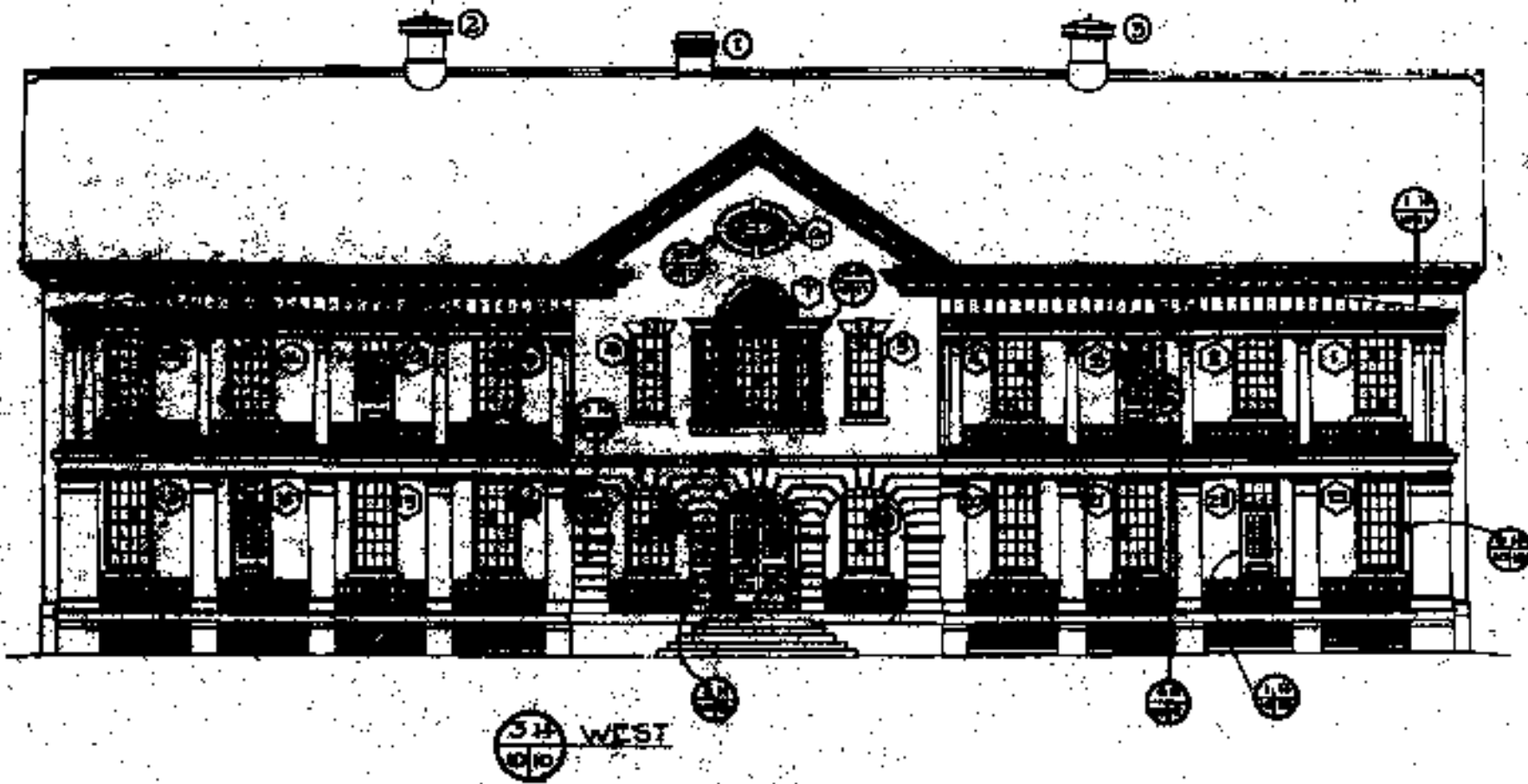


# Fort Hancock Rehabilitation Guidelines



Sandy Hook, New Jersey March 1999



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The developed areas of Sandy Hook, as they appeared in a 1943 aerial photograph.

## The Historic Leasing Program

**T**he National Park Service (NPS) is seeking to lease historic buildings at the Sandy Hook Unit of Gateway National Recreation Area, in Sandy Hook, New Jersey, using the authority derived from the National Historic Preservation Act Amendments of 1980, Public Law 96-515, 94 Stat.2997. These amendments, which are commonly known as the *Historic Leasing Program*, allow the National Park Service to enter into lease agreements with private individuals, institutions and corporations to provide for the upgrade and maintenance of historic and cultural properties owned by the Government of the United States through preservation, rehabilitation, or restoration.

All the buildings that the NPS has included in this leasing effort are historic, and contribute to the significance of the Fort Hancock and Sandy Hook Proving Ground Historic Landmark Districts. For the purposes of this document, the “Fort Hancock Historic District” is defined to include the Sandy Hook Proving Ground and the Sandy Hook Lighthouse, as well as the Fort Hancock army base. The district includes the batteries, proving grounds, fortifications, and military structures within the developed areas of Sandy Hook. The NPS can ensure the preservation of the buildings within the Fort Hancock Historic Landmark District by selecting lessees who can provide compatible adaptive reuses for these buildings. These lessees will become Park Partners, and through their occupancy, rehabilitation, and continued maintenance, will help the NPS accomplish its preservation goals at Sandy Hook.

## National Standards for Preservation of Historic Buildings

The NPS seeks Park Partners who will repair, rehabilitate and maintain these facilities in accordance with *The Secretary of the Interior’s Standards for the Treatment of Historic Properties*. These *Standards*, which include the *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*, have become the “ten commandments” for preservation and rehabilitation of National Register properties in the United States. The legitimacy of the historic leasing program

is derived from its ability to rehabilitate historic buildings, structures and landscapes to this national standard. The purpose of the *Fort Hancock Rehabilitation Guidelines* is to supplement the information set forth in *The Secretary of the Interior’s Standards and Guidelines*, and to assist potential Park Partners in making decisions about the rehabilitation and maintenance of the historic buildings.

### The Secretary of the Interior’s Standards for Rehabilitation

Within the Fort Hancock Historic District, it is assumed the work being done will be “rehabilitation,” which is defined as “the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values.” Within the Secretary’s *Standards*, the pertinent chapter, entitled *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*, will serve to direct rehabilitation work at Sandy Hook.

The NPS assumes that at least some repair or alteration to the historic building will be needed in order to provide for an efficient contemporary use. However, these repairs and alterations must not damage or destroy materials, features, or finishes that are important in defining the building’s historic character. For example, certain treatments—if improperly applied—may cause or accelerate physical deterioration of the historic building. This can include using improper repointing or exterior masonry cleaning techniques, or introducing insulation that damages historic fabric. In almost all of these situations, use of these materials and treatments will result in a project that does not meet *The Standards*. Similarly, exterior additions that duplicate the form, material, and detailing of the structure to the extent that they compromise its historic character will fail to meet *The Standards*.

*The Standards* pertain to historic buildings of all materials, construction types, sizes, and occupancy, and encompass the exterior and interior, related landscape features, and the building’s site and environment as well as attached, adjacent, or related new construction. *The Standards for Rehabilitation* are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility. These ten standards are as follows:

### **The Secretary's Standards for Rehabilitation**

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

### **Guidelines for Rehabilitating Historic Buildings**

Lessees conducting rehabilitation work on historic buildings at Fort Hancock are expected to follow the *Guidelines for Rehabilitating Historic Buildings*. The *Guidelines* are intended to assist in applying *The Standards* to projects in general, and pertain to historic buildings of all sizes, materials, occupancy, and construction types; to interior and exterior work. Consequently, they are not meant to give case-specific advice or address exceptions or rare instances. For example, they cannot tell owners or developers which features of their own historic building are important in defining the historic character and must be preserved or which features could be altered, if necessary, for the new use. This kind of careful case-by-case decision-making is best accomplished by seeking assistance from qualified historic preservation professionals in the planning stage of the project. Such professionals include architects, landscape architects, architectural historians, historians, archeologists, and others who are skilled in the preservation, rehabilitation, and restoration of historic properties.

Within the *Guidelines*, there is a hierarchy of historic preservation concerns that need to be addressed to ensure the preservation of a building's important or "character-defining" architectural materials and features. Rehabilitation guidance begins with protection and maintenance—the work that should be maximized in every project to enhance overall preservation goals. If deterioration is present, repair of the building's historic materials and features is recommended. If repair is not possible, the replacement of historic materials and features with new materials may be considered.

### **Identify, Retain, and Preserve**

Basic to the treatment of all historic buildings is the *identifying, retaining, and preserving* of those architectural materials and features that are important in defining the historic character. Avoid the types of actions that will cause the diminution or even loss of a building's historic character. It should be remembered, however, that such loss of character is frequently caused by the cumulative effect of a series of actions that would seem to be minor interventions.

### **Protect and Maintain**

*Protection and maintenance* are addressed after identifying those materials and features that are important and must be retained in the process of rehabilitation. Protection generally involves the least degree of intervention and is preparatory to other work. For example, protection includes maintenance of historic material through treatments such as rust removal, caulking, limited paint removal, and re-application of protective coating; cyclical cleaning of roof gutter systems; or installation of fencing, protective plywood, alarm systems, and other temporary protective measures. Although a historic building will usually require more extensive work, an overall evaluation of its physical condition should always begin at this level.

### **Repair**

*Repair* is recommended when the physical condition of character-defining materials and features warrants additional work. Guidance for the repair of historic materials such as masonry, wood, and architectural metals begins with the least degree of intervention possible, including such techniques as patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading according to recognized preservation methods. Repair also includes replacement-in-kind or the use of compatible substitute material where there are surviving prototypes (e.g., brackets, dentils, steps, plaster, or portions of slate or tile roofing). Although using the same kind of material is always the preferred option, substitute materials is acceptable if the form and design, as well as the material itself, convey the visual appearance of the remaining parts of the feature and finish.

### **Replace**

An entire character-defining feature is replaced with new material if the level of deterioration or damage of materials precludes repair (e.g., an exterior cornice, an interior staircase, or a complete porch or storefront). If the essential form and detailing are still evident and can be used to reestablish the feature as an integral part of the rehabilitation project, then its replacement is appropriate. As with repair, the preferred option is always replacement of the entire feature in kind (i.e., with the same material). Because this approach is not always technically or economically feasible, provisions are made to consider the use of a compatible substitute material.

It should be noted that, while the NPS guidelines recommend the replacement of an entire character-defining feature under certain well-defined circumstances, they never recommend removal and replacement with new material for a feature that could reasonably be repaired and thus preserved.

### **Design for Missing Historic Features**

When an entire interior or exterior feature is missing (e.g., an entrance or cast iron facade, or a principal staircase), it no longer plays a role in physically defining the historic character of the building unless it can be accurately recovered in form and detailing through the process of carefully documenting historical appearance. Where an important architectural feature is missing, its recovery is always recommended in the guidelines as the preferred course of action. Thus, if adequate historical, pictorial, and physical documentation exists so that the feature can be accurately reproduced, and if it is desirable to reestablish the feature as part of the building's historical appearance, then designing and constructing a new feature based on such information is appropriate. However, a new design that is compatible with the remaining character-defining features of the historic building is acceptable. The new design should always take into account the size, scale, and material of the historic building itself and, most importantly, not create a false historical appearance.

