an inappropriate double leaf door in aluminum and glass. The vestibule protrudes into the main lobby space within (Figure 3-13). The wood and glass french doors above the porte cochere are set under a two-light transom. The doors and transom appear to be original; they are in good condition.

On the second floor, doors open onto the roof surfaces of the solarium. These doors are not original.

Windows

Most of the windows appear to be the original six-over-six wood double hung sash (Figures 3-1, 3-5, 3-6, 3-11). The wood frames are recessed from the plane of the facade and the muntins are thick and rounded in profile. (This detail is noted on the interior.) Unlike the windows in the other buildings on the site, the top sash do not have molded brackets on the bottom of the meeting rail. There is an obvious replacement window on the west side of the south elevation (Figure 3-5)--a casement located on the first floor in the first bay. The windows flanking the main entry are four-over-four.

The windows on the first floor are set into segmentally arched openings; those on the second floor have flat arches. Both have brick voussoirs and limestone keystones and sills. The basement windows are six-over-six with limestone lintels and sills.

The windows appear to be in generally sound condition upon initial inspection. Many window openings have A/C units; the bottom sash are raised to accommodate the units, which are flanked by glass or plastic side panels. Comments from building occupants indicate that a majority of the windows are painted shut. The top half of toilet windows are typically infilled with plywood mounting for exhaust fans. The windows are painted white. Paint analysis shows that they were originally dark green.

Fire Escapes

The fire escapes, which serve this building are attached to the north solarium corridors. The east fire escape (Figures 3-6, 3-9) begins at the roof dormer, and descends to the solarium below.

Please see the Fire Escapes under Solarium Corridors section.

Lighting

There are no original exterior light fixtures on this building. One brass fixture in a vaguely classical style is suspended from the porch ceiling (Figure 3-2). Like the other similar fixtures on the site, this is flimsy and out of scale with the building. Flood lights are attached to the pavilions and solarium at cornice level.

Foundation and Areaways

The brick-clad foundation walls are above grade (Figure 3-5, 3-6, 3-9). The north side of the building is served by a concrete areaway, which provides access, light and air to the basement levels. The east side opens onto a concrete patio. The retaining wall is clad in brick on the north side with a concrete curb. Some areas of the retaining walls have been rebuilt. They also exhibit large areas of efflorescence. Simple pipe rails surmount the retaining walls; they appear to be in good condition.

Site and Landscape

Asphalt parking abuts the building on the south side, wrapping around both the east and west (Figures 3-5, 3-6). The drive on the north side abuts the curb of the retaining wall (Figure 3-1). Every building on the site is severely impacted by the presence of such expanses of asphalt parking; but, this building particularly suffers because the parking fills the spaces between sections of the building (Figure 3-10).

On the northwest corner, a covered walkway connects Building 3 to Building 1. The walkway paving is concrete, and the wood structure is covered by a simple pitched roof covered with asphalt shingles.

BUILDING 3 - INTERIOR EXISTING CONDITIONS

Floor plans

Building 3 was constructed to house the administrative functions of the hospital. The floor plan alterations in this building are mostly observed on the second and third floors. The building is laid out on a bi-axial plan: the north-south axis is dominated by the entry lobby and stair hall; double-loaded corridors define the east-west axis. The central iron stair runs through the building from the basement to the top floor.

The originally intended uses for the first floor included offices, an examining room, a reception room, a dispensary, two dining rooms, and a doctor's living room. On the second floor were eight rooms for sick officers, a room for use as a parlor or dining room, a kitchen, nurses' room and store rooms. The third floor was to contain nurses' rooms. No original basement plan was located; however, written documentation indicates that the basement had ancillary uses. Solarium corridors connect Building 3 to Building 4 and to the northeast and northwest pavilions on the basement and first floor.

Condition/Integrity: Based on examination of the existing conditions, it appears that the basement floor plan, as it exists today, retains much of its integrity. The greatest departure from the original appears to be that some original openings have been infilled and some new doors have been installed.

The first floor plan, too, retains much of its original spatial configuration. The existing conditions do suggest that the west partition wall of the entry lobby was altered or constructed at a later date. The cornice molding breaks at this wall and continues in Room 3114, and the door and door opening leading into the corridor from Room 3114 are not original. The original architectural drawing does indicate a partition in this location, so the cause for the apparent alterations is not evident. In Room 3116 a demising wall was removed to create a larger space from two smaller ones.

The second and third floors have been altered more than the others. These changes include the reconfigurations of the toilets on the east and west sides; the removal of partitions within office spaces; and the closure of the stair hall on the second and third floors.

Offices and other spaces:

Basement (Rooms 3009, 3011, 3012, and 3012A, 3014, 3014A)

The perimeter walls in the basement are painted plaster. Most of the partition walls are plaster and are probably original. The walls dividing Room 3012 from 3012A and Room 3014 from 3014A are gypsum board, indicating that these rooms were created by sub-dividing larger rooms. Baseboards are a mixture of wood (3"-5") and vinyl base covering. A few rooms have no baseboard at all. The windows in the basement typically have simple frames with projecting sills.

First floor (Rooms 3109, 3110, 3112, 3113, 3114, 3115)

The walls on this floor are painted plaster. To a large degree, they represent the original floor plan configuration, except as noted in the discussion of floor plans above. The walls in Room 3116 are surfaced with fabric wall-covering, a wood paneled dado, vinyl paper base cover, and a stained wood cornice molding. Rooms 3113 and 3115 have chair rails. The east wall in Room 3110 has been laminated with gypsum board. None of these finishes appear to be original. Original wood baseboards are typically 7" in height. Variations in height probably indicate

replacements. Some wood baseboards have been removed, covered or replaced by vinyl bases. Unlike offices in many of the buildings on site, dropped ceilings have not been installed in these spaces; the existing ceilings appear to hold to the original height. Rooms 3110, 3116 and 3115 are fitted with toilets, which appear to be in the locations of original toilets (please see discussion on toilets below). Paint analysis done in Room 3115 indicates that the wall finish was a light green. This color was identified in other spaces as well.

Second floor (Rooms 3201, 3202, 3203, 3204, 3206, 3207, 3208, 3209, 3211)

Third floor (Rooms 3301, 3302, 3303, 3304, 3306, 3307)

The walls on these floors are painted plaster except where later gypsum board partitions were added. This is noted in the demising walls between Rooms 3203 and 3207 and where the toilets on the east side have been reconfigured. Wood molding has been added to both sides of the wall between Rooms 3202 and 3207. Baseboards are typically painted wood, 5" in height; some later partition walls do not have baseboards. Some baseboards have been covered or replaced by vinyl. The ceilings are, for the most part, painted plaster, maintaining the original height.

Corridors

Most spaces open directly onto the double-loaded corridor on the basement, first and second floors (Figures 3-16, 3-19). The third floor circulation space is large and centralized, due to the removal of partitions on the north side, which made a larger space from several smaller ones. A trap door to the attic space is located in the third-floor ceiling adjacent to the elevator.

At either end of the first-floor corridor, is a short solarium connecting this building to the ward pavilions on the east and west (Figure 3-16). The first-floor corridor is crossed by the entry lobby and stair hall.

The entry lobby (Figure 3-13), on the north side, contains significant plasterwork including coved ceiling moldings, pilasters and dropped beams supported by plaster brackets (Figure 3-13a). Paint analysis indicates that the walls in this room were originally painted a terra cotta color, and the ornamental plaster ceiling was white. Doors and door frames were varnished. On the south, the entry lobby opens into the stair hall, which in turn, opens into the solarium connecting this building to Building 4. The central features of the stair hall are the iron stair and the elevator, both of which are described below. The elevator opening is flanked by iron neo-classical pilasters supporting a projecting entablature; paint analysis shows that these were painted glossy black.

The rest of the corridor walls and ceilings are flat plaster. Gypsum board is noted where later partitions have been installed, particularly on the basement, second and third floors. In the third-floor corridor ceiling is situated the frame of the original skylight (Figure 3-20).

The basement corridor floors are concrete with quarry tile. Upstairs, the corridor floors are wood, but they are all covered with wall-to-wall carpeting.

Condition/Integrity: The corridors are generally in their original configurations except as noted in the discussion of floor plans above. The current paint scheme in the entry lobby does not reflect the historic condition. Replicating the original finishes would enhance the quality of this space.

Stair

The main stair is centrally located on the southern side of the building. It is an iron structure that runs from the basement to the third floor (Figures 3-13, 3-14, 3-15). The simplicity and elegance of its design is evidenced by the proportion of the elements and the curved diminution of the newel side of the stone stair treads as they corner the posts at the landings. Wood handrails and iron balusters serve the open side of the stair and newel posts; there is no handrail on the wall side of the stair.

Paint analysis shows that the iron was originally painted a glossy black and the handrail was varnished; the existing condition is consistent with the original. Like the entry lobby, the walls were painted a terra cotta color, and the window frame and sash were varnished.

At the basement level, the stair opens into a vestibule with a quarry tile floor. A beaded-board dado runs from the vestibule up to the first landing where a window opens into the space.

Condition/Integrity: The condition is generally good. The stair treads are covered with aluminum and concrete anti-skid surfaces. The stair is enclosed with non-original gypsum board partitions at the second and third floors, which detract from the architectural character of the stair. The current paint scheme in the stair hall does not reflect the historic condition. Replicating the original finishes would enhance the quality of this space.

Elevator

The elevator is in its original location; however, it appears that the cab and doors have been replaced within the last decade (Figure 3-14a). The Inventory of Significant Spaces written in 1981 indicates that, at that time the elevator was in original condition with a cast iron outer door and frame. Currently, the doors are standard stock items that do not fill the space defined by the classical pilasters as the originals probably did. The document also indicates that the cab was original as well. The existing elevator cab is surfaced with stainless steel and plastic laminate panels and vinyl floor tiles; these are certainly recent materials.

Condition/Integrity: The changes made to the elevator detract from the architectural character of this space.

Toilets (Rooms 3110 A, 3112, 3115A, 3116B, 3210, 3213, 3300)

Most of the toilets are in original bathroom locations. Most of the fixtures and finishes are replacements, although there is an early sink in Room 3210. Walls and ceilings are painted plaster. The walls in Room 3112 are clad with ceramic tile, but this does not appear to be original. The floors are either ceramic tile or vinyl floor covering; none are original.

Finishes

Walls

The walls throughout the building are painted plaster or gypsum board with a wide variety of baseboards. Typically, on the first floor, original baseboards are 7" in height; those on the upper floors are 5". Non-original partitions are typically gypsum board. Some offices on the first floor have chair rails or wood paneled dados, but these do not appear to be original finishes.

Condition/Integrity: Original walls are painted plaster. Gypsum board partitions with miscellaneous finishes are not original. The basement walls are badly dented, chipped and scuffed; they also exhibit some water infiltration, particularly in Room 3011. Those on the upper floors appear to be in fairly good condition, although there are signs of efflorescence and peeling paint on some perimeter walls. Damage noted in Room 3302 is probably related to faulty dormer flashing.

Ceilings

Most ceilings are painted plaster, which appears to be the original treatment. Acoustical tile ceilings are suspended in Rooms 3012, 3012A. There is a 1'x1' perforated fiberboard ceiling in some rooms.

Condition/Integrity: The plaster ceilings appear to be the original treatment. They are in good to fair condition, with some staining and peeling paint. The decorative plaster in the main lobby is significant, and should be maintained. Fiberboard and acoustical tile ceilings are not original; they tend to detract from the architectural character of the building.

Conduits, ducts and plumbing are run throughout the basement ceiling.

Floors

The corridor floors in the basement are concrete slabs covered with quarry tile. Other floors in the basement are covered with carpet or vinyl tile. On the upper levels, the floors are wood covered with wall-to-wall carpeting or vinyl tile. The toilet floors are generally covered with vinyl floor covering, although a couple of rooms have ceramic tile.

