

MOSES H. CONE MANOR HOUSE

HISTORIC STRUCTURE REPORT

MOSES H. CONE MEMORIAL PARK
BLUE RIDGE PARKWAY,
NORTH CAROLINA

Part One of Two

U.S. Department of the Interior
National Park Service
Southeast Regional Office

United States Department of the Interior

NATIONAL PARK SERVICE
Blue Ridge Parkway
400 BB&T Building
One Pack Square
Asheville, North Carolina 28801

IN REPLY REFER TO:

H30

March 1, 1996

Memorandum

To: Team Coordinator, Education and Visitor Services, Gulf Coast System Support Office

From: Superintendent, Blue Ridge Parkway

Subject: Approval of the Final Moses H. Cone Manor House Historic Structure Report

We are pleased to accept as final the subject Moses H. Cone Manor House Historic Structure Report (HSR). Parkway acceptance of this HSR is conditioned on the clear understanding that specific HSR recommendations for use or management, and for treatment or technical improvements will be implemented within the planning and fiscal constraints of the Parkway.

This document is an outstanding addition to the two previous Moses Cone Estate documents: the Historic Resource Study by Barry Buxton, and, the Cultural Landscape Report by Ian Firth. We want to recognize the excellent performance of the HSR contractor Surber and Barber Architects, Inc., as well as the superior project coordination conducted by historic architect Ali Miri of your staff. Again, our hearty congratulations to all those who made this significant report a reality.

Gary Everhardt

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NORTH CAROLINA

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Prepared by:
Surber & Barber Architects, Inc.
1389 Peachtree Street, N.E.
Atlanta, Georgia 30309
(404) 874-2400
fax (404) 892-1940

Prepared for:
The Southeast Regional Office
National Park Service, Department of the Interior

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EXECUTIVE SUMMARY

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PROJECT MANAGEMENT AND RESEARCH

This Historic Structure Report provides a detailed present day description of the Moses H. Cone Manor House, augmented with photographs and the 1987 HABS drawings by Eric Cook Swanson. Documentation of the existing conditions was accomplished during site visits made by members of the study team between November of 1994 and June of 1995. Interior and exterior paint samples provide information about paint colors and alterations to the building. The Historic Structure Report also identifies specific maintenance and preservation issues. The history of the building's design, construction and subsequent alterations and use is based on a review of archival materials and a thorough examination of the building's fabric.

Important primary reference tools included two Cone Estate ledger books from the Blue Ridge Parkway Archives in Asheville. One ledger contains the original handwritten invoices for building materials purchased between 1899 and 1901. This information provides a checklist of architectural features original to the house and provides information about turn-of-the-century construction methods, materials and costs. A second ledger contains handwritten entries for the Estate's expenses, including payroll expenses, maintenance and building materials and labor, and expenses associated with the operation of the apple orchards, from 1900 to 1947. Together, these ledgers provided information about changes which were made to the house during its period of historical significance. Handwritten information about the Manor House has been organized in chronological order and is included in the Appendix.

Park Service maintenance records from 1973 to the present were collected from the Southeast Regional Office in Atlanta and the Blue Ridge Parkway Headquarters in Asheville. These materials were reviewed for information about restoration treatments, alterations and maintenance of the Manor House. This information was summarized and organized in chronological order and is included in the Appendix of this report. To date, no preservation or maintenance records have been located to indicate what work was performed at the Manor House between 1947 and 1973.

Other valuable primary reference tools were the original Orlo Epps plans for the basement, first and second floors, and east and west elevations. These documents are stored on microfilm in the Blue Ridge Parkway Museum Documents Collection in Asheville. The south and north elevations, attic and roof plans, sections and details are not part of this collection and the location of the original documents is not known. Epps' 1899 plans for the Manor House, when compared with 1987 HABS drawings and the existing condition of the house, provide a clear picture of the alterations which have occurred over time.

Other primary reference tools included newspaper articles about the Cone Estate from the local Watauga Democrat in 1899 and 1900. Historic post cards of the Manor House and the estate were purchased in Atlanta from a Dillsboro, North Carolina collector. These colorized photographs and renderings, dating as early as 1907, provided information about the architectural details, color palette and landscape elements. Bertha Cone's Will, prepared in 1945 and amended in 1946, provided detailed information about the interior furnishings present in the mid-1940s. Information about the Manor House architect, Orlo Epps, was obtained from his obituary published in the New York paper The Oneonta Herald, on June 3, 1926. North Carolina Manufacturer's Records for 1891 to 1902, listed the buildings that Epps & Hackett designed in Greensboro. City directories in Greensboro, North Carolina and Oneonta, New York were consulted. A historic post card and copies of historic photographs and a rendering show four of Epps' Greensboro buildings: the Foust and Brick Dormitory Buildings at the State Normal and Industrial School for Girls, now the University of North Carolina at Greensboro campus; Proximity Mill (1897); and the

Cone Export and Commission Building (1902); provided information about Epps' other designs.

In addition to the primary research conducted by the study team, the team utilized several secondary reference tools. The historical development of the house is based on the extensive research and information compiled by Blue Ridge Parkway Interpretive Specialist, Phil Noblitt. His 1994 Master of Arts thesis for Appalachian State University entitled A Search for Belonging: Moses and Bertha Cone and The Flat Top Manor Estate, provides the definitive social history of the estate. Two earlier reports Historic Resource Study and Historic Structure Report for the Moses H. Cone Estate prepared by Barry Buxton in 1987, and Moses H. Cone Memorial Park: Cultural Landscape Report prepared by Ian Firth in 1993, also served as references. Catherine Bishir's book North Carolina Architecture, published in 1990, was a valuable reference for developing the architectural context for the Manor House. A 1965 book by Edwin R. Moore entitled In Old Oneonta, provided additional information about Orlo Epps.

To complete the Moses H. Cone Manor House Historic Structure Report, Surber & Barber Architects assembled a team of experienced professionals. The architectural assessment was directed by Eugene L. Surber, FAIA. An architect with over 29 years of preservation experience, Mr. Surber has been honored by the American Institute of Architects and the Georgia Trust for Historic Preservation for his efforts in historic preservation. Kathleen O'Malley wrote and edited the first draft of the report, and coordinated team efforts. Ms. O'Malley was the marketing coordinator for Surber & Barber for over six years, and wrote or edited over ten rehabilitation master plans for the firm. Other staff members involved with the Part One investigation and report include graduate intern architects Stacie Monroe, Cathryn Thomas and Amitabh Verma. Ms. Monroe and Ms. Thomas have extensive training in preservation. Mr Verma is trained in both architecture and landscape architecture.

Amanda D. Talbott, who joined the firm as Ms. O'Malley's replacement, wrote and coordinated the production of subsequent drafts and the finished report. Ms. Talbott received a formal education as a writer, and has worked with several architectural firms. Graduate intern architect Stacie Monroe completed all architectural drawings and conducted field investigation and analysis for the second half of the report.

Paint investigation and analysis were provided by Preservation Consultant Sara B. Chase of Lexington Massachusetts. Ms Chase was former director of the Society for the Preservation of New England Antiquities and has extensive training and experience in her specialty area: historic paint and surface treatments. Architectural historian Maurie Van Buren of Atlanta earned a Master of Arts degree in Architectural Conservation from the Institute for Advanced Architectural Studies at the University of York, England. She has worked as a preservation professional for 16 years and has researched and prepared 31 National Register Nominations.

MAJOR RESEARCH FINDINGS

This Historic Structure Report documents several major research findings:

1. The career of Orlo Epps, previously identified as the architect of the Manor House in Phil Noblitt's thesis, is thoroughly examined. The Historic Structure Report contains copies of Epps' floor plans and two elevations of the house. Information about Orlo Epps, including his education, career and a list of buildings he designed in New York and North Carolina is included in the Appendix. This information will be forwarded to the AIA in Washington, which has no information about Orlo Epps in its files.

2. A period of significance for the Manor House, from 1899 to 1947, has been established. This period begins with the start of construction in 1899, and ends in 1947 with the death of Bertha

Cone. The period of significance spans the length of time that the house functioned as the Manor House of a large country estate. Once the period of significance was established, it was possible to identify changes to the building as either historic or non-historic.

3. The importance of Bertha Cone's role in the historical development of the Manor House has been stated in the Historic Structure Report. For 39 years, from the time of Moses Cone's death in 1908 until her own death in 1947, Bertha Cone steadfastly preserved and managed the estate along the lines laid out by her husband. In 1909 she expanded the kitchen wing, in late 1912 she built the Apple Barn, in 1913 she built the large balustrade fence in front of the Manor House and created Flat Top Dairy, Watauga County's first Grade A dairy. In the 1920s, the apple trees the Cones had planted had grown to maturity.

4. The Manor House has been identified as architecturally significant as an example of the Beaux Arts approach to design, incorporating elements popularized by the World's Columbian Exposition held in Chicago in 1893, as well as Classical and Colonial Revival influences. Previously, the style of the house has been described as Colonial.

5. A historical context was developed which not only defines the Moses H. Cone Estate as part of the country place movement of the Gilded Age, but further identifies it as a type of country place known as a "manor." The Cone Estate was an agricultural enterprise, best understood within the context of the American progressive movement. Moses and Bertha Cone's goal was to establish a "model farm" which would demonstrate the latest scientific methods of agriculture and provide housing and a school for the tenants on the estate.

6. The wealth of archival materials detailing the construction and maintenance of the Manor House during its period of significance, 1899 to 1947, makes this an extremely well-documented building. Original invoices for construction materials and other records provide valuable information about turn-of-the-century construction materials, costs, and availability, as well as insight into the management and maintenance of a large country estate in the first half of the 20th century.

7. The original exterior color scheme for the house was not white on white, but a deep ochre yellow with ivory trim, green doors and a brown porch floor. This scheme appears to have been short-lived, perhaps less than a year, with the entire house being painted shades of ivory and white throughout the remainder of the period of significance.

8. The most significant architectural changes to the Manor House were the extension of the north wall of the kitchen wing by approximately ten feet and the erection of the large balustrade in front of the Manor House. Cone Estate records place these changes after Moses Cone's death, most likely in 1909 and 1913 respectively.

9. The paneled glass sun parlor, or sun porch, originally thought to be added by Bertha Cone after her husband's death, was in fact an original feature. The sun parlor panels were ordered in 1900 and are demountable. The west portion of the sun porch was added between 1960 and 1977.

RECOMMENDED USE AND TREATMENT

The following is a summary of the proposed use plan provided in the body of the report. This summary will be altered to reflect any revisions to the final report.

RECOMMENDED USE

Since 1951, the Moses H. Cone Manor House has functioned as a craft center that displays the work of regional artisans. Through this use, the National Park Service found a way to fit this stately mansion into the overall interpretative theme for the Blue Ridge Parkway as the land of pioneers and primitive mountain life. The advantage of this use is that the house has been routinely maintained and has been open to the public for approximately seven months each year since 1951. The disadvantage of this current use is the missed opportunity to tell the real and fascinating history of the Moses H. Cone Estate and its creators as part of the Country Place Movement of the Gilded Age.

The Biltmore Estate, in nearby Asheville, which attracts over 750,000 visitors a year, clearly documents the wide-spread interest in this type of historical resource. Over the years, the Parkway has emphasized the recreational aspects of the Moses Cone Estate. Now, a century after its creation, the time has come to interpret the historical resources of the park.

The Manor House should become an interpretative center and not a historic house museum. House museums are successful when a house has its original furnishings. Bertha Cone's belongings were widely dispersed after her death. As a historic house museum the Moses H. Cone Manor House would pale in comparison to nearby Biltmore, which has maintained its original furnishings and is owned by the same family.

As a historical interpretative center, a nominal admission charge could fund the careful and ongoing maintenance of the house. If the Park Service charged $3.00 per person, and the house received 200,000 visitors per year, as it did in 1991, the revenues would total $600,000 per year. Compared to the Biltmore Estate's $24.95 admission price, the Moses H. Cone Manor House would be affordable for families.

Specific Recommendations for Use

1. Architecturally the house should be returned to its 1947 appearance, inside and out. This would entail removing the public restrooms at the east end of the porch and part of the sun parlor at the west end of the porch, replacing the large balustrade fence in front of the house, and returning the house to its 1947 palette of paint colors.

2. The Cone Manor House should interpret a wide array of historical subjects appropriate to the history of the Cones and their Estate. Different areas of the house could be used to interpret different subjects. For example, the formal spaces could be used to tell the "rags to riches" story of The Denim King -- Moses Cone. The office could be used to tell the story of how Moses Cone and Bertha Cone managed the estate. The kitchen wing and servants quarters could be used to tell the story of the Estate from the servants' point of view.

3. A visitor's center could be constructed behind the Manor House where the original Laundry building was located. This would re-establish the historic relationship of the manor house to its out buildings. The visitor's center could have an installation that discusses the Country Place Movement in both national and regional contexts, another could highlight the Cone Sisters' famous collection of modern art, and another installation could describe the apple orchards and carriage trails.

4. Visitors should first view the Manor House from the front, not the rear of the house. To re-establish the proper relationship between the house and its setting, visitors should approach the Manor House via the original carriage road from the west.

RECOMMENDED TREATMENT

The Moses H. Cone Manor House is unique in that the interior spaces have remained largely unchanged, except for paint colors, since Bertha Cone's death.

From this point forward, the objectives for preservation treatment of the Manor House should be:

- To protect those materials and features that are significant by utilizing the least degree of intervention whenever possible.
- To repair original or character-defining materials and features whenever possible by patching, piecing-in, consolidating, reinforcing or upgrading them, or by limited replacement of extensively deteriorated or missing parts or features when there are surviving prototypes.
- To replace an entire character-defining feature with new material only if the amount of deterioration precludes repair, or if replacement has already taken place and the quality of the replacement materials or workmanship diminishes the overall historic character of the Manor House.
- To utilize materials and workmanship of a quality consistent with that of a stately manor house costing $2.5 million or more by today's standards. *Historic newspaper accounts placed the original cost of the Manor House at $25,000, and this may be a modest figure. When today's material and labor costs are compared with those recorded in the Cone Estate ledgers, one can surmise that construction costs over the last 95 years have increased as much as one thousand percent.*
- To document preservation and maintenance work so that the life of each character-defining material and feature, from the columns and balustrades down to the smallest dentil or pane of glass can be charted.

Specific Recommendations for Treatment

1. If funds are not available to turn the Manor House into an interpretive center, DO NOT move the Crafts Center out of the house as the house may deteriorate further if not used.
2. Both roofs are at the end of their lives and need to be replaced.
3. The building should be handicapped accessible. Barring the addition of an elevator, the solution will entail creating a ramp from the parking lot to the front porch, providing access either through the front door or through the dining room door, and providing an interpretation on the first floor of any exhibits on the upper floors.
4. The public restroom addition at the east end of the porch should be removed and this facade returned to its original appearance. New public restrooms could be located in a separate visitor's center.
5. The Manor House's lighting rod system was removed in 1978. Because the house is located on an exposed site, a new lighting protection system should be installed in the location of the previous system.
7. There appear to be no original pedestals and few second generation pedestals at the porches and porch roof. Most are probably fourth or fifth generation. The balustrade elements have also been frequently replaced. For all pedestals and balustrade elements, large scale drawings should be developed and adhered in replacement and ongoing maintenance to assure consistency and proper design. Here again, craftsmanship is key. The pedestal caps and the top and bottom rails of the balustrades must be milled

from material thick enough to provide a sufficient slope that will allow water to drain from these elements while retaining the appropriate thickness.

At the porch roof, the pedestal caps may be made of cast aluminum which would last longer than wood. These too should have a proper slope.

Many of the balusters within the balustrades are rotting at the transition point where the circular portion of the baluster meets the square block. Here again, the balusters must be milled with enough slope, creating a scallop on each face of the blocks, so that water will roll off the balusters.

The pedestals under the porch columns also need to be milled of thicker material to allow for the proper slope while retaining the appropriate thickness of the cap at the edge.

8. On the columns themselves, every attempt should be made to repair the shafts using epoxy material. The four columns at the porte cochère should be replaced with columns with the proper number of flutes and entasis. Efforts should be made to retain the carved wooden capitals at the main porch and the molded composition material capitals at the kitchen porch. If the composition capitals cannot be repaired, they should be replaced with composition capitals replicating the original design.

9. A painting system, including methods and materials, should be investigated for all exterior wood elements. This system, in combination with the proper milling of the pedestals and balustrades, should prolong the life of these elements.

10. The painting system should return the house to its appearance during the period of significance: clapboard, trim and dormer cheeks should be painted ivory, the porch floor a warm brown, the doors and screens a deep green, and the brick chimneys and foundation a deep red-brown.

11. Originally, many of the windows had half screens. The full screens are a later addition. The bedroom windows on the second story also had green shutters with hinges that were left closed in the winter. These historic shutters and half screens (or replacements) are stored in the basement of the Manor House. This system should be reinstated: half screens in the summer and closed wooden shutters throughout the winter.

12. The grade should be lowered at the porte cochère so that the hardware screen panel below the steps is fully exposed. This would illustrate how a visitor to the manor house could step out of a carriage and onto the porch without ever setting foot on the ground.

13. The east wall of the house should be treated to remove mildew before repainting. Removal of the public restroom addition will increase sunlight and air circulation and may eliminate the conditions which have promoted mildew problems. The trimming back or removal of a few trees may also increase the presence of sunlight at this facade.

14. It is questionable whether an underground storm water drainage exists. If one does, it should be cleared out, repaired or enlarged as necessary.

15. The continuing damp in the foundation of the manor house may indicate the need for a foundation drainage system.

Once the water problems at the Manor House are corrected, the rehabilitation of water damaged elements at the interior can begin. Please note that specific recommendations for the treatment of the interior of the Manor House will be developed in Part Two of this Historic Structure Report.

ADMINISTRATIVE DATA

Administrative Data for the Moses H. Cone Manor House was provided to Surber & Barber Architects by Mr. Ali Miri, Historic Architect, National Park Service Southeast Regional Office.

This information is presented in the order and format described in NPS-28, Release No. 4, Chapter 8, Page 124.

a. Names, numbers and location data from List of Classified Structures:

The Single Entry Report for the Moses H. Cone Manor House dated 10/21/94 and included in the Appendix identifies the structure as follows:

- IDLCS: 06502
- Structure Number: HS-359
- Structure Name 1: Flat Top Manor House
- Structure Name 2: Moses Cone House
- Park Alpha Code: BLRI
- Name: Blue Ridge Parkway
- ORGCODE: 5140
- County: Watauga, North Carolina

b. Proposed treatment and use of the structure and source document:

To date, a Development Concept Plan for the Moses H. Cone Manor House has not been prepared, therefore, no treatment or use has been proposed prior to the publication of this Historic Structure Report. Management information regarding the treatment of this structure is, however, reported in the List of Classified Structures. The Single Entry Report dated 10/21/94 and included in the Appendix identifies the structure as follows:

- Management Category: SHOULD BE PRES. & MAINT
- Management Agreement: CONCESSION CONTRACT
- Proposed Ultimate Treatment:
- Approved Ultimate Treatment: NO TREATMENT

The treatment and use proposed in this Historic Structure Report are as follows:

- Treatment: Restoration
- Use: Interpretive Center

c. Related studies:

Previous studies regarding the Moses H. Cone Manor House include:

- Historic Resource Study and Historic Structure Report for the Moses H. Cone Estate, prepared by Barry Buxton in 1987

- Moses H. Cone Memorial Park: Cultural Landscape Report, prepared by Ian Firth in 1993

d. Cultural resource data including date listed in the National Register, period of significance and context of significance:

- Neither the Moses H. Cone Manor House nor the Moses H. Cone Memorial Park is listed in the National Register. As of this writing, no draft or completed copy of a National Register nomination was available for inclusion in this Historic Structure Report.

- Period of Significance: The period of significance established in this Historic Structure Report is 1899 to 1947. This period

begins with the start of construction in 1899 and ends in 1947 with the death of Bertha Cone. This period encompasses the years that the house functioned as the Manor House of a large country estate.

- Context of Significance: The context of significance developed in this Historic Structure Report defines the Moses H. Cone Estate as part of the country place movement of the Gilded Age.

  The Manor House has been established as architecturally significant as an example of the Beaux Arts approach to design. Previously, the style of the house has been described as Colonial.

  Further significance is attributed to the vast amount of information available about the construction of the Manor House and the operation of the Cone Estate during its period of significance. Original invoices for construction materials and other estate records provide valuable information about turn-of-the-century construction materials, costs, and availability, as well as insight into cyclical maintenance for the first half of the 20th century.

e. Recommendations for documentation, cataloging and storage of materials generated by the Historic Structure Report:

The primary and secondary reference materials used in this Historic Structure Report came from a variety of sources and locations. Park Service files and drawings are located in the Southeast Regional Office in Atlanta and two places in Asheville: The Blue Ridge Parkway's office in downtown Asheville, and the Engineering and Technical Division's Active Drawing files. Additional information about the Cone Estate, including a copy of Bertha Cone's will and oral histories about the estate were located inside the information desk in the Manor House. Phil Noblitt's thesis is on file at Appalachian State University in Boone. In addition, new information was collected and new documents created by the Historic Structure Report team. Much of this information is included in the Appendix.

The team recommends that originals or copies of all written information, photographs, architectural drawings and other plans utilized, generated or discovered during the preparation of this Historic Structure Report be cataloged and stored in the Blue Ridge Parkway Archives in Asheville. Since the Blue Ridge Parkway Technical and Engineering Division is located in a building which does not have electricity, HVAC, telephones or copy machines, a detailed list of all materials utilized, generated or discovered during the preparation of this Historic Structure Report should be retained in the Blue Ridge Parkway's headquarters in downtown Asheville, the Southeast Regional Office in Atlanta, the Parkway offices in Blowing Rock and the Cone Manor House information desk.

In addition, the team recommends that copies of this Historic Structure Report and the Moses H. Cone Memorial Park: Cultural Landscape Report prepared by Ian Firth in 1993 be circulated within the Southeast Regional Office, the Blue Ridge Parkway's Office, and the Moses H. Cone Memorial Park staff to inform Park Service employees. The team further recommends that these materials and others, including the Historic Resource Study and Historic Structure Report for the Moses H. Cone Estate prepared by Barry Buxton in 1987 and Phil Noblitt's 1994 Master of Arts thesis for Appalachian State University entitled A Search for Belonging: Moses and Bertha Cone and The Flat Top Manor Estate, be used to develop comprehensive interpretive materials focusing on the historic aspects of the Cone Estate.

DEVELOPMENTAL HISTORY

DEVELOPMENTAL HISTORY

HISTORICAL BACKGROUND AND CONTEXT

The story of Moses H. Cone is a classic American rags-to-riches tale. Born in Jonesboro, Tennessee in 1857, Moses Cone was the eldest of thirteen children born to Jewish immigrant, Herman Cone and his wife Helen. Moses began his career as a "drummer," or traveling salesman, traveling throughout the South for his father's grocery business.

In 1888, at the age of 30, Moses Cone married Bertha Lindau, whose family was part of the Jewish community in Baltimore. The couple did not have children. By the time he was 35 years old, Moses had made a fortune in the textile industry. With his brother Caesar as his business partner in the Cone Export Company, Moses Cone reorganized the marketing of textiles from southern mills. Moses Cone earned the nickname "The Denim King" because he introduced the manufacture of denim cloth to the South.

At the center of the Cone brothers textile empire were their three mills in Greensboro, North Carolina, which they built, owned and managed. First was Proximity Mill, established in 1895, which produced blue and brown denims. It was so named for its "proximity" to railroads and the raw material, cotton. Mill villages built within walking distance of the plant insured the proximity of a cheap and abundant supply of labor. In 1899, the Cone brothers, in cooperation with the Sternberger family of South Carolina, opened Revolution Mills, which produced flannel. Then in 1902, the brothers began construction of their third and largest plant, White Oak Mills, which was also a denim plant.

Money from the Cone brothers' growing textile empire made it possible for Moses' sisters Claribel and Etta to travel extensively and collect modern art. Following the advice of their friend, author Gertrude Stein, the Cone sisters patronized struggling modern artists in Europe. By 1949, when the sisters bequeathed their collection to the Baltimore Museum of Art, they had acquired over three thousand objects, including works by Matisse, Picasso, van Gogh, Gauguin, Pissaro, Delacroix, Courbet and Renoir.

The Country House and Resort Movements in America

The term "manor" dates back to medieval western Europe and was used to define a feudal estate over which a lord had domain. Like its medieval predecessor, the manor of the Gilded Age provided housing for its workers. Many manors provided schools and set social standards for their workers. Their landscaped gardens and recreational areas were open to the community.