### **Alterations/Additions to Historic Building**

Some exterior and interior alterations to a historic building are generally needed to ensure its continued use, but it is most important that such alterations do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes. Alterations may include providing additional parking space on an existing historic building site, cutting new entrances or windows on secondary elevations, inserting an additional floor, installing an entirely new mechanical system, or creating an atrium or light well. Alterations may also include the selective removal of buildings or other features of the environment or building site that detract from the overall historic character.

The construction of an exterior addition to a historic building may seem to be essential for the new use, but the guidelines emphasize that such new additions should be avoided, if possible, and considered only after it is determined that those needs cannot be met by altering secondary (i.e., non-character-defining) interior spaces. If, after a thorough evaluation of interior solutions, an exterior addition is still judged to be the only viable alternative, it should be designed and constructed to be clearly differentiated from the historic building and so that the character-defining features are not radically changed, obscured, damaged, or destroyed.

### **Energy Conservation/Accessibility/Health and Safety Code Considerations**

Building rehabilitation invariably includes meeting accessibility requirements and health and safety code requirements, or retrofitting measures to conserve energy. Although this work is quite often an important aspect of rehabilitation projects, and is assessed for its potential negative impact on the building's historic character, it is usually not a part of the overall process of protecting or repairing character-defining features. In the process of meeting code and energy requirements, particular care must be taken not to radically change, obscure, damage, or destroy character-defining materials or features.



## Preservation Tax Incentives

Lessees of buildings at Fort Hancock who are performing rehabilitation on historic buildings may be eligible to participate in the Federal Historic Preservation Tax Incentives program. This program is designed to encourage the protection of historic buildings by private citizens. It is available for properties rehabilitated for commercial, industrial, agricultural, or rental residential purpose, but is not available for properties used exclusively for private residences. Unlike an income tax deduction, which lowers the income subject to taxation, a tax credit lowers the amount of taxes owed. The rehabilitation tax credit available through this program equals 20% of the amount spent in the *certified rehabilitation of a certified historic structure*. All structures altered at Fort Hancock may be reasonably assumed to qualify as certified historic structures, although formal certification will still be required through the normal application process. To be certified for federal tax purposes, a rehabilitation project must be determined by the Secretary of the interior to be consistent with the historic character of the structure and where applicable, the district in which it is located.

The National Park Service administers the program in partnership with the Internal Revenue Service and the State Historic Preservation Officers. Certification requests for building rehabilitation proposed for Fort Hancock are made to the NPS through the New Jersey State Historic Preservation Office. Additional information on the Federal Historic Preservation Tax Incentives program is available through the NPS.

## Applicable Building Codes

Federal legislation and National Park Service policies clearly stipulate that as buildings are rehabilitated, attempts shall be made to meet the nationally accepted model building codes to the maximum extent feasible. In addition, all relevant state and local building code provisions will be given appropriate consideration. Rehabilitation proposals for buildings at Sandy Hook will be reviewed for compliance with these codes. The following is a list of applicable codes:

- Uniform Building Code (UBC)
- Uniform Code for Building Conservation (UCBC)
- National Fire Protection Association 101 (NFPA 101):
  - Life Safety Code
- NFPA 913: Protection of Historic Structures and Sites
- Uniform Mechanical Code (UMC)
- Uniform Fire Code (UFC)
- Americans with Disabilities Act Accessibility Guidelines (ADAAG)



Aerial view of Fort Hancock taken in 1924 with the Parade Ground in the foreground. The Sandy Hook Proving Ground appears in the background.

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## PART 2 MAINTAINING THE CHARACTER OF THE HISTORIC DISTRICT

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All rehabilitation work planned for the Fort Hancock Historic District must be in keeping with the Secretary's Standards and Guidelines for Rehabilitation. There are two separate Historic Landmark Districts at Sandy Hook: Fort Hancock and Sandy Hook Proving Ground. The two areas were developed at different times, and served different functions for the Army. Each of these areas has certain distinguishing characteristics which must be identified and preserved in order to maintain its historic nature. The Proving Ground site was developed over many decades without a clear organizational system and contains a wide variety of building types and materials. Fort Hancock, on the other hand, was initially laid out according to a carefully ordered plan. The buildings are related in size, material and architectural style. The site grew over many decades, but successive building campaigns respected the original plan, and followed the colors, materials and scale of the original buildings. The main buildings are arranged around a central open space (the parade ground), and each building acts to define its edges. What was created at Fort Hancock is an ensemble or grouping of buildings that are totally integrated with each other, and with the landscaped open space.

An understanding of the historic character of the two areas is necessary when planning adaptive re-use projects at Fort Hancock. A wide variety of new uses is possible, which may mean modifications and additions to the buildings and landscape. It may also mean that new buildings are constructed within the Fort Hancock Historic District. But whatever new features or structures are added, the existing historic character must be preserved. Specifically, that means that the following site characteristics must be respected and maintained:



Fort Hancock Officer's Row as seen from the Parade Ground.



The Officer's Club situated in the Sandy Hook Proving Ground area.

## MAINTAINING THE CHARACTER OF THE HISTORIC DISTRICT

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Warehouse area, Proving Ground.

### **Sandy Hook Proving Ground**

- Variety in building type and building style
- Inward focus of building groups, with no water views or relationship to the larger site
- For the Warehouse area, an industrial, utilitarian landscape without decorative planting.
- For the Warehouse area, repetitive structures with similar roof lines and building forms.
- For the Officer's Club area, a residential landscape characterized by decorative foundation planting, gardenesque placement of trees and broad lawns



Barracks in Fort Hancock.

### **Fort Hancock**

- Uniformity among buildings of the same type.
- Compatibility between buildings achieved by materials, proportions and color.
- Classical revival architecture with restrained detailing.
- Restrained use of landscape material. Trees usually located at street edges only.
- Strong site plan which governs placement of all buildings
- Open spaces which are defined by buildings
- Orientation to the Bay, the importance of views, and connection to the outside world
- Hierarchy and regimentation among buildings; clearly established major and minor buildings.
- Buildings with clearly defined primary and secondary facades.
- Hierarchy and identity for open spaces; major public spaces having a ceremonial character, and subordinate open spaces used as service spaces.

### Compatible New Buildings and Site Features

Designing within an Historic District means that new building features and additions, as well as completely new buildings and new site features must be compatible with what already exists. The preceding list of site characteristics will help set the parameters for determining compatibility. At the same time, it is not the intent of the Secretary's Standards to make new features that appear to be old. Instead, it is expected that the new features will be adequately differentiated from the old. Designing something that is identifiable as new, but that is compatible with what is old, is the challenge posed by historic rehabilitation.

Compatible design will respect the existing materials, scale of building, or military nature of the setting. For the Fort Hancock building ensemble, the widespread use of buff colored brick and gray stone, the restrained detailing, the color scheme used on wood trim, and the prevalent height and proportions of the buildings offer a obvious palette of materials and forms for new design. For the Proving Ground, additions to the Warehouse Area should reflect the character of the red brick utilitarian architecture, and the consistent building form and roof pitches, which give the area its distinctive "roofscape". Building additions to the Officer's Club, on the other hand, must meet a different set of design criteria to be compatible with the high style architecture represented there. The additions to the east side of the Officer's Club constructed in the 1940's give an example of how a failure to consider the original building's proportions and fenestration pattern can result in an incompatible addition.

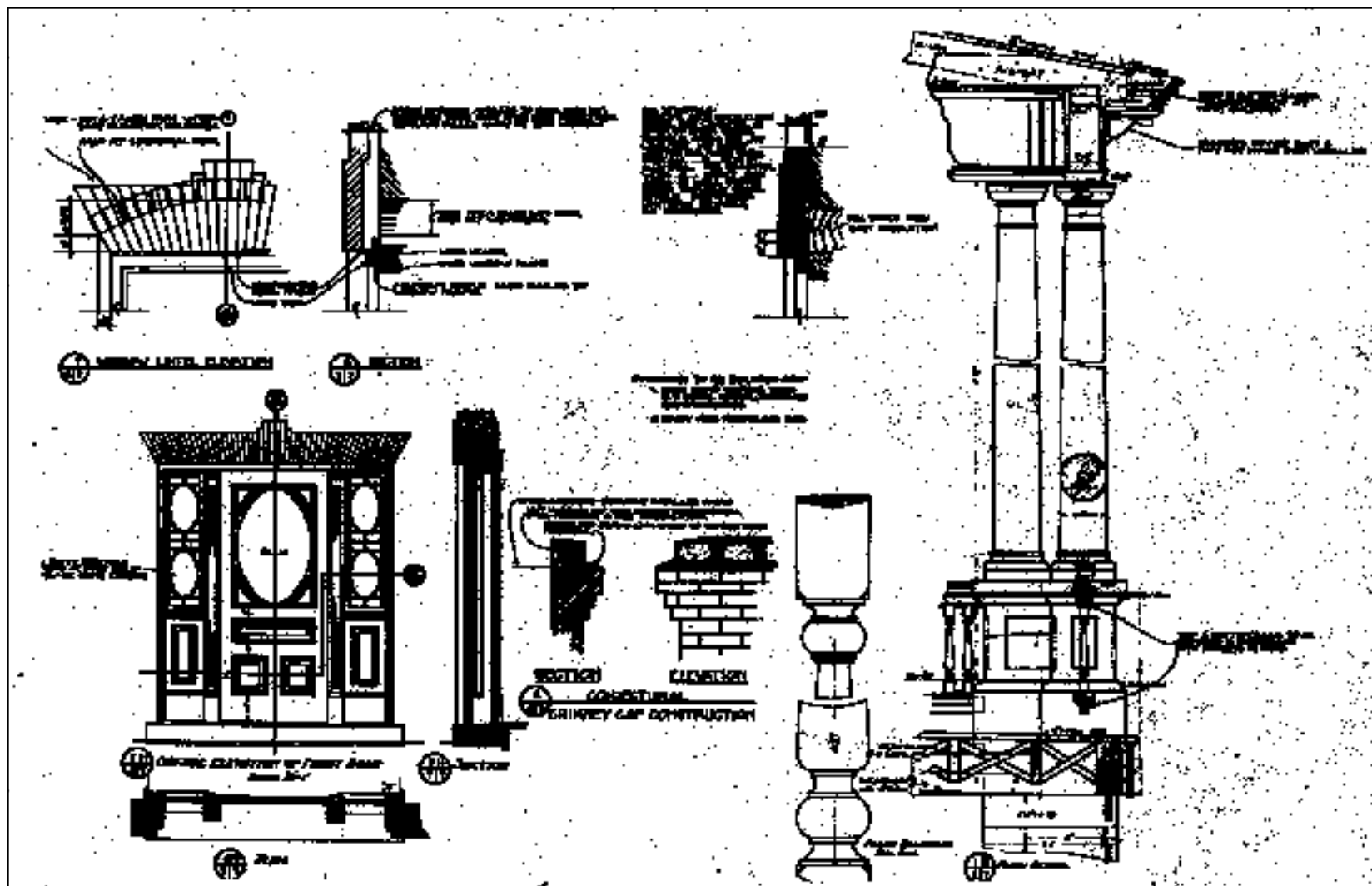
Site features and vegetation must respect the existing patterns of planting, and reflect the military character of the site. Determining the historic plant palette is as useful as determining the historic colors or building materials used in the Historic District. Landscape design, as well as architectural design, should respect the character of the existing site.