Condition/Integrity: The quarry tile in the basement is in good to fair condition. The carpeting is typically in good condition, with some signs of wear in the corridors. Vinyl tile tends to be worn and scuffed.

Doors

The door frames on the first floor are painted wood with a raised cyma molding on the outer edge and the window frames are flat with rounded edges. (Figures 3-16, 3-32). On the upper floors they are flat with rounded edges. There appear to be several configurations of original or early replacement doors. On the first floor, the typical original door has four panels. (Figure 3-31)

Original doors on the second floor are wood, typically single leaf with five horizontal panels, hung by two hinges, and fitted with brass door knobs and locksets (Figures 3-33). Some early doors were later fitted with glazed panels (Figure 3-32). All doors entering corridors are typically surmounted by glazed transoms. Replacement doors include a variety of flush hollow-core wood (Figure 3-15) and metal doors, and some replacement five-panel doors replicating the originals (Figure 3-33).

On the third floor, there are painted wood flush doors, which appear to be original or early alterations (Figures 3-18, 3-34). They are similar to doors located in Building 4 on the first floor. Original doors in the basement corridors are set into segmentally arched openings (Figure 3-35) with wood frames flush with the face of the brick walls and rectangular transoms. The doors have two leaves of unequal size with glazed panels in the upper half. There are also two-panel doors whose door frames are flat with rounded edges.

Condition/Integrity: The doors are generally in good condition.

The following list indicates locations of original or early replacement interior doors.

Five Panel: Second floor restrooms: 3207 A & B

Four Panel: Six on the first floor

Flat Panel Doors: 3302, 3303, 3304, & 3307

Built-in Features

There are no significant built-in features in this part of Building 3.

Lighting

The lighting throughout the building consists of various non-original ceiling-mounted fluorescent fixtures (Figures 3-13, 3-17, 3-18, 3-20). They appear to be in fair to good condition, but most are obsolete, and all are obtrusive.

Fire and Life Safety

Lighted exit signs are mounted on walls and hung from ceilings at stairways and exit doors throughout the building. Wall-mounted emergency lights are also located throughout the building. Sprinkler piping and heads suspended from ceiling or through walls are typical throughout.

Strobe fire alarms are noted in the following locations: Rooms 3301, 3302, 3303, 3304, 3306, and 3307.

Wall-mounted fire extinguishers are noted in the following locations: Elevator Machine Room (on basement level), Rooms 3301, 3302, 3303, 3304, 3306, 3307, and the stair.

Fire alarm pull stations and bells are noted in the following locations: Rooms 3301, 3302, 3303, 3304, 3306, and 3307.

Smoke detectors are noted in the following locations: Elevator Machine Room (basement level).

Structure

There are no original structural drawings for Buildings 3 & 4, and the architectural drawings give little clue as to the structural systems employed. Visual observations, without the benefit of destructive inspections, are therefore the only means of determining the original materials comprising the buildings' framing systems.

It was discovered by gaining access to an attic space in the main wing of Building 3, a ventilation chamber of Building 4, and the attic of the Southwest Pavilion, that the hospital buildings are cast-in-place, reinforced concrete structures. Even the steep pitched roofs of Building 3, and those of the pavilions, are cast-in-place concrete slabs.

Access was gained to Building 3 where it was observed that the structure is constructed of reinforced concrete. The slope of the roof system is one-way slab spanning between concrete frames (or "bents") which are oriented in a north-south direction. The slab thickness is unknown, but the frames are composed of sloping concrete beams 15" x 12" in size with a 22" x 24" horizontal beam at the high portion of the roof. The frames are supported by 12" x 24" horizontal east-west beams spanning between 12" x 12" columns (Figure 3-38). The concrete members appear to be in very good condition; there was no evidence of water intrusion though the roof slab, nor was any significant cracking noted. At each end of the attic is a concrete shaft

directly below a skylight in the roof which directed sunlight through the attic to the third floor space (Figure 3-39).

The attic floor construction could not be determined as it is insulated on the top and finished on the underside, but it appears that at least a portion of the attic supported very heavy loads. This fact is evident by the large abandoned water tank situated in the attic just west of the cupola and fan chamber. The tank, which appears on the original architectural drawings, was field measured and found to have a capacity of as much as 1500 gallons, giving a full weight of approximately 12,000 pounds.

The type of concrete construction used for the elevated floor is unknown. Possible framing systems are ribbed slab, or beam and one-way slab.

Mechanical and Electrical Systems

HVAC

Buildings 1 through 7 of the Potomac Annex Complex are provided with GSA supplied steam through an underground distribution system that originates in a small utility building at the southern end of the property. Steam is also provided to the three buildings of the adjacent 2430 E Street complex from this utility building. Buildings 1 through 7 were originally heated by cast iron steam radiators. These radiators still provide most of the heating in all of these buildings, except Building 6. Although, the buildings had their own boilers when they were constructed; the steam distribution system was not added until a later point.⁸

Cast iron radiators in the basement are suspended from the ceiling or are floor-mounted units. Units on the first through the third floors are cast iron floor-mounted units.

A variety of HVAC modifications have been made to the buildings over the course of the years. The major change has been the addition of window air conditioning units to virtually all areas of the buildings except those air conditioned by larger packaged commercial units. Obviously, because of the age of the buildings, air conditioning was not installed during initial construction. Consequently, the air conditioning units, whether window or packaged units, are of many different ages and conditions.⁹

In general, environmental conditions in the buildings are poor due to the lack of control on many of the radiators and the lack of cooling capacity of the window units. Additionally, the window units are less energy efficient than the commercial packaged units or central chiller plants. In most areas, air infiltration through window cracks and door openings is the only source of ventilation.

⁸ "Building Evaluation Report for Potomac Annex Buildings 1-7." GSA-NCR Repair and Alterations Division. Washington D.C., December, 1991. P. IV-4-IV-5.

⁹ Ibid.

Electrical

The interior electrical systems in Building 3 have been upgraded; and the building's lighting system has been modernized. In addition, several energy conservation measures have been incorporated; they include the use of occupancy sensors to turn the lights on and off in selected rooms and the replacement of incandescent lamps with compact fluorescent lamps. The capacity of the building's main service equipment has been increased to take care of the increased electrical loads. Additional receptacle circuits from new distribution panelboards were also installed in the buildings to serve offices and other spaces.¹⁰

¹⁰ Ibid. p.IV-8.

BUILDING 4: OPERATING PAVILION (1903-1906)**EXTERIOR EXISTING CONDITIONS*****Roof***

Building 4 is constructed in two sections, both have flat roofs covered in built-up roofing. The roof over the operating room is modified bitumen coated with an aluminized paint. The lower, southern section of the roof, is built up roofing with gravel slag.

The sloped section at the second-floor level facing south, was originally the skylight for the operating room within (Figures 4-4, 4-5). The central area at the location of the skylight is covered with aluminum sheets with six seams located roughly in the same place as the mullions of the glazing, as shown in the original elevation drawings. The remainder of this roof surface is covered with painted flat seam metal (probably copper). Without a destructive probe, it is not possible to ascertain whether or not the original skylight exists under the visible roofing material (It is obscured on the interior as well).

Cornice

The roof of both sections is finished by brick parapets (Figure 4-4). The only cornice exists on the colonnaded portico on the south, which is discussed below.

Masonry**Brick**

The body of the building is constructed of buff-colored glazed bricks laid up in English bond (Figure 4-4). The bricks measure 8-1/2" x 4" x 2-3/8". Mortar joints have a rodged profile. Horizontal joints are approximately 1/2" wide; vertical joints are approximately 1/4". The brick used to construct the one-story addition to the south is similar in color and brick bond to the original.

The brick exhibits surface cracking throughout and heavy soiling including deposits of flyash and gypsum. There are also areas of settlement cracking, mortar loss and a few cracked bricks. There are some areas where bricks are heavily broken by physical impact, particularly at the southern porch where heavy mortar loss is noted as well. Some of these areas have been repaired inappropriately and ineffectively with hard mortar and mismatched bricks. There is also quite a lot of water staining from the window A/C units.

The brick corner on the southwest section of the colonnaded porch has been damaged by physical impact and has been inappropriately repaired with hard mortar and mis-matched bricks.

Glazed Brick

The white glazed bricks forming the quoins at the corners of the building (Figure 4-4) appear to be in good condition; although loss of glazing is noted in some areas.

Limestone

Limestone elements (Figures 4-4) include the water table belt course, the window lintels and sills and the coping stones on the addition. The limestone is generally in good condition, but it is soiled and exhibits some staining due to condensate from window A/C units. The mortar between limestone units in the water table belt course has occasional sections of missing mortar and lost adhesion.

The limestone and brick pier on the southeast corner of the colonnaded porch has shifted; the limestone is cracked, mortar is missing and the masonry has been stained by asphalt drips from repair work done to the roof above.

Granite

Granite steps lead up to the porch on the south side. The steps appear to be in good condition.

Colonnaded Porch

The south elevation is dominated by a colonnaded porch (Figures 4-1, 4-2) consisting of six ionic columns supporting a denticulated cornice with a blank frieze. The east and west ends of the colonnade are terminated by brick segmental arches supported by brick piers, and the structure is surmounted by a balustrade with turned balusters.

As on the front of Building 3, the original door has been replaced by a highly obtrusive aluminum and glass entry vestibule (Figure 4-3). It is flanked by two nine-over-nine wood sash windows.

Granite steps lead up to the porch at the east and west ends; and the curbs on the southern edge of the porch are granite as well. The porch platform is paved with scored concrete; the ceiling is painted concrete. A thin metal railing spans the space between the columns on the south edge of the porch; each section is attached to the columns. This is not an original feature, but it is relatively unobtrusive.

The porch exhibits signs of wear and poor maintenance, particularly the brick masonry as described above. The ceiling paint is peeling, as is the paint on all wood elements. The second column from the east is missing its capital. The wood elements are painted white, which is consistent with the historic treatment.

Loading Dock

On the east side of Building 4 is a loading dock (Figure 4-5), which was constructed as part of the addition and alterations made in 1917. The loading dock is illustrated in the drawings from that time. It spans the distance between the north edge of the building to the north edge of the second window from the south. It is a concrete structure including platform, piers and steps (which rise from the south end). It corners to the east across the front of a one-story infill (Rooms 4018 and 4019), which is a later construction of concrete block.

The platform is covered by a metal roof supported by scrolled iron brackets, and struts tied back to the parapet. This roof does not appear on the original drawings; however, it probably dates to the loading dock construction. There is a double-leaf wood door leading from the loading dock into the basement level of Building 4, which is probably original. Two doors lead into the one-story infill at the north.

This loading dock is heavily used for trash sorting and hauling.

Doors

The original wood and glass door, transom and sidelights have been removed from the main entry. The space was infilled with an aluminum and glass vestibule and doors (Figure 4-3). The vestibule protrudes into the porch space and detracts from the architectural character of the building. The original masonry opening and limestone lintel and granite sill are still intact.

The double-leaf loading dock door, as described above, is probably original to the 1917 construction date.

Windows

Most of the windows appear to be the original nine-over-nine double hung sash (Figures 4-4, 4-6). There are a couple of replacement window sash. The wood frames are recessed from the plane of the facade and the muntins are thick and rounded in profile. (This detail is noted on the interior.) The east and west gable ends of the operating room have narrow one-over-one double hung sash. All windows have limestone lintels and sills.

The windows appear to be in generally sound condition upon initial inspection. Many window openings have A/C units; the bottom sash are raised to accommodate the units, which are flanked by glass or plastic side panels. Comments from building occupants indicate that a majority of the windows are painted shut. The windows are painted white; however, paint analysis shows that they were originally dark green.

Fire Escapes

Steel fire escape ladders are attached to the masonry on the southwest corner of the second floor and the west side of the first floor. They are relatively unobtrusive.