The manor of the Gilded Age was a large estate that functioned as a working farm. Unlike the American plantations of the colonial and antebellum eras which were established to create a profit, the manor of the Gilded Age was not the primary source of its owner's income. At a time when affluent Americans were escaping to the country, struggling farmers were seeking employment in the city. Reformers believed that better education and application of scientific farming methods would combat this migration of farmers from the country to the city. The manor was an agricultural enterprise, which served as a "model farm" applying the latest scientific methods of agriculture for the benefit of the community. Moses and Bertha Cone's 3,500 acre estate outside Blowing Rock, North Carolina, was an example of the Gilded Age Manor.

During the rapid industrialization and urbanization that followed the Civil War, Americans sought to escape from urban life on a seasonal basis. This anti-urban movement took two forms: the resort and the country house. By building his country manor on the outskirts the mountain resort community of Blowing Rock North Carolina,

Moses Cone combined the best of both worlds: the privacy of a country house and ready access to the social life of a resort community.

In a chapter entitled "Resort Life and Country Life" from his book The American Country House, author Clive Aslet points out that "in the United States the resort was such an attractive alternative to the country house that it has tended to obscure the fact that a country house movement existed at all." (Aslet, p 239) Summer visitors were attracted to resorts by the natural beauty of the environment and recreational activities. The great resort hotels became the center of social life.

Moses and Bertha Cone were not alone in their desire to escape from the crowded conditions and pressures of urban life into the pastoral countryside. The boom in country estate building could have only been sustained by an increase in wealth and an expansion of America's upper class. This chapter in American history, called the *Country Place Era*, stretched from 1870 to 1900, during which time the national wealth rose from $30,400 million to $126,700 million (Hewitt, p. 10). Resort communities such as Newport, Bar Harbor and Jekyll Island illustrate one advantage of a resort over a country house-social interaction with their peers. As turn-of-the-century writer Katherine G. Busey observed in her book Home Life in America, "we are gregarious people - even a millionaire in America does not want to ' flock by himself.'" (Aslet P 239)

If the 1870s and 1880s were good for the captains of industry, the 1890s were a watershed. As Mark Alan Hewitt describes in his book The Architect & the American Country House:

> *The urban wealth that grew from the consolidation of industrial trusts after the panic of 1893 and the adoption of the gold standard established a new American aristocracy and made possible a new, elite country life.* (Hewitt, p. 14)

The adoption of the gold standard in the 1890s saw the birth of America's Gilded Age. Wealthy industrialists idealized country life; they were convinced that it promoted health and was emotionally and spiritually uplifting -- a moral tonic. The grand country estate, or *country place*, was more than an escape from the city; it was a way to display wealth.

Moses and Bertha Cone's Flat Top Manor, however, was not only a retreat, it was an agricultural enterprise, best understood within the context of the American Progressive Movement. Moses and Bertha Cone's goal was to establish a "model farm" which would demonstrate the latest scientific methods of agriculture.

There were several types of Country Places in the Gilded Age. Some wealthy industrialists purchased large tracts of land and built hunting lodges so they could entertain guests and enjoy nature while quail hunting or shooting game. Located in rural areas, they were part of a national urban sphere of architectural patronage and design. Seaside and mountain resort communities tended to be small estates of perhaps ten to fifty acres grouped in enclaves, often around a country club. Many were built on onetime farmlands bought for their scenic beauty and proximity to urban centers. The resort communities of Newport, Rhode Island, Bar Harbor, Maine, Lenox, Massachusetts, Lake Geneva, Wisconsin, Palm Beach, Florida, Jekyll Island, Georgia, and the mountain resort communities in the Adirondacks were popular seasonal enclaves of the wealthy.

In Newport: Our Social Capital written in 1905, author Mrs. John King van Rensselaer provides insight into the advantages of the resort over the country house:

> *Up to that time the great American families has* [sic] *been scattered, as they had lived in their country seats while the weather was warm, and only occupied their town houses in the cities during the winter. The men who were busy at their counting houses and the merchants made their home in Boston, New York, Philadelphia, etc. went with their families to some hotel during the hot months. It was a new departure to have these merchants establish themselves in cosy cottages, where they were sure of privacy and not*

> *burdened with the cares and responsibilities of a large country place.* (Aslet p239)

For families staying for several months, many resort hotels offered their guests a separate cottage away from the main building but serviced by it. The term 'cottage' first used with hotels, was later applied to private houses constructed on small parcels of land in resort communities. At Newport, the millionaire's "cottages" such as Marble House, Chateau-sur Mer, and the Breakers, were so large and grand that in the words of Henry James the place had become "the breeding-ground of white elephants. "

Newport was not always the "Fifth Ave. by the sea" that it came be in the last decades of the 19th century. In the antebellum era, the quaint whaling village of Newport was frequented largely by southerners. Then it was fashionable to rent a farmer's house rather than live in town. Attracted by the Newport Casino's recreation and social activities, upper class families established seasonal homes in the 1870s. By the 1880s the Newport "cottage," which generally sat on a parcel of 10 to 15 acres of land, had clearly diverged from the country house movement, so much so that socialite Edith Wharton considered her country estate in the Berkshires as a refugee from Newport's relentless urbanity.

Bar Harbor in Maine was a more rustic version of Newport. The coast of Maine offered the relaxed close-to-nature lifestyle, so sought out by harried capitalists during the Gilded Age. Like many resorts, Bar Harbor was discovered first by artists such as Thomas Cole who painted its rugged picturesque landscape as early as 1844. Next scientists arrived, followed by yachtsmen, and then by the summer visitors. Hotels were the nucleus of the summer colonies established by wealthy families along the Maine coastline. Though many luxurious hotels were built in Bar Harbor by the 1870s , as a rule the wealthy summer visitors who came in the 1880s preferred to stay in their own summer homes.

Vacations on the islands off the coast of Maine offered a lifestyle of primitive simplicity and wholesome vigor and every effort was made to keep it that way. In 1883 Frederick Law Olmsted, advised how to maintain the character of Cushings Island:

> *The Island is not a good place for a neighborhood of smart, fine suburban residences such as many prefer to pass their summers ... Villas and cottages of the class in question would appear out of place, tawdry, and vulgar upon it . Lawns and gardens appropriated to them are in large parts of the island out of the question, notions of improving the island based on what has generally been attempted at many public favored places of summer resort should therefore be wholly abandoned.* (Aslet p249)

Baymeath, five miles from Bar Harbor, is one example of a country house. Built from 1894-95, the house contained six bedrooms, ten bathrooms and eight maids' rooms. The owners, Mr. & Mrs. Joseph Tilton Bowen, came from Chicago. "Our idea about the house," wrote Mrs. Bowen, "was that it should be a farm house, rather low and in order not to keep too many gardeners, its own grass was to come to the front door." (Aslet p250) At their French Colonial home, the Bowens lived an informal lifestyle, preferring clambakes and picnics to formal entertaining.

In The American Country House, Clive Aslet explains that "Jekyll Island had been a remarkable phenomenon of American social life, encapsulating cherished ideas of privacy, community informality and architecture, and sport. Its connection with the country house was at Cumberland Island." (Aslet p 251)

In contrast to the lavish entertainment and splendor of popular resort colonies such as Newport; Jekyll and Cumberland Islands were private vacation retreats, where access was limited by ownership or invitation. In 1886, a group of elite and wealthy New Yorkers including Vanderbilts, Rockerfellers, Morgans, Pullmans, and Pultizers purchased Jekyll, off the coast of Georgia, as a private island refuge. Jekyll Island Club, called the richest, most inaccessible club in the world, was a winter haven for millionaires. On the island, club

members created a natural paradise dedicated to the pursuit of sports such as hunting, golfing, tennis, bicycle and motorcar racing. The clubhouse was the hub of the island's social life, providing 60 sleeping rooms, and a dining hall. Members who wanted to be sure of adequate accommodation for family and guests constructed their own cottages on one acre plots. The first generation of houses on Jekyll were unpretentious and did not have kitchens, as the club members were expected to dine at the Club house.

Cumberland Island, adjacent to Jekyll, was almost an extension of the club organized for the benefit of the Carnegie family. In 1881, Thomas Carnegie, brother of Andrew, purchased four thousand acres of land on Cumberland Island. On the site of an old cotton plantation house, he and his wife, Lucy, constructed a large country home called Dungeness. The house was completed in 1885. The following year Carnegie died, but his widow Lucy continued to acquire land on Cumberland, eventually owning over 16,000 acres. Virtually the whole island was a small fiefdom under the control of Mrs. Carnegie.

On Cumberland, the Carnegies enjoyed a variety of recreational activities, including a nine-hole golf course, a polo field, tennis courts, a fleet of boats, fifty to sixty horses and later electric-powered cars. Mrs. Carnegie had a casino constructed which housed a swimming pool, a squash court and billiard room. Hunting in the island's well-stocked forest, archery and croquet were also popular past times.

Through not income-producing, the Carnegie's farming operations made the Island almost self-sufficient. A variety of fruits and vegetables grew on reclaimed marshland and in greenhouses. To provide fresh meat, nearly 500 head of cattle grazed on Cumberland. Forty milk cows produced milk, and chickens were raised in large quantities. Cumberland had its own icehouse, bakery and woodworking shop maintained by a staff of 200-300.

Lucy Carnegie constructed houses for each of her nine children on Cumberland. Plum Orchard, built in 1898 for George Lauder Carnegie and still standing today, was the grandest of all. Designed by the well-known Boston architectural firm of Peabody and Stearns, the white-columned mansion contained 30 rooms including 13 bedrooms and 12 bathrooms. Situated nine miles from Dungeness it had its own swimming pool and squash courts. It also had its own generating plant, laundry, barn, water tower, and chicken house.

Although Flat Top Manor is located in the mountains of western North Carolina and Plum Orchard is located on Cumberland Island off the coast of Georgia, there are several similarities between the two country houses. Both were located near a resort community; both were architect-designed examples of the colonial-classical style of the so-called American Renaissance. Both estates engaged in farming activities and a variety of recreation pursuits with a focus on horseback riding. And both country houses are now managed by the National Park Service.

Like Plum Orchard and its proximity to Jekyll Island, the Moses Cone Estate combines the advantages of both the country house and the resort community. Both are close to nature with ample privacy, yet adjacent to a resort community with a seasonally active social life. By the time Moses Cone began purchasing land to create his country manor, Blowing Rock had become a popular mountain resort. Among Blowing Rock's attractions was its elevation of 4,000 feet, which provided beautiful mountain scenery, cool summers, and trout fishing in mountain streams. The year round population of 200 grew during the summer to more than 600 (Noblitt p.79). To accommodate summer visitors three hotels opened between 1884 and 1891: the Watauaga, Blowing Rock, and Green Park Hotels.

Flat Top Manor, like Plum Orchard, was a substantial dwelling with white classical columns. Plum Orchard was designed by Peabody and Sterns in 1898, just one year before Orlo Epps designed Moses Cone's country house. Plum Orchard was located nine miles from Dungeness and, like the Cone estate, had its own generating plant, laundry, and barn. Plum Orchard also had a pool and squash courts. Farming was an important past time on Cumberland, as it was at the Cone estate.

The Carnegie houses on Cumberland formed a family compound

near a resort community. While the Cone's estate was never a family compound, Bertha's sisters did live at Flat Top Manor after Moses death. Herman Cone, Moses brother, built a house called "Shadow Falls" in nearby Mayview Place in 1927. The local Blowing Rock newspaper recorded the arrival of Sam Cone, Julian Cone and Herman Cone in Blowing Rock in 1947. And Bertha's relatives, the Lindaus also built a home in Blowing Rock.

The Country Place in North Carolina

Viewed in a statewide context, the Cone's Flat Top Manor predates the North Carolina pattern of the country house which developed as a suburban villa. What might have been called a villa in the late 18th or early 19th century became known as a country house in the Gilded Age. The term "villa" was used by Romans as early as the first century to describe a country retreat located within a day's travel from the city where business was conducted. In the 19th century, streetcars and trains made it possible for successful American businessmen to live in the country and commute into major American cities. It is in this suburban context that the country house movement in North Carolina developed. As Catherine W. Bishir explains in Architecture of North Carolina:

> *Country house architecture in North Carolina developed as part of a national urban framework, specifically the Philadelphia country house movement. A country house was usually conceived as a family' s primary residence, located on a transportation line that allowed the man of the house to commute to this office while maintaining his family in a healthful, spacious estate suitable to elaborate entertaining. Key examples, the creations of wives of wealthy industrialists, express personal ideals on a grand scale* (Bishir, p. 445).

Flat Top Manor was not the Cones' primary residence. When the house was constructed between 1899 and 1900, the Cones resided in Baltimore, Maryland. From the outset, the house was occupied seasonally, from April to November. Unlike most North Carolina country places, Flat Top Manor was not on a transportation line; the nearest railroad stop was at Lenoir 20 miles away. Moses Cone did not commute to Greensboro daily, but kept in touch through a telephone linking Flat Top Manor to a store in Blowing Rock, from which he could send and receive telegraphs. If necessary, he could be in Greensboro within a day's travel by rail.

Flat Top Manor bears similarities with two other properties in North Carolina: George Washington Vanderbilt's Biltmore (1890-1895) near Asheville, and Katherine and Richard Reynolds' Reynolda (1914-1917) near Winston-Salem. Biltmore, Reynolda and Flat Top Manor are all examples of the American progressive movement. Each was designed as a "model farm" which would demonstrate the latest scientific methods of agriculture: Biltmore focused on forestry, Reynolda on livestock, and Flat Top Manor on apple orchards. Each estate also provided housing for its workers and a school, and each had landscaped gardens accessible to the community.

In many ways, Flat Top Manor is a smaller, less grandiose version of its 255-room neighbor in the western North Carolina mountains, the Biltmore Estate. Both Cone and Vanderbilt sought refuge from the city and hoped that the mountain climate and country life would benefit their health. While both men were wealthy, Vanderbilt was a member of the third generation of one of America's richest families and had inherited a vast railroad and shipping fortune. Cone, on the other hand, was still creating a fortune in the southern textile industry.

Biltmore, with over 125,000 acres, was substantially larger than Flat Top Manor which encompassed approximately 3,600 acres. The creation of Biltmore predates Flat Top Manor by only four years, and it is believed that Cone modeled his estate after Vanderbilt's. Vanderbilt began purchasing land in 1888, and Moses Cone began in 1893. Both men transformed the landscape with trees, lakes, deer parks, and miles

of carriage roads, albeit on differing scales. Vanderbilt hired America's most renowned landscape architect, Frederick Law Olmsted, to plan Biltmore's approach roads, carriage roads, formal gardens and deer parks, and to site the house. Moses Cone developed his 25 miles of carriage roads with the assistance of Greensboro, North Carolina contractor, J.M. Wolfe (Noblitt, p. 114).

Both estates were designed as "model farms" illustrating scientific principles of agriculture for the region. As the Greensboro Patriot reported on September 13, 1899, the Flat Top orchards were an example of what could be accomplished in horticulture in the North Carolina mountains, and were of value to the state and to humanity. In 1905, the county newspaper Watauga Democrat reprinted an article published in the Charlotte Chronicle which favorably compared "Farmer Cone" with "Farmer Vanderbilt." It stated:

> *Farmer Vanderbilt, at Asheville, pays most of his attention to Forestry and science effects. Farmer Cone at Blowing Rock, is devoting his efforts to supplying the country with apples. Both are doing a great work for the state, but we believe that for real promotion of mountain interest, Farmer Cone stands ahead of Farmer Vanderbilt* (Noblitt, p. 201).

Moses Cone's commitment to husbandry had its rewards; in 1900 he won second place for the apples he entered in a Paris exhibition (Noblitt, p. 199).

In addition to its thousands of acres of forest, Biltmore had a dairy farm, livestock and extensive vegetable gardens. At Flat Top Manor, in addition to four apple orchards with more than 32,000 trees, there were chickens, vegetable gardens and a herd of cattle. Bertha Cone established a dairy at Flat Rock Manor in 1919, expanding the range of her husband's endeavors. Like Vanderbilt, Cone made a significant contribution toward the construction of a school and houses for the thirty families who lived and worked on his estate.

The architect for Biltmore House was Richard Morris Hunt, one of the founders of the American Institute of Architects and the first American to graduate from the École des Beaux Arts in Paris. At Biltmore, Hunt employed the Beaux Arts approach by imaginatively combining historical features of 17th century French Renaissance architecture with modern technology and needs. Between 1890 and 1895, Vanderbilt employed hundreds of workers from the area and artisans from all over the country and Europe to build his stately new home. To house his workers, Vanderbilt constructed a manorial village complete with houses, shops, schools and a hospital.

Four years after Biltmore House was completed, Moses Cone began construction of his 23-room Flat Top Manor House. Like Biltmore House, the design of Flat Top Manor employed the Beaux Arts approach, but instead of using the 17th century French Renaissance, the historical references for Flat Top Manor were Classical and Colonial -- the styles popularized by the 1893 Columbian Exposition. Although not a grand mansion on the scale of Biltmore, it was nevertheless a part of the Beaux Arts design tradition during the Gilded Age.

Bertha Cone interviewed Stanford White of McKim, Mead and White (Noblitt, p. 89), however the Cones did not commission this nationally known designer to create their estate. Instead, the architect for Flat Top Manor was Orlo Epps, who practiced architecture in Oneonta, New York; Greensboro, North Carolina; and Washington, D.C. Epps was educated at Cornell and was among the first generation of American architects educated in this country. The Beaux Arts method of teaching was established at American universities such as Cornell by French faculty and Americans who had studied at the École.

Reynolda, located just two miles from downtown Winston-Salem and the Reynolds' primary residence, is an example of the Philadelphia country house movement in North Carolina. From its creation, however, Reynolda was more than a suburban villa; the 1,000 acre estate was also conceived as a "model working farm" and has many other features in common with Flat Top Manor. Both were the products of wealth created by the industrialization of the New South and both feature a classically influenced Beaux Arts-period manor

house.

Reynolda was larger, with 60 rooms compared to Flat Top Manor's 23 rooms, but both houses featured expansive one-story porches with classical columns and semi-circular porticos. The Reynolds' estate was designed by architect Charles Barton Keen and landscape architect Thomas Sears, leaders in the Philadelphia country house movement.

Both Reynolda and Flat Top Manor were, for the most part, run by the wives of the industrialists. By 1914, Widow Bertha Cone had been managing Flat Top Manor for six years when Katherine Reynolds established Reynolda. The concept for the 1,000 acre Reynolda belonged to Mrs. Reynolds. She initially purchased farmland in 1909, and it was she who commissioned landscape and architectural plans in 1914. While the design of Flat Top Manor may have been conceived by Moses and Bertha Cone, it was Bertha who interviewed architect Stanford White in New York.

From the outset, Katherine Smith Reynolds ran Reynolda as a working farm, combining private luxury with a concern for progressive paternalism and agricultural and social reform. A native of Mount Airy, North Carolina, Katherine Reynolds attended college at the State Normal and Industrial School for Girls at Greensboro in 1899, where the "influence toward reform and improvement was extremely strong" (Bishir, p 446). Incidentally, the Cone's architect, Orlo Epps, designed two of the schools most significant buildings in 1891, the Foust Building and the Brick Dormitory.

Period of Significance

The period of significance of the Moses H. Cone Manor House is from 1899 to 1947. This period begins with the start of construction in 1899, and ends in 1947, with the death of Bertha Cone. This period of significance encompasses the years that the house functioned as the Manor House of a large country estate.

Presently, neither the Manor House nor the Moses H. Cone Estate is listed in the National Register of Historic Places. When a nomination is prepared, the National Park Service will determine the areas of significance for the Moses H. Cone Estate as a whole.

Completed in 1993, the Moses H. Cone Memorial Park: Cultural Landscape Report, by Ian J. W. Firth of the University of Georgia School of Design, developed context and significance for the historic landscape. For the purposes of this Historic Structures Report, the significance of the Manor House within the context of the Moses H. Cone Estate will be identified.

Significance

The Moses H. Cone Manor House is significant as defined by **National Register Criterion C - Architecture.**

- Moses and Bertha Cone's Flat Top Manor House, built between 1899 and 1900, combined Beaux Arts elements made popular by the Columbian Exposition of 1983 with the Classical and Colonial Revival styles popular at the time.

- The architect of the Flat Top Manor House was Orlo Epps. A graduate of Cornell University, Epps was among the first generation of architects schooled in America.

- Archival information about the construction of the Manor House provides an exceptionally well-documented and well-preserved example of turn-of-the-century construction methods, technology and costs. Cone Estate ledger entries and other records dating from 1900 to 1947 provide insight into the management practices and maintenance cycles and costs of a large country estate.

Beaux Arts Approach

In placing Flat Top Manor within the context of the Beaux Arts movement in America, it is important to differentiate between the broad concept of the Beaux Arts approach to design and the popular style of architecture commonly referred to as Beaux Arts. According to Virginia and Lee McAlister in their work A Field Guide to American Houses,

> *The term Beaux Arts...is used by architectural historians in two different senses. Some use it to describe the entire 1885-1920 period of elaborate eclectic styles because these tended to be advocated by Americans who studied at France's École des Beaux-Arts, the era's premier school of architecture. A more limited meaning...stresses only one eclectic tradition among the many that were then popular. This is based on classical precedents elaborated by lavish decorative detailing, and was perhaps the most typical of the many styles inspired by study at the Ecole.*

In 1881, Richard Morris Hunt, the first American to graduate from the École des Beaux Arts in Paris, designed the first mansion of the Gilded Age: a stone French Chateau built on Fifth Avenue in New York for William Kissam Vanderbilt (Mary Mix Foley, The American House, p. 197). Hunt masterfully employed European architectural history to create American castles. He based his design for Cornelius Vanderbilt's mansion, "The Breakers" in Newport Rhode Island (1892-1895), on the Renaissance merchants' palaces in Genoa. The inspiration for Hunt's design of George Washington Vanderbilt's Biltmore House in Asheville, North Carolina (1890-1895), was the French Renaissance chateaux of the Loire Valley.

After the World's Columbian Exposition of 1893, Classical and American Colonial references were added to the European vocabulary of Beaux Arts design. Moses and Bertha Cone were probably among the approximately twenty-seven million visitors to the Exposition in Chicago who saw the monumental white classical columned buildings designed by the nation's most accomplished Beaux Arts architects, including Richard Morris Hunt, Daniel Burnham and the firm of McKim, Mead and White. This white classical city appeared at a time called The American Renaissance, when America emerged as a world economic power. White buildings with classical columns and balustrades created the historical allusion that America was the cultural heir to ancient Rome.

At the same time, American architects were trying to a new style of architecture fashioned out of its own historical past. Individual state pavilions at the Chicago Exposition featured classical porticos representing America's earlier Greek Revival styles, and a wide range of Colonial models. It was probably at the Virginia Pavilion, however, that the Classical and Colonial styles became incorrectly linked. The Virginia Pavilion was a replica of Mount Vernon, George Washington's estate in Mt. Vernon, Virginia. Mount Vernon, however, was an early Georgian house onto which a full portico had been added in 1784. This early blending of styles, and subsequent reproduction at the Columbian Exposition, contributed to the erroneous assumption that Classical porches were Colonial (McAlister, A Field Guide to American Houses, p. 346).

Flat Top Manor House is an example of the Beaux Arts approach utilizing both Classical and Colonial Revival elements. Its symmetrical arrangement of features, classical columned porch, semi-circular portico, roofs bedecked with balustrades and Palladian window all derive from the Columbian Exposition. Flat Top Manor, with its wrap-around porch and rambling hip roof, marks the transition when the picturesque Victorian form gave way to the symmetry and balance of Classical design.

Despite its many classical elements, however, the house has been described as Colonial. At the turn-of-the-century, the term Colonial was an elastic one; it stretched to embrace not only America's 17th and 18th century heritage, but also the pre-industrial antebellum era. While the plantation house was a product of the land on which it was built, the

manor house of the Gilded Age was a product of wealth created elsewhere. Southern Colonial, as it was called in the literature of the time, gained prominence in North Carolina in the early 1900s. This style featured a monumental central portico flanked by one-story porches and rooms arranged around a central hall. Dormers, balustrades and porte cochères are also typical features of this style. Flat Top Manor displays many characteristic features of the so-called Southern Colonial style, except that it lacks a monumental two-story central portico.

Orlo Epps, Architect

For the design of their country house, Bertha and Moses Cone first contacted Stanford White, a partner in the New York firm of Mc Kim, Mead and White, and the designer of the Beaux Arts Classical Agriculture Building at the Columbian Exposition. Bertha Cone met with Stanford White, but was told that unless the Cones were prepared to spend a minimum of $100,000 constructing their manor house, he would not be interested (Noblitt, p. 89). Instead, the Cones engaged Orlo Epps. Born in Elkhart, Indiana in 1864, Epps moved to Oneonta, New York, when he was sixteen. He attended Cornell University from 1884 to 1887, and was among the first generation of American architects schooled in America.