The new NOAA building, constructed in 1992, uses a compatible palette of building materials to fit into the Parade Ground area.



This new Coast Guard building employs masonry details and building forms found in the historic warehouses.



Millwork frequently defines the character of the Fort Hancock structures, such as these Officer's Row details.

The following section contains building fact sheets with character-defining features and landscape characteristics for each building included in the historic leasing program. This information is given for reference, and to provide guidance to potential lessees. A character-defining feature is a specific architectural element or building component that helps to give the building its historic character. These items are individual components that, when taken together, define the age, architectural style, or previous use of the building. For landscape, the characteristics listed here serve a similar function as the architectural features in defining the historic identity and character of the landscape.

The process of rehabilitation will of necessity result in changes to the historic buildings and landscape. By identifying and maintaining the most important features, it is possible to preserve the historic character of both the architecture and the landscape, and still allow for new uses. The following pages are not meant to be the final word in directing work, but are meant to provide preliminary guidance for proposal development. This section also includes gross floor areas, which include basements and attics. It is important to remember that all of this is leasable or occupiable space. The category "Special Considerations," contains specific information pertaining to the individual building that may be useful to potential lessees. Not all building sheets contain that level of information.



Interior of the Officer's Club.



Barracks 24 exterior view.

## Lieutenant, Captain and Commanding Officer's Quarters



**Constructed:** 1898-1899  
**Building Type:** Masonry  
**Gross Floor Area:** ranges from 7420SF–10,044 SF  
**Number of stories:** two stories, basement and finished attic

### Special Considerations

These Officer's Quarters exhibit some of the most developed architectural detail found at Sandy Hook, and as such, these buildings warrant special attention. The high level of design and the restrained use of classical revival detailing which characterize most of the Fort Hancock buildings are especially refined in these residences. Because they are essentially uniform in appearance, and are located side-by-side, changes that significantly alter the appearance of one building will have an adverse effect on the whole row of buildings. There should be a standardization of design for the new features that is repeated for each building whenever it is needed. Appendix A shows examples of lift designs which can be used for any building on Officer's Row. Garages should be repaired, not demolished.

## Character-Defining Features

### Interior

- Configuration of main floor rooms
- Stair hall, railings, banisters, and stair assembly on first and second floors. Open main stairwell.
- Fireplaces on first and second floors.
- Wood floors
- Millwork and cabinetry original to the residence.
- Pressed tin ceilings.

### Exterior

- Brick and stone walls, stone sills and banding
- Open front porches, including columns, pedestals, railings, and decorative trim.
- Wood windows, wood doors
- Roof form, including dormers, rake returns.
- Decorative sheet metal eave and rake trim

### Landscape Characteristics

- Shade trees placement confined to edges of roads
- Variable foundation planting in front of bayside porch
- Personalized gardening space confined to within 4 feet of building—
- "Island" garden beds not used
- Concrete front walkway/Bluestone walkways
- Lighting fixtures placed at edges of roads
- Unobstructed views from porches to the bay



## Officer's Quarters; Buildings 21, 144 & 145



**Constructed:** 1939  
**Building Type:** Masonry  
**Gross Floor Area:** 5715 SF  
**Number of Stories:** two stories and basement

### Special Considerations:

Residence 21 is an anomaly in Officer's Row, because it was not constructed in the initial 1898-1899 building campaign, but was added in 1939. It is stylistically unrelated to its neighbors, and is a duplex rather than a single residence. This gap in the Row was originally left to allow views to a small lighthouse which stood on the west side of Hartshorne Drive.

The enclosed side porches on both units are in poor condition, and use incompatible materials and design.

Porches may be returned to open porches, or may stay enclosed, but the design of the infilling components should be compatible with the building.

## Character Defining Features

### Interior

- Millwork, including mantelpiece and built-in cabinets.
- Stair case assembly including railing.
- Transoms over interior doors.

### Exterior

- Horizontal brick volume with minimal detailing, pronounced brick quoins
- Stone window sills.
- Large classical door surrounds in wood.
- Front stoop with decorative metal railing.
- Hipped roof with slate shingles, no overhang, small dormers on front.

### Landscape Characteristics.

- (same as for Officer's Row)

### Barracks, Buildings 23 and 24



**Constructed:** 1899  
**Building Type:** Masonry  
**Gross Floor Area:** 17,116 SF  
**Number of stories:** two story, basement and finished attic

#### Special Considerations

These are exceptionally fine examples of the use of classical revival architecture for military uses, and show a greater level of finish and detail than is usually found at an army base. Particularly noteworthy is the use of terra cotta elements, used to greatest effect on the Palladian windows centered on the projecting central bay. Two sections of two-story porch framed this central bay, which unfortunately are no longer standing. The bottom story of the porches was supported by square brick columns (still standing), with simple Doric columns on the second story. The balustrades comprising the railings were cast iron.

In 1989, the two-story front porches were removed from the barracks because they posed a safety hazard. The brick piers were capped and stabilized. It is the desire of the NPS to have the porches rebuilt, based on the original drawings and on record photographs made prior to their dismantling.

Building 23 has lost most of the integrity of its interior due to fire and water damage. Considerable flexibility will be allowed for proposed interior work.

Rake returns have been boxed out in wood in several cases. It is preferred that rake returns which are compatible with the decorative metal rake detailing be reconstructed.

### Character Defining Features

#### Interior *(These pertain to Building 24 only)*

- Staircases, railings banisters.
- Pressed tin ceilings.
- Cast iron columns
- Wood recessed panel doors, some with divided light transoms above.
- Wood trim around original doors, especially trim including dentilated cap molding.
- Chair rail, wood wainscoting in stair hall.
- Original plan configuration, especially open barracks on second floor

#### Exterior

- Brick and stone walls, stone sills and banding.
- Wood windows.
- Main entry door (for Building 24 only).
- Secondary doors with 28 light fixed glass.
- Roof form, including, decorative sheet metal eaves and rake trim.
- Central entrance bay, with three open arches, forming an open "loggia".
- Rusticated brick banding at main entry.
- Terra cotta details in central Palladian window, and elliptical window in gable ends.
- Limestone steps cascading from central arched opening.
- Cast iron balustrades in railings.

#### Landscape Characteristics

- Simplified and uniform foundation plantings from building to building.
- Geometric arrangement of concrete sidewalks
- Curved brick walkway on west façade of barracks
- Plantings located at perimeter of quadrangles between mess halls rather than in center

## Mess Halls, Buildings 56, 57



**Constructed:** 1905  
**Building Type:** Masonry  
**Gross Floor Area:** 6676 SF  
**Number of stories:** one story, basement and unfinished attic

### Special Considerations

The mess halls were added six years after the barracks were constructed after it was found that the mess halls and kitchens originally included within the barracks were too small. Architecturally, they pick up on the Palladian references found in the Barracks and are seamlessly integrated into the earlier building complex. Yet their scaled back detailing make it clear they are subservient structures. The spaces created between the Mess Halls and Barracks are well defined and have a comfortable human scale.

For Building 57, the rear porch should be rebuilt.

## Character Defining Features

### Interior

- Pressed tin ceilings, where extant.
- Wood trim around doors and windows in all public rooms.

### Exterior

- Brick and stone walls, stone sills and banding.
- Wood windows.
- Main entry doors with divided light transom.
- Secondary door with 28 light window.
- Roof form, including dormers, rake returns.
- Decorative sheet metal eave and rake trim
- Front and rear porches including columns, railings and trim.

### Landscape Characteristics

- Simplified and uniform foundation plantings from building to building.
- Geometric arrangement of concrete sidewalks
- Curved brick walkway on west façade of barracks
- Plantings located at perimeter of quadrangles between mess halls rather than in center

### Post Headquarters, Building 26



**Constructed:** 1899  
**Building Type:** Masonry  
**Gross Floor Area:** 5390 SF  
**Number of stories:** two stories, basement

### Character Defining Features

#### Interior

- Original wood doors, door and window trim, where remaining
- Stair and railing.

#### Exterior

- Brick and stone walls, stone sills and banding.
- Gable end walls with distinctive double chimneys, corbelled projections, terra cotta cap.
- Wood windows, especially the half-round windows in the gable end walls and the lunette windows at the attic story.
- Front door, including fanlight and sidelights.
- Roof form.
- Front porch, including columns, railings and trim.

#### Landscape Characteristics

- Landscape characteristics similar to that of Officer's Row Residences
- Landscape plantings limited to perimeter of building foundation

## Bachelor Officer's Quarters, Building 27



**Constructed:** 1899  
**Building Type:** Masonry  
**Gross Floor Area:** 10,303 SF  
**Number of stories:** three stories, basement

### Special Considerations

The existing metal fire escape will require repair and partial rebuilding.

## Character Defining Features

### Interior

- Stair rail and banister
- Some original millwork, such as mantelpiece and built-in buffet in dining room.

### Exterior

- Brick and stone walls, stone sills and banding.
- Round bay windows.
- Wood windows, wood doors.
- Decorative sheet metal eave and rake trim
- Front porch, including columns, railings and trim.

### Landscape Characteristics

- (same as for Building 26)

### YMCA and Gymnasium, Building 40



**Constructed:** 1901/1940  
**Building Type:** Masonry  
**Gross Floor Area:** 18,890 SF  
**Number of stories:** two stories, basement and finished attic

#### Special Considerations

The existing metal fire escapes can be retained provided that repair work is performed to ensure structural stability.

### Character Defining Features

#### Interior

- Some original window trim remains in older section (1901)
- Gymnasium wood trusses supporting roof, with exposed wood decking
- Glazed block lower wall section.
- Gallery with metal pipe rail.

#### Exterior

- Brick and stone walls, stone sills and banding.
- Entrance door with lunette transom, and adjoining arched windows.
- Roof form, including dormers, and wood entablature with built-in gutters.
- Front porch, including columns, railings and trim.
- Large double-hung gym windows.
- Metal Railing at entry porch

#### Landscape Characteristics

- Landscape plantings limited to perimeter of building foundation
- Foundation planting facing street required—typical to that of barracks/mess halls

## Post Exchange, Building 53



**Constructed:** 1905-1910  
**Building Type:** Masonry  
**Gross Floor Area:** 6180 SF  
**Number of stories:** one story, basement and attic

## Character Defining Features

### Interior

- Pressed tin ceilings
- Wood tongue and groove panel wainscoting
- Wood trim at doors and windows

### Exterior

- Brick and stone walls, stone sills and banding.
- Wood windows.
- Pair of entry doors at front porch. Doors are not original, but door frames and transoms appear to be.
- Hipped roof with slate shingles and built-in gutter.
- Flat roofed porch with slender square columns.
- Metal pipe railing at entry porch

### Landscape Characteristics

- Landscape plantings limited to perimeter of building foundation
- Foundation planting facing street required—typical to that of barracks/mess halls

### Post Exchange/Gymnasium, Building 70



**Constructed:** 1909  
**Building Type:** Masonry  
**Gross Floor Area:** 8747 SF  
**Number of stories:** two stories, including finished basement.