Lighting

There is one original, or early, exterior light fixture on this building (Figure 4-3). It is the center fixture of three suspended from the ceiling on the colonnaded porch. It appears to be iron, and its design and detailing are more in keeping with the design of the building than the two flanking fixtures. Flood lights are attached to the pavilions and solarium at cornice level.

Foundation and Areaways

The foundation walls are above grade, and they are clad in brick. Asphalt parking abuts the building on the east, west and south sides. The drive is particularly narrow around the southern edge of the building, exposing the masonry at the corners to physical damage.

Site and Landscape

Asphalt parking abuts the building on the south, east and west sides (Figures 4-1, 4-2, 4-3, 4-4). Every building on the site is severely impacted by the presence of such expanses of asphalt parking; but, this building particularly suffers because the parking fills the spaces between sections of the building.

BUILDING 4 - EXISTING INTERIOR CONDITIONS*Floor plans*

Building 4 was constructed to house the operating room and ancillary functions. It is two stories in height, including the basement level and the first floor. The basement was reconfigured in 1917 when the addition was constructed.

Condition/Integrity: The basement floor plan, as it exists today, reflects its 1917 double-loaded corridor configuration. However, the finishes are all new. Some inner office partitions have been relocated. Rooms A, A-1 and G were created from the original Mess Hall; and Rooms D and E were created from the Mess Room.

On the first floor, the original operating room is similar in plan to its original configuration, with small rooms flanking the larger central room. Some original inner office partitions have been relocated. Room 4111B was created from the original operating room, and partitions were removed from the rooms on the east side to create Rooms 4110 and 4111A.

*Offices and other spaces*Basement (Rooms A, A-1, B, C, D, E, F, G, H, I, 4018, 4019)

Rooms A, A-1 and F are used as offices. Room B is the telecommunications/electric room. Room C is the Mechanical Room. Rooms 4018 and 4019, D, E and G are used for storage. Room H is the kitchen. Room I is the snack bar.

The double-loaded corridor configuration of the basement with rooms on either side is reflective of the original plan layout. However, many of the interior partitions have been moved. Rooms 4018 and 4019 are enclosures of what was originally outdoor space. Their perimeter walls reflect the original exterior materials (brick and infilled windows); the south wall and the demising wall are constructed of concrete block.

Painted plaster or gypsum board partitions with vinyl bases are typical, with a variety of wall coverings. Plaster or exposed concrete ceilings are noted throughout, but many have had gypsum board or suspended acoustic tile ceilings installed. The basement floors are concrete. Some are exposed, but most are covered with wall-to-wall carpeting or vinyl tile. All the original interior doors in this section of the building have been replaced.

There are a few rooms, which retain some original finishes. Room C, originally designated as the vegetable room for the kitchen, retains the finishes indicated in the original drawing including 6" x6" quarry tile floors and ceramic tile walls with a bullnose base. Although the ceramic tile walls have been painted, it is likely that these are the original finishes.

Rooms D and E are in very poor condition, and have painted concrete block partitions; however, they also have remnants of ceramic tile on the walls that appear to be original. Room H also has remnants of ceramic tile.

First Floor (Rooms 4109, 4110, 4111, 4111A, 4111B, 4111C, 4111D, 4111E)

The rooms on the first floor are all used as offices (Figures 4-11, 4-12, 4-13, 4-14). The spaces have been altered in their conversion from the original surgery functions to office use. However, the original spatial relationships are still evident as are some remnants of original finishes.

The central space, Room 4111, was the operating room of the hospital (Figure 4-13). It is a large, nearly two-story space with gypsum board walls finished with 3" painted wood base board. Room 4111B was carved out of the larger space with the installation of gypsum board partitions. The walls were originally finished with ceramic tile similar to that found in the adjacent rooms. The pressed metal ceiling appears to be original with a ventilator near the entrance. The south wall reflects the shape of the original skylight. Without destructive probes, it is impossible to ascertain if the skylight still exists.

The ceilings in the adjacent spaces are painted plaster. Walls are painted plaster with 6" painted wood baseboards. Gypsum board partitions with 3" baseboards are later installations. The walls were originally finished with white ceramic tile and remnants of tile surfaces remain in Rooms 4109, 4111C, 4111D, 4111E and the ante room (Figure 4-12). All the floors are covered with wall-to-wall carpeting.

Painted wood door and window frames are flat with no moldings. There are a variety of doors in these spaces, including an early 5-panel door and original or early flush doors (see discussion of doors below). The opening from the ante room to Room 4111 was infilled with gypsum board and a flush wood door with a flat frame casing was installed. The original door had a double-leaf configuration.

Corridors

The basement corridor retains its double-loaded configuration, reflective of its 1917 condition. However all the finishes are later alterations, which cause have caused this space to have lost any sense of its original character.

The basement corridor and the ante room for Room 4111 enter directly into the solarium corridor connecting Building 4 with Building 3.

The solarium corridors are addressed separately below.

Stairs

There are no stairs in Building 4. The nearest stairs are in the ends of the south solarium corridors that lead into the southeast and southwest pavilions. These are addressed within the discussion of the solarium corridors.

Toilets

There are no toilets located in this part of the building. They are all located in the basements of the connecting solarium corridors or in the ward pavilions. They are discussed in those locations.

Finishes

Walls

Painted plaster or gypsum board is typical throughout the building. Remnants of ceramic tile finishes are noted throughout.

Condition/Integrity: The ceramic tile that remains is not in good condition, and there is not enough of it left to recall a sense of the original function of the building. Since the building now functions as an office, replacing the old finishes would not further detract from its historic importance.

The plaster and gypsum board partitions are generally in good condition. There are localized deficiencies as noted below:

Rooms 4018 and 4019: Water penetration is noted causing staining to the brick and concrete block walls. This is probably due to faulty roof drainage and flashing.

Some of the basement rooms endure heavy use, and the wall surfaces are damaged.

Room E: There is a very large horizontal crack in the east wall.

Ceilings

Painted plaster or concrete ceilings are typical throughout the basement. However, 2 x 4 acoustic tile ceilings have been suspended in Rooms A, A-1, F, G, H, I. Gypsum board ceilings were installed in Room 4018 and 4019.

Painted plaster ceilings are typical on the first floor. The exception is the pressed metal ceiling in Room 4111.

Condition/Integrity: The plaster ceilings on the first floor appear to be in good condition with some areas of peeling paint.

The pressed metal ceiling in Room 4111 appears to be original. Despite the installation of electrical conduit, it is relatively intact and should be considered an important feature of this space.

The basement ceilings are in fair to poor condition. This is especially noted in Rooms 4018 and 4019 where heavy water infiltration is noted. Many of the ceiling tiles in Room G are missing.

Floors

The floors in the basement are concrete. Some are exposed, but most are covered with carpeting or vinyl tile. The floors on the first floor are covered with wall-to-wall carpeting.

Condition/Integrity: The carpeting appears to be in good condition. Vinyl tile is chipping and missing in some places. The concrete floor in the snack bar (Room I) is damaged.

Doors

Painted wood window and door frames are flat with no moldings. There is a variety of original or early replacement doors on the first floor. Some are flush doors (Figure 4-14), similar to those found on the third floor of Building 3. There is one 5-panel door (Figure 4-12), similar to those found on the second floor of Building 3 and elsewhere on the site. However, this door is an anomaly in Building 4. In addition, the opening was reduced to accommodate the door, which indicates that it was probably salvaged from elsewhere on the site.

Condition/Integrity: The doors are generally in good condition. The corridor doors in the basement are all flush replacement doors.

The following list indicates locations of original, or early, interior doors.

Five-panel: 4109

Two-panel: 4111-B, 4111-A.1

Flush: 4110, 4111-A, 4111-A.2, 4111-B, 4111-C, 4111-E.1, 4111-E.2

Built-in Features

In the basement, the snack bar and kitchen are fitted with fixtures and features appropriate to their current uses. None of these features have any historic significance.

Lighting

The lighting throughout the building consists of various non-original, ceiling-mounted, fluorescent fixtures. They appear to be in fair to good condition, but most are obsolete, and all are obtrusive.

Fire and Life Safety

Lighted exit signs are mounted on walls and hung from ceilings at stairways and exit doors throughout the building. Wall-mounted emergency lights are also located throughout the building. Sprinkler piping and heads suspended from ceiling or through walls are typical throughout.

Strobe fire alarms are noted in the following locations: Rooms 4014 Stairs A and B.

Wall-mounted fire extinguishers are noted in the following locations: Rooms A and F.

Structure

There are no original structural drawings for Buildings 3 & 4, and the architectural drawings give little clue as to the structural systems employed. Visual observations, without the benefit of destructive inspections, are therefore the only means of determining the original materials comprising the buildings' framing systems.

It was discovered by gaining access to an attic space in the main wing of Building 3, a ventilation chamber of Building 4, and the attic of the Southwest Pavilion, that the hospital buildings are cast-in-place, reinforced concrete structures. Even the steep pitched roofs of Building 3, and those of the pavilions, are cast-in-place concrete slabs.

Building 4 is one of the few buildings on the site with a flat roof. Part of this roof structure is visible in the original fan chamber located above the first floor vestibule at the north entrance. The chamber can be accessed from the roof through the roof scuttle adjacent to the exhaust fan, or from the first floor through a ceiling hatch. The fan chamber is an attic space, roughly 8' x 10', with an exhaust fan through the roof, and four vertical sheet metal ducts which rise from the space below and open into the fan chamber. This fan and duct arrangement was a part of the original ventilation system for the operating room.

Part of the reinforced concrete beam and column system is visible in the fan chamber. Two columns and a floor beam, all measuring 12" x 12", support a concrete ribbed slab roof system with ribs spanning north and south. This system was formed by placing north-south lines of 12" wide terra cotta tile with 6" spaces between each line for the concrete ribs. The terra cotta tiles appear to be 12" deep, resulting in a system of concrete ribs 6" wide x 12" deep, spaced at 18" center to center. The ribs usually have steel reinforcing for strength, and in this case bear on the concrete beam and exterior masonry wall for support. The terra cotta is primarily a form for the void between concrete ribs and for the slab above, but it also provides fire-resistance (Figure 4-27). The ribbed roof appears to be perfectly flat. Through a small gap in the frame of the roof hatch, it could be seen that a wood-framed roof structure posts off the concrete ribbed slab thus raising the roof and providing slope for drainage. The maximum distance from the wood roof deck to the concrete sub-roof structure is about 18". The wood framing consists of 2" x 6" rafters.

The 12" x 12" concrete roof beam at the south end of the fan room has a large crack approximately 1 foot from the face of the eastern column which supports it. It appears that the bottom reinforcing bars are fractured (Figure 4-28). Although the crack does not appear to be active, or worsening, the beam is structurally damaged, and repair should be effected soon. The beam-column joint should be reinforced, possibly by bolting a 45 degree steel kicker from the column to the bottom of the far side of the crack.

The framing system used for the first floor of Building 4 could not be determined, however drawings of the 1917 addition suggest it is a ribbed slab system with terra cotta infill.

Structural drawings do exist for the 1917 addition constructed on the south end Building 4. The addition is a one-story, reinforced concrete building with a structural roof framed over an unexcavated space. The concrete foundations consist of rectangular wall footing, and stepped column footing. Both the floor and the roof are 4" concrete two-way slabs with span lengths between 10 and 13 feet. All slabs panels are bounded by beams or perimeter walls. Concrete beams 9" x 14" in size span 10 to 13 feet, and 12" x 18" girders span roughly 20 feet. The concrete columns are either 14" x 14" or 18" x 18" square. At the south end of the original building the existing exterior masonry bearing wall was removed to open the space up to the new addition. In its place a continuous steel girder was constructed which supports the upper floor of the operating room and the roof of the addition. The steel girder consists of side by side I-shaped beams 18" deep, each weighing 70 pounds per foot. The girders bear on the interior concrete columns and the exterior masonry walls.