The turn-of-the-century witnessed the dawn of the age of the professional architect in America. Before architectural schools were established in the United States, mid-19th century American architects, including Richard Morris Hunt, Henry Hobson Richardson, Charles McKim and Louis Sullivan, attended the École des Beaux Arts in Paris. In America, the first architecture school was founded at the Massachusetts Institute of Technology in 1865, with the Universities of Illinois, Cornell, Columbia, Pennsylvania and Harvard following soon after. Cornell's school of architecture was established in 1871. Architecture was an adjunct to engineering at most of these schools. From the outset, the Beaux Arts method of teaching was established at these schools by French faculty and Americans who had studied at the Ecole.

After graduating from Cornell, Epps spent a short time in the U.S. Army and then returned to Oneonta to practice architecture, associating himself with prominent builder Lyman H. Blend. In 1894, he moved to Greensboro, North Carolina, where he was a professor of mathematics and physics for seven years at the Agricultural and Mechanical College at Greensboro. As a partner in the architectural firm of Epps & Hackett, he designed many of Greensboro's most prominent buildings while Moses Cone was establishing his textile empire.

Epps & Hackett designed the Victorian Romanesque style Main Hall (1891), also known as the Foust Building, and Brick Dormitory (1891) at the State Normal & Industrial School for Girls, now the University of North Carolina at Greensboro. The Foust Building still exists and is listed on the National Register, but the Brick Dormitory burned in 1904. Epps & Hackett designed the three-story Knights of Pythias Building (1891); the five-story B.J. Fisher Hotel (1892); a block of five-story brick buildings (1892); and the Tallulah-Richardson House in Reidsville, south of Greensboro; and the Togden House in Greensboro.

In 1895, Epps & Hackett designed the Cone Brothers' Proximity Mill in Greensboro. By 1899 however, when Epps was engaged by Moses and Bertha Cone to design Flat Top Manor, he had moved his practice to Washington, D.C. In 1902, Epps designed the three-story Cone Export and Commission Building in Greensboro. This building, now Biltmore Hotel-Greensboro, is located at 111 W. Washington Street and is part of a National Register district.

Epps worked in Washington, D.C. until 1905, when he moved back to Oneonta, New York. At first Epps was engaged in the hardware business in the firm of Epps and Kerr. After the Wooden Row fire of 1908, he reentered his chosen profession, and helped L. H. Blend, a prominent Oneonta builder, design a row of brick blocks which replaced the burned structures. In 1911, he opened his own office and practiced architecture there until he died of diabetes and



Proximity Mills, Greensboro, NC, 1907-1915

Orlo Epps' firm, Epps & Hackett, designed the Cone Brothers' Proximity Mill in 1895.

The back of this post card reads:

"THE PROXIMITY MILLS, located on the outskirts of Greensboro, were established in 1897. This plant includes separate weave and spinning mills, dye and power houses, machine shops, cotton warehouses, office and store buildings. It is equipped with 1000 looms and 20,000 spindles, all running on Indigo blue denims, of which its annual output is about 18,000,000 yards. This mill is one of the foremost in welfare work among its employees.

Also: "Raphael Tuck & Sons 'RaphoType' [Regd] Postcard No. 5176, "Greensboro, N.C."



Cone Export and Commission Company, date unknown

This photograph, from the Greensboro Historical Museum, shows the entrance to the Cone Export and Commission Company, designed by Epps & Hackett in 1902. There were no additional notations accompanying this photograph.

anemia at age 61 in 1926. Epps designed several more notable buildings in New York, including the State School of Agriculture in Delhi, Morris Brothers Building, Elmore and West-Nesbitt feed mills and grain elevators.

Orlo Epps was married to Charlotte (Carrie) Mackley of Oneonta and had two children, Helen and Max. He was a leader in the small socialist party in Oneonta and was a proponent of the women's suffrage movement and the direct election of United States Senators.

Significant Documentation

The Moses H. Cone Manor House is an exceptionally well-documented and well-preserved example of turn-of-the-century construction methods and technology. The house was constructed at a time when the availability of mass-produced building materials transported by rail made it possible to build a grand mansion in an isolated mountain setting. As part of the management of this model estate, the Cones kept detailed records of their expenses. Numerous files are located in the Blue Ridge Parkway Department of Technical and Engineering Services in Asheville, including two ledger books. One ledger contains the original receipts for construction materials purchased between 1899 and 1901, and provides valuable information regarding the availability, cost and shipping of materials at the turn-of-the-century. A second ledger contains line item entries for the Estate's expenses, including payroll expenses, maintenance and building materials and labor, and expenses associated with the operation of the Estate and Flat Top Orchards from 1900 to 1947. This ledger provides valuable information on the costs of managing and maintaining a large country estate during the first half of the 20th century. (Key entries from the Cone ledger are shown in the Appendix.)

Bertha Cone's detailed will is also a valuable document recording the contents of Flat Top Manor as of October 27, 1945. Item Five of the will describes rugs, furniture, fixtures, silver, artwork, china and other effects which were located in Flat Top Manor, and to whom they were bequeathed. Because the items are referred to by room, it also gives insight into how the house was furnished. Among other fine things, Mrs. Cone had "two Renoirs in the upper hall," and a "Pecasso [sic] woman with loaf on head." (A copy of Mrs. Cone's will and a room-by-room description of her possessions are included in the Appendix.)

In January of 1949, the estate became part of the Blue Ridge Parkway. After 1949, all but five of the fifty-seven buildings on the estate were demolished or moved. By 1951, the Park Service had subsequently entered into several concessions agreements which allowed for the Manor House to be used as a Crafts Center by the Southern Highlands Handicraft Guild. Many of the pastures and meadows on the estate are used by local people for grazing cattle and horses and for growing hay (Firth, p. 6).

Park Service Records dating from 1973 to the present provide information on maintenance and costs for this time. However, no maintenance records have been located for the period between 1947 and 1973. (A summary of Park Service maintenance documents is included in the Appendix.)

CHRONOLOGY OF DEVELOPMENT AND USE

The following chronology is based on the Moses H. Cone Estate records, including ledgers containing receipts for the original building materials and Estate expense records from 1899 to 1947, early newspaper accounts, historic post cards and photographs, National Park Service files and maintenance records, paint analysis by Preservation Consultant Sara B. Chase, on-site evaluation by Surber & Barber Architects, Inc., and analysis by architectural historian Maurie Van Buren. In addition to the primary research conducted by this team, the historical development is based on the extensive research and information compiled by Blue Ridge Parkway Interpretive Specialist Phil Noblitt. Mr. Noblitt's 1994 Master of Arts thesis for Appalachian State University, entitled A Search for Belonging: Moses and Bertha

Cone and The Flat Top Manor Estate, provides the definitive social history of the estate.

The chronology of development and use falls into three distinct periods. The first period, 1893 to 1908, begins with the creation of the estate and ends with the death of Moses Cone. The second period, 1908 to 1947, spans the time that Bertha Cone managed the estate, from the death of Moses Cone until her own death in 1947. The third period, 1947 to the present, covers the years between Bertha Cone's death and the acquisition of the Estate by the Park Service, as well as the years the Estate has been a part of the Blue Ridge Parkway.

First Period (1893-1908)
Creating a Country Place

It was in September of 1893 that Moses Cone first began to purchase land on the slopes of Flat Top and Rich Mountains in western North Carolina with the dream of creating a large country estate. At that time, nearby Blowing Rock had become an established summer resort with several hotels and boarding houses. At an elevation of 4,000 feet, visitors enjoyed cool summer days which averaged less than seventy degrees and beautiful mountain scenery, horseback riding, fishing and other outdoor activities. The village also offered telephone and telegraph service; rail connection was only 20 miles away in Lenoir.

Through 45 separate real estate transactions spanning from 1893 to 1908, Moses Cone acquired over 3,600 acres of land. He paid an average price of $7.95 per acre (Noblitt, p. 82). Shortly after purchasing his first tract, Cone began the work of transforming the landscape. In 1893, he hired 20 men to clear land and plant 1,000 fruit trees. But for the next six years, Cone focused his attention on the business of establishing Proximity Mill in Greensboro.

By January of 1899, plans were well on their way for the Manor House. On January 12, 1899, the local Watauga Democrat reported: "Mr. Cone is now preparing to erect a magnificent house on his estate at a cost of $25,000. It will be on an elevated slope overlooking a lake that will cover 25 acres or more of land."

The first mention of Orlo Epps' involvement with the project was on February 9, 1899, also in the Watauga Democrat: "Mr. and Mrs. Moses H. Cone of New York, in company with Mr. Epps, a Washington contractor, are at Blowing Rock selecting a site for the mansion Mr. Cone will have erected in the near future." Construction was underway by Summer of 1899, reported in the June 15, 1899, Watauga Democrat: "Mr. Moses H. Cone is having lumber delivered as fast as possible... [his mansion] will be one of the most splendid structures in Western North Carolina."

At this initial stage, two other men assisted the Cones: J. M. Wolfe, the contractor for the carriage roads, and W. A. Fries, the building contractor who estimated the cost of the project.

The Site

The relationship between a house and its landscape was an important element in the design of the country house. In addition to the practical considerations, such as exposure, soil drainage and proximity to a spring for water supply, there were many aesthetic considerations. The placement of the house within its surroundings, and the views of the landscape from the house were of primary importance, as was the relationship between the house and the carriage roads. The Flat Top Manor House was sited at an elevation of 4,000 feet on the side of Flat Top Mountain, for which the house and estate were named. It faced south, near the edge of a long slope which afforded panoramic views of the valley and a lake created below. By the end of the Summer of 1899, J. M. Wolfe and his crew had completed 22 of the 25 miles of carriage roads on the estate (Noblitt, p. 116). From the main entrance to the west, a winding carriage road provided access to the house through its

porte cochère. A road leading to the carriage house passed directly in front of the house and a second carriage road passed in front of the house, further down the slope. The lower carriage road has since been eliminated.

The Manor House did not sit alone in the landscape as it does today. Originally several buildings sat on the knoll behind the house the most prominent of which was the laundry building. The design of the laundry building, with its pedimented portico and balustrades on the hipped roof, complemented the Manor House. Its main floor contained the sinks and equipment needed to wash linens and clothing. The basement of the laundry building contained two rooms; one was an ice house, and the other was a gas light plant. Gas was produced by an automatic acetylene generator when water dropped on carbide pellets. Also on the knoll behind the house was an 864 square foot board-and-batten building which served as a ten-pin bowling alley. Two simple frame servants' houses, one for male servants and the other for female servants, sat near the laundry building. Tennis courts and gardens were also located on the rise behind the house. The buildings clustered around the Manor House were moved or demolished in the 1950s, shortly after the National Park Service acquired the property. One of the relocated buildings, a servant's house, is presently located near the carriage barn.

Although geographically isolated in the mountains of Western North Carolina, Flat Top Manor had all the modern conveniences available at the turn-of-the-century. It had a central heating system with the equipment in the basement and hot and cold running water was supplied to the kitchen, lavatories and bathrooms in the house. A telephone system linked the Manor House to other buildings on the estate and a store in nearby Blowing Rock, from which Moses Cone could send and receive telegraphs. Rooms were lit at night by gas lights fueled by the estate's gas generator.

W. A. Fries, a building contractor who had constructed Proximity Mill and Village for the Cone brothers in Greensboro, had greatly underestimated the cost of construction of the Manor House. Instead of costing $25,000 as he had predicted, the final cost of the house was between $60,000 and $75,000 (Noblitt).

Exterior

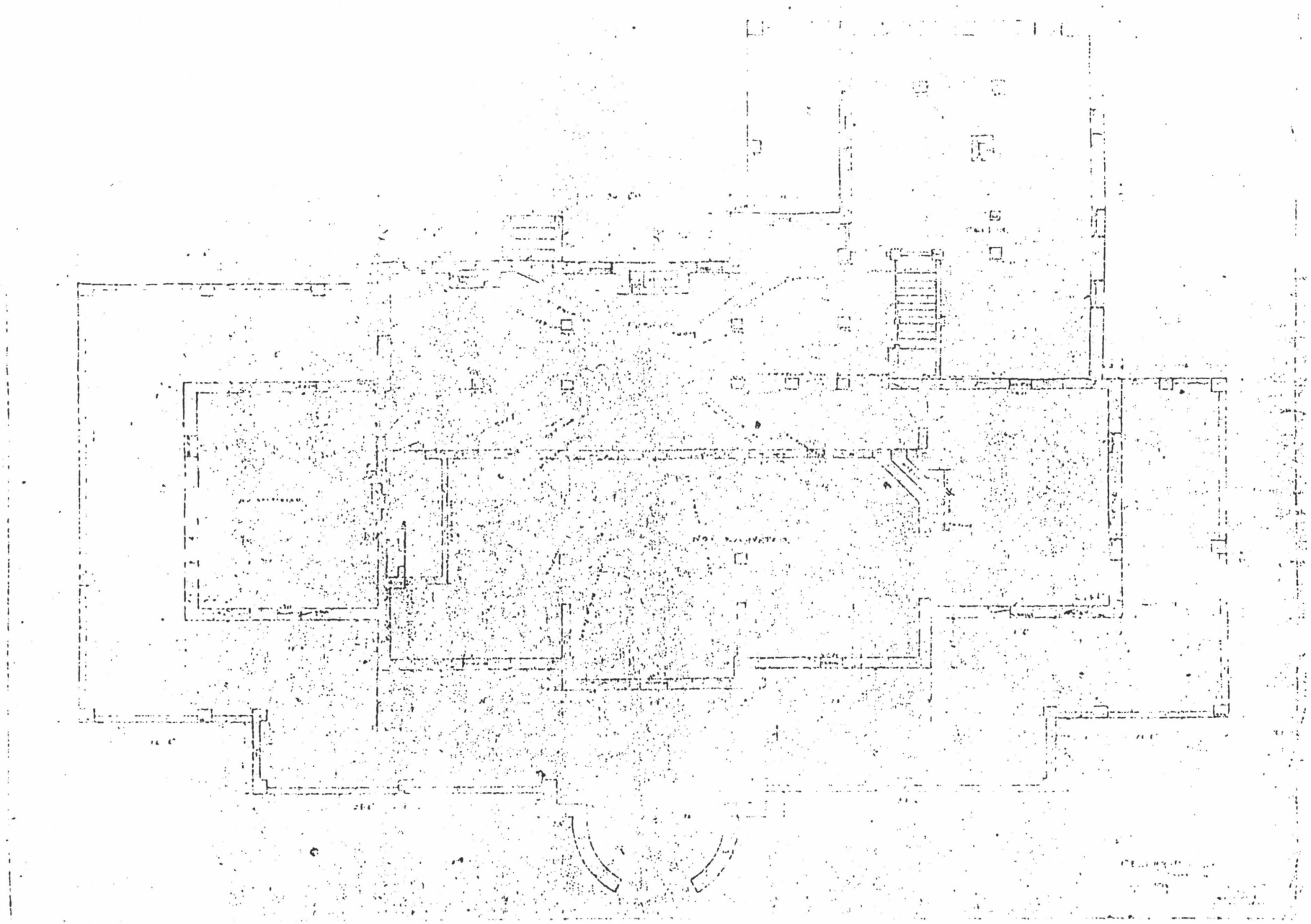
Original receipts indicate that much of the original building materials came from North Carolina. Cape Fear Manufacturing Company in Greensboro provided most of the materials, including millwork, columns, capitals and pedestals, and window sash. Dudley Lumber Company in Granite Falls, North Carolina, also provided millwork, as well as treads and risers. Odell Hardware Company in Greensboro provided nails and hardware. The Knoxville Brick Company in Knoxville, Tennessee, provided bricks for portions of the foundation, and the Miller Manufacturing Company in Milwaukee, Wisconsin, supplied the pocket doors, although the door frames came from Cape Fear Manufacturing Co. in Greensboro.

Reductions of Orlo Epps' plans for the Flat Top Manor House are stored on microfilm at the Blue Ridge Parkway offices in Asheville. The plans include the first, second and basement floor plans and east and west elevations of the house. There are no south and north elevations, or attic or roof plans in the Parkway's files.

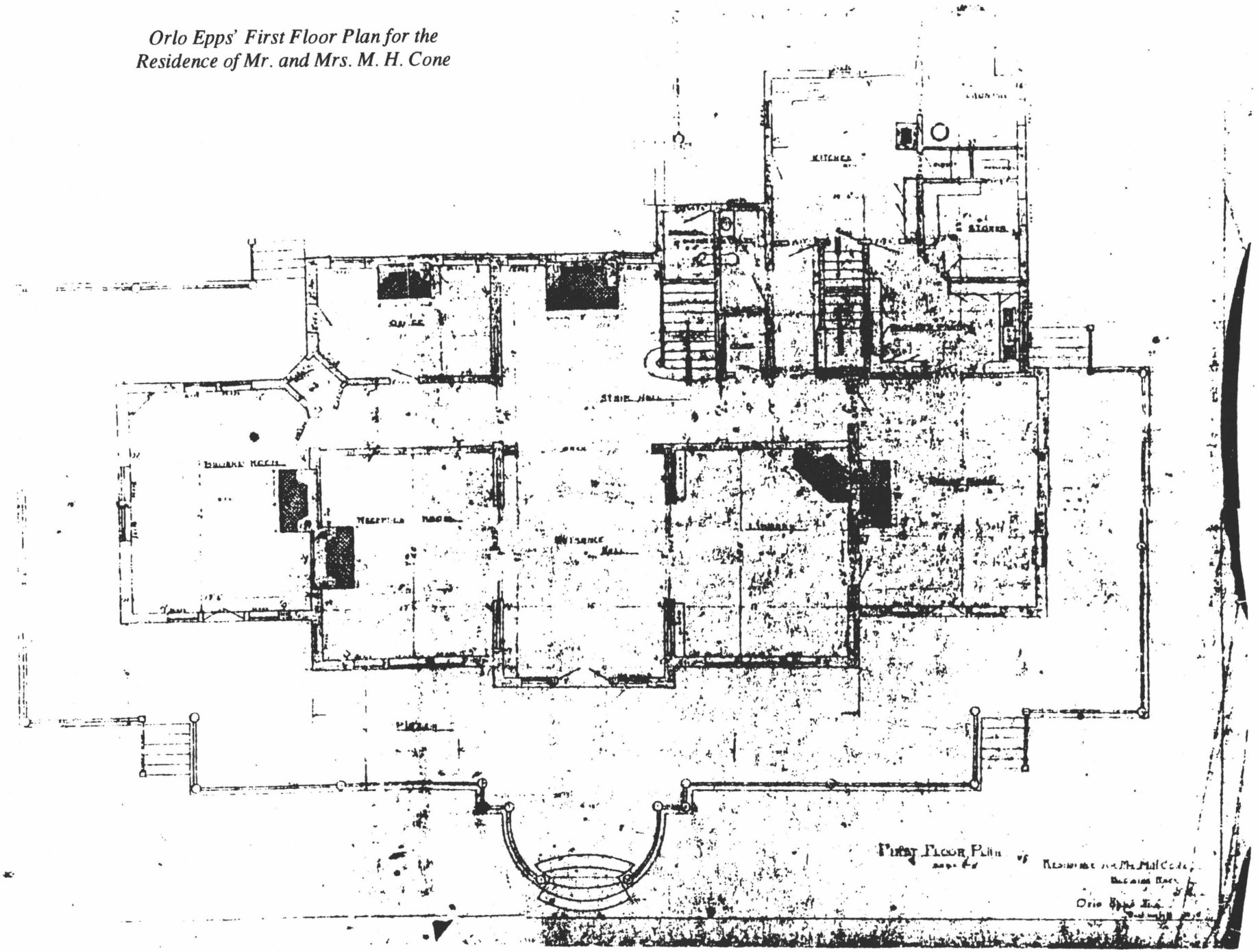
When Epps' plans are compared with HABS drawings completed in 1987 by Eric Cook Swanson, several significant changes are evident. The first is the porte cochère on the west facade, which is not on the Epps plans, but is believed to be an original feature of the house. A receipt from Cape Fear Manufacturing Co. dated May 17, 1900 lists "31 porch columns with capitals 19.00 - $589.00". If the porte cochère was not built in 1900, this number would have been 27. The earliest photograph of the Manor House, believed to be taken before 1913, shows the porte cochère as it appears in the HABS drawings.

The second significant change is the extension of the north wall of the kitchen wing by approximately 10 feet, retaining the appearance of the porch along the west and north facades. (See Figure 1). The discrepancy in the width of the room may be attributed to the quality of

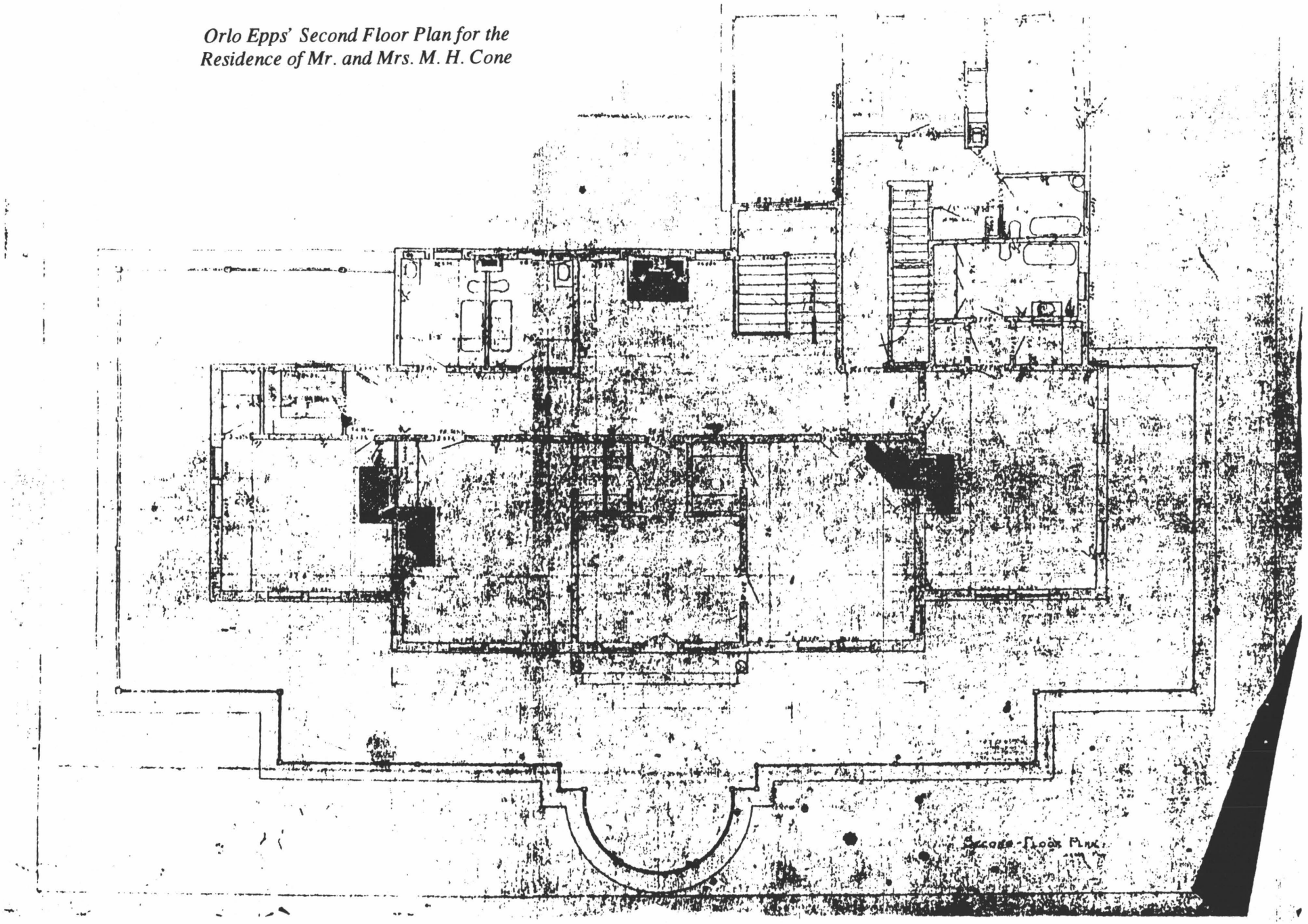
Orlo Epps' Foundation Plan for the Residence of Mr. and Mrs. M. H. Cone