#### Special Considerations

Building 70 is a unique structure at Fort Hancock with a high level of architectural detail. The craftsman detailing of the wood members at the porch and roof overhangs is an unusual departure from the classical revival detailing normally found at the fort, although this building also has fine classical revival details, especially the tall, arched windows. The shed addition on the rear is non-historic. The basement level bowling alley fittings and finishes are from the 1960's, but the bowling alley function is original to the building.

### Character Defining Features

#### Interior

*Entry hall and 2 rooms on either side of entry retain original features:*

- Pressed tin ceilings, where they exist.
- Window and door trim, including some remaining transoms over doors. Doors are non historic.
- In basement, original exposed cast-iron columns with wood beams overhead.

#### Exterior

- Brick and stone walls, stone sills and banding.
- Wood windows, especially tall, arched windows with raised panels below.
- Roof form, including dormers.
- Decorative rafter tails on porch, main roof and dormers
- Front porch, including brackets and decorative framing
- Railings at porch are original pipe and bulb rail.

#### Landscape Characteristics

- Landscape plantings limited to perimeter of building foundation
- Foundation planting facing street required—typical to that of barracks/mess halls



## Gas Station, Building 60



**Constructed:** 1936 and 1939  
**Building Type:** Masonry  
**Gross Floor Area:** 1325 SF  
**Number of stories:** one story

## Character Defining Features

### Interior

- Pressed tin ceilings, in office
- Wood window trim
- Operable glass transom over front door
- Painted brick wall finishes.

### Exterior

- Brick and stone walls, stone sills and banding.
- Porte-cochere and gas-pump island.
- Wood windows, and steel casements (indicating different construction dates)
- Skylights in roof over service bays.

### Landscape Characteristics

- Utilitarian landscape devoid of planting

### Fire Station #2, Building 76



**Constructed:** 1910  
**Building Type:** Masonry  
**Gross Floor Area:** 1350 SF  
**Number of stories:** one story plus hose-drying tower

#### Special Considerations

This utilitarian structure has little decorative detailing, but its tall floor-to-ceiling height gives it very elegant proportions. The interior is devoid of details, with a utilitarian feeling.

### Character Defining Features

#### Interior

- Tongue and groove wood siding on ceiling, and at office walls.
- Painted brick interior walls.

#### Exterior

- Brick and stone walls, stone sills and banding.
- Arched openings at apparatus bay doors, with stone squinches.
- Wood windows, wood doors
- Roof form, including decorative rafter tails.
- Hose Drying tower, covered in slate shingles.

#### Landscape Characteristics

- Utilitarian landscape devoid of decorative planting.

## Mule Barn, Building 36



**Constructed:** 1899  
**Building Type:** Masonry  
**Gross Floor Area:** 7629 SF  
**Number of stories:** two stories

### Special Considerations

The mule barn is highly distinctive and expresses its original function in its design. The ground floor has been modified to such an extent that most original finishes and features are missing. There are two additions to the original barn which may be removed; the east facing room is in especially bad condition due to roof failure. One of the dormer windows has been closed in, but it is desirable to open it and reinstall windows in this opening.

## Character Defining Features

### Interior

*Finishes on second floor are the only historical materials remaining.*

- Plaster walls and ceiling with softwood strip flooring
- Wood columns
- Wood stairs and stair railing

### Exterior

- Brick and stone walls, stone sills and banding.
- Small window openings with arched lintels, set deeply into walls; wood windows.
- Barn doors with arched tops.
- Roof form with rake returns, also including dormers, sided with wood clap-board.

### Landscape Characteristics

*Landscape characteristics typical of all service oriented buildings on site*

- Ornamental landscape plantings not used—grass or groundcover only
- Animal Fencing

### Post Theater, Building 67



**Constructed:** 1933  
**Building Type:** Masonry  
**Gross Floor Area:** 6151 SF  
**Number of stories:** one story

#### Special Considerations

The entrance marquee has been enclosed and a windblock has been created which obscures the original design. It is the NPS goal to remove the enclosure and replace it with a transparent enclosure to reveal the original marquee. The uses for this building may be expanded if an addition is added to the side or rear to create more backstage space or by reconfiguring mechanical/utility rooms backstage. Severe rust jacking has damaged the front corners of the building and needs to be corrected to prevent water infiltration. The NPS has completed a design for accessibility for this building, which creates ADA bathrooms and wheelchair spaces in the auditorium, which will be made available upon request.

### Character Defining Features

#### Interior

- Main volume of auditorium with raked seating.
- Curved plaster ceiling with cornice molding.
- Shallow stage with arched proscenium opening
- Lobby including architectural millwork, french doors with mirrored glass, and shallow arched plaster ceiling.

#### Exterior

- Overall building volume
- Corner pilasters with stone or cast-stone capitals
- Arched door and window openings with keystones.
- Lunette window in front gable.
- Marquee supported by thick chains anchored to building face.

#### Landscape Characteristics

- Minimal decorative landscaping
- Concrete steps at building front.

## Post Chapel, Building 35



**Constructed:** 1941  
**Building Type:** Wood Frame  
**Gross Floor Area:** 3277 SF  
**Number of stories:** one story

### Special Considerations

The cement asbestos siding is an inappropriate siding, and must be removed. The wood lapped siding beneath the asbestos is still intact. The steeple should be rebuilt, to match its historic appearance. The park can provide the design for the historic steeple.

## Character Defining Features

### Interior

- Wood trusses and exposed wood roof decking.
- Stage/Altar with arched proscenium opening
- Hardwood floors
- Pine wainscoting in auditorium
- Balcony/choir loft (closed in at a later date)

### Exterior

- Overall building volume
- Tall wood windows with amber glass.

### Landscape Characteristics

- Landscape plantings at perimeter of building foundation and following walkways

### Bakery, Building 33



**Constructed:** 1899  
**Building Type:** Masonry  
**Gross Floor Area:** 2740 SF  
**Number of stories:** one story

#### Special Considerations

Portions of the original bread ovens still remain, especially the front face of the oven made of glazed brick with steel doors. Despite the deteriorated state of most of the oven, the NPS would like to see portions of the oven retained.

### Character Defining Features

#### Interior

- Wood beaded-board ceilings, where extant
- Light wells leading to clerestory on roof
- Glazed brick oven, remaining in part.
- Unadorned utilitarian finishes.

#### Exterior

- Brick and stone walls, stone sills and banding.
- Wood windows, wood doors
- Roof form, including cupola,.
- Decorative rafter tails.

#### Landscape Characteristics

- Landscape characteristics typical of all service oriented bldgs on site
- Ornamental landscape plantings not used—groundcover only

## Officer's Club, Building 114



Constructed: 1878  
 Building Type: Wood Frame  
 Gross Floor Area: 23,616 SF  
 Number of stories: three stories and basement

### Special Considerations

One of the oldest buildings on Sandy Hook, the Officer's Club also is one of the most architecturally distinct, designed in the Second Empire style. The building was originally red brick and was later painted yellow to match Fort Hancock. It is not necessary to retain the paint color; in fact, returning it to red brick would better express its original appearance. The additions on the east side include a bar and a dining room, added in the 1940's. These additions are stylistically incompatible with the building and have a negative impact on the 1870's structure. They may be removed, or replaced with new additions which are compatible with the historic building. Although the building is seriously deteriorated, every attempt should be made to retain interior character defining features; these interiors are perhaps the finest at Fort Hancock. It is desirable to reduce the amount of asphalt paving around the kitchen and west wall. Parking adjacent to the building will be limited to accessible parking and delivery functions.

## Character Defining Features

### Interior

- Pressed tin ceilings.
- Wood panel doors, french doors, and sliding pocket doors.
- Wood wall paneling, plaster cornice molding, on first floor.
- Wood window and door trim.
- Wood flooring on first floor, in diagonal strip parquetry.
- Staircase with wood railings, banisters and newel posts.
- Mantels and fireplace surrounds.

### Exterior

- Brick and stone walls, stone sills and banding. Stone window lintels with brackets.
- Wood windows, especially bay window over front door and curved bay window on second floor west wall.
- Wood doors.
- Mansard roof form, including curved top dormers, and decorative trim.
- Wide eave with decorative brackets.
- Wrapping front porch, with porte-cochere, including columns, railings and trim.
- Tall, thin proportions of windows, porch columns, tall ceilings on first floor.

### Landscape Characteristics

- Informal landscape of grass and trees in outlying yard.
- Gardenesque placement of trees within open lawn rather than confined to edges of road.
- Central concrete walk to front door flanked by ornamental shrubs
- Placement of ornamental shrubs confined to edges of walks or perimeter of building
- Shepherd's crook lighting standards typical of the historic Proving Ground area
- Concrete barbecue terrace and barbecue pit

## Instruction Building/Warehouse, Building 124



**Constructed:** 1880  
**Building Type:** Masonry  
**Gross Floor Area:** 3845 SF  
**Number of stories:** one story

## Character Defining Features

### Interior

- In west area, open ceilings with exposed wood roof decking and steel trusses
- For east area, dropped ceiling.
- Glazed white brick in southeast corner.

### Exterior

- Simple long building form
- Simple roof form without overhanging eaves.
- Specialized brick work; corbels, pilaster, and low arches over windows, especially at gable ends
- Wood divided light windows, stacked units.
- Wood doors with X bracing and vertical grooved boards.

### Landscape Characteristics

- Landscape characteristics typical of all service oriented bldgs on site
- Ornamental landscape plantings not used—grass or groundcovers only



## Motor Shop, Building 125



**Constructed:** 1880  
**Building Type:** Masonry  
**Gross Floor Area:** 11,694 SF  
**Number of stories:** one story

## Character Defining Features

### Interior

- Big open interior volumes.
- Overhead steel gantries.
- Steel rail sections embedded in floors.

### Exterior

- Long building forms in parallel arrangement.
- Specialized brick work; corbels, pilasters, and low arches over windows, especially at gable ends
- Large doors.
- Wood divided light windows, stacked units.
- Simple roof form without overhanging eaves.