Mechanical and Electrical Systems

HVAC

Buildings 1 through 7 of the Potomac Annex Complex are provided with GSA supplied steam through an underground distribution system that originates in a small utility building at the southern end of the property. Steam is also provided to the three buildings of the adjacent 2430 E Street complex from this utility building. Buildings 1 through 7 were originally heated by cast iron steam radiators. These radiators still provide most of the heating in all of these buildings, except Building 6. Although, the buildings had their own boilers when they were constructed; the steam distribution system was not added until a later point.¹¹ Cast iron radiators in the basement are suspended from the ceiling or are floor-mounted. Units on the first floor are floor mounted.

A variety of HVAC modifications have been made to the buildings over the course of the years. The major change has been the addition of window air conditioning units to virtually all areas of the buildings except those air conditioned by larger packaged commercial units. Obviously, because of the age of the buildings, air conditioning was not installed during initial construction.

¹¹ "Building Evaluation Report for Potomac Annex Buildings 1-7." GSA-NCR Repair and Alterations Division. Washington D.C., December, 1991. P. IV-4-IV-5.

Consequently, the air conditioning units, whether window or packaged units, are of many different ages and conditions.¹²

In general, environmental conditions in the buildings are poor due to the lack of control on many of the radiators and the lack of cooling capacity of the window units. Additionally, the window units are less energy efficient than the commercial packaged units or central chiller plants. In most areas, air infiltration through window cracks and door openings is the only source of ventilation.

Electrical

The interior electrical systems in Building 4 have been upgraded; and the building's lighting system has been modernized. In addition, several energy conservation measures have been incorporated; they include the use of occupancy sensors to turn the lights on and off in selected rooms and the replacement of incandescent lamps with compact fluorescent lamps. The capacity of the building's main service equipment has been increased to take care of the increased electrical loads. Additional receptacle circuits from new distribution panelboards were also installed in the buildings to serve offices and other spaces.¹³

¹² Ibid.

¹³ Ibid. p.IV-8.

WARD PAVILIONS

The ward pavilions are so similar in original design and use that they are treated together in this section. The northeast and northwest pavilions are currently considered part of Building 3 and the southeast and southwest pavilions are considered part of Building 4. The spaces are numbered accordingly.

EXTERIOR EXISTING CONDITIONS

Roof

The form of the pavilion roofs is a simple center gable flanked by a flat roof on the north and south sides (Figures 3-7, 3-8, 4-7, 4-8). Like the rest of the buildings on the site, the gable on each pavilion was originally roofed with grey slate tiles. Three of the four still retain their slate; however, the roof on the northeast pavilion has been replaced with asphalt shingles. The flat sections on the northeast and northwest pavilions are modified bitumen apparently applied over the original copper. The flat roof on the southwest is copper. The roof ridges and edges are flashed with copper; except where modified bitumen has been applied. The gutters and down spouts are copper. Each of the roofs was fitted with a square vent on the in one corner of the gable roof; these features still exist.

Some of the down spouts are missing and should be replaced.

Cornice

There are painted wood cornices on the north and south sides of the pavilions with integral copper-lined gutters. The cornices appear to be in sound condition, but all exhibit paint failure.

Masonry

The four, two-story ward pavilions are constructed of buff-colored brick with parapet gables and chimneys. They are ornamented with white glazed brick quoins and center panels. The east and west elevations (the gable ends) are ornamented with a stepped pattern in white glazed brick.

Each of the pavilions has a chimney clad in the white glazed brick on the outward-facing elevation. A small brick structure with a metal roof is attached to the base of each chimney (Figures 3-7, 4-8). These were part of the original heating system (see discussion below). The inward facing elevations have false chimneys to balance the design (Figure 3-8, 4-7). The inward-facing elevations also have oculus windows at the apex, which have been infilled. These were originally fan exhausts. The original fan was discovered behind the masonry opening in the southwest pavilion (Figure 4-26).

Brick

The buildings are constructed of buff-colored glazed bricks laid up in English bond (Figure 4-9). The bricks measure 8-1/2" x 4" x 2-3/8". Mortar joints have a rodded profile. Horizontal joints are approximately 1/2" wide; vertical joints are approximately 1/4".

The brick exhibits surface cracking throughout and heavy soiling including deposits of flyash and gypsum. There are also areas of settlement cracking, mortar loss and a few cracked bricks. There are some areas where bricks have chipped by physical impact. Some of these areas have been repaired inappropriately and ineffectively with hard mortar and mismatched bricks. The brick surfaces are extremely soiled and they have areas exhibiting biological growth (especially on the north and west facades).

Metal corner guards have been attached to the west corners of the southwest pavilion as a means of protecting the building from automobile impact (Figure 4-8).

Glazed Brick

The white glazed bricks forming the quoins at the corners of the building sections and the decorative patterns on the gable ends of the pavilions appear to be in good condition.

Limestone

Limestone elements include the water table belt course and the window lintels and sills. The limestone is generally in good condition, but it is heavily soiled particularly on the north and west facades. The mortar between limestone units in the water table belt course has occasional sections of missing mortar.

Brick Air Intakes

Each chimney elevation is fitted with a small brick structure with a hipped metal roof. These were air intakes for the original heating system. The original building sections show these structures to be shafts open to a basement space designated as "heating apparatus" directly under the fireplace in each pavilion. Each structure has an opening with a limestone sill and lintel. The openings on the northwest and southwest structures are infilled with plywood; those on the northeast and southeast have metal screens, which appear to be original.

Additions

A one-story garage was added to the southeast pavilion on the south side (Figure 4-7). The date of construction is not known. The garage is constructed of brick compatible in color and detail to the original building; and, it is trimmed with limestone. Two paneled roll-up gates enclose the car entries on the south side. Because the design and materials of the garage are compatible with the original building, this garage does not have a negative impact on the overall appearance of Buildings 3 and 4. In addition, it is small in scale, and in the back of the rest of the complex.

Entries

Access is gained to the interiors of the pavilions through the solarium corridors connecting them to the main cores of Buildings 3 and 4. The northwest pavilion has an entry into Room 3003; it appears to be original, or an early alteration. It is located in the areaway on the north side and is served by bluestone steps.

One window opening in the southeast pavilion was insensitively converted to a door. The opening was lowered to grade, widened, and the upper section was infilled with red brick. A similar treatment was given to a nearby window opening in the adjacent solarium (Figure 4-7).

Doors

The door on the northwest pavilion is a single-leaf painted wood paneled door with glazing in the upper half. As noted above, it appears to be original or an early addition.

Windows

Most of the first-floor windows appear to be the original nine-over-nine double hung sash with six-light transoms (Figures 3-7, 3-8, 4-7, 4-8, 4-9). The basement windows are nine-over-nine without the transoms. The wood frames are recessed from the plane of the facade and the muntins are thick and rounded in profile. (This detail is noted on the interior.) All windows have limestone lintels and sills.

Most of the windows appear to be in generally sound condition upon initial inspection. However, some of the windows, particularly two on the north side of the southwest pavilion are in very poor condition (Figure 4-9). The wood frames and the top of the sash appear to be suffering from severe water damage. This may have been caused by long-term roof drainage deficiency. Some window openings have A/C units; the bottom sash are raised to accommodate the units, which are then flanked by glass or plastic side panels. Comments from building occupants indicate that a majority of the windows are painted shut. The transoms have been painted over or boarded up in a number of windows; this condition probably relates to the installation of suspended ceilings within.

The windows are currently painted white, although the original color was probably dark green to match the windows in the other buildings.

Fire Escapes

There are no fire escapes on the pavilions.

Lighting

There are no original exterior light fixtures on the pavilions. Flood lights are attached at the cornice level.

Foundation and Areaways

The foundation walls are above grade; they are clad in brick. The north side of the two north pavilions is bordered by the concrete areaway described in the section on Building 3.

Site and Landscape

Asphalt parking abuts the ward pavilions on all sides. Every building on the site is severely impacted by the presence of such expanses of asphalt parking; but, this building particularly suffers because the parking fills the spaces between sections of the building.

WARD PAVILIONS - INTERIOR EXISTING CONDITIONS

Please note that the survey for the ward pavilions was undertaken in the Summer of 1994. On a return visit in the Autumn of 1995, it was noted that extensive work was being undertaken, which entailed the removal of partition walls and the renumbering of rooms. The following survey reflects the conditions found in 1994, and utilizes room numbers that were in place at that time.

Floor plans

The four pavilions were constructed as hospital wards. The 1903 plans indicate that the wards were large open spaces intended to accommodate sixteen beds each. Dependencies within the wards contained a quiet room, kitchen and toilet. No basement plan from the 1903 set was located.

The southeast pavilion was constructed in 1907. The 1907 drawings illustrate the basement plans for the southeast and southwest pavilions; but, the annotations are not clear. It appears that the basements were intended for storage.

Condition/Integrity: The first-floor plans of the pavilions have been altered by the removal and introduction of partition walls. Three pavilions have been divided into offices using partial-height partitions, which could allow the original spatial configuration to register. However, the suspended ceilings transform the space to such a degree, that they barely represent their original appearance.

In plan, the northeast pavilion retains most of its original partitions separating the ancillary spaces from the main ward space. The northwest and southwest pavilions have lost their ancillary spaces in the northeast corner. The southeast pavilion has been most impacted by the introduction of partition walls creating four offices out of the original ward space.

On the first floor, each of the pavilions is fitted with four vertical ventilating ducts, which open into the attic. The southwest pavilion has its original metal vents at the top and bottom; the others have been removed or enclosed by gypsum board and suspended ceilings.

Based on visual inspection of the basements in all the pavilions, it appears that their current spatial configuration reflects the original condition to a large degree. Exceptions include the northwest pavilion, which appears to have lost its original corridor configuration to a large room (Room 3002); and the southeast pavilion, which includes the garage addition described above and the additions of Rooms 4011 and 4011A.

Offices and other spaces:

Basement (Rooms 3001*, 3002*, 3003*, 3004*, 3005*, 3006*, 3007*, 3008*, 3013, 3018, 3022, 3024, 4001, 4002, 4003-4005, 4004-4006, 4007, 4008, 4012, 4012A, 4013, 4014, 4015, 4015A, 4020)

*These rooms are highly restricted areas used by the Navy. Access to them was extremely limited.

Room 4015 is a later garage addition.

Walls throughout the basement are typically painted brick with plaster partitions. Gypsum board partitions indicate non-original construction. There is a variety of painted wood baseboards and vinyl base covering throughout.

Window frames are recessed in the masonry opening. The floors are concrete although they are mostly covered by wall-to-wall carpeting or vinyl tile; some are exposed. Most ceilings are painted plaster although a few have suspended acoustic tile.

First floor (Rooms 3101, 3108, 3117, 3118, 3119, 4101-4108, 4107, 4113, 4114, 4115, 4116, 4117)

The first-floor plans of the pavilions have been altered, and as noted above, their original spatial configuration is barely recognizable due to the introduction of the suspended ceilings, and, in the southeast pavilion the introduction of partition walls (Figures 3-23, 3-27, 4-16, 4-17, 4-18, 4-21, 4-22).

The southwest, northwest and northeast pavilions have been divided into smaller office spaces by the use of partial-height partitions. Like the other rooms throughout the site, the finishes in these rooms are quite simple. The walls are typically plaster with painted wood baseboards. The window and door frames are painted wood, flat with no moldings. The floors are wood and covered with carpeting.

Stairs

There are no stairs in any of the pavilions. The nearest ones are in the solarium corridors adjacent to the southeast and southwest pavillions. Please refer to that section.

Toilets

The toilets on the first floors of the ward pavilions are in original toilet locations (Rooms 3101A, 3119A, 4108A, 4117A).

There appears to be a toilet renovation project underway. However, at the time of the survey, some original, or early, fixtures and features were noted. Room 4108A (Figures 4-19, 4-20) and Room 4117A have original, or early, marble water closet stalls with paneled wood doors, and an original slop sink, similar to others found on the site. The floor and wall finishes are not original.