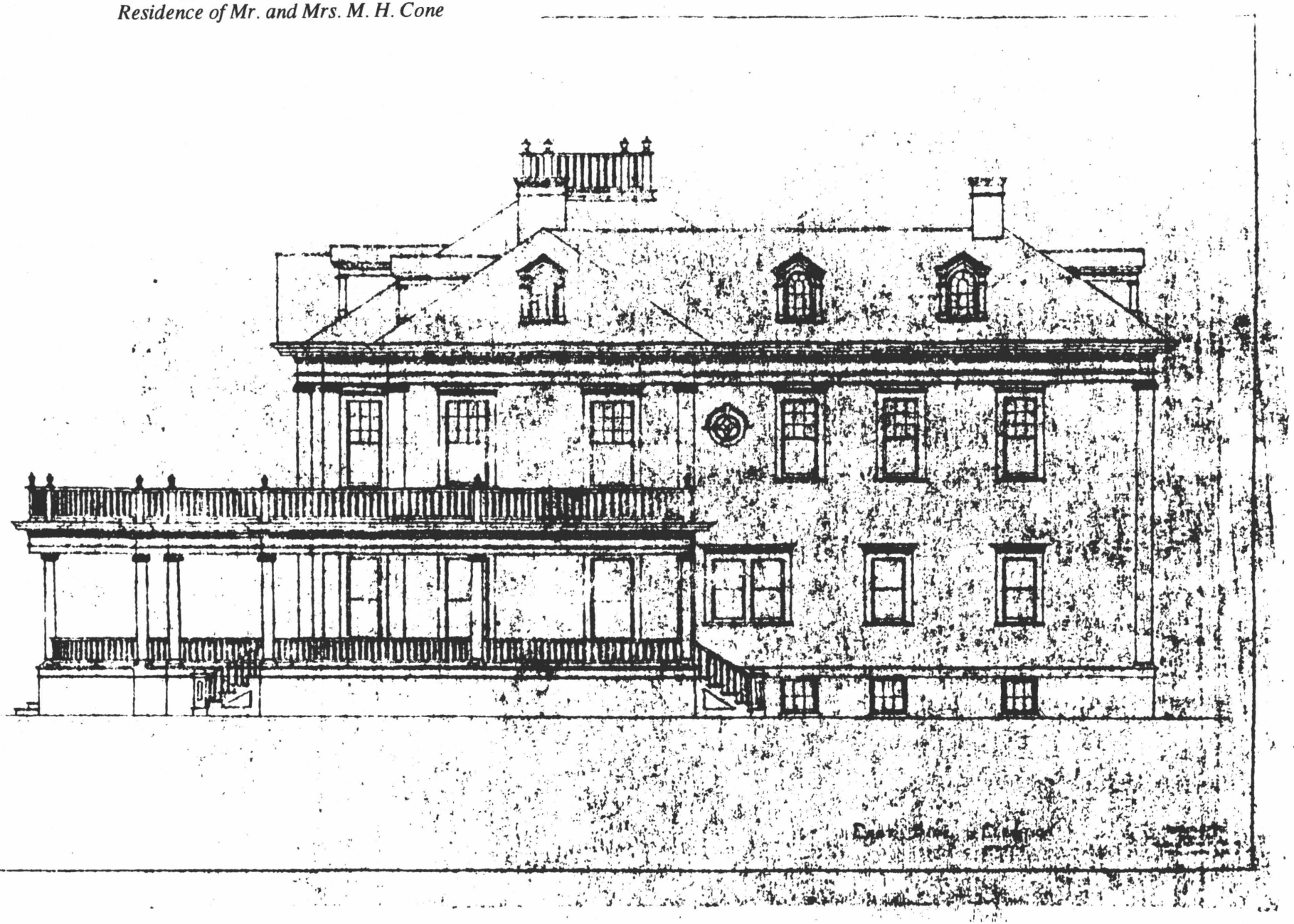
Orlo Epps' First Floor Plan for the Residence of Mr. and Mrs. M. H. Cone



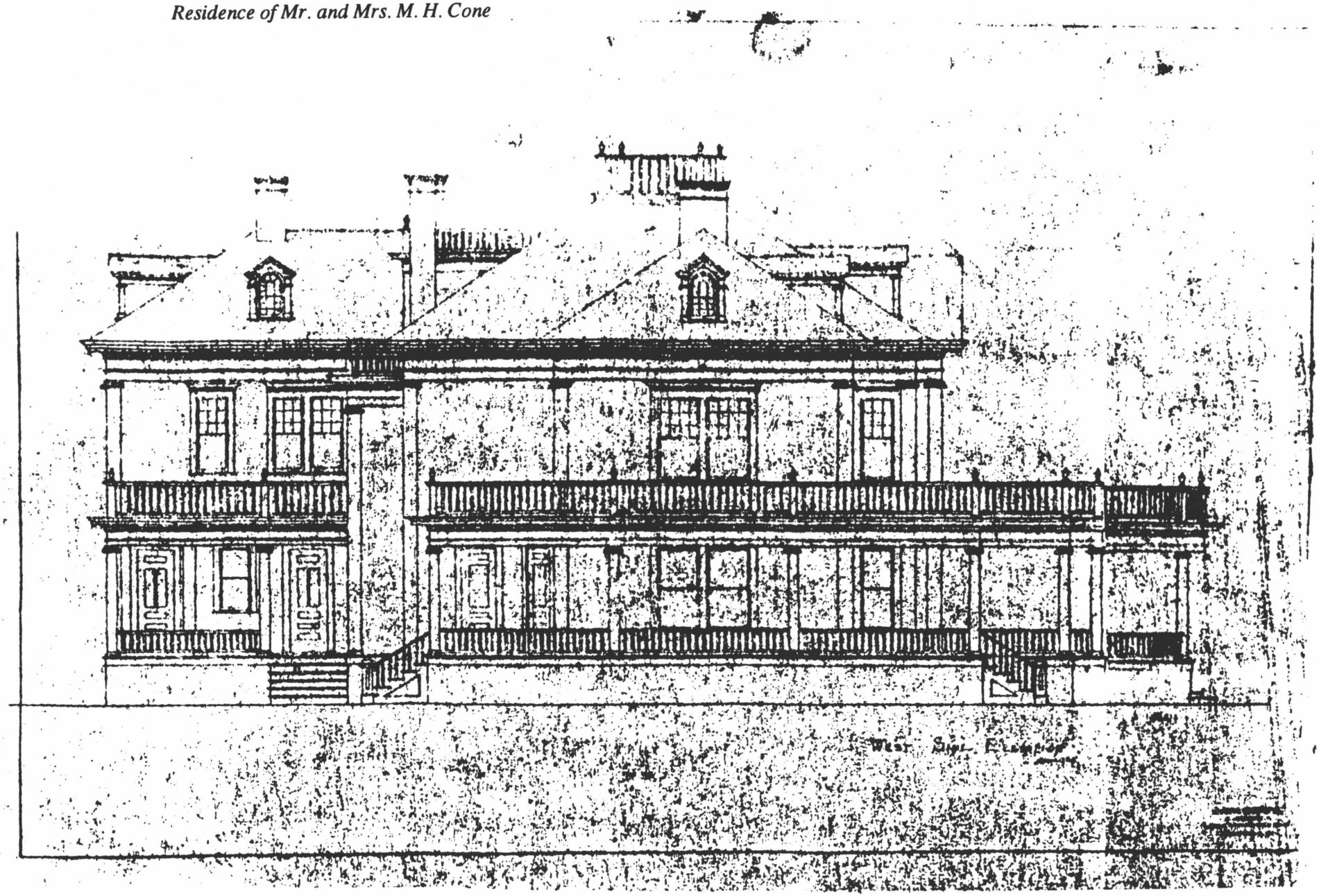
Orlo Epps' Second Floor Plan for the Residence of Mr. and Mrs. M. H. Cone



Orlo Epps' East Side Elevation of the Residence of Mr. and Mrs. M. H. Cone



Orlo Epps' West Side Elevation of the Residence of Mr. and Mrs. M. H. Cone



the original Epps plans, which do not indicate a scale. The width of the room has not changed. Physical evidence is indicated on the HABS foundation plan, which shows an additional set of load bearing foundation walls beyond the original foundation. Further evidence includes a diagonal cut in the kitchen porch ceiling indicating the original corner location of the porch and the peculiar pilaster capital at the northwest corner of the kitchen wing porch. This pilaster may be the bottom half of the two-story pilaster originally located at the outside corner of the kitchen. When the kitchen wing was expanded, the pilaster was probably cut and moved further north. The flutes in the faces of the pilaster run straight up and under the double band of trim at the pilaster capital. Other evidence includes the difference in the widths of the clapboard siding and the 3-fluted corner pilasters on the north facade, which do not match the five-fluted originals. Finally, the four Ionic columns supporting the kitchen porch roof had capitals made of composition material, rather than the carved wooden capitals of the other exterior porch columns, indicating that they may have been ordered separately.

From entries in the Cone Estate expense ledger, it appears that the kitchen wing was expanded by Bertha Cone after the death of her husband. An entry dated March 31, 1910 reads: "Bob Cambell for plastering kitchen - 55 hours - $19.25", followed by an entry dated April 15, 1910 which reads: "Last three items for plasterer not entered earlier." Also, on May 19, 1911 there were receipts from Odell Hardware in Greensboro for "$26 range, tea kettle, pots, pans, pie pans, roasters, muffin pans, knives, etc. - $35.61."

Also not recorded on the Epps plans is the sun parlor, or sun porch. Once thought to be a later addition, the Cone Estate ledger indicates that the sun parlor was in fact an original feature of the house. A December 3, 1900 receipt from the Cape Fear Manufacturing Co. reads: "sash for sun Parlor - $90". Early photographs of the south facade and physical examination indicate that the Cone's original sun parlor was not as large as it is today. The west wall of the sun parlor originally ended at the center mullion of the Billiard Room windows. Also, the original 15 panels which made up the sun parlor walls were demountable. Visible on each panel are two surface-mounted head and foot bolts which kept the panels in place. Later photographs indicate that the sun porch was expanded to its present configuration sometime after 1960. (See Figure 1.)

Another feature which has received considerable speculation is the configuration of two sets of windows at the central bay on the second story. Epps' second floor plan shows this opening as a single set of inward opening doors flanked by side lights. What was actually built was an inner triple window with a 1/1 double hung window at the center flanked by two 9/1 double hung windows. There is a transom above the three windows with curved and radial muntins. The outer triple window has a 12 light transom at the center above a pair of casement windows flanked by two 9/1/1 fixed sash windows. The Cone Ledger shows that the materials for the inner triple window were ordered in March of 1900, while the materials for the outer triple window were not ordered until October of 1900. Although Epps' south elevation of the house is not available to indicate what he intended at this central bay, the current configuration was most likely constructed before 1901.

Epps also intended for there to be decorative finials atop each second floor pedestal. These are shown on Epps' east and west elevations, but do not appear in any of the historic photographs or in the estate's ledgers.

Examination of Epps' first floor plan also indicates that he intended for there to be triple openings on the south facade at the billiard room, reception room, library and dining room. Those at the reception room and library may be triple windows, and those at the billiard room and dining room appear to have either an inward opening set of casement windows or doors at the center opening. The plan indications for those windows are the same as the central window on the second floor. The first floor rooms, however, were all built with the existing configuration of windows. Other first floor differences include two stairs at either end of the central portion of the front porch.

Another feature which is not shown on the Epps' plan is a door leading from the dining room to the east porch. (This doorway was eliminated when the public restrooms were added at the east side of the porch. Presently, there are shelves within this door casing in the dining room.)

Exterior Paint Investigations

Not discernable from any early photographs is that the original exterior color scheme has contrasting trim and clapboard colors. Paint analyses conducted by Sara B. Chase, Historic Consultant, shows that the clapboards were first painted an intense French ochre yellow, the trim a warm ivory, the porch floor a rich brown and the exterior doors, screen doors and screens a deep bright green -- all in a high-gloss paint. There were also wooden blinds, or shutters, on the second story bedroom windows, also painted a deep bright green. This color scheme follows a traditional Colonial Revival (high-style Federal) palette.

This color scheme is supported by the Cone Ledger, which contains a transaction with Odell Hardware Company in Greensboro, North Carolina, on December 8, 1899, for 1000 pounds of French ochre at a cost of $60.00. Although it was common practice at the turn of the century to prime new wood with an ochre tinted primer, microscopic examination at 200x shows that the ochre on the clapboards is thick enough to have been both primer and finish coats. However, it is possible that the next paint layer covered it within a year. There is virtually no dirt visible on the ochre although nearly every other layer of paint on both the clapboards and trim has a thin telltale layer of black dirt particles on its surface. On all trim where ochre appears, it is clearly a primer, soaked deeply into the grain of the wood, with ivory paint layers over the ochre primer.

Subsequent exterior paintings have rendered the body of the house and the trim with the same or very nearly the same whites and off-whites. The greatest number of paint layers found on any sample area was twelve. Many of the whites and off-whites on top of the bright ochre may have weathered off or been scraped away before later paints were applied. On the salvaged balusters and column capitals which are stored in the Apple Barn, there are at least 30 paint layers. The first was the ochre primer, then two to four finish layers of ivories, followed by five to six layers of thick and oily creams, followed by two or three layers of very thin, very pale pearl gray layers. The porch floor changed from warm brown to dark brown to off-white to the present gunmetal gray.

Based on this analysis, it follows that the color palette of the house at the time of Moses Cone's death was ivory clapboards and trim with deep green doors and brown porch floors. The earliest post cards and photographs reflect this monochromatic color palette.

Interior-
First Floor

The entrances to the house reflect a hierarchy of social functions and spaces within the house. The formal entrance through the front door gives visitors a grand sense of arrival. The porte cochère entrance on the west facade opens into a small vestibule off the hallway adjacent to the billiard room and office. A second door on this facade opens directly into the office. The rear entrances to the basement and kitchen wing all provide access to the working areas of the house by the domestic staff.

The front entrance was designed to provide a formal entry into the house: up two flights of exterior stairs, onto a semi-circular entrance portico, and in through the front doors embellished with a leaded glass transom and sidelights. The front door opens into a spacious entrance hall which is visually divided by an Ionic colonnade into two social spaces. The area directly inside the front doors served as an entrance vestibule, providing access through pairs of pocket doors to the reception room, or parlor, on the west and the library on the east. The second area, north of the entrance vestibule, is the main stair hall.

The main stair hall and each formal room on the first floor contains a fireplace and an elegant mantel with classical features. The

fireplaces in the Manor House served a purpose which was primarily aesthetic, because the house not only had central heating, but was only occupied during summer months.

The most formal room in the house, the reception room features an elegant mantel in the Adamesque, or high Federal/Colonial Revival style. (In some documents, including the HABS drawings, this room is called the music room because the Cones had a piano in this room.) The room is only accessible through a pair of pocket doors and was reserved for receiving important guests. Visitors to Flat Top Manor included the Governor of North Carolina, the president of the Southern Railroad Company, the Secretary of the Navy, and noted author Gertrude Stein (Noblitt, p. 190).

On the east side of the entrance hall is the library. This room has a corner mantel and built-in book cases on the north and west walls. Although the Epps's plans show book cases only on the west wall of this room, the Cone Ledger receipts confirm that the current configuration was in place in 1901; eleven book case doors were ordered from Cape Fear Manufacturing Co. on February 14, 1901. These doors are currently stored in the attic. The Cones would have entertained guests in the library, which opened into the dining room through a second smaller pair of pocket doors. The dining room has built-in china cabinets in the northeast and southeast corners which are not indicated on the Epps' plans. The Cone Ledger receipts, however, show that leaded glass china doors were an original feature. These doors have also been removed and are stored in the attic.

At the rear of the stair hall, on axis with the front door, is a fireplace with an ornate mantel trimmed with scroll modillions and dentils. A fireplace in the hallway was an element popular during the Queen Anne Victorian period. The fireplace is flanked by double hung windows with leaded glass. The area around the fireplace functioned as a sitting room where social callers would leave their cards and sit for a short time before entering other parts of the house. The large staircase on the east side of the stair hall has ornamental balusters and paneled wall surfaces. At the landing of the staircase is a Palladian window with leaded glass.

Paneled pocket doors in the entrance hall, stair hall, reception room, library and dining room made it possible to regulate access to various areas of the house. Two smaller hallways lead east and west from the stair hall, each with a single pocket door to separate it from the stair hall. The hallway to the east led to the service areas and dining room. The hallway to the west led to Moses Cone's office, the billiard room and a small vestibule which opens onto the side porch.

This side entrance would have been used by family and friends arriving at the porte cochère and people involved in business transactions at the estate. Although less formal than the main entrance, this entrance linked the house to the rest of the estate. The 25 miles of carriage roads were an important feature of Flat Top Manor, and it was from this entrance that horse drawn carriages would arrive and depart.

Moses Cone's office was a small room at the back of the house where he met with farm foremen, paid employees, kept ledgers and saw to the operations of the estate. The billiard room, as the name implies, was used for games. The Epps' plans show a built-in cabinet in the northwest corner of this room, most likely to hold billiard cues.

The domestic workers entered the Manor house through doors located in the rear service wing, which contained the kitchen, pantry and store rooms, bedrooms, a bathroom and a service stair. From the service wing porch one door opened into the kitchen and another opened into the store room. When the kitchen wing was expanded after Moses Cone's death, a second door into the store room was built on the east facade of this wing. On the Epps floor plans, this store room is labeled "laundry". When a separate laundry building was constructed behind the house, this room became a servants' hall. It contained a large table and chairs and a telephone and became a place where the help "waited and socialized between chores" (Noblitt, p. 169). According to Phil Noblitt's research, Bertha Cone employed between seven and ten servants in the 1930s and 40s, including a cook, cook's helper, butler, laundress, chauffeur and one or two chamber maids.

When Moses Cone was alive, the domestic staff at Flat Top Manor was probably larger.

There are two bathrooms in the service wing, each having a sink and toilet. One is located under the main stair and is accessible only from the kitchen wing porch. The other is located in the narrow hall of the service wing, behind the hall closet. From the kitchen, a flight of service stairs allowed servants to move between floors and perform their duties without interfering with the Cone family or their guests. For storage of bulk supplies, the service wing contained a walk-in pantry, marked "store" on the Epps' plan, with shelves and a linoleum floor. On the Epps plan there is also a small closet in this room, which appears to be labeled "preserves". Originally a large wood-burning stove was located near the east wall of the kitchen; a sink, drain board and cabinets were in the northwest corner.

It was the male butler's responsibility to set the table and serve the food. In the butler's pantry, he would transfer food from cooking pans into the good serving china, which was stored in the china cabinet on the west wall of the pantry. With its white tile floor, marble water fountain, and sink with built in shelves, the butler's pantry was designed with a concern for sanitation in mind. In the first decades of the 20th century, domestic scientists waged a household war against germs. This room served as a transition between the noise and smell of the kitchen and the formal dining area. The dining room was accessible from the porches, the stair hall, the butler's pantry, and the library.

Rooms on the first floor of Flat Top Manor have 11'- 8" high ceilings and maple floors. Plaster walls have paneled wainscoting, picture rails and plaster cornice. All windows and doors, including those in the service areas, have wide architraves at the sides and top and a monumental entablature above. Door paneling and hardware reflect the hierarchy of the interior spaces; in the family and public rooms, single doors have seven panels, and double doors have 13 panels each. On the other hand, doors in the service areas have only five panels and simple brass knobs.

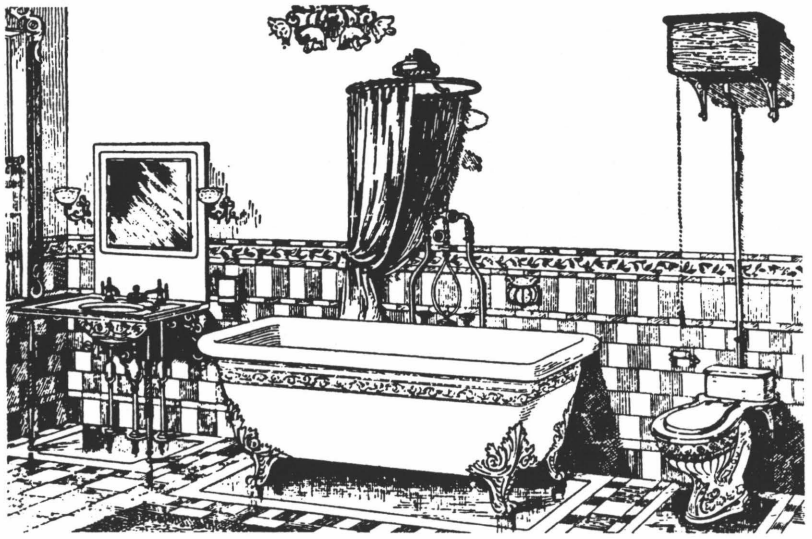
Second Floor

While the first floor rooms served a public function, the upstairs rooms were for the private use of the family and their overnight guests. Reflecting this, the mantels and wall trim in the upstairs rooms are simpler than those downstairs. Ceiling heights are almost one foot lower than first floor rooms and window heights 4" shorter. Upstairs plaster walls have baseboards, picture rails and simpler plaster cornices; only the hall has paneled wainscoting.

The plan for the second floor of the house is almost the same as the first floor. At the top of the main stair is a second stair hall with a fireplace flanked by double hung leaded glass windows. Four large, approximately 17' by 20' bedrooms are located at the front of the house which have beautiful views of the estate. Each bedroom has a fireplace with a decorative mantel and one or more closets. Above the entrance hall is a fifth room, with an entry vestibule, a closet and the triple window previously mentioned. This central room opens into the bedroom directly east of it and was used as a sitting area. The only pocket door upstairs separates the service wing from the hall.

Two smaller hallways lead east and west from the upper stair hall. The hallway to the east leads to the master bedroom, which has two large closets and a bathroom with a built-in linen cabinet or wardrobe. The hallway to the west leads to a large walk-in closet, most likely for storing linens, and two adjacent bathrooms on the north side of the hall. Both bathrooms feature white tile floors and a dado of white glazed tile with a colorful tile frieze. Each has a marble sink, enameled tub with shower, a toilet and a window. The bathrooms on the second floor feature shower heads - a rarity at the turn of the century and a luxury that distinguished the Cones as being ahead of their time.

The illustration below features a luxury bathroom in 1884, fifteen years before Flat Top Manor was built. Many of the fixtures in the illustration bear a striking resemblance to those in the Cone's bathroom, with the exception of the water closet.



In The Well Appointed Bath, editor Gail Caskey Winkler explains that "during the 1890s, the wooden tank with a lead or copper liner was replaced by one entirely of vitreous china," which explains the difference between the old-fashioned water closet in the picture and the Cone's modern toilet. (Winkler, 19) This illustration confirms that the fixtures in the manor house are original.

A narrow hall leading to the rear wing separates the main staircase from the service staircase to the east. The area above the kitchen contains a bathroom, a janitor's closet with a utility sink, and two small bedrooms, each with a closet. These rooms are accessible from the rear hall servants' stair.

Attic

The third floor attic is accessible by the servants' stair. Instead of plaster, the walls and ceilings are covered with unpainted tongue-and-groove wood paneling. The shapes of the attic rooms conform to the roof structure and the many dormer windows. At the top of the stairs is a large open storage area for trunks and household supplies. The four bedrooms and one bathroom in the attic served as spare rooms for children, nursemaids or servants of guests.

Basement

The basement at Flat Top Manor originally contained a wood-burning central heating system. Nine-foot-high brick basement walls provided adequate head room for the servant who stayed in the basement and stocked the furnace in the winter. Wood was delivered through an exterior basement door located at the rear of the house near the office. A stair from the basement leads to the kitchen above. The basement also contains a small meat room under the kitchen. A wine room was located toward the front of the house, away from the kitchen wing. The wine room may have originally been accessible only by the Cones through the front exterior entrance to the basement on the west side of the porch. The Cones were supporters of the temperance movement and strictly controlled alcohol consumption on their estate.

First Period Interior Paint Investigations

Like the exterior, the original color scheme for the interior of the Manor House was colorful. Moses and Bertha Cone originally painted their house with a recognized Colonial Revival palette of colors. In addition to the ochre used to prime and paint the exterior of the house, they were billed in 1900 for other pigments, including Venetian Red, Richmond Brown, French Zinc Green, Chrome Green, Chrome Yellow, Venetian Green, and for vast amounts of arsenate of lead, linseed oil,

turpentine and Japan drier. Because dated receipts exist for specific pigments, the presence of those pigments in certain paint layers indicates the dates of those paint layers and no others.

The first finish paint on each architectural feature is considered the original or "first period" paint. The "second period" paints are the second finish layers, assumed to have been applied shortly after Moses Cone's death in 1908. The second period paints are discussed in the section entitled Second Period (1908-1948).

The first step in the paint research on site was examining all painted wood, plaster, metal and masonry surfaces in each room with a 10x jeweler's loupe. Since most of the walls in the house are covered with a layer of canvas most likely applied at a later date, the back sides and edges of the canvas were examined for traces of earlier pigments. Once the common paint layers were established for each painted element, a 24x Zeiss binocular microscope was used to get the best samples. In the laboratory, each sample was examined under a Nikon SMZ-10 stereo zoom microscope at up to 200x. The original (1899-1900) and the next colors only were matched to the Munsell color system.