### Landscape Characteristics

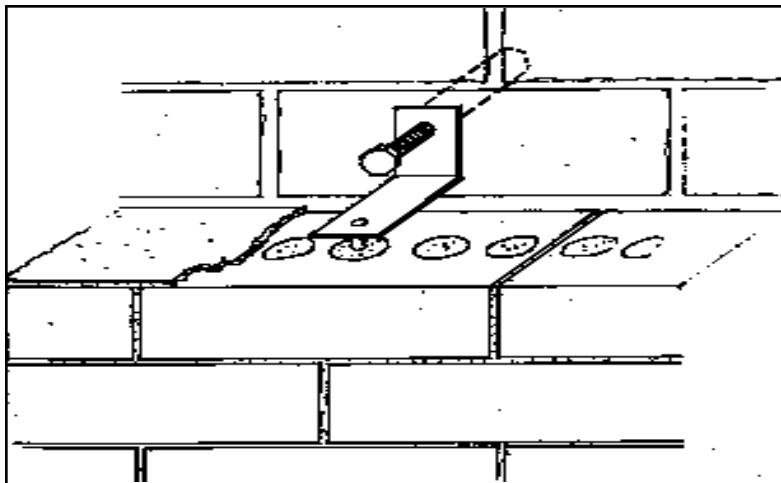
- Landscape characteristics typical of all service oriented bldgs on site
- Ornamental landscape plantings not used—grass or groundcovers only



**B**ased on past experience, there are certain building repair issues that are frequently found at Fort Hancock. What follows is a set of general repair strategies for some of the most common building deficiencies found at Fort Hancock:

#### **Brick, Stone and Mortar**

Fort Hancock and the Warehouse area of the Proving Ground Warehouses contain different types of masonry, and different types of deterioration. For the brick Warehouse buildings, the deterioration of mortar joints must be corrected by raking the joints to remove the old mortar and then repointing the joints with new mortar. For buildings of this age, it is usually necessary to use a soft, lime-based mortar. Repointing with modern cement mortars will cause more damage than it will correct, because it is extremely hard and the brick is comparatively soft. For Fort Hancock's buff brick buildings, the brick is extremely hard, so repointing can be done with a harder mortar. However, the thin "butter joints" will necessitate hand raking and repointing. Stone foundations walls may also require repointing to repair failed masonry joints. As in any repointing project, the type of mortar must be compatible with the existing mortar and the stone.



Detail of brick anchor used to repair walls at Officer's Row.

Efflorescence, or the white residue seen on the face of the brick, is evidence of mortar deterioration or salts leeching out of the mortar and brick. This problem is usually caused by water damage to the brick wall. Correcting the source of the water infiltration, either at the coping or parapet, or at a leaking roof, is frequently the first step in repairing the problem. If it is a result of the mortar washing out of the joints, repointing is the solution.

An unusual problem has existed in the past at Fort Hancock related to the buff brick. This brick is a veneer layer, and in some cases is detached from the back-up brick, and is bowing out. The veneer layer is not attached to the back-up brick layer using any anchors to tie the two together, but instead, the buff brick sits on horizontal shelves created in the back-up wall. In 1992, the NPS corrected the problem in the most severe cases on Officer's Row by taking down the walls where the veneer brick had become detached, and rebuilt the buff brick wall using a brick anchor which tied it to the back-up wall.

#### **Lintel replacement**

Steel lintels and other structural pieces embedded in brick walls are prone to "rust jacking", a situation where water infiltrates the brick wall, and corrodes the steel. The swelling that is caused by the corrosion jacks the bricks out of alignment, which then further breaks up mortar joints and allows more water to enter the wall cavity. Where this has happened, it is often necessary to remove both the bricks and the corroded lintel. Replacement of new steel lintels is best done using stainless steel or, if that is not feasible, regular steel that has a sturdy rust-proof, water repellent coating.



East wall of Building 10, which was rebuilt using new anchoring system, new brick and replacement steel in lintels.

### **Roof replacement**

There is a mixture of slate and asphalt roof shingles, and standing seam sheet metal roofs in the Fort Hancock Historic District. Some roofs, in part or total, may need to be replaced. Retention of the historic roofs is an NPS goal, and every reasonable effort should be made to repair rather than replace a historic roofing material. If replacement is the only option for a roof, care should be given to select substitute materials that are compatible with historic materials. In the case of selecting asphalt roof shingles, Park management has selected a type and color shingle to be used by lessees. This information will be provided by the park.

### **Gutters and downspouts**

Gutters and downspouts are the first defense against water damage, and their repair and maintenance should be a priority. Most of the original gutters and downspouts are copper, and whenever possible, they should be repaired in place. Corroded areas should be patched, and damaged sections replaced. Substitution with aluminum sections will not, in most cases, be acceptable, because this modern gutter and downspout materials are different sizes and profiles. Substitutions using improperly sized gutter is evident at the Barracks, and on many of the Officer's Row houses.

### **Built-in Gutters and Flashing**

Flashing materials should also match the existing materials, which in most cases are copper. This includes valley and chimney flashing. Many of the built-in gutters at roof eaves that were original to the Fort Hancock buildings have been covered over, (especially on Officer's Row and the Barracks) and surface mounted metal gutters have been added. Reconstructing the absent built-in gutter, following the original appearance, is the preferred course of action. Retaining the surface mounted gutter may be acceptable in some cases. However, installation of a new surface mounted gutter will require custom fabrication to fill the space and provide adequate drainage.



Roof rakes and gutters require attention on many Fort Hancock buildings.

### **Trim and molding**

Applied wood and metal trim and moldings must be replaced in damaged sections. At Fort Hancock, the characteristic formed metal rake and eave moldings on the major Parade Ground buildings are important to preserve. In cases where the majority of the sheet metal moldings are extant, repairs and insertion of missing components is the correct procedure. Where the moldings are missing entirely, substitute materials may be used, if they adequately replicate the historic molding. Rake returns, which have been modified from their original appearance, should be restored using the historic molding.

### **Chimneys**

Chimneys will be retained in most cases. To do so will require repointing, and sometimes rebuilding failed sections of brick. Exceptions to this will be addressed on an as-needed basis. Usually, the chimneys will be capped.

### **Windows and Doors**

The historic wood windows and doors on buildings in the Fort Hancock Historic District are important character-defining features and should be retained. This includes front door assemblies composed of fixed glass elements like fan lights, transoms, and side lights. In most cases, repairs can be made on these doors and windows to make them operational and serviceable. In cases where windows are missing or in extremely bad condition, new windows are permitted, as long as they match the historic window in size and appearance. True divided-light windows are required. Double paned glass is permitted in new windows, but windows will have to match the mullion and muntin sizes of the historic window sash. Storm windows may be added to improve energy efficiency, but the storm window unit must be mounted on the inside of the window, facing the building interior. Window screens can also be included in the storm window assembly. Storm doors are permitted as long as they are sufficiently compatible with the rest of the building. The NPS will provide product information for approved types.

### **Porches**

Porches are prevalent in all areas of the Fort Hancock Historic District and are a character-defining feature. Their repair and maintenance should be factored in to any rehabilitation proposal. Because the porches contain so much architectural detail, in the form of columns, railings, and balustrades, loss of any of these pieces would have a negative impact on the buildings. Repairing in place, and selective replacement of damaged elements, are preferred to replacement of entire components. Wood consolidation and dutchman patching are recommended procedures to correct damaged wood. Substitute materials may be used to replace damaged elements as long as they match the original in size, profile and detail. For example, many of the railings are made up of cast iron balustrades, which would be very expensive to replace. A modern replacement balustrade may be cast from the original, thereby copying its size and shape.

Enclosing open porches may be allowed in certain areas of the park. For Officer's Row enclosing porches with insect screen is the only allowable enclosure. Frame work to support screen must sit behind columns & railings and designed to be as inconspicuous as possible.



Cast iron balustrades still exist on some barracks' porches.

In the case of Residence 21 on Officer's Row, which is not one of the original 19th century officer's residences, building has enclosed side porches which are currently enclosed using incompatible materials. These enclosures may be replaced with a more compatible enclosing system.

The NPS removed the two story porches on the Fort Hancock Barracks buildings in the late 1980's because they had become a safety hazard. Rear porches were also removed. Photographs were taken prior to their removal, and certain components were salvaged and stored, which can be used as models for new components. It is the desire of the NPS to have the porches rebuilt. Replicating the original porch is desirable, although modifications may be necessary in order to incorporate emergency egress stairs from the second floors. Substitute materials may be used, if the design is copied from the original components.

### **Paint Colors**

The NPS has recently completed an analysis of historic paint colors. Lessees will be required to follow the Paint Color Guidelines which will be provided upon request. Paint colors are based on readily available paint brands.

### **Lead Paint**

It is safe to assume that whenever paint stripping, scraping or sanding is planned, that the paint being removed contains lead. This is true for paint chips that have already fallen off. Therefore, cleanup of the interiors and the preparation for repainting must be done in accordance with EPA and OSHA procedures for handling lead-containing materials. The lead paint must be abated by a licensed abatement contractor, the dust, chips and residue properly contained, and the waste disposed of at a licensed disposal facility.

### **Garages on Officer's Row**

Although these structures are in poor condition, they should be retained. Replacing steel lintels is necessary in many cases, as well as roof replacement. Replacement of missing wood doors is necessary in many cases. New garage doors must conform to the type of door on Building 12 or another compatible design as approved by the Park.

### **Cement Asbestos Siding**

Many of the frame structures on Sandy Hook have been totally or partially re-sided using cement asbestos siding. This siding was installed over horizontal board siding. The NPS requires that the siding be removed, in order to return the buildings to their historical appearance. This is especially necessary if the asbestos siding is damaged, or if rehabilitation plans call for large areas of disruption or cutting of this siding. This removal must be done by a licensed hazardous waste demolition firm.

**Electrical, Plumbing, and Telephone**

Most of the buildings' mechanical systems will require upgrading to bring them into code compliance and serviceable operation, and to meet the needs of the new user groups. Removal is preferred over abandonment in place. Placement of exterior components, such as electric service panels, must be submitted to the NPS for review, in order to minimize their visibility.

**Heating, Ventilation and Air Conditioning**

In general, the buildings that are currently unoccupied no longer have operable heating systems. Buried fuel tanks have mostly been removed. Hot water radiators and the supply and return piping are usually intact in each building, but they are often in deteriorated condition. Repairing and reusing the existing radiator system should be considered as an option, but in most cases, furnaces and boilers must be replaced. New energy efficient heating systems may be considered. Fuel tanks must be located in the basements with the mechanical equipment, wherever that is possible. Above-ground storage tanks are not permitted except in special cases.

Window air-conditioners are not permitted. Central air-conditioning is preferred by the NPS. The location of interior ductwork and piping shall be designed in such a way as to avoid destroying character-defining features within the building's interior. Exterior equipment, such as condenser units, should be unobtrusively located close to the building.

**Additional Information**

The National Park Service's Preservation Assistance Division publishes two technical resources which will provide lessees with additional information on building repairs. These are *Preservation Briefs* and *Preservation Tech Notes*; both publications contain case studies and technical information on how to treat historic materials and solve common problems with historic building systems and materials. The NPS staff at Sandy Hook can provide information on obtaining these publications. In addition, they will provide a technical manual to prospective lessees specific to the Fort Hancock Historic District, which will include recommended products, treatments, materials and color schemes which are pre-approved for use at Fort Hancock.



Rebuilding porches on the Barracks Buildings would not only reestablish their historical appearance but would also allow for the inconspicuous addition of secondary exit stairs.