Room 3101A (Figure 3-24) was under demolition at the time photographs were taken. It also had marble stalls and a slop sink similar to that in Room 4108A. Demolition made it possible to see the original mosaic tile floor (Figure 3-25) and the original ceramic tile wall finish (Figure 3-26).

Finishes and fixtures in other toilets are recent replacements (Rooms 4011, 4011A, 4013A).

Finishes

Walls

The original partition walls are typically painted plaster with a 7" painted wood base. Some basement walls are painted brick. Non-original partitions are usually gypsum board with a variety of wood or vinyl baseboards.

Like Building 3, some pavilion rooms on the first floor have remnants of white 4" x 6" ceramic tile remaining from their original uses in the hospital (Figure 4-12).

Condition/Integrity: Original walls are either brick or plaster. Gypsum board partitions with miscellaneous finishes are not original. Room 4113 has ceramic tile remnants. Room 3117 has a laminated layer of gypsum board at dado height, which may cover or replace the original ceramic tile. The partition between Rooms 3018 and 3022 is a non-original terra cotta infill. The north wall of Room 3024 is gypsum board.

Walls throughout indicate some paint failure, impact, and water damage caused by water infiltration from the outside, or faulty plumbing and steam heat. This is especially noted in the basement, Room 3006.

Ceilings

The basement ceilings are typically painted plaster. Exceptions include: 1' x 1' lay-in acoustic tile in Rooms 4001, 4003-4005; 2' x 4' suspended acoustic tile in Rooms 4012, 4012A, 4013, 4014, 4016. The ceiling in the garage (Room 4015) is painted concrete. The ceilings in Rooms 4018 and 4019 are painted gypsum board.

The first-floor pavilion rooms have been fitted with suspended acoustic tile ceilings (Figures 3-27, 4-16, 4-17, 4-21).

Condition/Integrity: Ceilings are original for the most part, although they have been impacted by the installation of suspended ceilings, plumbing and conduits. Like the walls, the ceilings indicate limited areas of paint failure and water damage caused by water infiltration from the outside, or faulty plumbing and steam heat.

The ceiling in Room 3018 exhibits severe water damage and plaster failure. Room 3108 has some staining in the ceiling.

The installation of suspended ceilings in the ward pavilions cuts the space nearly in half. It detracts from the original character of the space and impacts the exterior appearance of the windows. Where the early ceiling was visible behind the acoustic tile, it appeared to be painted fiberboard with wood battens at the seams. The electric conduit runs across the surface, indicating that this material is either original or early.

Floors

The basement floors are concrete slabs, those above are wood. Both floor types are typically covered with wall-to-wall carpeting or vinyl tile. There are some areas of exposed wood floors in the closets. The toilet floors are generally ceramic tile covered by replacement ceramic or vinyl tile.

Condition/Integrity: The carpeting is typically in good condition, with some signs of wear in the corridors. The vinyl floors are scuffed and worn. The concrete floor in Room 3018 is cracked and pitted.

Doors

Painted wood window and door frames are flat with no moldings. There is a variety of original or early replacement doors in the ward pavilions. Typically, the original or early replacement doors are wood 5-panel with brass hardware, similar to those found elsewhere on the site.

Condition/Integrity: The doors are generally in good condition.

The following list indicates locations of original, or early, interior doors.

Five-panel (some of these, particularly in the basement are replacement doors that replicate the old doors): 3119A, 3117, 4001, 4007-A, 4007-D, 4008-A, 4010A, 4013-A, 4016, 4015-A, 4020, 4101/4108 (closet doors), 4113, 4116 (probably salvaged), 4117 (closet), and 4117-A.

Two-panel: 4002, 4006-B, 4007-C, 4112, 4112-A, and 4115.

The doors in the basement of the northeast pavilion corridor are fit into segmentally arched brick openings. The frames are set within the openings without casings. They are mostly double-leaf doors with glazed panels in upper half. Some have leaves of equal width; others, have leaves of unequal width (Figure 3-35). The following appear to be original or early basement doors: 3013A, 3013-B, 3013-C, and 3022-B, 3018-B and 3022-A.

Built-in Features

Originally, all four pavilions were fitted with fireplaces on the exterior wall facing away from the complex. They had simple painted wood mantel shelves and brick fire box surrounds and hearths, similar to those in Building 5. The fireplaces in the southeast (Figure 4-22) and northwest pavilions are in original condition (Figure 3-23). The fire place in the northeast pavilion has been blocked in by a gypsum wall enclosure. The fire box in the southwest pavilion has been blocked in with gypsum board, but the surround and mantel shelf remain exposed (Figure 4-16).

Room 3002 is fitted with painted wood shelves and base cabinets with sliding chalk boards on the north wall. These are not original features.

Lighting

The lighting throughout the building consists of various non-original ceiling-mounted fluorescent fixtures. They appear to be in fair to good condition, but most are obsolete, and all are obtrusive.

Fire and Life Safety

Lighted exit signs are mounted on walls and hung from ceilings at stairways and exit doors throughout the building. Wall-mounted emergency lights are also located throughout the building. Sprinkler piping and heads suspended from ceiling or through walls are typical throughout.

Strobe fire alarms are noted in the following locations: Room 3101 (NW Pavilion)

Wall-mounted fire extinguishers are noted in the following locations: Vestibule in NW Pavilion.

Fire alarm pull stations and bells are noted in the following locations: Room 3003, Vestibule in NW Pavilion.

Structure

Access was gained to the attic space in the southwest pavilion where it was confirmed that the building has a reinforced concrete roof framing system. The steep sloping roof (approximately 12 in 12 pitch) is a one-way slab spanning east-west between reinforced concrete frames. The gabled frames are spaced approximately 10 feet apart. There are four interior frames, with the slab bearing on the masonry walls at each end. At the roof scuttle it was possible to estimate the slab thickness at 6". The exposed portion of the frame members is 12" x 12" in size. The frame is supported at the eaves (or where the sloping of the roof meets the flat roof) by an east-west beam. The beam's location would indicate that it spans from the column to column, however the columns cannot be seen from the attic. The frame locations do not align with the column locations below.

The attic floor is uninsulated allowing identification of the framing. It consists of a ribbed concrete slab system similar to that of the roof of Building 4 previously described. The ribs are 6" wide, 12" deep, and are spaced 18" apart. Normally a concrete slab 2' to 3' thick would cover that whole system, spanning from rib to rib providing direct support for floor loads. The absence of a slab over the ribs in this structure indicates that only bond (adhesion) between the concrete ribs and the terra cotta tiles holds the floor system together. This is not a positive load transfer mechanism, and so the attic should not be used for storage or other loadings. It is walkable, but should not be considered suitable for other uses. The attic is currently empty.

The concrete ribs forming the attic floor have a midspan supporting in the form of an upturned concrete beam which runs the length of the building. Its exposed size is 10" x 12" and it is supported by a pair of 3/4" diameter steel hanger rods at each concrete roof frame. The attic floor is thus suspended from the roof structure (Figure S-5).

The first floor construction is unknown; however possible framing types are ribbed slab, or beam and one-way slab concrete systems.

Along the side walls of the attic are 12" x 12" vertical sheet metal ducts which are from the occupied space below and terminate just above the attic floor. Part of the original ventilation system, air was drawn through these ducts from the patient ward below by the large exhaust fan mounted in the attic end wall. The attic thus became a large plenum for the ventilation system.

Although only one of the four pavilions could be accessed, it is likely that the construction described above is similar for the others.

Mechanical and Electrical Systems

HVAC

Buildings 1 through 7 of the Potomac Annex Complex are provided with GSA supplied steam through an underground distribution system that originates in a small utility building at the southern end of the property. Steam is also provided to the three buildings of the adjacent 2430

E Street complex from this utility building. Buildings 1 through 7 were originally heated by cast iron steam radiators. These radiators still provide most of the heating in all of these buildings, except Building 6. Although, the buildings had their own boilers when they were constructed; the steam distribution system was not added until a later point.¹⁴ Cast iron radiators in the basement are suspended from the ceiling or are floor-mounted. Units on the first floor are floor mounted.

A variety of HVAC modifications have been made to the buildings over the course of the years. The major change has been the addition of window air conditioning units to virtually all areas of the buildings except those air conditioned by larger packaged commercial units. Obviously, because of the age of the buildings, air conditioning was not installed during initial construction. Consequently, the air conditioning units, whether window or packaged units, are of many different ages and conditions.¹⁵

In general, environmental conditions in the buildings are poor due to the lack of control on many of the radiators and the lack of cooling capacity of the window units. Additionally, the window units are less energy efficient than the commercial packaged units or central chiller plants. In most areas, air infiltration through window cracks and door openings is the only source of ventilation.

Electrical

The interior electrical systems in the ward pavillions have been upgraded within the last six years; and the building's lighting system has been modernized. In addition, several energy conservation measures have been incorporated; they include the use of occupancy sensors to turn the lights on and off in selected rooms and the replacement of incandescent lamps with compact fluorescent lamps. The capacity of the building's main service equipment has been increased to take care of the increased electrical loads. Additional receptacle circuits from new distribution panelboards were also installed in the buildings to serve offices and other spaces.¹⁶

¹⁴ "Building Evaluation Report for Potomac Annex Buildings 1-7." GSA-NCR Repair and Alterations Division. Washington D.C., December, 1991. P. IV-4-IV-5.

¹⁵ Ibid.

¹⁶ Ibid. p.IV-8.

SOLARIUM CORRIDORS

EXISTING EXTERIOR CONDITIONS

There are five solarium corridors connecting Buildings 3 and 4 to each other and to the four ward pavilions. The two solariums on the north (Figures 3-5, 3-6, 3-9) and the center solarium running between Buildings 3 and 4 are straight in plan, providing a direct route from one core or pavilion to the other. The two solarium corridors at the south begin at a 90 degree angle east and west from the central solarium and then turn another 90 degrees to the south before turning again into their respective pavilions (Figure 4-10).

The two north solariums recess at their junctures with Building 3 and with the flanking pavilions (Figures 3-1, 3-5, 3-6, 3-9). The recessed areas adjacent to the pavilions have transoms over their windows. The recessed areas adjacent to Building 3 have openings in the transom space. The original drawings show this to be an original feature. As noted in the interior description, it appears that this open area was a plenum connected to a duct leading into rooms on either side.

All the wood members are painted white. Paint analysis is inconclusive as to the original paint colors. It appears that the early paint layers been stripped. The first paint layer on windows, frames and cornices is white. However, the windows on all the other hospital buildings on the site, including Buildings 3 and 4, were originally painted dark green. It is possible that the solarium corridors maintained the color scheme of white trim and dark green windows.

Roof

The roofs over the solarium corridors are flat with built-up roll roofing with a gravel slag. Original drawings and historic photographs show that the solarium corridors on the north side of the building were originally finished with a balustrade with turned balusters. A thin metal pipe rail exists there now (Figures 3-5, 3-6, 3-9). The original intent was to use the outdoor spaces on the north solariums as roof gardens; whether or not this idea was executed is not known.

Cornice

There are painted wood cornices with integral copper-lined gutters. The cornices appear to be in sound condition, but all exhibit paint failure. Down spouts are located at the sides of the solariums (Figures 3-10, 4-10); some are missing. The cornices are painted white, which is probably consistent with the historic treatment. Please see the general note on paint analysis above.

Masonry

Brick

The basement level of all the solarium corridors is brick matching the brick on the other structures within the building complex.

The basement-level walls of the solarium corridors are constructed of buff-colored glazed bricks laid up in English bond (Figure 4-9). The bricks measure 8-1/2" x 4" x 2-3/8". Mortar joints have a rodded profile. Horizontal joints are approximately 1/2" wide; vertical joints are approximately 1/4".