All of the wood trim throughout the house has seven to eight layers of paint. The first layers are an ivory white, followed by cream, followed by chalk white. The brick of the fireplaces in the house were also painted a deep red-brown brick color, a heavily pigmented flat paint, most likely to make the mortar joints less prominent. (On the exterior, the foundation brick was also painted with this flat brick-colored paint.)

The paints on the ceilings throughout the house must have been calcimine paints, no doubt carefully scrubbed off each time fresh paint was applied, at least in the more formal rooms during the Cones' occupancy. Nowhere in the house were more than two layers of paint found under the canvas on the ceilings.

At least some of the walls also had flat water-based paints on them before the canvas was applied. These paints, too, were carefully scrubbed off, but traces of them remain where the paints ran down behind the tops of door and window casings and behind chair rails. When the present wall canvas was carefully cut and pulled up from a position just at the edges of several such casings, flecks of colored flat paint were readily apparent under the microscope.

The walls in the front hall and corridors on the first floor were painted a salmon pink color. The window seats flanking the fireplace had a deep red-brown translucent coating, probably to give them the look of mahogany. The balusters on the main staircase were originally stained with a reddish cherry stain and coated with a clear resin (like a damar varnish).

In the other first floor formal rooms, the window sills are not deep enough to be called window seats, but they too had the mahogany wood-look coating originally. The reception room was painted a light blue-gray color, the library a light terra cotta color, and Moses' office a light yellow. No flecks of a previous water-based paint were found on the samples collected in the dining room and billiard room. More investigation might turn up earlier wall treatments.

The walls in the kitchen and service areas were painted a very light yellow with oil-based paint. This color appears to be an original oil paint, as it has run in behind some of the original wood trim. The wood trim in these rooms was originally stained a golden oak color and coated with shellac.

In the main hall of the second floor, the window sills are painted the same red/brown as the first floor windows sills. In all of the other rooms on the second floor, however, the window sills are painted the same color as the wood trim. The walls in the second floor main hall and corridors were the same salmon pink as the first floor halls. No samples were collected from behind the canvas in the remaining second floor rooms. More investigation might turn up earlier wall treatments, paint or perhaps even wall paper.

Second Period (1908-1947)
Widow Bertha Cone Manages the Estate

When Moses Cone died in 1908, he was buried at his beloved country estate in Blowing Rock. He left no will directing the distribution of his assets. In agreement with the Cone family, Bertha conveyed her Cone Company stock to the Moses H. Cone Memorial Hospital, Inc. During her lifetime, she would receive income from the dividends, and upon her death, the assets would be used to endow a hospital in her husband's name. The trustees of the Hospital would run Flat Top Manor Estate as a public park and call it the Moses H. Cone Memorial Park.

From 1908 until her death in 1947, Bertha Cone managed the estate just as Moses had. In the winter months she lived in Baltimore and would review the estate's expense records for each month. In the summer, she lived at Flat Top Manor and would meet with her foreman and her cook in her husband's office every morning.

Flat Top Manor Estate flourished under Bertha Cone's charge. The apple trees Moses had planted grew to maturity by the 1920s. In late 1912, construction materials were ordered for the apple barn. In 1913, she commissioned plans from N. M. Sullivan of Greensboro for one of the estate's most distinct features, the large balustrade fence in front of the manor house. This fence, which was approximately 300 feet long, consisted of thirteen 20' sections, four 5' sections, 18 pedestals and 315 balusters, was removed sometime after March of 1990. (See Figure 8 in Proposed Treatment and Use section.)

In 1913, Bertha Cone also established Flat Top Manor Dairy, with a herd of from twelve to twenty cows. The dairy, which was Watauga County's first Grade A facility, continued to operate into the 1940s. In the winter months she would have the dairy's cream and butter shipped to her in Baltimore.

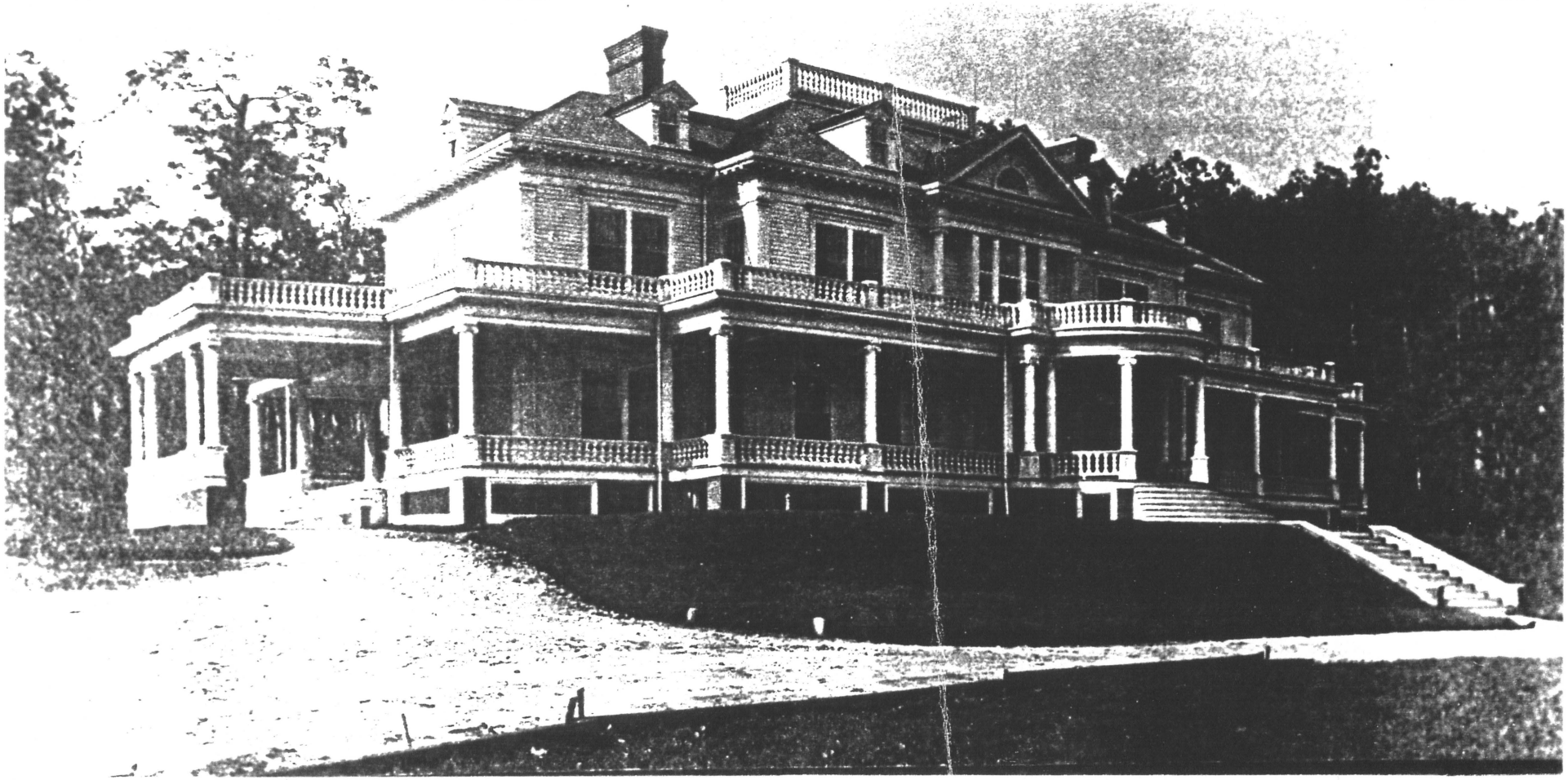
After Moses Cone's death, two of Bertha's sisters, Clementine and Sophie Lindau, came to Flat Top Manor to live. Bertha Cone also maintained a close relationship with her sisters-in-law Etta and Claribel Cone. Observed Etta Cone, "it was remarkable to see how well sister Bertha manages this place in every detail. She has wonderful executive ability and the men respect her immensely and do her bidding" (Noblitt, p. 278).

During Bertha Cone's lifetime, Flat Top Manor House served its original function as the manor house of a large "progressive farm". Because it was her express goal to continue the estate along the lines laid out by her husband, the house remained remarkably unchanged after his death.

Throughout Bertha Cone's life, the Manor House was well-maintained. Archive records document cyclical painting, roof repairs and replacement of balusters. Only one major change, and several minor changes to the house reflected the passing decades. As discussed in the discussion of the First Period (1899-1908), Bertha Cone expanded the kitchen wing by approximately ten feet and added a second door into the store room on the east facade of the house. (Figure 1). In 1915, she had the manor house reroofed.

In 1915, she also expanded the existing telephone system. By 1928, and perhaps as early as 1926, the estate was wired for electricity. The January 31, 1928 bill from the Blowing Rock Light & Power Company for the first month was 75 cents. She installed an electric light in the kitchen and a refrigerator on the back porch, but kept her gas light system (Noblitt, p. 312). By 1930, the central heating system was fueled by coal instead of wood.

During the Great Depression, while most of the country was financially strapped, Cone Company stock yielded Bertha Cone record breaking dividends, but she soon realized that money could not secure the future preservation of her estate. In 1935, she learned the National Park Service and the State of North Carolina were planning to route the Blue Ridge Parkway through Flat Top Manor Estate. For several years she battled the project by meeting with congressmen, and by writing President Roosevelt and National Park Service officials. In a July 28, 1939 letter to Park Service Director, Arthur E. Demaray, Bertha Cone stated:



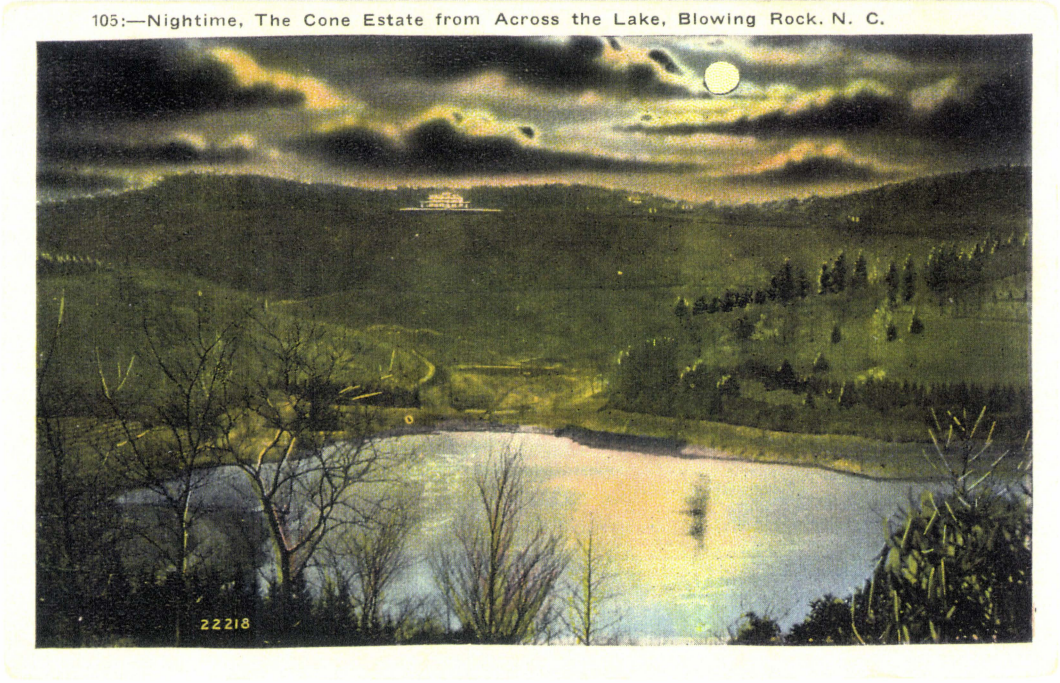
Flat Top Manor before 1913

The absence of the balustrade fence in front of the Manor House indicates that this photograph was taken before 1913.
Photograph on file at the Appalachian Consortium in Boone, North Carolina



Flat Top Manor and Environs before 1913

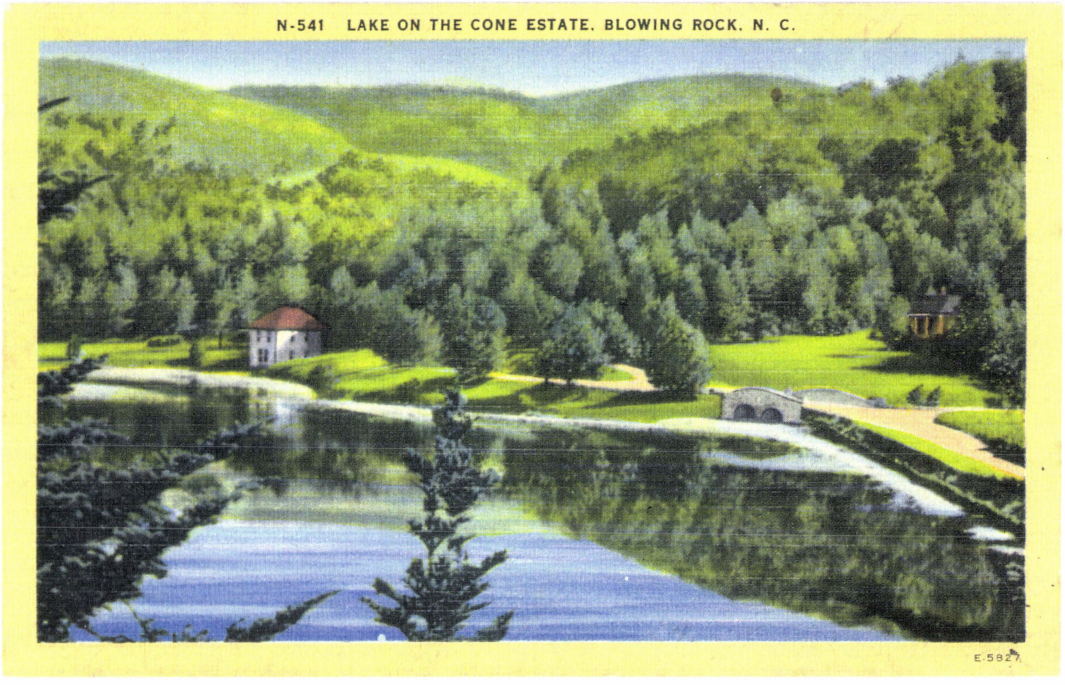
Photograph shows the relationship between the Manor House and the upper and lower carriage roads.
The absence of the balustrade fence in front of the Manor House indicates that this photograph was taken before 1913.
Photograph copied from Park Service Publication GPO: 1979-281353/20 entitled Moses H. Cone Memorial Park.



"Nighttime, The Cone Estate", 1915-1930

This post card was printed between 1915 and 1930. It shows the Manor House from the base of Bass Lake with the large balustrade fence clearly visible.

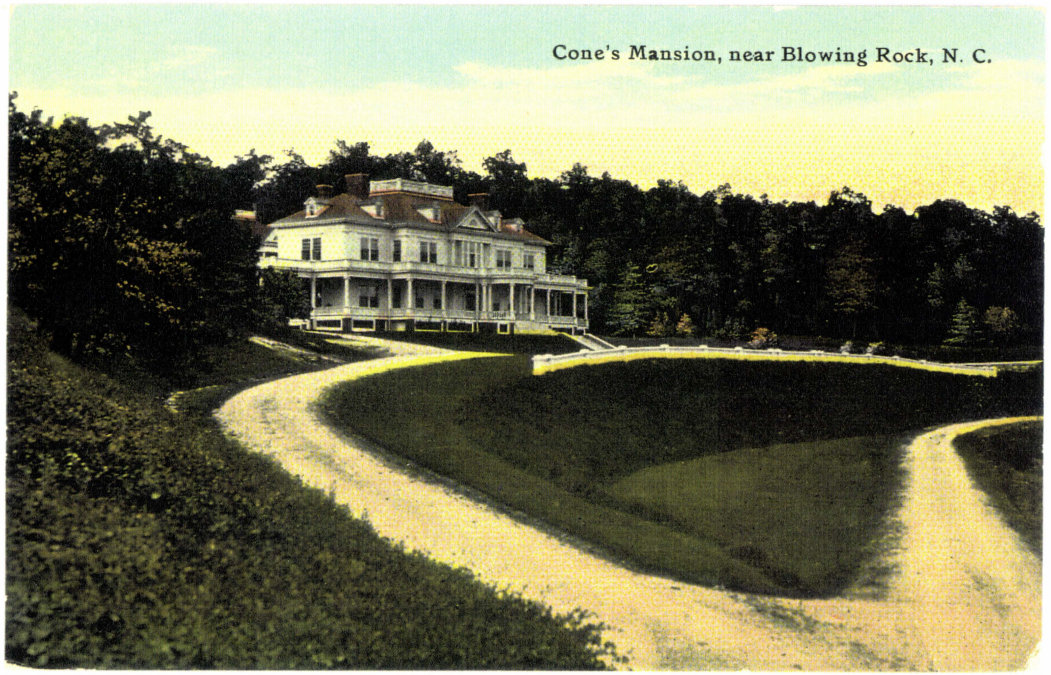
The back of this post card reads: "Pub. by Asheville Post Card Co., Asheville, N.C."



"Lake on the Cone Estate", mid-1940s

This post card has a linen finish indicating that it was printed in the mid-1940s. It shows the lake, the boat house (left), a bridge and a servant's house (far right).

The back of this post card reads: "Published by Asheville Post Card Co., Asheville, N.C."

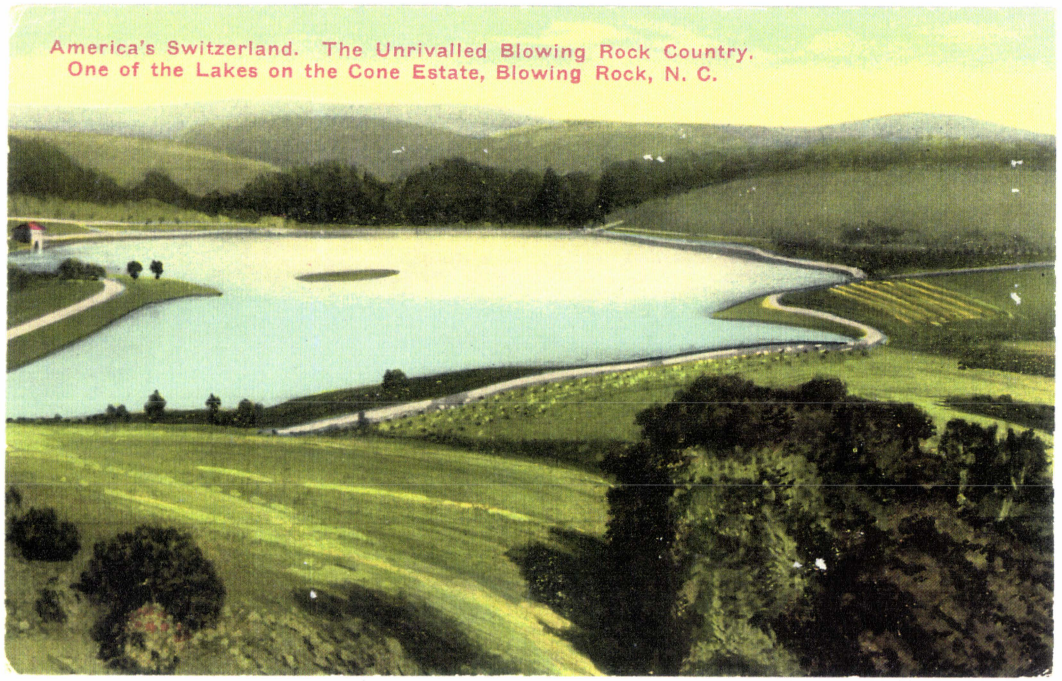


The post cards on this page were printed between 1907 and 1915

Flat Top Manor, 1914-1915

This post card shows the balustrade fence, constructed in 1913, therefore this photograph was taken between 1914 and 1915. Notice the non-white foundation and chimney and the white dormer cheeks. The servant's house directly behind the Manor House is visible, as are the upper and lower carriage roads.

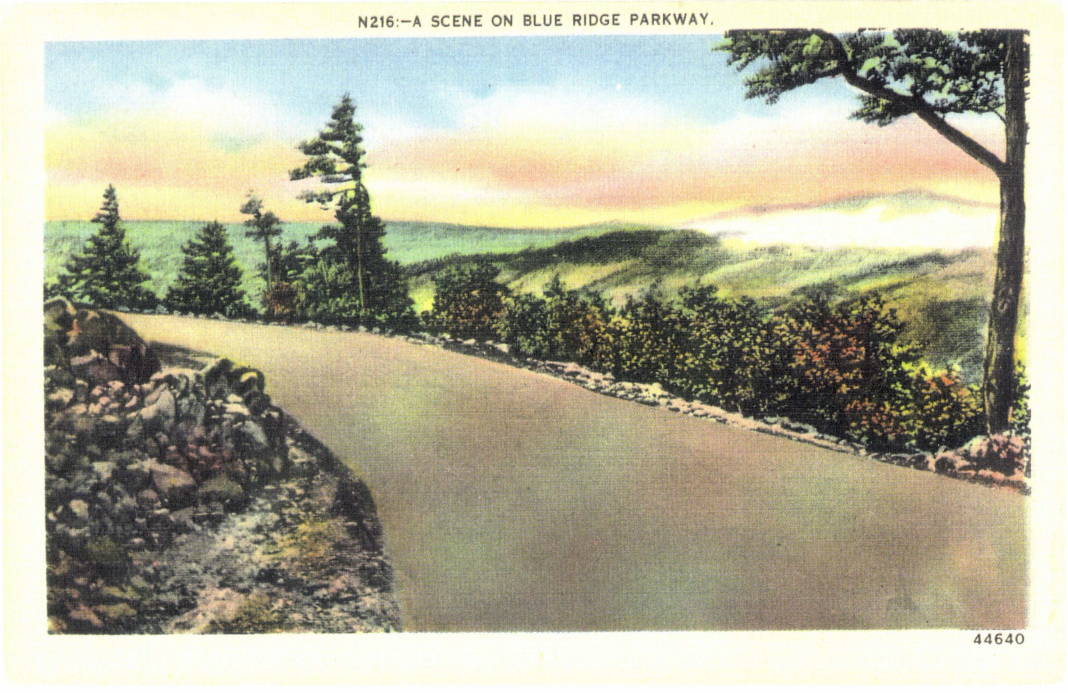
The back of this post card reads:
"B. 95 Published by the Brown Book Co., Asheville, N.C. Made in U.S.A."
In handwriting: "From Uncle Aden."



Cone Estate, 1907-1915

This post card was probably created from a photograph. It shows the boat house at the far left. An entry in the Cone Ledger dated June 15, 1910 states: "324 feet of Oak Lumber for Platform at Boat House @ 1.10 = 3.56", which could indicate that the boat house was built in 1910, or simply that the platform was rebuilt in 1910.

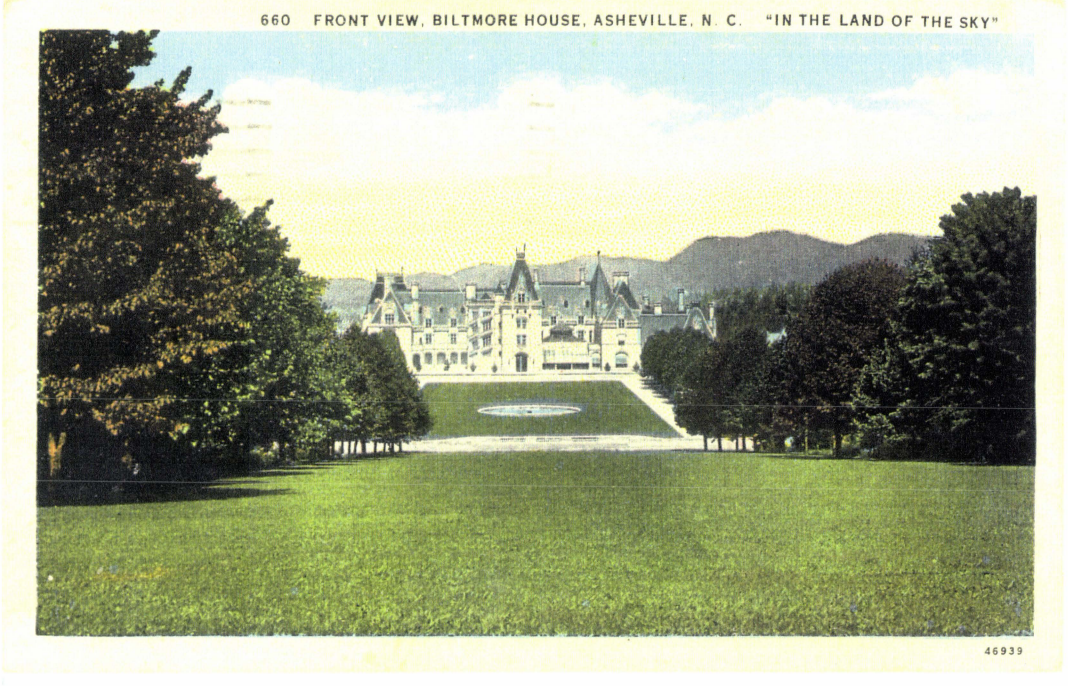
The back of this post card reads:
"E. Q. Kropp Co., Milwaukee"



"A Scene on the Blue Ridge Parkway", mid-1940s

This post card also has a linen finish and dates from the mid-1940s.