**I**t is expected that the rehabilitation necessary to adapt this historic military site for contemporary use will require the construction of some new building elements. The NPS is not attempting to prohibit change, but is trying to manage change, so that new uses are accommodated and historic characteristics are protected. Lessees and their designers will be expected to be sensitive to the impact that their proposed new features will have on the neighboring buildings and on the Fort Hancock Historic District at large. For example, new elements should be placed on secondary rather than primary building elevations whenever that is possible. Mechanical equipment should be placed inconspicuously at the building's foundation, or in such a way as to not obstruct an important building feature. Views and open spaces should be maintained. The following is a list of new elements or features that may be necessary to add to the historic buildings, with some suggestions concerning their selection and placement:

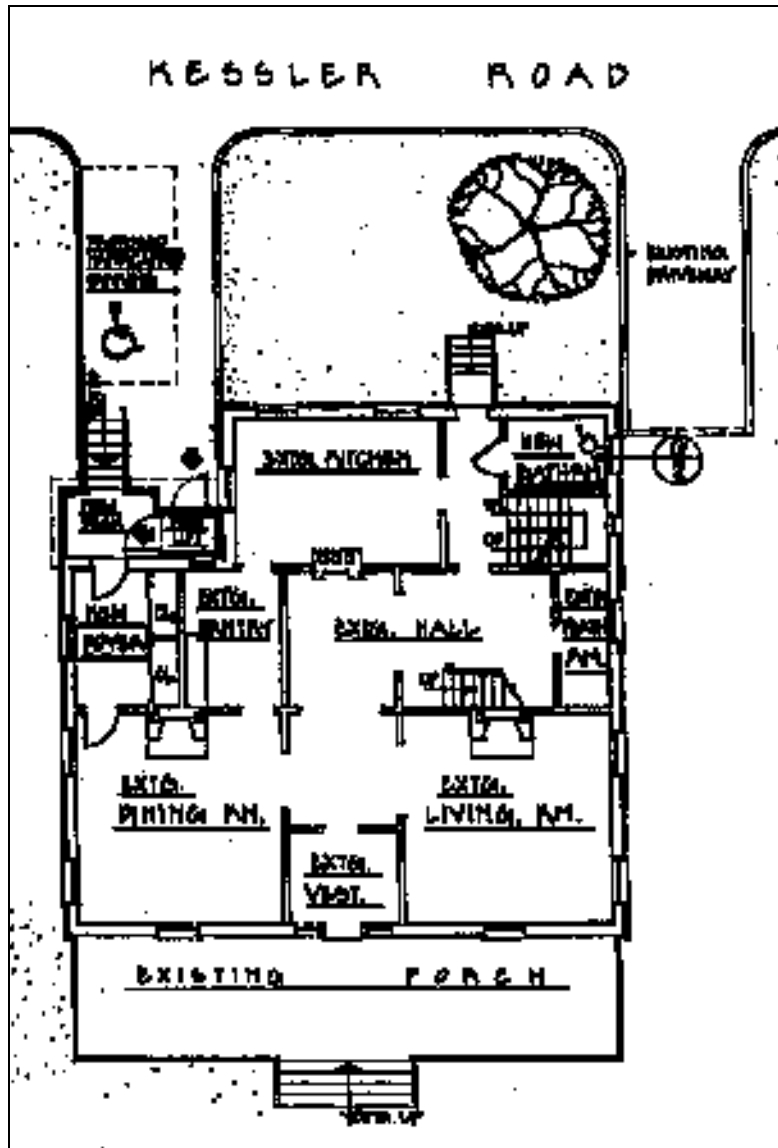
### Exterior Exit Stairs

Business or overnight accommodation occupancies will most often require a second means of egress from second and third floors. This is a very critical life-safety issue, and can pose a problem in a building designed for use by a single family or by a company of soldiers. When interior building configurations prevent the construction of new enclosed stairs, a staircase will have to be constructed on the building's exterior. In addition, doors will have to be added to provide access to the new staircase. In areas like the Parade Ground, uniformity of these new stairs will be necessary within buildings groups.

- For the Officer's Row houses, the NPS will assist the lessee(s) in developing a prototypical exterior metal stair, and will require all Officer's Row houses to use this prototype. It will be necessary to construct the stairs in the same location on each building.
- For the Barracks, reconstructing the front and back porches will provide an excellent opportunity to add an exterior stair without it being visible. Existing exterior doors at the second floor already exist can be used for the purpose of providing emergency egress.
- For buildings which are not facing the Parade Ground, exterior exit stairs should be located on a secondary building elevation, in such a way as to be inconspicuous from the main public areas of Fort Hancock.



New elements added to Officer's Row buildings should not compromise the uniform character of the ensemble.



For Officer's Row, accessibility will be achieved by adding mechanical lifts to each building. Shown here is a scheme developed for a Lieutenant's Quarters.

### Accessible Ramps and Lifts

Meeting the requirements of the Americans With Disabilities Act (ADA) is a required part of the building rehabilitation process. Installing interior elevators may be necessary for certain use groups if programmatic equivalency cannot be achieved on the main floor of a building. For example, an overnight accommodation operator can meet accessibility requirements by setting aside accessible rooms and baths on the main floor of a building, and will not have to install an elevator to upper floors. In a business use, elevators may be required if it is expected that disabled employees will need access to upper floors. If all levels of a building are intended for public use, an elevator will be necessary. In all cases, however, the main floor will require a ramp or a lift to allow access to it.

- For Officer's Row, lifts will be required to provide access to the east side of the building.
- For other buildings, either lifts or ramps are permitted. Ramps must conform to ADA standards. Ramps will be located in such a way to provide easy access from accessible parking spaces and accessible routes.



Mechanical equipment is barely visible when placed close to the building foundation.

### **Mechanical equipment**

Determining inconspicuous placement of mechanical equipment is part of the design challenge required when working with historic buildings and landscapes.

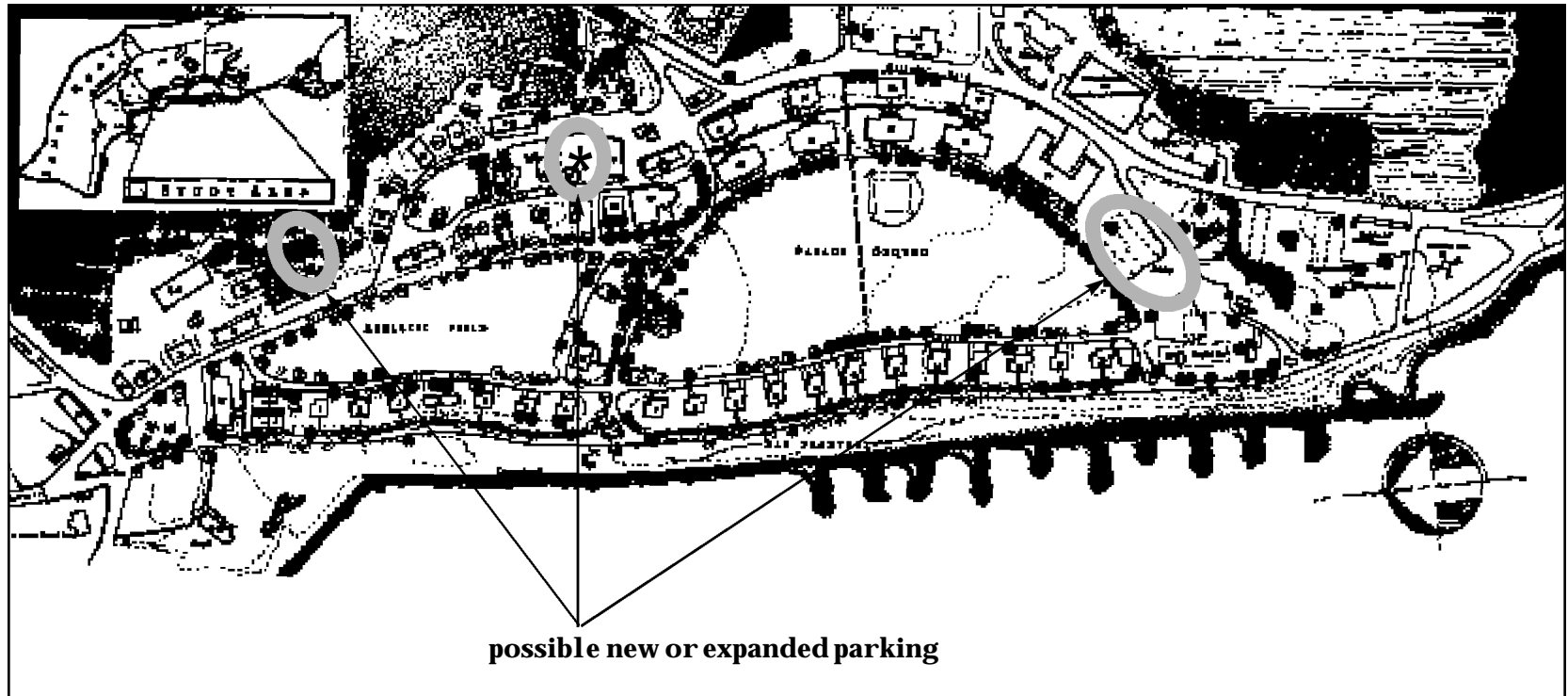
- External equipment, such as air conditioning condenser units, should be placed in the foundation area of the building, and held close to the edge of the building.
- Electric service panels must be placed on secondary elevations, and should not obscure historic building features.
- Hiding new elements under porches, or in garages, is a good practice.
- New conduit, plumbing, or other utility lines should be placed on the building interior and should not be mounted on the building exterior.

### **Television antennas and satellite dishes**

In making selections of this equipment, size should be kept to a minimum. Large satellite dishes are prohibited. Placement of dishes shall not obscure historic building features, impact the landscape, or be located on a primary building elevation.

### **Tenant Signs**

It is clear that new businesses and users will need to identify themselves to the public, but unless signs are uniform in type and consistently installed, the overall appearance of Fort Hancock will suffer. For this reason, the Park will provide sign guidelines to tenants.



Possible locations for new parking areas and new construction

\* Denotes site for possible new construction

Care must be taken in designing and locating new elements in the landscape in order to protect the character of the Historic District. Planning and selecting new plant materials requires the same consideration and sensitivity as does the selection of new building components, in order to achieve an overall appearance consistent with the historic and visual character of the historic districts. In Part 2, the site characteristics for Fort Hancock and the Sandy Hook Proving Ground were enumerated. Protecting these characteristics form the basis for planning and design of new elements.

### Parking lots

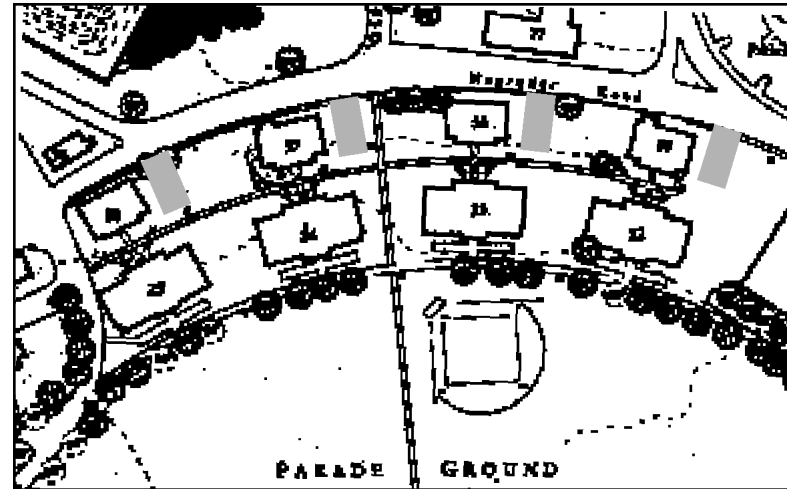
The historic leasing program for Fort Hancock has the potential to bring a huge influx of automobiles to Sandy Hook. This will have a negative impact on the character and appearance of the Historic District. In order to retain the historic character of the landscape, it will be impossible to provide all the needed parking directly adjacent to the leased buildings. The only exception to this rule is that handicap accessible parking will be permitted adjacent to each building or building group, and short term parking for passenger drop-off and deliveries will be allowed. The Park Partners who work at Fort Hancock must be willing to accept the fact that a short walk from their car to the their buildings will be required.