The brick exhibits surface cracking throughout and heavy soiling including deposits of flyash and gypsum. There are also areas of settlement cracking, mortar loss and a few cracked bricks. There are some areas where bricks are chipped by physical impact. Some of these areas have been repaired inappropriately and ineffectively with hard mortar and mismatched bricks. The brick surfaces are extremely soiled and they have areas exhibiting biological growth (especially on the north and west facades).

Limestone

A limestone belt course separates the basement from the first floor on all of the corridors. Basement windows sills and lintels are also limestone.

The limestone is generally in good condition, but it is heavily soiled particularly on the north and west facades. The mortar between limestone units in the water table belt course has occasional sections of missing mortar and lost adhesion.

Doors

The primary access to the solarium corridors is through the interior of Buildings 3 and 4. Most of the exterior entries are secondary and are located in the basements. The doors appear to be original or replications. Four doors are located on the central corridor (Figures 3-6, 3-10, 4-10). They are comprised of wood and glass double leaf doors; some appear to have original hardware, others are fitted with automatic openers. One has a wood screen door.

The entries to the north pavilions, which are below grade, have bluestone steps with poor concrete repairs.

Windows

The first-floor levels of all the solarium corridors are composed of glazed partitions supported by painted wood structural members (Figures 3-5, 3-10, 4-10). The windows are set into a wood framework composed of a paneled dado below and a running blank frieze above. Mullions separate the eighteen-over-eighteen operable sash from the paired vertical eighteen-light fixed sash.

As noted above, the recessed sections of the north solarium corridors have transoms or openings in the transom area; these are over twelve-light fixed sash (Figures 3-1, 3-2, 3-3).

The window openings on the basement level accommodate an array of window and door openings. The north solarium corridors have small two-over-two wood sash windows and some

wider windows, which have been fitted with exhaust fans (Figures 3-5, 3-6, 3-9). The south and central solarium have larger windows reflecting the configurations of those above (Figures 3-10, 4-10).

The panels under the windows are painted white, which is probably consistent with the historic treatment. The windows are also painted white; however, it is possible that they were originally dark green to match the other buildings on the site. Please see the general note on paint analysis above.

Fire Escapes

There are two steel fire escapes, which serve Buildings 3 and 4; they are located on the north solarium. The east fire escape (Figures 3-6, 3-9) begins at the roof dormer on Building 3; it turns at a landing between the third and second floors, and opens onto the roof of the solarium corridor. It then opens off the back of the solarium, switches back to a door at the first-floor level on the solarium and switches back again opening onto a concrete pad in the parking lot. The structure is supported by steel columns and by a deck over the solarium and cross bracing with concrete footings on both the north and south sides of the solarium.

The west fire escape (Figure 3-5) is a simpler structure. Made of steel, it begins at a door on the first-floor level of the solarium and switches back to a landing and then to grade.

The fire escapes appear to be fairly recent additions. They are far less obtrusive than the wood fire escape noted in the historic photos of this building; and, they are an improvement on those that still exist on Buildings 5 and 7. However, the east fire escape, particularly, has quite a significant impact.

Lighting

There are no original exterior light fixtures on the solarium corridors. Flood lights are attached at cornice level.

Foundation and Areaways

The foundation walls are above grade, and they are clad in brick. Asphalt parking abuts the pavilions on most sides, and has a serious negative impact.

Site and Landscape

Asphalt parking abuts the solarium corridors on all sides. Every building on the site is severely impacted by the presence of such expanses of asphalt parking; but, this building particularly suffers because the parking fills the spaces between sections of the building.

SOLARIUM CORRIDORS- INTERIOR EXISTING CONDITIONS

Floor plans

The first-floor plans of the solarium corridors express their original purpose of providing circulation from one building to the other. Their width suggests that, in addition to circulation, they also were used occasionally by patients for taking sun and fresh air. The south corridors are closed by sets of double doors where they turn into the southeast and southwest pavilions. The spaces entering into the pavilions were originally designated as sun rooms.

All of the corridors are fully glazed. The windows on the first floor are eighteen-over-eighteen double-hung wood sash flanked by eighteen-light fixed sash. They are set over a low plaster dado on the first floor. The wall surfaces are brick in the basements, and the window frames are recessed in the masonry openings. The basement corridors are flanked by smaller rooms on the sides. All the corridors (except the central one) were originally served by a set of stairs.

The ceilings are typically painted plaster. In the basement the floors are concrete with quarry tile. The first floor is wood covered with carpet.

Condition/Integrity: On the first floor, the northeast and northwest corridors have been bisected by non-original partitions, which obscure the original spatial configuration. These partitions seriously detract from the architectural character of the spaces. The southeast, southwest and central corridors remain open in their original configuration.

On the basement level, the partitions appear to be later gypsum board additions to accommodate toilets and storage rooms.

Room 3016C was evidently an original stair, although the stairs have been removed. Presumably, it matched those in the south corridors.

All the wood surfaces are now painted white. Paint analysis indicates that originally, the windows, frames and baseboards were stained dark and varnished.

Many of the corridors are heavily used for storage. This is condition detracts from the architectural quality of the building and poses a hazard for the occupants.

Stairs

The stairs in the southeast and southwest solarium corridors are mirror images of each other (Figures 4-23, 4-24, 4-25). The stairs rise from the basement to the first floor, and were originally open on one side. They both have been enclosed at the basement level. The stairs have painted wood risers and treads, which have been partially surfaced with aluminum anti-skid

surfaces. The banister is composed of a wood painted handrail and square-sectioned balusters, three to a stair. The exterior basement walls are painted brick; the inner walls are gypsum board.

Condition/Integrity: The stairs are in good condition although the surfaces are scuffed and chipped. Paint analysis shows that the riser and balusters were originally dark stained and varnished. The basement wall was painted light green.

Toilets (Rooms 3010, 3010A, 3016, 4009A, 4010A)

The toilets are all located in the basements of the corridors. They all are later additions with gypsum board partitions. The perimeter walls are painted brick.

Condition/Integrity: The construction of the toilets on the basement level does not detract from the architectural quality of the building. The fixtures are serviceable, but not significant.

Finishes

Walls

The brick walls in the basement have been painted. The walls on the upper floors and in the stairs are painted plaster with painted wood baseboards. The window frames are flat with no moldings (Figures 3-15, 4-15).

Condition/Integrity: The paint on the brick walls in the basement does not reflect the original condition; the brick would have been left unpainted.

The plaster walls exhibit a great deal of water penetration and damage due to impact. This is particularly noted in Rooms 3016, 3016A, 3016B. Some of the plaster walls on the first floor also suffer from severe water penetration (Figure 4-25).

Ceilings

The ceilings are typically painted plaster with some suspended acoustic tile ceilings.

In the north corridors, on the first floor, the ceilings are dropped at the point where the transoms open to the outside. This is an original feature, and appears to have served as a plenum for the original ventilating system.

Floors

The basement floors are concrete slabs, covered with quarry tile or vinyl tiles. The upper floors are wood and covered with wall-to-wall carpeting or vinyl tile.

Condition/Integrity: The carpeting is typically in good condition, with some signs of wear in the corridors. The quarry tiles are typically in good condition with some cracking and scuffing.

Doors

None of the interior doors in the solarium corridors is original.

Lighting

The lighting throughout the building consists of various non-original ceiling-mounted fluorescent fixtures. They appear to be in fair to good condition, but most are obsolete, and all are obtrusive.

Fire and Life Safety

Lighted exit signs are mounted on walls and hung from ceilings at stairways and exit doors throughout the building. Wall-mounted emergency lights are also located throughout the building. Sprinkler piping and heads suspended from ceiling or through walls are typical throughout.

Strobe fire alarms are noted in the following locations: Room 4010.

Wall-mounted fire extinguishers are noted in the following locations: Rooms 3110-A , and 4010.

Fire alarm pull stations and bells are noted in the following locations: Rooms 3010-B, and 4010 (fire alarm bells).

Structure

The solarium corridor between Building 3 and the northwest pavilion has a flat wood-framed roof composed of 3" x 10" rafters spaced at 18", topped with 5-1/2" wide wood decking. This framing was visible where some finishes had been removed. It is very possible that all the corridors are wood-framed both at floor and roof levels.

Mechanical and Electrical Systems

HVAC

Buildings 1 through 7 of the Potomac Annex Complex are provided with GSA supplied steam through an underground distribution system that originates in a small utility building at the southern end of the property. Steam is also provided to the three buildings of the adjacent 2430 E Street complex from this utility building. Buildings 1 through 7 were originally heated by cast iron steam radiators. These radiators still provide most of the heating in all of these buildings, except Building 6. Although, the buildings had their own boilers when they were constructed;

the steam distribution system was not added until a later point.¹⁷ The heating in the corridors consists of horizontal pipes running under the windows.

A variety of HVAC modifications have been made to the buildings over the course of the years. The major change has been the addition of window air conditioning units to virtually all areas of the buildings except those air conditioned by larger packaged commercial units. Obviously, because of the age of the buildings, air conditioning was not installed during initial construction. Consequently, the air conditioning units, whether window or packaged units, are of many different ages and conditions.¹⁸

In general, environmental conditions in the buildings are poor due to the lack of control on many of the radiators and the lack of cooling capacity of the window units. Additionally, the window units are less energy efficient than the commercial packaged units or central chiller plants.

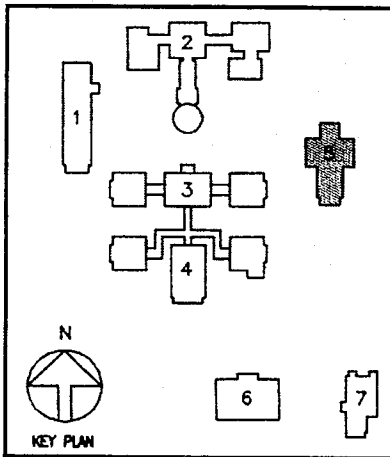
Electrical

The interior electrical systems in the solarium corridors have been upgraded within the last six years; and the building's lighting system has been modernized. In addition, several energy conservation measures have been incorporated; they include the use of occupancy sensors to turn the lights on and off in selected rooms and the replacement of incandescent lamps with compact fluorescent lamps. The capacity of the building's main service equipment has been increased to take care of the increased electrical loads. Additional receptacle circuits from new distribution panelboards were also installed in the buildings to serve offices and other spaces.¹⁹

¹⁷ "Building Evaluation Report for Potomac Annex Buildings 1-7." GSA-NCR Repair and Alterations Division. Washington D.C., December, 1991. P. IV-4-IV-5.

¹⁸ Ibid.

¹⁹ Ibid. p.IV-8.

BUILDING 5: SICK OFFICERS' QUARTERS (1908-1910)**EXTERIOR EXISTING CONDITIONS**

Building 5 is situated on the east side of the site. It was originally constructed as the Sick Officers' Quarters, which allowed officers to recover in separate quarters from enlisted men. It is a "T"-shaped brick building with a hipped roof, two-and-one-half stories in height, set on a raised basement. The body of the building is constructed of yellow brick laid up in Flemish bond with quoins at the corners and granite keystones, window sills, and water table.

The front elevation is oriented to the north (Figure 5-1). It is seven bays wide with a central entry dominated by a colossal two-story classical porte cochere (Figures 5-4, 5-6). The main entry, located under the porte cochere, is served by a flight of granite steps. A second set of concrete steps on the east side was added later (Figure 5-5). The ceilings are painted tongue-and-groove planks. The original door was a glazed double-leaf three-panel door set into an architrave with a leaded-glass fan light above. These were replaced by aluminum and glass doors, which detract from the architectural character of the building (Figure 5-7). The windows are six-over-six double-hung wood sash with flat arches composed of brick voussoirs with granite keystones and sills. Copper leaders and down spouts are attached to the masonry.