The back of this post card reads: "Published by Asheville Post Card Co., Asheville, N.C."



"Front View, Biltmore House", mid-1940s

This post card was sent to Miss Louise Noble in Okmulgee, Oklahoma from "Your friend Nikki". It is postmarked March 5, 1943.

The back of this post card reads:

BILTMORE HOUSE, ASHEVILLE, N.C.
Home of the late George W. Vanderbilt, four miles from Asheville. The estate comprises over 12,000 acres of forest and field. The mansion is one of the finest in America and contains many art treasures from all parts of the world. The house and gardens are open to visitors.

Also: "Published by Asheville Post Card Co., Asheville, N.C."

I hope that this lovely estate will be left intact during my lifetime - a fortune has been spent to make a charming place of what was wild mountain country, and after Mr. Cone's death many years ago, I have continued as well as I could, along the lines he laid out. I would never consent to the road going through this place. I am eighty-one years old and feel that I want my home place not to be disturbed while I live.

Bertha Cone got her wish: the estate was left unchanged until after her death.

Second Period Paint Investigations

The Cone Estate ledgers indicate that there was very little painting done at the estate between 1901 and 1911. The color palette for the exterior of the Manor House went from the ochre with ivory trim to a monochromatic ivory palette early on, perhaps before 1901. After 1911, there are receipts for some amount of painting or for paint materials at least every other year. None of these receipts is more than a few hundred dollars until 1947, when there are three bills in close sequence totaling close to $1,000 dollars. The receipts also show that paint was handmade at the Cone Estate through 1933.

The first period paints were those applied by Moses and Bertha Cone to their new home. The second period paints are the second finish layers, assumed to have been applied after Moses Cone's death in 1908, therefore, the next paint colors were chosen solely by Bertha.

In 1924, the Cone Estate ledger records the boarding of paper hangers, but no receipts for wallpaper have been located. The first mention of electricity in the Manor House also occurs in 1924. In that year there are bills for 25 pounds of finishing nails and some other carpentry. From the ledger entries, it seems likely that the installation of electrical conduit necessitated carpentry and millwork, and therefore painting of all of the trim at least. It is possible that the paper hangers installed the canvas, or linen, on the walls at this time, although there is no mention of this material in the ledger. There is canvas on the walls above the wainscot in all of the first floor rooms except the kitchen area, and on the walls of the halls, stairways, all of the second floor rooms including bathrooms, but not closets or the linen or utility room. There is also canvas on some of the ceilings.

The first finish paint layer on the canvas is identical throughout the first and second floors of the house and is a light cream color. Distinctly visible are particles of raw sienna, burnt umber and bright ochre pigments. There are four to five layers of paint on the canvas ranging from thick oily light cream with large pigment particles through equally thick, oil-rich and pigment-filled light tan to a thin machine-made mauve gray and the more recent thin, almost flat whites.

All of the wood trim has seven to eight layers of paint. The first four layers are consistent throughout the house and are shades of light cream. The next layers are clearly recent paints as they have no white lead. The first of these layers is a light mauve gray followed by layers of a chalk white. It may be that the wood was painted more often, but that later layers were scraped or sanded off before the last three paint jobs.

In addition, arsenate of lead is billed to Bertha Cone repeatedly from 1913 to 1933. This is unusual in that the common white lead pigment compounds are basic lead carbonate, lead sulfate or lead acetate. It is possible that lead and arsenic effectively prevented mildew while providing opacity, indicating that someone at the Cone Estate was quite creative at paint formulation.

Bertha Cone died on June 8, 1947. There are three entries in the Cone Ledger for payments to B. Castle for painting dated May 1st, 15th and 30th, 1947, and totaling just over $1,000. It is possible that the entire manor house, inside and out, was freshly painted just before her death, therefore, the paint scheme throughout the house at the time of her death was most likely light tan walls with light cream trim.

Third Period (1947-Present)
After Bertha Cone

When Bertha Cone died in 1947, she was 89 years old and had managed Flat Top Manor Estate for almost 39 years. After Moses Cone's death, the future of the estate had already been arranged by a legal indenture. The estate would be a public park owned and managed by the Moses H. Cone Memorial Hospital, Inc., in Greensboro. Bertha Cone's will, however, written in 1945, specified that the Manor House remain closed to the public. The hospital, realizing that running a park would drain its resources, turned ownership over to the very agency Bertha Cone had tried to keep away from the estate: the National Park Service.

On January 21, 1949, the National Park Service legally assumed responsibility for managing the Moses H. Cone Memorial Park. To honor the agreement with the hospital, the carriage roads and grounds were open to the public. The commercial enterprises of the estate, the dairy and the apple orchards were not maintained. The Park Service also demolished or removed all but five of the fifty-seven structures at Cone Memorial Park: the Manor House, a Servants' House, the Carriage House, the Apple Barn and Sandy Flats Baptist Church.

Blue Ridge Parkway planners attempted to fit the Moses H. Cone Estate and its stately mansion into the popular interpretation of primitive mountain life. In a report to the Parkway Superintendent Sam Weems dated July 27, 1947, Parkway landscape architect Stanley Abbott admitted that the house was in an exceptionally good state of repair and that it was a fine example of rural retreats built by the wealthy in the mountain south "during the horse and carriage days". The Manor House was, in his opinion "ostentatious in its generally naturalistic setting" and noted that "remarkably it has changed little since early in the century and never been reshaped to fit the motor car." (Noblitt, p. 343)

Ironically, the Moses H. Cone Manor House was not only opened to the public, but became a crafts shop with a pioneer museum installed in its parlor. The Southern Highlands Handicraft Guild has managed the Parkway Craft Center since 1951. Under its agreement with the National Park Service, it has been the Guild's responsibility to "perform routine housekeeping and interior painting, help pay utility costs, and notify the Parkway of major maintenance needs of the house."

In the 1960s, the first floor of the Manor House was used to exhibit, demonstrate and sell crafts, and its second floor housed the ten person staff of the Craft center. In the mid 1960s, the Park Service developed plans to create a pioneer community exhibit modeled after Old Sturbridge Village at the Moses Cone Memorial Park. This Early Americana interpretative center was never built due to lack of funds.

In 1967, a study team recommended that the house be restored and opened as a house museum. In 1973, however, the Parkway Officials reversed their decision and canceled their request for $480,000. A Parkway report entitled Projects Which Should be Deleted from the Development Program, stated: "There appears to be little interpretive or historic value in refurnishing this house and exhibiting it as a historic building." (Noblitt, p. 384)

Parkway records chronicle much of the maintenance and rehabilitation work which has taken place at the Manor House since 1973. In 1973, the Park Service repaired the roof at a cost of $75,000. The Park Service also rebuilt the front porch in March of 1973 and the kitchen wing porch in October of 1973. In 1980, a visitor information station was installed in the parlor. That same year over $175,000 was spent to rehabilitate the house. A new roof was installed, old paint was removed and the entire exterior repainted, window glass was repaired, all deteriorated mill work was replaced and the balustrade fence in front of the house was repaired and painted. The most notable alteration to the house under the Park Service management was the addition of two public restrooms at the west end of the porch, constructed before 1978. (See Figure 1.)

At the completion of a major rehabilitation effort in 1980, the Park Service estimated that it would cost $40,000 annually to maintain

the Manor House. In 1987, a drainage system was added behind the retaining wall for $60,000. In 1990, the reproduction and repair of balustrades and the repair of the masonry foundation cost $90,000.

Third Period Paint Investigations

Throughout this period, cyclical painting of the exterior or portions of the exterior has occurred, necessitated by the extreme and adverse weather conditions on Flat Top Mountain. In 1980, all of the exterior paint was removed, all deteriorated millwork replaced and the entire exterior painted white. In 1985, the exterior was once again prepped and primed for painting. Paint samples included in Park Service files include Glidden Gel-Flo White Y-1901 (1 coat) for the clapboards and trim, Glidden 76-08 (green) for the screen doors and screens, and Glidden 79-58 (gray) for the porch flooring and steps.

After the Park Service took possession of the house, the interior walls and woodwork were painted a light mauve gray. It is believed the woodwork was first painted white in the winter of 1983. An April 6, 1983 letter from the James Gentry, Director of the Southern Highlands Handicraft Guild, to Park Service Concessions Analyst Richard Wyatt states "...the change from Glenwood Gray to Golden White is an excellent one." From 1983 to the present, the interior has been painted or touched up by the Park Service or the Crafts Guild as necessary.



"Parkway Craft Center", 1951-1952

The white writing across the bottom of this post card reads: "Parkway Craft Center on the Blue Ridge Parkway -- Moses H. Cone Memorial Park near Blowing Rock, N.C." Then in blue fountain pen: "Went here on July 3, 1952."

Notice the half screens on the windows, the painted dormer cheeks and painted brick foundation and chimneys. The sun porch is also present for the first time.



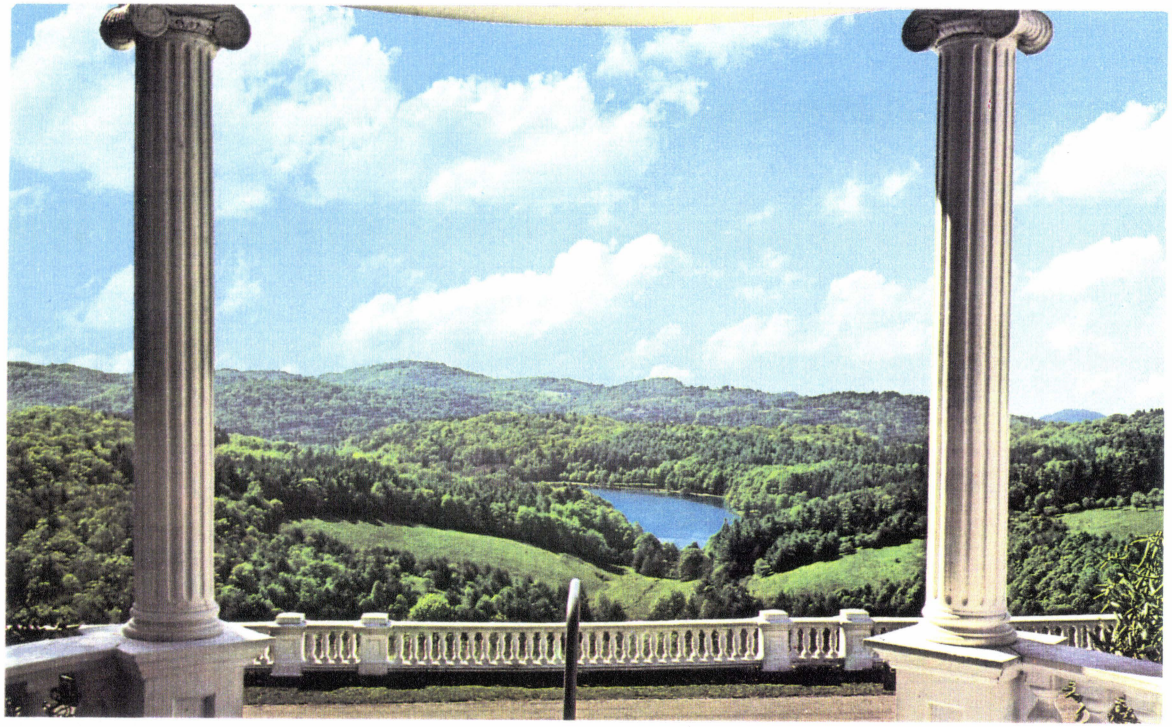
Cone Memorial Park, mid-1960s

This post card dates from the mid-1960s. Gone are the window screens, but the lightning rod system is visible on the dormers and roof.

The back of this post card reads:

CONE MEMORIAL PARK, BLOWING ROCK, NORTH CAROLINA The Manor House was the residence of North Carolina textile pioneer Moses Cone, whose family donated the property to the Blue Ridge Parkway.

Also: "Published by Hugh Morton, Linville, N.C."



The Moses Cone Estate - Blue Ridge Parkway - Blowing Rock, N. C. *Photo by Jim Doane*

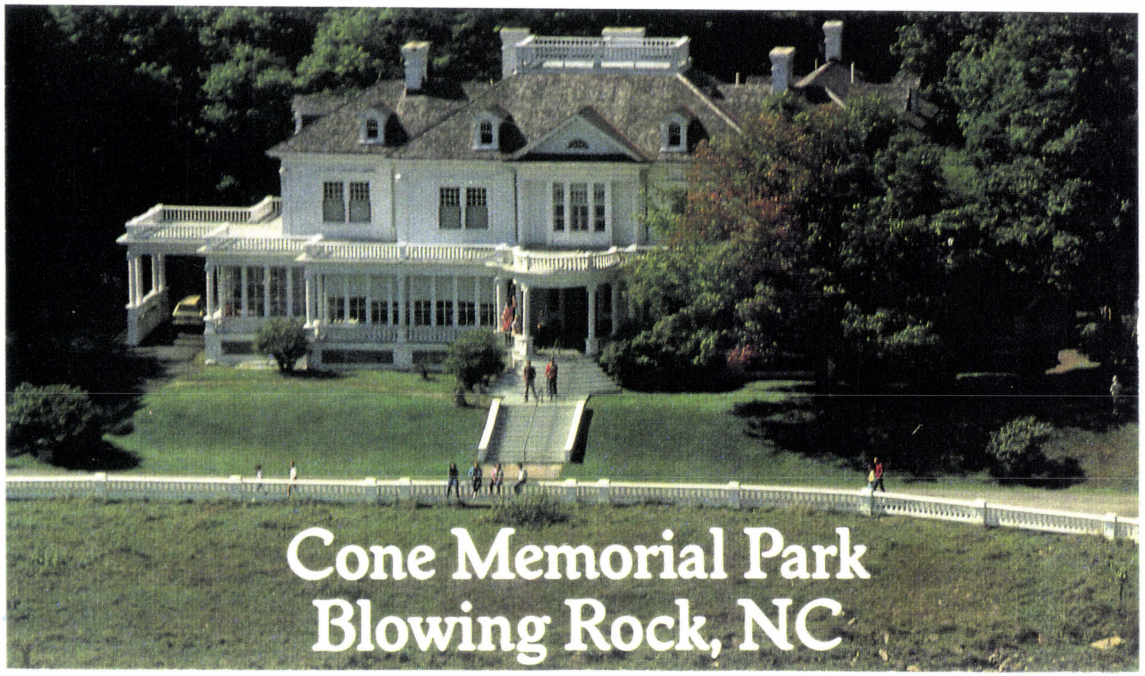
View from Cone Manor House, 1977

This photograph shows the large balustrade fence, built in 1913.

The back of this post card reads:

The Parkway Craft Center at the Moses Cone Estate presents demonstrations of various craft making and offers an excellent display of handicraft articles. This view from the porch overlooks the two lakes and nearly 25 miles of horse and carriage trails.

The photograph was taken by Jim Doane Aerial Photography Services, Inc. in 1977



Aerial View of Cone Manor House, probably 1977

This photograph was also taken by Jim Doane Aerial Photography, possibly at the same time as the one above. It shows the manor house with the expanded porch, half screens on the windows and the lightning rod system in place at the roof.

The back of this post card reads:

Aerial view of Moses Cone. The Manor House was the residence of the North Carolina textile pioneer, Moses Cone. It is presently a craft center, operated by the Southern Highlands Handicraft Guild. A "must" on every visitor's tour of the area.

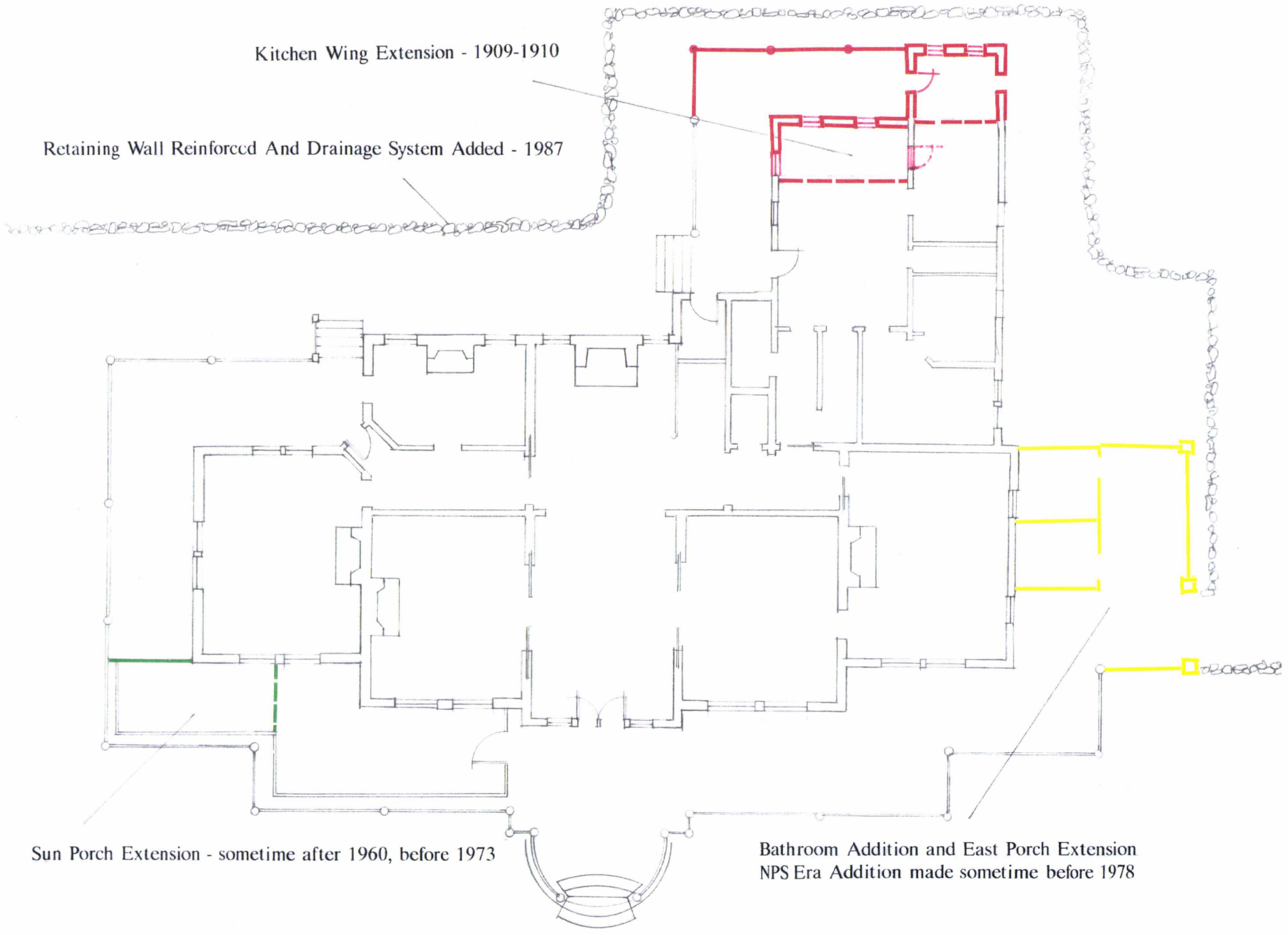


FIGURE 1 : Developemental History Plan

ARCHITECTURAL DESCRIPTION

ARCHITECTURAL DESCRIPTION

METHODOLOGY

The Manor House was examined and analyzed to document its existing condition, to determine where repairs are needed, and to provide a better understanding of the changes and modifications the building has undergone since its construction. The techniques used in the examination included visual investigation, measuring and photographing the building. The Orlo Epps elevations and floor plans, historic photographs and post cards of the Manor House and the 1987 HABS Drawings produced by Eric Cook Swanson provided insight into the changes and modifications which have been made over time. The HABS drawings also provided an invaluable framework for recording information about the condition of the Manor House and are used as illustrations in this section.

As part of the physical investigation, a preliminary paint analysis was undertaken to determine the original paint schemes of the exterior and interior, and to help determine the relative ages of portions of the house which were believed to be later additions.

SITING AND APPROACH

The siting of the Manor House provided the Cones with expansive views of their estate to the south and east. The original approach road from the Yonahlossee Turnpike (now US 221) offers an impressive arrival experience. The sloping topography allows sweeping views of the estate and, as one rounds the final bend, the dramatic sight of the Manor House rising over the valley. Within the last 50 years, this former carriage road was modified to alleviate a sharp turn. Due to horse traffic on the estate and limited parking available in front of the Manor House, this road is used only by Park Rangers. Public vehicle access to the Manor House is provided from the rear via a loop road off the Blue Ridge Parkway at mile post 294. After parking in the hill top lot behind the Manor House, visitors walk down a footpath and enter the porch on the east side. Although this approach provides visitors with splendid views of the estate from the Manor House porch, it prevents them from viewing the house in relation to its setting.

EXTERIOR

The Manor House is two stories high with a full basement and attic. The front, or south facade, is five bays wide with the center bay most prominent. The two bays flanking the central bay step back 2'-6" from the central bay and the outermost bays step back an additional 5'-6". At the first story, there is a porte cochère on the west facade and a Park Service era addition containing two public restrooms on the east facade. A deep porch spans the width of the south facade and follows the stepped-back configuration of this facade. The center of the porch curves outward and there are radial steps leading to the lawn. The porch continues around the east and west facades and a portion of the north facade as a unifying element. The southwest end of the porch is enclosed with demountable windows. At the rear of the building on the north facade is a two-story kitchen wing with a porch on the west and north facades.

The porch roofs are supported by columns placed on pedestals flanking balustrades. The columns and entablature are of the Ionic order. The columns have attic bases, fluted shafts with little entasis, and capitals with volutes on the front and back and egg-and-dart ornamentation. There are thirty columns supporting the first story porches and porte cochère. Although these columns look similar

from a distance, they vary greatly in detail and condition, and the column capitals are composed of three different materials. Across the south facade, the capitals are carved wood with a horizontal seam through the center of each volute. The balusters, or the rolls forming the sides of the capitals, have smooth outer surfaces. At the kitchen porch, the column capitals are made of a cast composition material. Here, the capital balusters have a beading at the outer surfaces and the volutes and egg-and-dart ornamentation is more intricate than on the carved wooden capitals. The four columns supporting the porte cochère have capitals that are aluminum cast from molds made from one of the original carved wooden capitals. Several deteriorated wood and composition capitals are stored in the Apple Barn, along with the molds for the cast aluminum capitals.

The columns support an entablature with a single fascia architrave, a continuous frieze and dentils in the cornice. At the second story, balustrades flanked by pedestals follow the outline of the first story porch roofs. The pedestals and balustrades have been removed from the curved center portion and the southeast portion of the front porch roof. There are also pedestals and balustrades on the upper roof around a widow's walk and on three sides of the flat roof over a large attic dormer on the north facade.

The foundation is a combination of brick piers on stone footings stucco over brick and stone. There is ¾" hardware screen between the brick foundation piers at the south facade and portions of the east and west facades. The siding at the first and second stories consists of 4½" exposed wood clapboard. The siding at the east facade restroom addition is 7⅞" exposed and ½" thick. At the outside corners of the building there are square pilasters with fluted shafts. On the second story, the pilasters are visually supporting an entablature with a single fascia architrave, a continuous frieze, dentils and block modillions at the roof eave.

The main public entrance to the house is through the front doors on the south facade. The front doors are flanked by leaded glass side lights with an arched, leaded glass transom window above the door. There are seven additional entrances to the house including three at the north facade (two at the porch and a pair of cellar doors), three at the kitchen wing and an areaway door on the south facade. A second areaway door leads to a basement tool shop, but does not provide access to the rest of the basement.

At the first story, the windows are typically 1/1 double hung windows with 7" wide architraves at the sides and top and an 8½" high cornice above each window. The windows on the south facade are typically 3'-8½" wide and 6'-7½" high with 2¾" thick sills.

At the second story, the windows are 12/1 double hung windows on the south facade, 9/1 double hung windows on the north facade, and a combination of 12/1 and 9/1 on the east and west facades. The windows typically have 7" wide architraves at the sides and top and an 8½" high cornice above each window. The windows at the second story are 4" shorter than those on the first story, but of similar widths. At the center of the south facade there is a wood framed bay flanked by two columns. The bay has wood panels across the bottom, an inward opening casement window and 12 light transom at the center, and 9/1/1 fixed sash side lights. The sides of the bay are clapboard. Behind the bay there is a second set of windows with a 1/1 double-hung window at the center and 9/1 double-hung windows at each side. The transom above these windows has a large arched mullion with scallops at the inside, a smaller arched mullion below the scallops and straight mullions radiating out from a central point at the bottom of the window.