#### On-Site Parking—Officer's Row:

Each residence fronting on Hartshorne Drive will accommodate two parking spaces accessed by curb cuts off Kessler Road, the service drive behind the residences. The two curb cuts and parking spaces already exist in most cases. Due to the narrow width of Kessler Road, parallel parking will not be allowed due to fire lane restrictions.

#### On-Site Parking—Barracks/Mess Hall Area

There are three small "quadrangles" between each Barracks and Mess Hall grouping that are important secondary spaces in the landscape. Each of these three spaces may accommodate a small parking lot for up to four parking spaces, for a total of twelve spaces. These parking lots should be located perpendicular to Magruder Road, placed close to the side of the Mess Hall so as to be hidden from view from the Parade Ground, thereby maintaining unimpaired views into the Parade



Locations for small, three to four car parking lots next to the Mess Halls is indicated with grey shading

Ground from Magruder Road.

### Off-Site Parking

New parking lots will also be allowed be at the perimeter of the historic district's main public spaces. These lots will be used for all parking that cannot be accommodated on site next to a leased building. The NPS has designated areas around Fort Hancock that may be used for parking. The following are possible parking lots convenient to the Parade Ground:

- The existing lot east of the former hospital site (west of Building 74) may be enlarged to accommodate more parking spaces, but this must be accomplished through a redesign of this lot to include appropriate tree and shrub plantings mitigating the impact of the enlarged parking lot within the viewshed of the Parade Ground.
- The space between Building 47 and Building 32, if properly designed, could become a parking lot to accommodate up to ten cars.

It is inadvisable to enlarge the current lot located behind the Headquarters and Bachelor's Officer's Quarters buildings.

## NEW LANDSCAPE ELEMENTS AND VEGETATION



Mechanical and electrical equipment should not be placed in open lawns or in view corridors.

### **Reserved Parking**

The designation of reserved parking will be limited. The park will develop rules for permit and reserved parking.

### **Sidewalks and pavement**

Existing sidewalk materials present on site should be preserved, and where severely deteriorated, should be replaced “in-kind.” No effort should be made to alter existing materials in order to effect a more “historical looking” appearance or to create a more pleasing result. For instance, the replacement of existing concrete sidewalks with brick or stone is unwarranted. Where brick and stone pavements or stone curbs do survive in association with any given leased building, these surfaces should be retained. Curb cuts will be needed to allow compliance with ADA in some cases and these will be reviewed by the Park in advance.



The existing layout of sidewalks will be retained.

### **Ramps, Parking and Accessible Routes**

Most of the buildings in the Fort Hancock Historic District are elevated several feet above grade because of the storms and flooding that occur in this coastal region. Designing ADA compliant ramps which compensate for this level change will require care. Elevated as they are, it will be impossible to create an accessible route through the “front” door of every building without great impact to the facade of the historic building or to the historic landscape. Furthermore, ramps should be coordinated to the greatest degree possible with the location of the “on-site” accessible parking. This being the case, accessible routes will most often be located near the backs of buildings.

### **Dumpsters and Trash Cans**

Buildings that historically served single family residential purposes should have service related fixtures that are scaled appropriately. For instance, a large commercial sized dumpster is not appropriate for placement within the environs of “Officer’s Row.” A lessee who anticipates a large volume of refuse from a proposed use, such as a food service establishment, must plan on more frequent pick-up and disposal at a remote location. Where they currently exist, the garage on the Officer’s Row buildings may prove useful for dumpster and trash can storage. Elsewhere, dumpsters may be appropriate in association with certain other buildings, for example, the Barracks and Mess Hall units or historically service-oriented buildings. Locations, sizes and designs for appropriate trash enclosures must be reviewed in advance by the NPS.

### **Site Lighting**

The NPS will select historically appropriate street lighting fixtures and will designate their locations.

### **Site Furnishings**

Benches, bicycle racks and other small site furnishings may be selected from a palette of alternatives prepared for the lessee by the NPS.

### **Foundation plantings**

Decorative foundation plantings are only historically appropriate when installed next to buildings which historically served residential, recreational, civic or administrative functions. Examples of such buildings include the Chapel, Theater, Headquarters, Barracks and Officer’s Quarters buildings. In keeping with photographic evidence from the historical period, a measure of planting variety from building to building appears to be appropriate. The close relationship of the planting material to the foundation of the building, seems to be a consistent trait, with the planting envelope extending no farther than four feet from any exterior wall. In order to maintain the historic landscape appearance free floating “island” flower beds or shrub massings be not be permitted at all. Lessees may design and periodically alter both herbaceous and shrub foundation plantings based on a palette of appropriate plants to be specified by the NPS.

Foundation plantings are not appropriate in an adaptive reuse of his-



Foundation plantings, as seen at Building 21.

torically service-oriented buildings such as the Gas Station, Fire House, Mule Barn, etc. Where a historically service-oriented building meets the landscape at the ground level, nothing more than grass or ground covers less than 6" in height is appropriate.

### **Hedges**

Privet hedges were used historically along the west side of Hartshorne Drive. Similar hedges may again be planted along this road. Privet hedges may also be used to mitigate the visual impact of new landscape elements such as parking areas, or dumpster and trash can enclosures.

## NEW LANDSCAPE ELEMENTS AND VEGETATION

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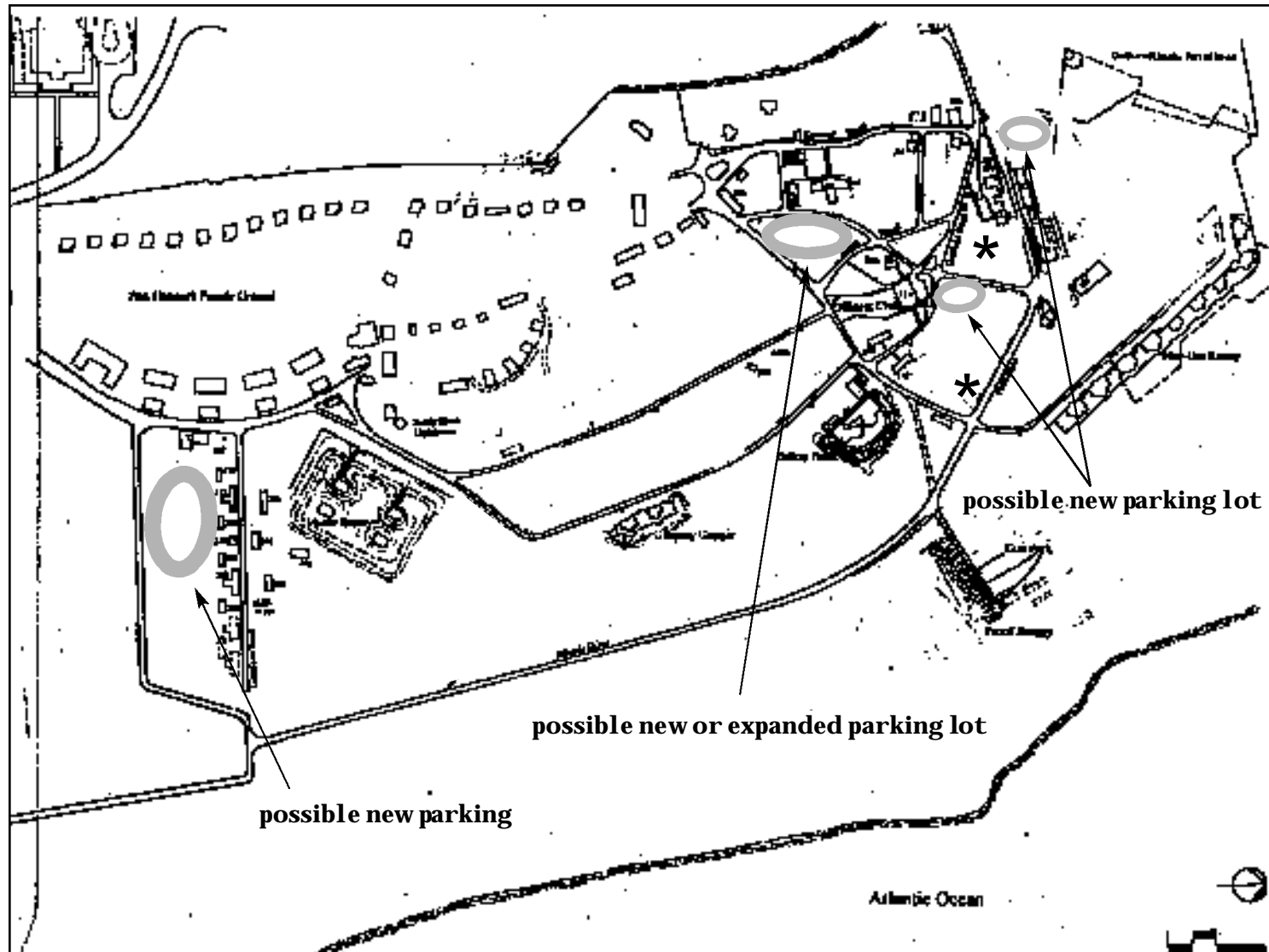
Trees line the edge of Kessler Drive behind Officer's Row.

### **Trees**

Examining the historic photographs taken within the Fort Hancock army base, it is clear that trees were planted almost exclusively in association with streets. Aerial photographs indicate that trees were not planted within open lawns adjacent to the buildings. Thus, any tree planting anticipated as part of a tenant's occupancy must occur within three feet of a road. The NPS will assist the lessee with tree selection and placement. For the Sandy Hook Proving Ground area, around the Officer's Club and neighboring residential area, trees were planted in open lawns. Adding new trees to the grounds around the Officer's Club may be considered, especially if they replace dead or diseased existing trees. Adding trees to the Warehouse area, around Buildings 124 and 125, is not appropriate and would detract from the historic character of this area.