The south elevation (Figures 5-2, 5-3) is characterized by a two-story sun porch defined by wood Tuscan columns set on a granite sill. Originally, this porch was open; but, it was infilled to create office spaces on the interior. The west elevation (Figure 5-3) is defined by the projecting short stem of the "T" at the north end and the longer stem to the south creating a right angle into which is situated a secondary entry. The projection at the north end is three bays wide and otherwise detailed in the same manner as the rest of the building. The long stem to the south is five bays wide including the entry bay. A one-story classically-inspired portico with a short flight of steps serves the entry on this side. The east elevation (Figure 5-2) is similar to the west except for the areaway configuration.

The slate-covered hipped roof has a cross hip over the north stem of the "T." There are ten roof dormers and a skylight, situated on the west side. A slate-covered elevator bulkhead pierces the roof on the west side. Brick chimneys flank the dormers on the east and west sides. Copper flashing was used throughout and the entire roof is finished by a wood modillioned cornice with an integral copper-lined gutter.

Roof

The hipped roof (Figures 5-1, 5-2, 5-3) is covered with grey slate tiles and has a cross hip at the north end. It appears to be in good condition generally. Roof and dormer ridges and edges are

flushed with copper. The gutters and down spouts are also copper. Nine dormer openings are the characterizing roof elements: two are centered over the porte cochere, one over the sun porch, and the others are grouped on the other roof slopes. The dormers have painted wood trim and slate siding. The dormer windows are three-over-three or two-over-two wood sash; most have been altered to receive A/C units or vents. The dormer on the south also serves as an entry to the top level of the sun porch. A pair of brick chimneys flank the dormer on the east and west stems of the "T." A slate-covered elevator bulkhead with a hipped slate roof pierces the roof on the west side. The quoins on the elevator bulkhead are painted wood. Next to the bulkhead is a stairwell skylight. There are several vents and ventilators.

The roof surfaces over the porte cochere and sun porch are covered with built-up roll roofing, which is in very poor condition. In addition, the drainage systems are partially blocked on both roofs causing continual standing water problems and serious water infiltration.

Cornice

The roof is finished with a painted wood modillioned cornice. The cornice is in generally good condition. However, water damage is noted at the southeast corner where the porte cochere joins the body of the building; this is due to poor roof drainage on the porte cochere. The cornice is painted white, which is consistent with the historic condition.

Masonry

Brick

The body of the building is constructed of variegated yellow brick laid up in Flemish bond (Figure 5-19). The bricks measure 8" x 3-7/8" x 2-3/8". The brickwork features quoins at the building corners and voussoirs over the windows on the first and second floors. Mortar joints have a rodged profile. Horizontal joints are approximately 1/2" wide; vertical joints are approximately 1/4".

The brick is generally in good condition with limited areas of settlement cracking, mortar loss and a few cracked bricks. Some cracks on the east side have been inappropriately and ineffectively repaired with hard mortar. Moisture staining is noted throughout. This condition is particularly noted under windows, mostly due to condensate from window A/C units. Several areas under the cornice and along down spouts are also moisture stained due to poor roof drainage. On the north side, where roof drainage is particularly bad and sunlight is scarce, biological growth is noted in several areas.

Granite

Granite elements include the water table belt course; all arch keystones and window sills; basement window lintels; and coping on the porch platforms (Figures 5-4, 5-8, 5-9, 5-14, 5-15, 5-17, 5-19, 5-29). The granite is generally in good condition, but it exhibits some staining from

window A/C units and poor roof drainage. The joints between granite units in the water table belt course have some sections of mortar loss or loss of adhesion.

Porte Cochere

The north facade is dominated by a colossal two-story classical porte cochere (Figures 5-1, 5-4). The porte cochere is three window bays wide with a central entry at both the first and second floors (Figure 5-7). Six, two-story columns (and two pilasters) support the entablature and balustrade above (Figure 5-6). The entablature consists of a blank frieze and the modillioned cornice, which continues around the building. The ceilings are painted tongue-and-groove planks (Figures 5-5, 5-6).

The first-floor porch is a poured concrete slab with a ramp up to the entry step (Figures 5-7, 5-8). The first-floor entry platform is served by a flight of granite steps leading directly from the porte cochere on the north side; these appear to be original. On the east, there is a second set of non-original concrete steps with an iron pipe rail (Figures 5-4, 5-5); these steps are cracked and spalling. On the west side, the porch has been altered to serve as a loading dock (Figure 5-8). Two iron ladders are attached to the porte cochere. One runs up the west side from the first to the second floor and is attached to the balustrades (Figure 5-8); the other is attached to the masonry adjacent to the second-floor entry and serves as a scuttle to the roof.

A balcony projects from the second floor (Figure 5-4). The floor of the balcony consists of 9-1/2" x 6" terra cotta tiles, which may be original, and were evidently painted at one time. Moisture is a problem here, and organic growth is noted in several places.

The porte cochere is the most prominent feature of the building. It is also the most compromised and deteriorated of the building features. Its conversion to a loading dock entailed the removal of a section of balustrade on the west side and its replacement with a wood gate. The original architectural drawings indicate granite steps in this location. The crude installation of edge and corner bumpers and the attachment of metal signs do not enhance the appearance. Furthermore, the use exposes the structure to continual damage from vehicular impact including broken brickwork and displacement of column bases and granite coping (Figure 5-9).

Poor roof drainage noted above has caused serious deterioration of wooden members including the ceiling, entablature, pilasters, balustrade and columns. This condition is particularly bad in the southeast corner where the moisture penetration is visible all the way down the pilaster to the first floor (Figure 5-6). The damage is caused by an over-loaded roof drain on the east side and a blocked drain on the west. All of the columns are constructed of wood with the exception of the northwest plinth, which is steel. The columns exhibit moisture damage and paint failure. This is particularly noted where the wood plinths are rotting and the steel plinth is rusting. Even on a sunny day, the wood is wet and punky.

The wood members are painted white, which is consistent with the historic treatment.

Sun Porch

The south elevation is characterized by a two-story sun porch defined by two-story Tuscan columns set on a granite sill at grade (Figures 5-2, 5-3, 5-10). The structure is surmounted by a balustrade with turned balusters. Originally, the sun porch was open, but was infilled to create office spaces on the interior. The infill material appears to be cementitious panels with stock wood windows. While enclosing the sun porch could be done sympathetically, the materials and details of this installation do not enhance the appearance of the building.

There is access to the structure at grade on the south side (Figure 5-11) and from the roof dormer at the balcony level. A wood fire escape is attached to the structure on the south side and access is gained from a door on the second floor and from the balcony above.

The wood trim encasing the structural members is heavily overpainted but it appears that the wood is rotted and checked, especially on projecting horizontal trim elements (Figure 5-12). There is severe paint failure throughout. As noted above, on-going roof drainage problems have caused both exterior and interior water damage.

Secondary Entries

On each of the east and west facades, a one-story entry portico is situated in the corner where the short and long stems of the "T" join (Figures 5-2, 5-3, 5-13, 5-16). These porticos are supported by one-story Tuscan columns and have balustrades with straight balusters. Access to the west portico from the interior is through a wood and glass door set beneath a transom; this appears to be original (Figure 5-14). Access to the east portico is through two french doors, which also appear to be original (Figure 5-17). The floor slabs for both porticos are poured concrete set on a brick base with granite coping. Each is served by a set of steps. Those on the west (Figure 5-15) include an original granite step, that is in good condition and a concrete step, which is cracked in a number of places, probably due to physical impact. In addition, the columns exhibit serious paint failure and the steel plinths are rusting.

Doors

The original door entering from the porte cochere was a glazed double-leaf three-panel door set into an architrave with a leaded-glass fanlight. It was probably similar to the existing door on the south side (Figure 5-30). The existing door is an obtrusive glass and aluminum double leaf door with an insensitive aluminum infill in the arch above (Figure 5-7). Entering the second-floor balcony in the porte cochere is a single-leaf wood and glass door, which appears to be original.

The original exterior entry on the south side is now the interior vestibule entry; it retains the double leaf glass and wood doors and the leaded-glass fanlight (Figure 5-30). The south sun porch is entered at grade through a single leaf wood and glass door (Figure 5-11), which is probably contemporaneous with the infill of the sun porch. A second-story window on the south facade of the sun porch (Figure 5-10) was lowered for access to the fire escape, the door here

probably dates to this alteration. A wood and glass door enters the top balcony of the sun porch through the dormer; this door appears to be original.

Of the two entries on the east portico, one retains its original wood and glass french door, the other was replaced by a wood and glass single leaf door. The west portico door appears to be original. Two doors enter the basement on the west side; one is an original three-panel wood door; the other is a flush wood door with a glass panel.

Windows

Most of the windows appear to be the original six-over-six double hung sash (Figure 5-19). The wood frames are recessed from the plane of the facade and the muntins are thick and rounded in profile. (This detail is noted on the interior.) The top sash of the windows in the original section have molded brackets on the meeting rail. These windows are typical throughout the hospital buildings on the site. The windows in the sun porch were added at the time of the infill; they are also six-over-six double hung, but have thinner dimensions. The basement windows on the east and north sides of the building (Figure 5-20) are in window wells and are three-over-three wood sash. One opening has been converted to a vent.

Generally, the windows appear to be sound on initial inspection. A number of window openings have A/C units; the bottom sash are raised to accommodate the unit, which is then flanked by plastic side panels. The top half of toilet windows are typically infilled with plywood mountings for exhaust fans. Moisture penetration, visible on the interior, occurs below some window openings. Many of the windows are painted shut, and there is severe paint failure on windows and dormers throughout the building. The windows are painted white, although paint analysis has shown that historically, they were a dark green.

Fire Escapes

A non-original painted wood fire escape structure is attached to the south sun porch (Figure 5-3). It is set on concrete footings. The third floor provides access to the fire escape from the balcony of the sun porch; the second floor access is through a door converted from a window on the south side. The fire escape dominates and obscures most of the south elevation; it is a highly obtrusive alteration.

An iron ladder is attached to the west side of the sun porch (Figure 5-10), and two iron ladders are attached to the porte cochere (Figure 5-8).

Foundations and Areaways

A concrete areaway is located on the west side (Figure 5-13) giving access, light and air to the basement spaces. The areaway is entered from grade by way of concrete steps leading down to two entries. The concrete retaining wall is surmounted by a painted iron pipe rail, which appears to be original. The concrete coping is cracked at the corners and the sections are separating from

each other; this probably is caused by water entering at the railing socket and freezing. The steps are worn and cracked. Otherwise, the retaining wall appears to be in sound condition.

Adjacent to the areaway is a non-original brick-and-concrete block structure, which covers the tunnel entrance connecting Building 5 to Building 3 (Figure 5-13).

The basement windows on the north and west elevations are enclosed by window wells with concrete sills; and the basement level is unexcavated under the south sun porch. The foundation walls are clad in brick.

Lighting

There is no original lighting on the building. There are flood lights attached at cornice level, which are fairly unobtrusive. The second-floor balcony in the porte cochere has a globe fixture mounted on the ceiling. Brass light fixtures (Figure 5-18) in a vaguely classical style are suspended from the ceilings on the most of the porches. Like the other similar fixtures on the site, this is flimsy and out of scale with the building.

Site and Landscape

The site is surrounded by asphalt parking on the west, south and east sides (Figures 5-1, 5-2, 5-3, 5-10) and an asphalt drive through and around the porte cochere on the north (Figure 5-4). In most cases, the asphalt adjoins the building directly (Figures 5-1, 5-15, 5-16, 5-20). In some places, a small grass lawn with miscellaneous border plantings and crossed by concrete walks serves as a buffer (Figure 5-13). One mature tree is planted at the southwest corner of the sun porch (Figure 5-3). On the east side, the asphalt parking lot has a concrete curb with a painted iron pipe rail (Figure 5-2). Beyond that, a grass lawn slopes down to the retaining wall at 23rd Street. An asphalt swale runs partially around the areaway on the west side of the building and a grate-covered swale runs between the concrete walk and the asphalt drive on the north (Figure 5-4). Adjacent to the drive around the porte cochere, is a wood fence separating this building from the residence to the north.