The second story windows across the front of the house had shutters at one time as evidenced by hinge recesses in the architraves. These shutters are painted dark green and presently stored in the basement meat room. None of the windows on the south facade have screens and fewer than half of the windows on the east, west and north facades have half or full screens. Both doors at the porch on the north facade have screen doors. There are presently a number of half and full screens stored in the basement wine room and between the southwest foundation walls.

On the north facade, there are double-hung leaded glass windows flanking the fireplaces in the stair halls at both the first and second stories and a leaded glass Palladian window at the landing of the main stair.

The roof over the first story porch is a flat-seam metal roof which has been coated with a single membrane roofing material. The hip roof that covers the second story has a deep eave which is visually supported by 4" x 3" x 12" block modillions below the horizontal cornice. In the pediment over the central bay on the south facade, there is a semicircular window with a keystone in the trim. The window has arched mullions with scallops at the inside and straight mullions radiating out from a central point at the bottom of the window. The pediment is trimmed with the same block modillions below the raking cornice. The entire second story roof is clad in cedar shingles. There are five chimneys: four at the main portion of the house and one at the kitchen wing.

There are ten attic dormers with gable roofs and double-hung windows. The dormers are quite elaborate in detail with decorative mullions in the top sash and a keystone above the window. Each window is flanked by two pilasters with simple bases and double-banded capitals. The entablature has a continuous frieze and dentils in the cornice. The dentils in the raking cornice are set perpendicular to the raking cornice rather than vertical. The dormer cheeks are clad in cedar shingles. On the north facade, there is a larger dormer with two casement windows which is clad in cedar shingles.



South Facade

The south facade is the most prominent and has historically been the most photographed side of the Manor House. The major changes to this facade since 1947 include the expansion of the Sun Porch in front of the Billiard Room, the addition of public restrooms to the east end of the porch, the replacement and reorientation of the porte-cochère columns and the removal of the large white balustrade in front of the Manor House in the early 90's.

Park Service maintenance records indicate that the exterior of the Manor House has undergone a number of restoration treatments since 1973, and that the south facade in particular has received more frequent attention than the other three facades. Most notable is a major restoration of the exterior in 1980 by Moretti Construction of Charlotte, North Carolina. This work included installation of a new roof, removal of all exterior paint and repainting, replacement of all



MATERIALS

ROOF - FLAT SEAM AND CEDAR SHINGLE
SIDING - CLAPBOARD
FOUNDATION - BRICK ON STONE FOOTING

SOUTH ELEVATION

0 5 10 15 20

FEET 3/16" = 1'-0"

broken glass panes (both leaded and plain), replacement of all deteriorated millwork, and repair and painting of the large balustrade in front of the house. Detailed maintenance records and/or working drawings which might indicate more precisely which exterior elements were replaced and when have not been located in Park Service files.

Foundation: Brick piers on stone footings, painted white. The bricks are 4" wide by 8½" long by 2½" high with ¼" mortar joints. 15 to 16 rows of brick are exposed above the grade. Rectangular openings between the foundation piers are covered in ¾" hardware cloth encased in wood molding, all painted white. There is a row lock of brick along the bottom of each opening, painted white.

Walls: On the first story, clapboard siding, 4½" exposed and ⅝" thick, painted white. Clapboard on the restroom addition is 7⅞" exposed and ½" thick, painted white. Where the clapboard meets the porch ceiling, there is a ¾" quarter round trim. At outside corners of the building there are flat pilasters under five flutes measuring 1'-4" by 1'-4".

On the second story, the clapboard varies in exposed width from 3" to 4½". At the outside corners of the buildings there are flat pilasters with five flutes that have been flashed at the capitals. The pilasters visually support an entablature with a single fascia architrave, a continuous frieze and dentils in the cornice. The dentils are 1½" wide, 3" long, 1" thick and spaced 1¼" apart. The paint on the clapboard siding, pilasters and entablature is peeling considerably and there are cracks in the fascia below the dentils in the cornice.

Porch: The porch floor is 1½" wide tongue-and-groove decking, 1¼" thick, assumed not original, painted gray. The decking runs perpendicular to the walls of the house, changing directions at corners to follow the stepped-back configuration of the facade. Decking joints are staggered at outside corners and miter-cut at inside corners. At the front doors, the porch extends 20'-3" from the facade and ends in a circular curve. The portions directly east and west of the curve extend 11'-9" and the portions at the far ends extend 10'. At the east end of the porch, there is a considerable amount of mildew on the decking and two rotted areas of decking totaling approximately five square feet. The decking which protrudes from the sun porch is more weathered than the rest of the porch decking, indicating that it was not replaced as recently as the rest of the porch decking. A portion of the decking has rotted away at the southwest corner of the porch under column C117. The decking under column C115 has been replaced with what appears to be a solid wood board.

The porch ceiling is 2¼" wide tongue-and-groove beaded board with a ½" bead, painted white. In plan, the profile of the porch ceiling follows that of the floor, however the boards run parallel to the walls of the building, changing directions at corners to follow the stepped-back configuration of the facade. The board joints are staggered at outside corners and miter-cut at inside corners. Below the porch ceiling, the back side of the entablature is covered by six beaded boards running horizontally with a quarter round trim molding where the ceiling meets the entablature. There is a seam in the porch ceiling running north and south adjacent to column 108. The beaded board at the east end of the porch has slightly smaller beading than that at the center portion of the porch. The porch boards are splitting and sagging approximately ¾" adjacent to column C104 and less so at C105. There is slight splitting at the curved portion of the ceiling between columns C109 and C110. There are two small knobs protruding from the ceiling adjacent to columns C105 and C114.

Lighting: There is a single ceramic socket in the center of the porch in front of the main doors between columns C108 and C111.

Columns C101 through C117: The porch roof is supported by columns placed on pedestals. The columns and entablature are of the Ionic order. The columns are typically 7'-10" high and have attic bases, fluted shafts without entasis, capitals with volutes on the front and egg-and-dart ornamentation. The wood paneled pedestals

are approximately 2'-2" high, including a 6" base molding and a 4" cornice, and 1'-3" wide square at die. The columns support a 2' high entablature with a single fascia architrave, a continuous frieze and dentils in the cornice. The columns, pedestals and entablature are painted white. The columns on the south facade have original carved wood capitals and shafts with 16 flutes, painted white. (Specific information about each column is presented in the Appendix.)

Balustrades B101 through B115 and B126, and B201 through B206: The balustrades between the pedestals are composed of wood top and bottom rails with wood balusters between. The balusters have vertically symmetrical bellies and sleeves about a central bead. The upper surfaces of the top and bottom rails are either flat or have a very slight bevel of ⅛" to ¼". The balusters on the first story are 1'-7" high and placed approximately 4½" apart. On the second story, the pedestals and balustrades above the curved portion and east end of the porch have been removed. The balusters on the second story are 1'-9⅛" high and placed approximately 5" apart. The pedestals flanking the balustrades on the second story are 2'-5" high and 1'-1" square, and therefore higher and thinner than those on the first story. (Specific information about each balustrade and pedestal is presented in the Appendix.)

Steps: Leading from the curved portion of the front porch are 7 curved wood steps. The treads are constructed of straight boards with 1' - 2¾" tread, 1" nosing, 7½" risers and ¾" quarter round molding where the underside of the tread meets the riser. The treads are painted gray, the risers white. The side elevations of the stair consist of a wood stringer with 2½" wide tongue-and-groove boards running vertically below it. The tongue-and-groove boards are bound on the horizontal and vertical by 8" wide boards with a 1½" wide molding detail.

There is a gray painted pipe handrail at the center of the stair approximately 2'-6" above the tread which runs from porch to mid-landing at level of the lawn. The mid-landing extends 6'-5" out from the base of the stairs and is composed of 3½" wide boards painted gray. A second stair leading to the road has 11 wood steps with 1'-3" treads, 6¾" risers. The steps are 12' wide and bordered by a 3-course brick wall with a 3" thick, slightly beveled cast concrete cap. The walls and caps are painted white. At each wall, there is a crack running through the concrete cap and brick.

At the west end, there are five concrete steps leading to a basement level areaway.

Doors: A pair of front doors open inward and are 2'-6" wide, 7'-3¼" high and 2¼" thick, painted white, with six panels in each door. There is a brass eagle knocker on the west door and an elliptical brass knob with a Yale lockset on the east door. A pair of wood screen doors open outwards and are 2'6" wide and 7'-4½" high, painted dark green. Each door has six screened openings that approximate the panels on the solid wood doors. The bottom two openings of each screen door are covered with diagonal hardware cloth and screen. The screen doors have two hinges each, spring closers, a knob on the west door and a hook-and-eye latch at the interior. Flanking the doors are side lights with leaded glass at the inside, solid glass at the outside and wood panels below.

Between the doors and side lights are two half-round pilasters resembling Ionic columns applied to 8" wide architraves. The pilaster shafts are 5" in diameter, have 6 flutes and no entasis. The capitals have two volutes and egg-and-dart ornamentation. The base is a single tori set on a plinth. Where the shaft meets the base, the shaft has been cut, creating an uneven octagonal shape. Flanking the side lights are two flat pilasters with no flutes or base molding. The pilasters are 7" wide and protrude 10¾" from the adjacent sidelight molding. The four pilasters visually support an entablature with a single fascia architrave that is continuous over the sidelights and door, but does not continue around the square pilasters. There are dentils in the cornice that are 1" wide, 1¾" high and approximately ¾" thick spaced 1⅛" apart. Over the cornice is a 10' wide, arched, leaded glass transom window that is 1'-8" high at the center, with

8½" trim and a keystone. The pilasters, entablature and trim are all painted white. The door sill is 2¼" thick, painted gray, and sits 1½" above the porch floor.

The door at the base of the areaway at the southwest corner of the building is 2'-9" wide and 7'-1" and has three panels. There is hardware screen in the top panel and tongue-and-groove siding in the bottom two panels.

Windows: On the first story, the southwest portion of the front porch is enclosed with floor to ceiling glass in wood frame panels, creating a sun parlor or sun porch. The original sun porch was 8 panels wide and spanned between columns C115 and C113. The panels are 3'-¼" wide and 11'-½" high and are demountable. The panels have a solid wood base and top panel and 6 glass panes which are 1'-2½" wide and 2'-5½" high with 1¼" mullions. There is a 2½" muntin between the panels. After 1950, the sun porch was expanded with panels that are not demountable. This later portion is 5 panels wide and spans between columns C117 and C116. These panels are 3'-2½" wide and 10'-11" high with a 3" piece muntin between the panels. The panels have a solid wood base and top panel and 6 glass panes which are 1'-3" wide and 2'-5¼" high with 1¼" mullions. The second panel from the left shows rot in the base panel. The overall width of the earlier sun portion is 26'-0¾", the later portion is 17'-2½" wide.

East of the front doors there are two 1/1 windows in the Library, and a double window with 1/1 lights in the Dining Room. These windows are 3'-8¼" wide and 6'-7¼" high with 2¾" thick sills, 7" wide architraves at the sides and top and an 8½" high cornice above. The double window is divided by a 6¾" wide mullion. The window on the bathroom addition is 4' wide and 18½" high with a screen on the outside. There are two panes side by side with a 1" center mullion.

On the second story, at Bedrooms 213, 212, 210 and 207, the windows are 12/1 double-hung windows. These windows are 4" shorter than those on the first story, with 7" wide architraves at the sides and top and an 8½" high cornice above. At Room 211, the center room, there is a wood framed bay flanked by two columns. The bay is 9'-9" wide and projects 1'-10½" from the wall of the house. The bay has wood panels across the bottom front, an inward opening casement window with a 12 light transom above at the center, flanked by 9/1/1 fixed sash side lights. The sides of the bay are clapboard. Inside the first layer of glazing there is a second set of windows with a wide double-hung window at the center and 9/1 double-hung windows at each side. The rectangular transom above these windows has a large arched mullion with scallops at the inside, a smaller arched mullion below the scallops and straight mullions radiating out from a central point at the bottom of the window. The two columns flanking the bay are 9'-6" high and in poor condition. The entire bay, including the two columns, is set on an 8" high platform similar to the flat roof over the porch. Behind the columns are two flat pilasters which have horizontal seams 3'-5½" above the base of the platform, indicating that the lower portions only were replaced due to rot. In general, the condition of the window architraves and sills is poor with a large portion of the paint peeling.

The second story windows on the south facade also had shutters at one time, as evidenced by recesses in the jamb which indicate the original placement of the shutter hinges. There is no evidence of shutter hardware on the first story windows. These shutters are presently stored in the basement meat room. None of the windows on the south facade have screens, but there are a number of half and full screens stored in the basement wine room and between the southwest foundation walls.

Roof, Dormers and Chimneys: These elements are described following the description of each facade.



MATERIALS
ROOF - FLAT SEAM AND CEDAR SHINGLE
SIDING - CLAPBOARD
FOUNDATION - STUCCO OVER STONE/BRICK

NORTH ELEVATION

0 5 10 15 20
FEET 3/16" = 1'-0"



North Facade

Foundation: Stucco over stone and brick, painted white.

Walls: On the first story, clapboard siding, typically 4½" exposed and ⅝" thick, painted white. Clapboard outside Room 115 - Store Room is 4¼" exposed and ½" thick. Clapboard on the restroom addition is 7⅞" exposed and ½" thick. Where the clapboard meets the porch ceiling, there is a ¾" quarter round trim. Right below the clapboard at the top edge of the foundation there is a 7" wide continuous fascia with an angled drip mold at the top edge which projects 2½" from the face of the house and is 1¼" thick. At outside corners of the building there are flat pilasters with 5-flutes and measuring 1'-4" by 1'-4". Outside Room 115 - Store Room, the pilasters are narrower and have only 3 flutes. The pilaster bases are severely rotted on this facade.

On the second story, the pilasters visually support an entablature with a single fascia architrave, a continuous frieze and dentils in the cornice. The dentils are 1½" wide, 3" long, 1" thick and with a 1¼" space between dentils. The paint on the clapboard siding, pilasters and entablature is peeling considerably and there are cracks in the fascia below the dentils in the cornice.

Porch: At the west end of the building, the porch floor is 1½" wide tongue-and-groove decking, 1¼" thick, painted gray. The decking runs perpendicular to the wall of the house. The porch ceiling is 2¼" wide tongue-and-groove beaded board with a ½" bead, painted white. The board joints are staggered at outside corners and miter-cut at inside corners. Below the porch ceiling, the back side of the entablature is covered by 6 beaded boards running horizontally with a quarter round trim molding where the ceiling meets the entablature.

There is a second porch outside the kitchen wing which is 5'-2½" wide at the north facade and 9'-1½" wide on the west facade. The porch floor in this area is 2¼" wide and 1¼" thick tongue-and-groove decking, painted gray. The decking is typically warped and mildewed in some areas and there is a small hole in the decking at the base of Column C124. The porch ceiling is 2¼" wide tongue-and-groove board, painted white, with considerable peeling. The boards run parallel to the wall of the house and there is a miter-cut seam where the boards meet. There is a second seam in the porch ceiling adjacent to the west facade which runs at an odd angle from between the kitchen windows to Column C124. Below the porch ceiling, the back side of the entablature is covered by 6 beaded boards running horizontally with a quarter round trim molding where the ceiling meets the entablature.

Columns C120 through C126: The porch roofs are supported by columns placed on pedestals. The columns and entablature are of the Ionic order. Columns C121 and C122 at the west porch (C120 through C122) are 7'-10" high and have attic bases, fluted shafts without entasis, capitals with volutes on the front and egg-and-dart

ornamentation. These three columns lean away from the house slightly where the capital meets the architrave, indicating some shifting of the foundation wall beneath the porch. Column C120 has been removed and replaced with a 5½" x 5½" square post. The wood paneled pedestals are approximately 2'-2" high, including 6" base molding and a 4" cornice, and 1'-3" square. The columns support a 2' high entablature with a single fascia architrave, a continuous frieze and dentils in the cornice. The columns, pedestals and entablature are painted white.

At the kitchen wing, only one of the white Ionic columns remains, Column C 123. This column is slightly different than those on the west porch or those at the south facade, it has 24 flutes and a more ornate molded composition capital. Columns C124 through C126 have been replaced with temporary square, unpainted wood columns placed on unpainted wood plinths which are set on top of the pilasters. The plinths are warping creating a concave surface which traps water. (Specific information about each column is presented in the Appendix)

Balustrades B118 through B118, and B215 through B223: The balustrades between the pedestals are composed of wood top and bottom rails with wood balusters between. The balusters have vertically symmetrical bellies and sleeves about a central bead. The upper surfaces of the top and bottom rails are either flat or have a very slight bevel of ⅛" to ¼".

The balusters on the west end of the second story are 1'-9⅛" high and placed approximately 5" apart. The pedestals flanking the balustrades on the second story are 2'-5" high and 1'-1" wide at each side, and therefore higher and thinner than those on the first story.

The first story balustrades at the kitchen wing (B120 through B123) are 1'-9⅛" high and placed approximately 5" apart. The balusters are wider and are shaped different than those on the south facade. The bellies flatten out at the center bead of the baluster. The pedestals on the first story at the kitchen wing are 1'-10½" tall and 1'-3" wide.

The second story balustrades at the kitchen wing (B215 through B223) are 2'-1½" high and placed approximately 5" apart. The pedestals are 2'-3½" high and 1'-3" wide.
(Specific information about each balustrade and pedestal is presented in the Appendix.)

Steps: At the west porch, adjacent to the door to Room 107 - Office, there are four wood steps leading to the footpath behind the house. The treads and risers are painted gray and there is an unpainted wood railing consisting of a 3½" by 3½" vertical post with a 3½" wide by 1¼" thick handrail.

At the west side of the kitchen porch, there are three 6' wide wood steps with 1'-2½" treads, 1" nosings and 7¼" rises, all painted gray. The bottom tread is rotted with a portion of the tread missing.

Doors: The restroom door west of the kitchen wing is 2'-6" wide and 6'-6" high with a glass panel over one horizontal and two vertical wood panels, painted white, with a wood frame screen door, painted dark green. The door has an elliptical door knob and a skeleton key hole on the escutcheon. There is a 7" wide architrave at the sides and top with an 8½" cornice above. The door to the sun porch is 3'-1" wide and 8' high with 4 glass panes over a solid panel and a single pane glass transom window above. The glass panes are 1'-2½" wide and 2'-9¼" high with 1¼" mullions. There is a wood frame screen door with four screened openings approximating the glass panes. This door has an elliptical knob. The trim around the door projects 4" from the adjacent window panel to allow for the screen door and hardware. At the second story there is a door providing access to the flat roof at the west end of Room 217 - Hallway. This door has 7 panels and is 3' wide and 8' high.

Windows: On the first story, there are two 1/1 double hung windows at Room 115 - Store Room. The windows are 2'-6½" wide and 4'-11½" high with no screens. There are two 1/1 double hung windows at Room 114 - Kitchen. The windows are 2'-6½" wide and 5'-0½" high and have full screens. There is one 1/1 window at

Room 112 - Toilet. The window is 2'-6" wide and 3'-11" high with a half screen. Flanking the fireplace at Room 103 - Stair Hall are two double hung leaded glass windows that are 3'-4" wide and 6'-7" high, with no screens. Flanking the fireplace at Room 107 - Office are two 1/1 double hung windows that are 3'-4" wide and 6'-7" high. There is a half screen over the east window only. At the west end porch, there are twin 1/1 windows at Room 105 - Billiard Room. These windows are 3'-4½" wide and 6'-7½" high with no screens. All of these windows have white painted sash and 7" wide architraves at the sides and top and an 8½" cornice above, painted white. Wood frame screens are painted dark green. At the sun porch, there is a single 3'-6½" wide panel. The panel has a solid wood base and top panel and 6 glass panes measuring 1'-5½" wide and 2'-5½" high with 1¼" mullions. The window on the east end restroom addition is 4' wide and 18½" high with a screen on the outside. There are two panes side by side with a 1" center mullion.

On the second story, at Bedrooms 204 and 205, the windows are 9/1 double hung windows with half screens and measure 2'-6½" wide and 6'-4" high. At Bathrooms 215 and 216 the windows are 9/1 double hung windows with half screens and measure 2'-10¾" wide and 6'-4½" high. The window at Room 214 - Linen Closet is also a 9/1 double hung window measuring 2'-10¾" wide and 6'-4½" high, however it has no screen. Flanking the fireplace at Room 201 - Stair Hall, are two double hung leaded glass windows that are 3'-4" wide and 6'-7" high, with no screens. All of these windows have 7" wide architraves at the sides and top and an 8½" high cornice above. At the stair hall landing, there is a leaded glass Palladian window. The side windows are 1'-6" wide and 5'-1½" high and the center window is 3'-7½" wide and 7'-1½" high. There is plexiglass over the center window which is held in place by nails driven into the window frame parallel to the sash.

Roof, Dormers and Chimneys: These elements are described following the description of each facade.



East Facade

Foundation: At the front of the house, brick piers on stone footings, painted white. At the rear of the house, stucco over brick, painted white.

Walls: Clapboard siding at front portion of the first story under the porch is 4½" exposed and ⅝" thick, painted white. Where the clapboard meets the porch ceiling, there is a ¾" quarter round trim. The clapboard north of the restroom addition is 4" exposed and ⅝" thick, painted white and peeling severely. Clapboard on the restroom addition is 7⅞" exposed and ½" thick, painted white. At the rear of the house below the clapboard above the stuccoed foundation there is a 7" wide continuous fascia with an angled drip mold at the top edge which projects 2½" from the face of the house and is 1¼" thick. At outside corners of the building there are flat



MATERIALS

ROOF - FLAT SEAM AND CEDAR SHINGLE
SIDING - CLAPBOARD
FOUNDATION - BRICK STONE STUCCO OVER BRICK

EAST ELEVATION

0 5 10 15 20
FEET 3/16" = 1'-0"

pilasters, typically with 5 flutes and measuring 1'-4" by 1'-4". The pilaster adjacent to the round window at room 208B - Closet, is damaged. At the northeast corner of the building, Outside Room 115 - Store Room on the first floor, the pilaster is narrower and has only 3 flutes and no base mold.

On the second story, the pilasters visually support an entablature with a single fascia architrave, a continuous frieze and dentils in the cornice. The dentils are 1½" wide, 3" long, 1" thick and spaced 1¼" apart. The paint on the clapboard siding, pilasters and entablature is peeling.

Porch: The porch floor is 1½" wide tongue-and-groove decking, 1¼" thick, painted gray. The decking runs perpendicular to the wall of the house. The porch ceiling is 2¼" wide tongue-and-groove beaded board with a ½" bead, painted white. The board joints are staggered at outside corners and miter-cut at inside corners. Below the porch ceiling, the back side of the entablature is covered by 6 beaded boards running horizontally with a quarter round trim molding where the ceiling meets the entablature.

Balustrades B124 and B125: The two segments of balustrade outside the restroom addition on the porch are composed of wood top and bottom rails with wood balusters between. The balusters have vertically symmetrical bellies and sleeves about a central bead. The upper surfaces of the top and bottom rails are either flat or have a very slight bevel of ⅛" to ¼". On the second story, the balustrades and pedestals have been removed on the eastern half of the building.

Steps: At the door to Room 115 - Store Room, there are five wood steps. The treads and risers are painted gray and there is no railing.

Doors: The door to Room 115 - Store Room is 3' wide and 7'-5" high with a spherical knob and a skeleton key hole in the escutcheon. There is a 7" wide architrave at the sides and top with an 8½" cornice above. Entry to the house through this door is blocked by shelves covering the door. The two door openings on the restroom addition are covered with sheets of unpainted plywood. The door to the sun porch is 3'-1½" wide and 8'-1" high with 4 glass panes over a solid panel. There is a 3½" architrave at the sides and top and a single pane glass transom window above. There is a wood frame screen door with four screened openings approximating the glass panes.

Windows: At the sun porch, there are two 3'-2¼" wide panels flanking a door. The panels have solid wood base and top panels and 6 glass panes measuring 1'-3½" wide and 2'-5½" high with 1¼" mullions.

There is a 1/1 double hung window at Room 119 - Library, that is 2'-10¼" wide and 6'-7½" high. There is a 1/1 double hung window at Room 118 - Dining Room, that is 3'-4¼" wide and 6'-7½" high. Both of these windows have half screens. There are twin 1/1 double hung windows at Room 117 - Butler's Pantry, that are 6' 9½" wide and 5'-5" high, and two 1/1 double hung windows at Room 115 - Store Room, that are 2'-5" wide and 5'-5" high. These windows have full screens.