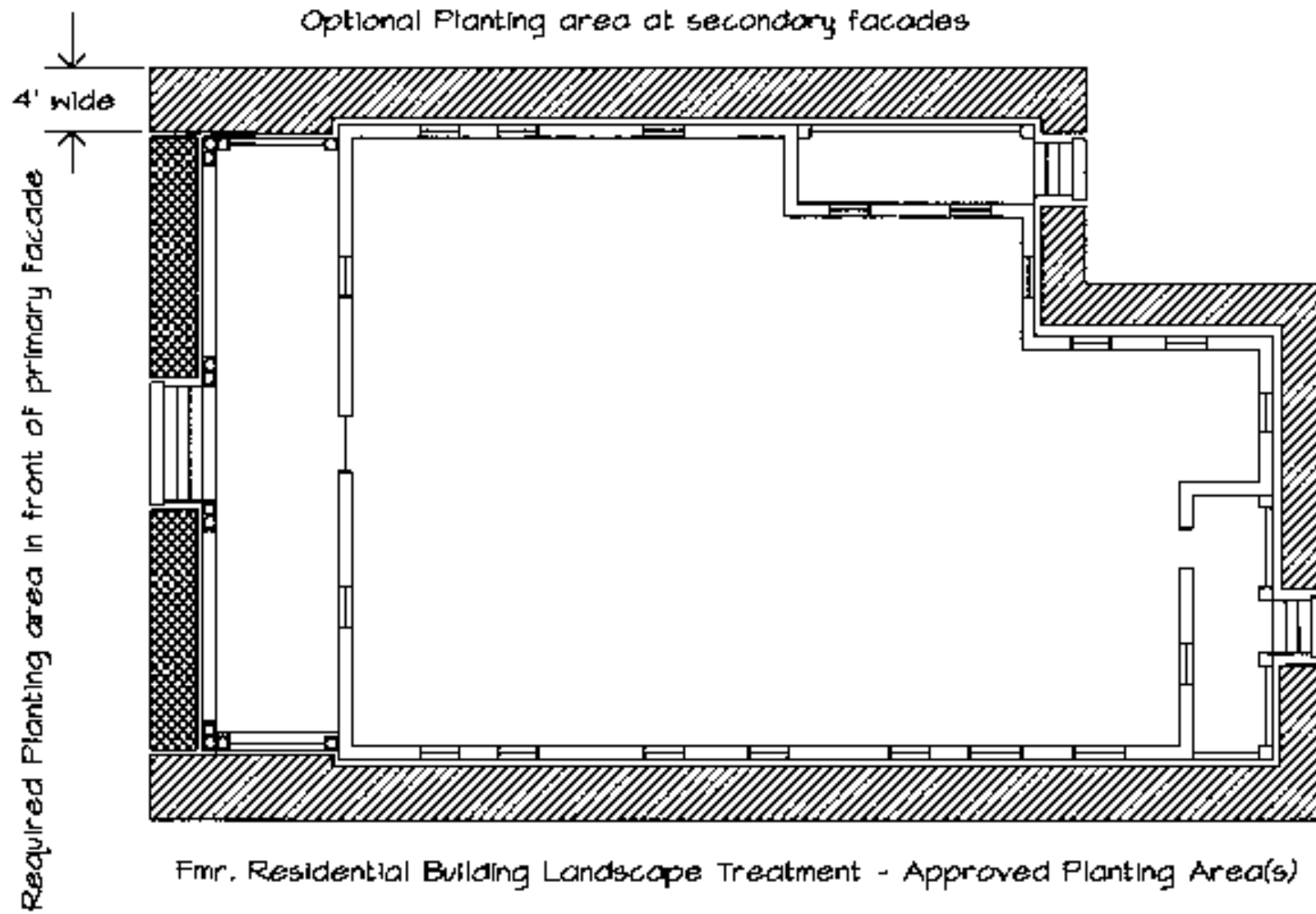
## NEW LANDSCAPE ELEMENTS AND VEGETATION

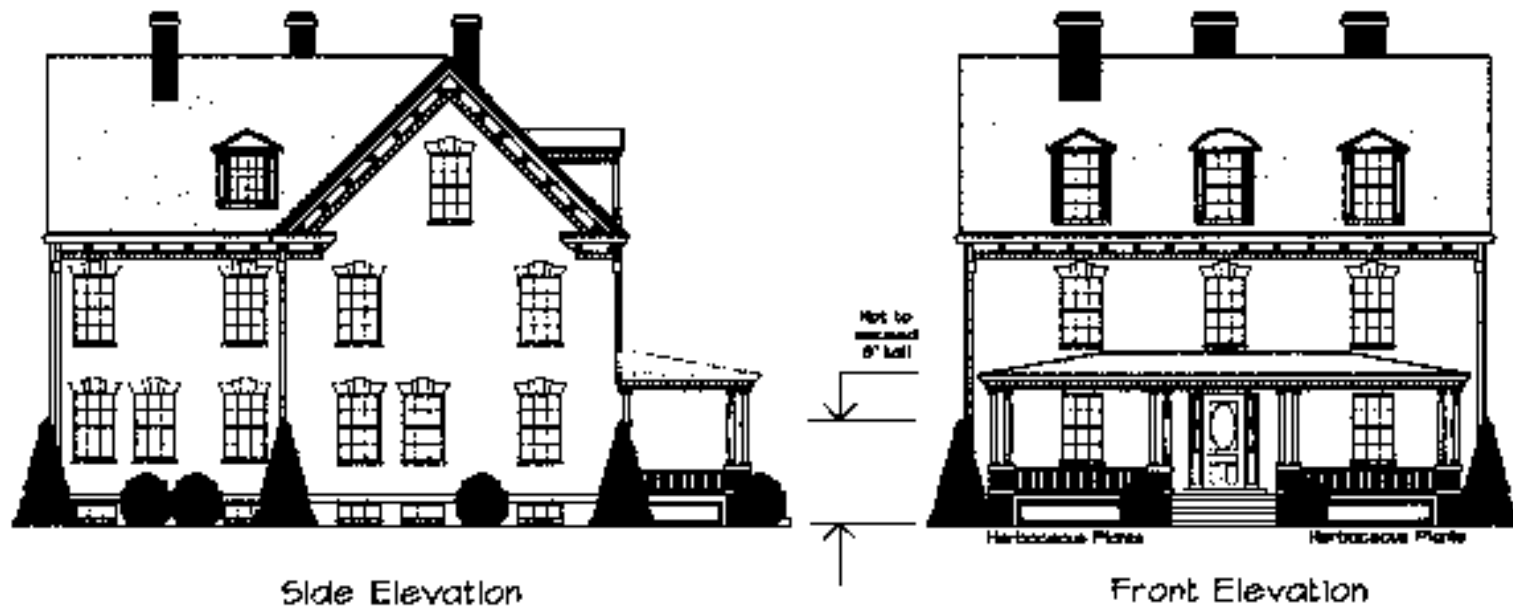


Possible locations for new parking areas and new construction

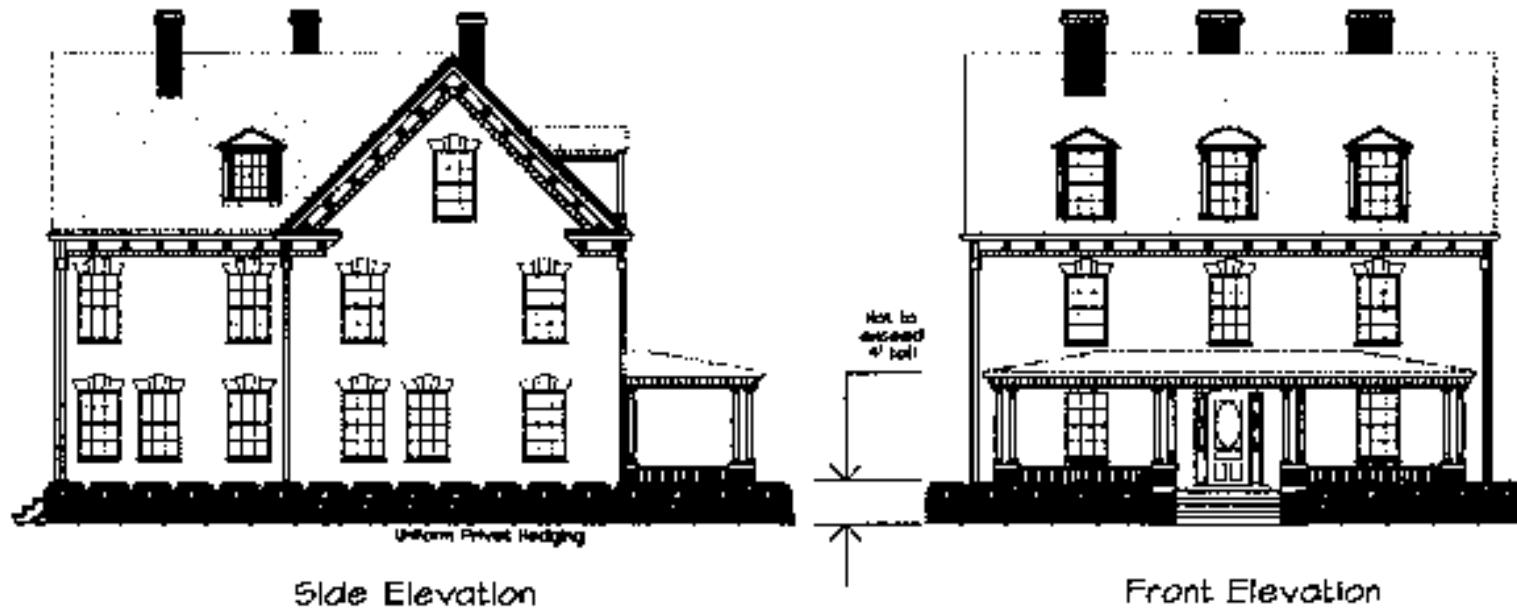
\* Denotes site for possible new construction







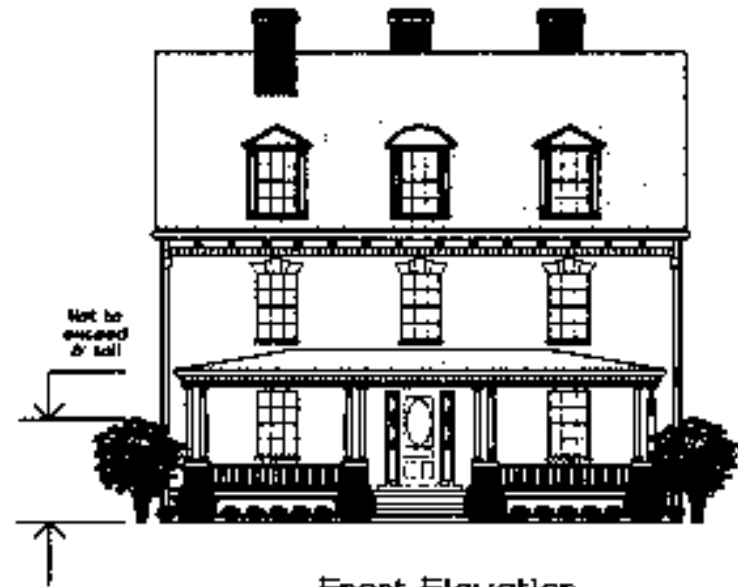
Former Building Landscape Treatment - Schematic Option One



Former Building Landscape Treatment - Schematic Option Two



Side Elevation



Front Elevation

Former Building Landscape Treatment - Schematic Option Three







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Page 43: Ibid.

Pages 49-52: NPS, Olmsted Center for Landscape Preservation,  
(E. Foulds and T. Stakely, August 1998)

Prepared for the National Park Service

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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for peoples who live in island territories under U.S. administration.

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