BUILDING 5 - INTERIOR EXISTING CONDITIONS

Please note that the survey for this building was undertaken in the Summer of 1994. On a return visit in the Autumn of 1995, it was noted that work was being undertaken in this building, which entailed removal of partition walls and renumbering of rooms. The following survey reflects the conditions found in 1994, and utilizes room numbers that were in place at that time.

Floor plans

The interior spaces were originally arranged around a central, T-shaped, double-loaded corridor. A stair and elevator were placed just off center of the building. This plan has been heavily modified on the first and second floors, and radically altered on the basement level. The use change from a hospital to an office building necessitated many alterations in the plans, features

and finishes of the inner spaces. The first floor originally accommodated bedrooms, toilets, offices, a library, a dining room and a diet kitchen. The public spaces featured corner fireplaces, which are still extant. The second floor accommodated bedrooms. No third-floor plan was located, but it is likely that space also accommodated bedrooms. A large recreation space, occupying the entire south side, was located in the basement. The north side of the basement was sub-divided for storage space.

Condition/Integrity: The basement floor plan is very different from its original configuration. Room 5000 was created from the east-west corridor and four smaller rooms. The east and west transepts of the corridor "T" were obliterated when the partition walls between the structural columns were removed. The south end of the basement, which was originally a large recreation room with two ancillary rooms, was divided into several smaller spaces.

The first floor plan retains some of its original layout, but it has been modified by the construction of a partition on the east side of the north corridor eliminating the east stem of the T. Interior partition walls have been added in some places and removed in others; this is particularly true in the areas of Room 5114 and 5101.

The second-floor alterations are similar to those on the first floor. A partition was constructed on the east side of the north corridor eliminating the east stem of the T. In addition, the south end of the building has been closed off and the corridor partitions removed to create Room 5213. No original third-floor plans were located; however, alteration to the plan seems likely, since at the least, the interior doors are different from those found on the other floors.

Additional changes include the closure of the stair hall on the basement, second and third floors. And, as noted in the other buildings on the site, the south sun porches, originally open, were enclosed to create additional interior space.

Offices and other spaces:

Basement (Rooms 5000, 5001, 5003, 5004, 5006, 5007, 5008, 5009)

These rooms are mostly used for storage. Room 5000 is bisected by a row of structural columns, which were originally incorporated into a partition wall. The walls throughout the basement are typically painted plaster or exposed brick. Others are of a temporary nature, being constructed of fiberboard attached to wire mesh stretched between studs. Ceilings are painted plaster. The windows are recessed into their masonry openings. The floors are concrete and typically covered with vinyl tile.

First floor (Rooms 5101, 5102, 5103, 5104, 5105, 5106, 5107, 5111, 5112, 5114, 5117).

Second floor (Rooms 5200, 5202, 5203, 5204, 5205, 5206, 5207, 5208, 5211, 5212, 5213)

Third floor (Rooms 5301, 5302, 5302A, 5304, 5305, 5307, 5308, 5309,)

The offices are extremely utilitarian, with little architectural embellishment (Figures 5-25, 5-26, 5-27). On all three floors, the partition walls are typically painted plaster with a 7" painted wood base. Where base boards do not exist, or are of substitute materials, the wall is probably a later

partition. The ceilings are painted plaster. The floors are wood, but all are covered with wall-to-wall carpeting. There are several door types ranging from original five-panel wood doors to hollow core metal doors. Door and window frames are painted wood, flat with no moldings. The third-floor dormer windows on the north and south accommodate entries to the sun porch and porte cochere roofs.

Sun Porches

The southern sun porches were originally open on the first, second and third floors; however, the first and second levels have been enclosed and converted to offices. The third-floor space retains its original configuration as a balustraded porch. There is no corresponding space on the basement.

Rooms 5119 and 5120, used as offices, are separated by a corridor linking the entry to the main corridor. Room 5214 (Figure 5-28) is used for storage. The north office walls on both levels are the original brick exterior walls of the sun porch; they have been painted. In each case, the original entry door connecting the sun porch to the main building remains, although the windows on the first and second floor have been infilled. The other wall surfaces are infill gypsum board panels with wood sash windows set between the original wood Tuscan columns. The floors are covered with carpet. The ceilings on the first floor are painted plaster; those on the second floor are 1' x 1' perforated fiberboard tiles

Condition/Integrity: Water penetration problems are evident in the ceilings, particularly at the corners where the porch meets the brick wall. Exterior infill walls and windows are not original.

Corridors

Most, but not all, spaces on each floor open onto the central corridor (Figures 5-23, 5-24). Typically the walls and ceilings are plaster. On the first and second floors dropped beams delineate the crossing of the corridors. A trap door opens to the attic crawl space in the third-floor ceiling. The basement corridor walls are composed of a variety of materials as described above. The corridor floors are covered with wall-to-wall carpeting.

Condition/Integrity: The corridors reflect their original configurations but have been modified as noted in the comments on the floor plans.

Paint analysis shows that the finishes in the public spaces in this building were creamy white; the existing conditions are consistent with that intent.

Stairs

Please note that there are notations on some drawings from GSA indicating the location of a secondary stair in the southwest corner of the building. However, there is no such indication on the original drawings, and the stair is not extant.

The stair (Figures 5-21, 5-22) is centrally located in the floor plan and rises from the basement through the third floor. The painted iron stair structure includes an open stringer and stone treads. The bottom surfaces of the risers and treads are exposed and painted white. The bottom two steps curve out around the structural column, which also serves as the newel. The treads are partially covered with concrete and aluminum anti-skid surfaces, and the landings are covered with carpeting. The ceiling at the top of the stair is fitted with a wired-glass skylight. The stair has been enclosed on the basement, second and third floors with a gypsum board enclosure. The gypsum board walls have 4" vinyl base boards. A continuous run of square-sectioned steel balusters is attached to the oak hand rail at the top and a flat base at the bottom. The entire banister is then attached to the exterior stringer by a curved steel armature. The detailing of this stair is similar, but not identical to the main stair in Building 3.

Condition/Integrity: The condition is generally good. The gypsum board enclosures detract from the architectural character of the stair, particularly on the second floor; however, the infill does allow the structural columns to be read on the inner space of the stair. Paint analysis indicates that the stair was originally painted glossy black; the existing condition is consistent with that intent. The oak handrail has been painted; the original finish was varnish.

Elevator

The elevator is located adjacent to the stair in its original location. The cab is either a replacement, or the original has been refurbished. Its walls are surfaced with white plastic laminate panels and the floors are vinyl tile. The ceiling is a suspended stainless steel frame with a white plastic lens for the fluorescent light fixture behind.

Toilets (Rooms 5005, 5105A, 5109, 5110, 5201A, 5204A, 5205A, 5209, 5210, 5306)

Because this building was originally used as a hospital, there were originally many bathrooms, which were fitted with tubs, toilets and sinks. Many of these were later converted to office use by the removal of the fixtures and the reconfiguration of the walls. Others were altered by the removal of tubs, the extension of the space and the addition of more toilets.

Typically, walls and ceilings are painted plaster with a three-course ceramic tile base with cove finish. The floors are covered by a mixture of original 1" x 1" ceramic tiles and non-original ceramic and vinyl tiles. The fixtures typically include 6' high wood or marble partitions enclosing toilet, urinal and shower stalls. The partitions are mounted to the floors and walls using brass pipe rods and angles. The toilet stalls have panel or louvered doors and self-closing hardware (Figure 5-36). The shower stalls have 7" concrete shower curbs and raised concrete floors (Figure 5-37). Wood shelves and wood-framed mirrors are located above the porcelain sinks.

Condition/Integrity: There are some original sinks (Figure 5-38). The wood partitions, while not original are early alterations. The floors, walls, ceilings, fixtures and partitions are generally in fair to poor condition. Deficiencies exist throughout.

Finishes

Walls

The walls throughout the basement are typically painted plaster or exposed brick. Others are of a temporary nature, being constructed of concrete block, or fiberboard attached to wire mesh stretched between studs. On the upper floors, the walls are painted plaster or gypsum board (Figures 5-23, 5-24, 5-25, 5-26, 5-27, 5-28). Some of the smaller storage rooms are finished with a ceramic tile base indicating that they were originally toilets or bathrooms.

Condition/Integrity: Original walls are either brick or plaster. The small amount of 7" wood base board found throughout this building indicates that the floor plans have been altered significantly. Typically, 7" base board is found on original walls. Walls throughout exhibit paint failure, impact and water damage caused by water infiltration from the outside, or faulty plumbing and steam heat. Non-original walls in the basement are generally in poor condition caused by mechanical impact. The first-, second- and third-floor walls exhibit signs of localized peeling and chipping of paint. Vinyl wall coverings on the second floor are peeling. The electrical enclosure in the second-floor corridor is obtrusive and in poor condition (Figure 5-23).

The walls in the following rooms were noted to have specific damage:

Room 5003: the north wall is deteriorated.

Room 5005 (a toilet): The plaster behind the lavatory is powdered and crumbling; this is also true of the south wall in Room 5010.

Room 5214 (the sun porch): The east corners are damaged from water infiltration. (Please note that as of Autumn 1995, it appears that the wall was repaired and repainted. It is not known whether the source of the damage was located and repaired).

Ceilings

The ceilings are typically painted plaster (Figures 5-23, 5-24, 5-25, 5-26). Exceptions include suspended acoustical tile ceilings in Rooms 5101, 5103, 5105, 5105A, 5109, 5110, 5213, and 1' x 1' perforated fiberboard tiles in Rooms 5119, 5120, 5214.

Condition/Integrity: Ceilings are original for the most part, although they have been impacted by the installation of plumbing and conduits. The installation of suspended acoustic ceilings interferes with the window and door frame (Figures 5-26). Water infiltration and peeling paint is noted in Rooms 5003, 5004, 5007, 5008, 5009. The other ceilings appear to be in fair to good condition.

Floors

The basement floors are concrete slabs; those above are wood. Both floor types are covered with wall-to-wall carpeting or vinyl tile. The toilet floors are generally a combination of original and replacement ceramic tile. Some storage room and closet floors are covered with masonite.

Condition/Integrity: The vinyl tiles in the basement rooms are soiled, chipped or missing in areas. The carpeting is typically in good condition, with some signs of wear in the corridors. The floor adjacent to the radiator in Room 5201 is missing sections probably due to long-term water leakage in the radiator. There are cracks in the floors in Rooms 5201A and 5205A.

Doors

Painted wood window and door frames are flat with no moldings. Original or early replacement doors are wood, typically single leaf, with five horizontal panels, hung by two hinges, and fitted with brass door knobs and locksets (Figure 5-31). Unlike the doors in other buildings on the site, the panel molding on these doors is not rounded. This may indicate that floor plan changes included replacing the doors at an early date. Some early doors have fewer than five panels and have glazed upper panels (Figures 5-32, 5-33, 5-34). Some corridor doors are surmounted by glazed transoms. The south vestibule door on the first floor is the original exterior door, as noted in the discussion on exterior doors (Figure 5-30). Replacement doors include a variety of flush hollow-core wood and metal doors (Figure 5-35).

Condition/Integrity: The doors are generally in good condition.

The following list indicates locations of original, or early, interior doors, but note that a door replacement project is underway, and this may not reflect the existing conditions.

Six-panel: 5008B.

Five-panel: 5007, 5109, 5110, 5111A, 5111B, 5103A, 5103B, 5105A, 5105B, 5106B, 5106C, 5204B, 5211, 5212.

Four panel (top glass): 5206.

Three-panel: 5003, 5004, 5005, 5008A, 5214, Second-floor corridor.

Glass and wood door with fanlight transom: First-floor corridor (Figure 5-30).

Two panel: 5000, 5114B, 5117, 5119, First-floor corridor, 5102B, 5203A, 5309A.

One wood and glass panel (These doors appear to be early, but may not be original): 5301, 5303, 5306, 5308 (with louver at bottom).