On the second story, there is one 9/1 double hung window at Room 210 - Bedroom, that is 2'-10¼" wide and 6'-3½" high, and two 12/1 double hung windows at Room 207 - Bedroom, that are 3'-4¼" wide and 6'-3½". These windows do not have screens. There is a 9/1 double hung window at Room 209 - Bathroom, that is 2'-6" wide and 6'-3½" high, and 9/1 double hung windows at Room 206 - Bathroom, and Room 205 - Bedroom, that are 3'-6" wide and 6'-3½" high. These three windows have half screens. All of the windows on the east facade have white painted sash and 7" wide architraves at the sides and top and an 8½" cornice above, painted white. Wood frame screens are painted dark green. There is a 26" diameter round decorative window at Room 208B - Closet that is surrounded by approximately 7" of trim with a wider drip mold over the top half and a large keystone at the top.

Roof, Dormers and Chimneys: These elements are described following the description of each facade.



MATERIALS
ROOF - FLAT SEAM AND CEDAR SHINGLE
SIDING - CLAPBOARD
FOUNDATION - STUCCO OVER STONE/BRICK

FOUNDATION - BRICK ON STONE FOOTING

WEST ELEVATION

0 5 10 15 20
FEET 3/16" = 1'-0"



West Facade

Foundation: At the front of the house, brick piers on stone footings, painted white. At the rear of the house, stucco over brick, painted white. The west wall of the porte cochère has a brick foundation, painted white.

Walls: Clapboard siding at the front portion of the first story under the porch is 4½" exposed and ⅝" thick, painted white. Where the clapboard meets the porch ceiling, there is a ¾" quarter round trim. At the rear of the house below the clapboard above the stuccoed foundation there is a 7" wide continuous fascia with an angled drip mold at the top edge which projects 2½" from the face of the house and is 1¼" thick. At outside corners of the building there are flat pilasters with 5 flutes measuring 1'-4" by 1'-4". The two-story high pilaster adjacent to the door to Room 107 - Office is severely rotted at the base and has a crack running down the lower 15' feet of the center flute. There is a horizontal seam 3'-7" above the base indicating that the lower portion of the pilaster may have been replaced at some time.

On the second story, the pilasters visually support an entablature with a single fascia architrave, a continuous frieze and dentils in the cornice. The dentils are 1½" wide, 3" long, 1" thick and spaced 1¼" apart. The paint on the clapboard siding, pilasters and entablature is peeling.

Porch: The porch floor at the front portion of the house is 2¼" wide tongue-and-groove decking, 1" thick, painted gray. The decking runs perpendicular to the wall of the house and the porch extends 9'-11½" from the face of the house. The porch and porte cochère ceilings are 2¼" wide tongue-and-groove beaded board with a ½" bead, painted white, running parallel to the face of the house. The porch ceiling joint at the northwest corner is staggered. The porch ceiling is buckling outside of the window at the Billiard Room, approximately 2'-6" out from the face of the house. Below the porch ceiling and inside the porte cochère, the inside of the entablature is covered by 6 beaded boards running horizontally with a quarter round trim molding where the ceiling meets the entablature.

Porte Cochère: The brick foundation wall has 14 courses of brick exposed at the south end of the wall and 10 courses at the north end, painted white. The bricks are 3⅞" wide, 8⅛" long and 2¼" high with ⅜" mortar joints. This low wall is topped by a 1'-10¾" wide "floor" consisting of 2¼" wide tongue-and-groove decking, 1" thick, running east to west. The decking is in poor condition and very warped. Below the decking there is an 8¼" wide continuous fascia with 1" quarter round trim where the fascia meets the underside of the decking.

Columns C118 and C119, and C127 through C130: The porch and porte cochère roofs are supported by columns placed on pedestals. The columns and entablature are of the Ionic order. The two porch columns (C118 and C119) are 7'-10" high and have attic

bases, fluted shafts without entasis, carved wood capitals with volutes on the front and egg-and-dart ornamentation. The wood paneled pedestals are approximately 2'-2" high, including 6" base molding and a 4" cornice, and 1'-3" square. The four columns supporting the porte cochère (C127 through 130) are not original and have aluminum capitals cast from molds made from one of the carved wood capitals. These columns have 14 flutes, no entasis, and are 7'-10" high. The volute faces of the capitals of Columns C127 and C130 face north-south, and the volute faces of Columns C128 and C129 face east-west. In the earliest photographs, all four capitals faced east-west. The columns support a 2' high entablature around the porch and porte cochère with a single fascia architrave, a continuous frieze and dentils in the cornice. The columns, pedestals and entablature are painted white. (Specific information about each column is presented in the Appendix.)

Balustrades B116 and B117, B127 through B129, and B205 through B211: The balustrades are composed of wood top and bottom rails with wood balusters in between. The balusters have vertically symmetrical bellies and sleeves about a central bead. The upper surfaces of the top and bottom rails are either flat or have a very slight bevel of ⅛" to ¼". (Specific information about each balustrade and pedistal is presented in the Appendix .)

Steps: Inside the porte cochere, there are three wood steps, painted gray with white risers. The lowest step is 18'-5½" long and the upper two steps are 17'-7¾" long. The steps have 11¾" treads with 1" of nosing. The lowest step is 9" above the ground at the north end and 1'-10" above the ground at the south end, following the slope of the pavement. The upper two steps have 7" risers. The lowest step wraps around the top two steps at the north end, is rotted on the south end. Underneath the lowest riser is ¾" hardware cloth in a wood frame painted white compensates for the gap between the riser and the pavement.

Doors: There are two doors on the northwest portion of the porch leading to Room 107 - Office, and Room 106 - Vestibule. Both doors are 3' wide and 8'-6" high 7 panel doors with elliptical knobs and skeleton key holes on the escutcheons and a dead bolt on the Office door. There is a door bell to the right of the Office door and both doors have wood frame screen doors. There is a ceramic single bulb light fixture at the ceiling above the Office door. There are two 5 panel wood doors at the kitchen wing. The door to Room 115 - Store Room, is 3' wide and 7'-6½" high. The door to Room 114 - Kitchen, is 3' wide and 7'-4½" high. Both doors have spherical knobs. The Store Room door has a pad lock and the Kitchen door has a dead bolt. There is a door bell to the right of the Kitchen door and hinges for a screen door, but the screen door is missing.

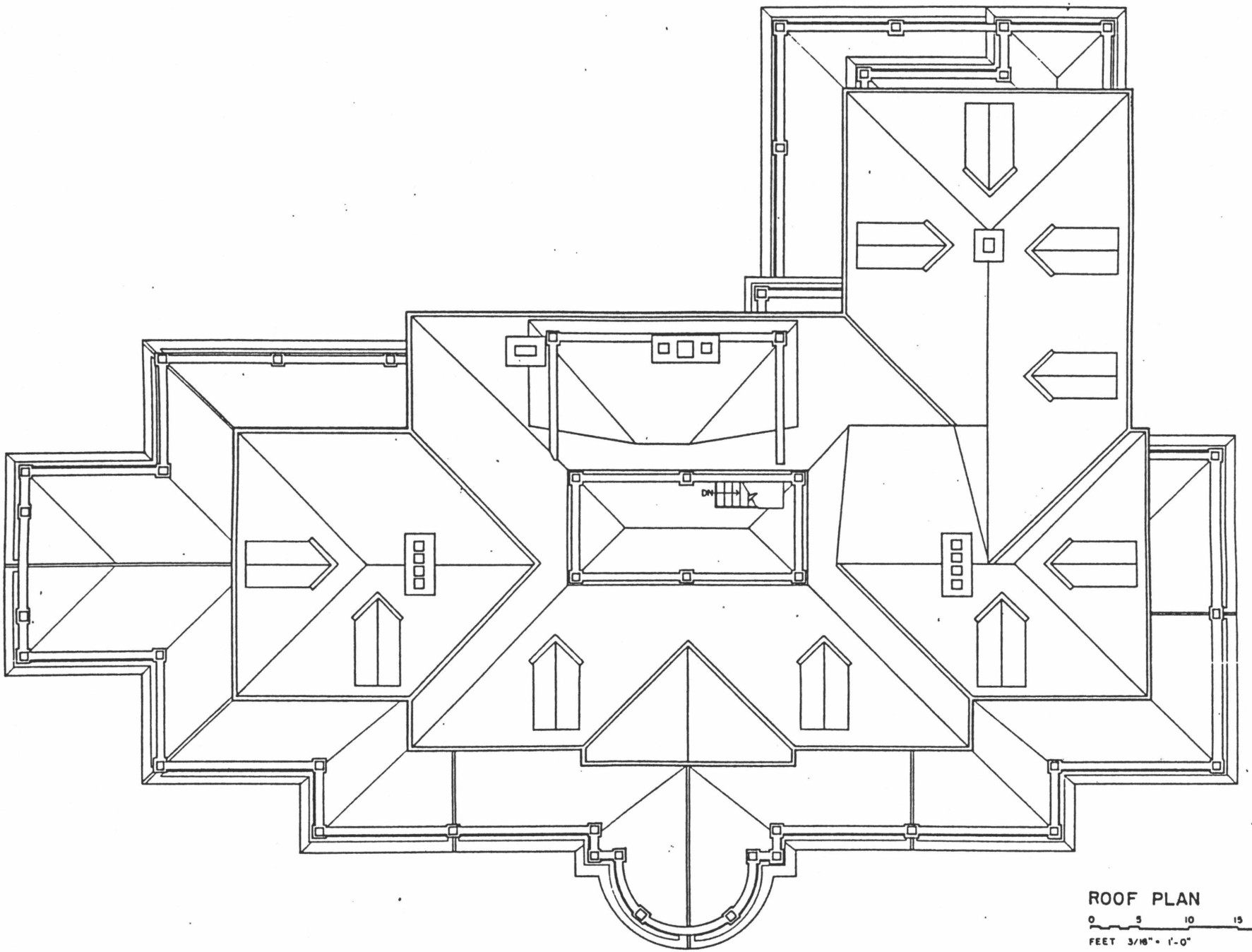
Windows: The portion of the sun porch between Columns C 117 and C 118 is 3 panels wide and 10'-3" overall. Each panel has a solid wood base and top panels and 6 glass panes measuring 1'-2¾" wide and 2'-5½" high with 1¼" mullions. The paint is peeling from these panels. The portion of the sun porch between Columns C115 and C116 is 2 panels wide and 7'-7½" overall. Each panel has a solid wood base and top panels and 6 glass panes measuring 1'-5½" wide and 2'-5½" high with 1¼" mullions.

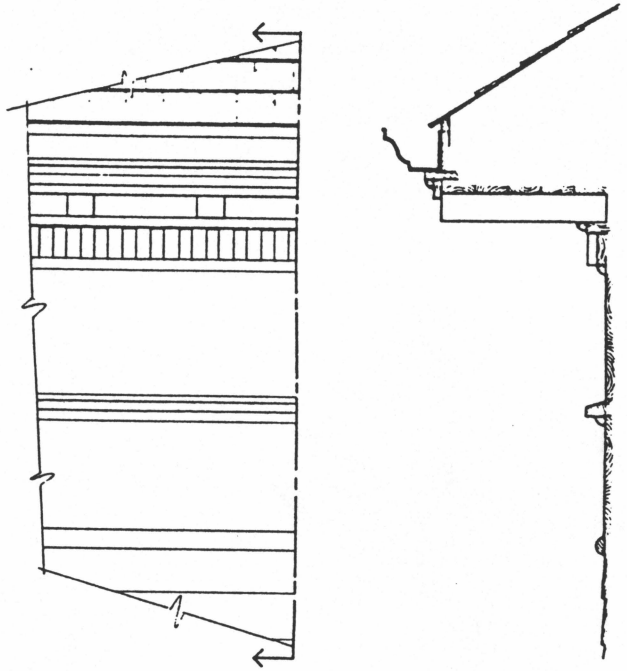
There are two 1/1 double hung windows at the kitchen wing that are 2'-6" wide and 5' high, both with full screens. There are 1/1 double hung twin windows at Room 105 - Billiard Room, that are 3'-4½" wide and 6'-7½" high. The north window has a half screen.

At the second story of the kitchen wing, there is one 9/1 double hung window at Room 204 - Bedroom, that is 2'-6¾" wide and 6'-4¼" high with severe peeling paint. There are 9/1 double hung twin windows at Room 202 - Stair Hall that are 2'-6½" wide and 6'-4¼" high. On the main portion of the house, at Room 213 - Bedroom, there are 9/1 double hung twin windows measuring 3'-4½" wide and 6'-4½" high. At Room 212 - Bedroom, there is a 9/1 double hung window that is 2'-10¼" wide and 6'-4½" high. All of the windows on the east facade have white painted sash and 7" wide architraves at the sides and top and an 8½" cornice above, painted white. None of

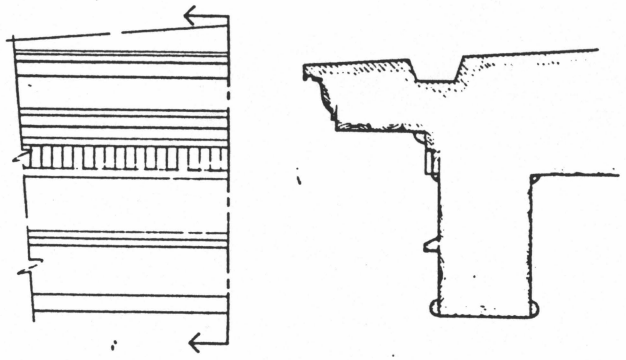
the windows have screens. The windows at Rooms 213 and 212 had shutters at one time, as evidenced by hinge recesses in the architraves.

Roof, Dormers and Chimneys: These elements are described following the description of each facade.

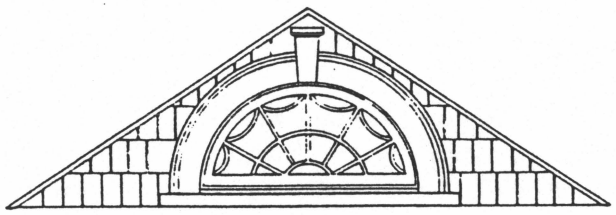

DN
ROOF PLAN
0 5 10 15 20
FEET 3/16" = 1'-0"



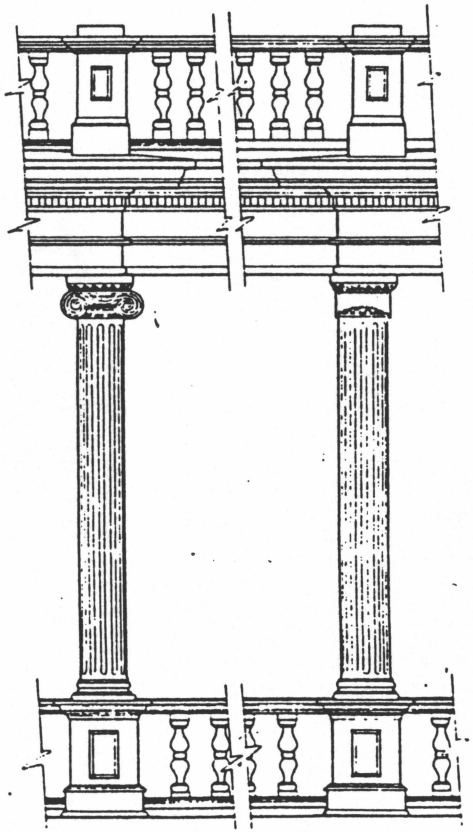
ROOF CORNICE - ELEVATION/SECTION



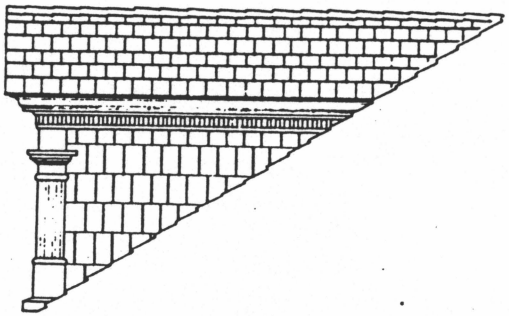
PORCH ROOF CORNICE - ELEVATION/SECTION

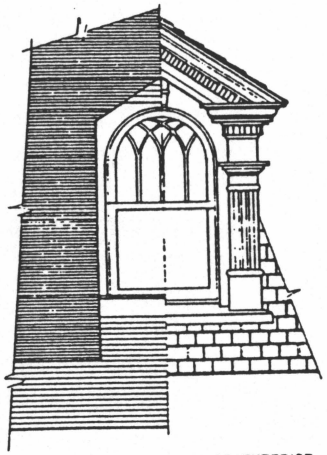


HALF ROUND WINDOW - THIRD FLOOR, SOUTH ELEVATION



PORCH COLUMNS AND BALUSTRADE
FIRST AND SECOND FLOORS





TYPICAL DORMER - INTERIOR/EXTERIOR
THIRD FLOOR

Roofs, Chimneys, Dormers and Widow's Walk

Roofs: The roof over the first story porch is a flat-seam metal roof which has been coated with a single membrane roof system. The expansion and contraction of the metal roof has caused the coating material to split.

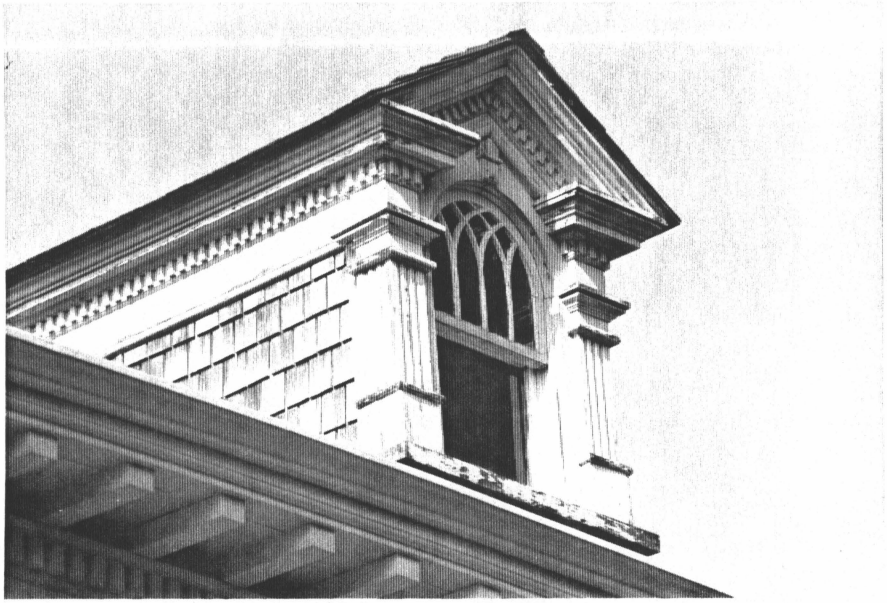
The hip roof that covers the second story has a deep eave which is visually supported by 4" x 3" x 12" block modillions. There is a gable over the central bay on the south facade which contains a semicircular window with a keystone in the trim. The window has arched mullions with scallops at the inside and straight mullions radiating out from a central point at the bottom of the window. The gable is trimmed with the same deep modillions at the eave. The entire second story roof is clad in cedar shingles.

Chimneys: There are five brick chimneys, four at the main portion of the house and one at the kitchen wing. Although the chimneys vary in overall height, they all have similar decorative bands and caps. Above the flashing, straight courses of brick rise up to a decorative 2 course band. Above the band there are 4 more straight courses with 4 courses graduating outward to a chimney cap that appears solid. The chimneys are painted white, however early photos show that the chimneys were not painted.

Dormers: There are ten attic dormers with double-hung windows. The dormers are quite elaborate in detail with decorative mullions in the top sash and a keystone above the window. Each window is flanked by two pilasters with simple bases and double-banded capitals. The entablature has a continuous frieze and dentils in the cornice. The dentils in the cornice below the gabled dormer roof are set at angles perpendicular to the architrave. The sash, trim and entablatures of the dormer faces are painted white. Most of the dormers have peeling paint and cracked joints. The dormer cheeks are clad in cedar shingles which are not painted. Early photos show that the dormer cheeks were painted white.

On the north facade, there is a larger dormer with two casement windows which is clad in cedar shingles. Each leaf of the casement window has five panes of glass.

Widow's Walk: The widow's walk is accessed from a stair in Room 301, the main hall of the attic. The balusters are significantly thicker than those of the first and second stories to create the optical illusion that they are the same thickness when viewed from a distance. Surrounded by balustrades on four sides, this roof landing provides spectacular views of the lakes and the orchards.



INTERIOR

The interior of the Manor House has remained remarkably unchanged since 1947. There have been no architectural changes and only minor cosmetic changes including the installation of commercial carpet on the first floor in early 1975 and the installation of wire mold and electrical devices.

The interior paint color was changed from Glenwood Gray to Golden White as mentioned in a letter dated April 6, 1983, from the Director of the Southern Highlands Handicraft Guild to the Blue Ridge Parkway Concessions Analyst. Prior to the interior being painted gray, several elements were removed and stored in the attic. These include the two dining room china cabinets' doors and the glass doors for the library bookshelves.



SECTION B-B

0 5 10 15 20

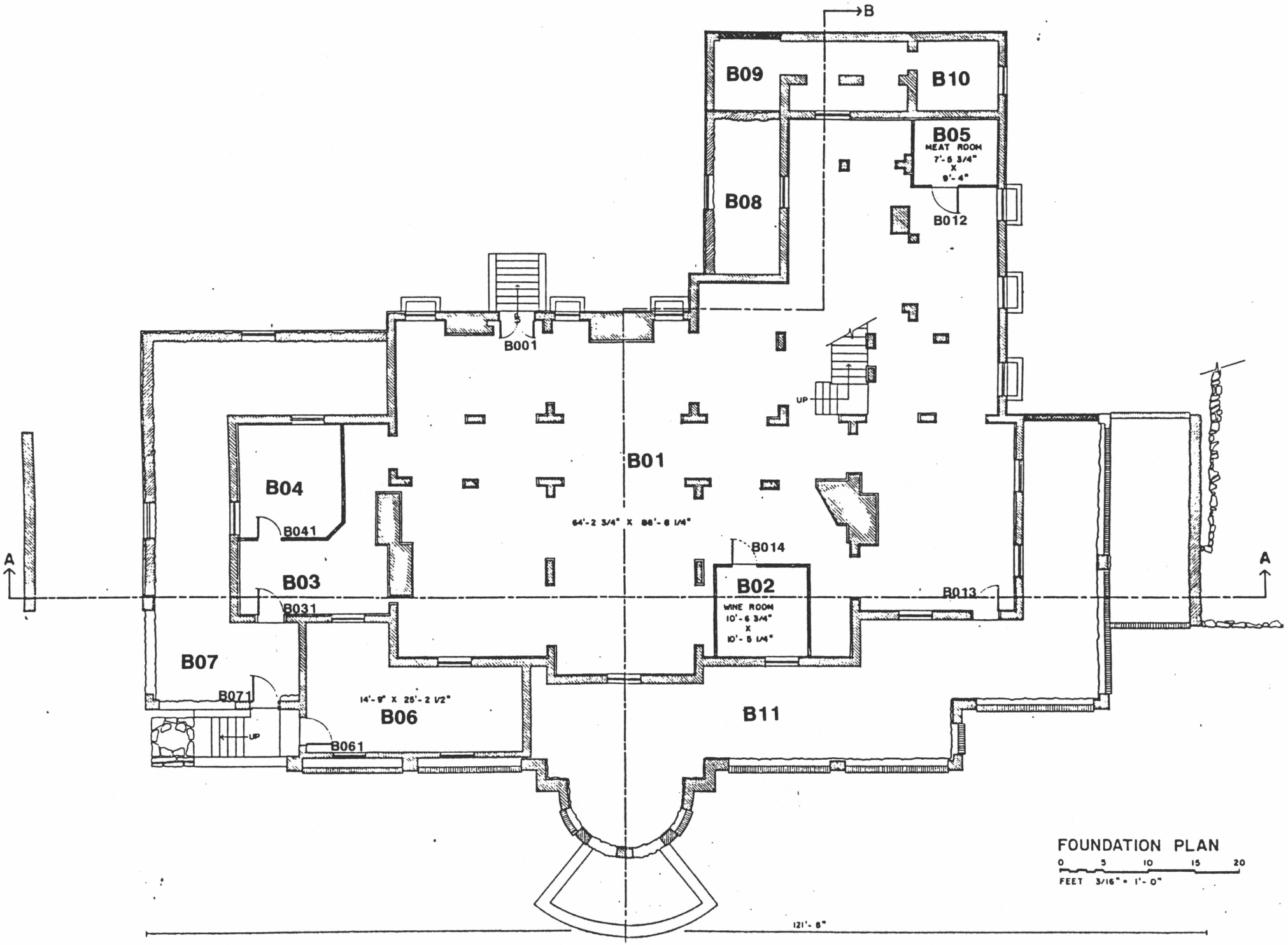
FEET 3/16" = 1'-0"



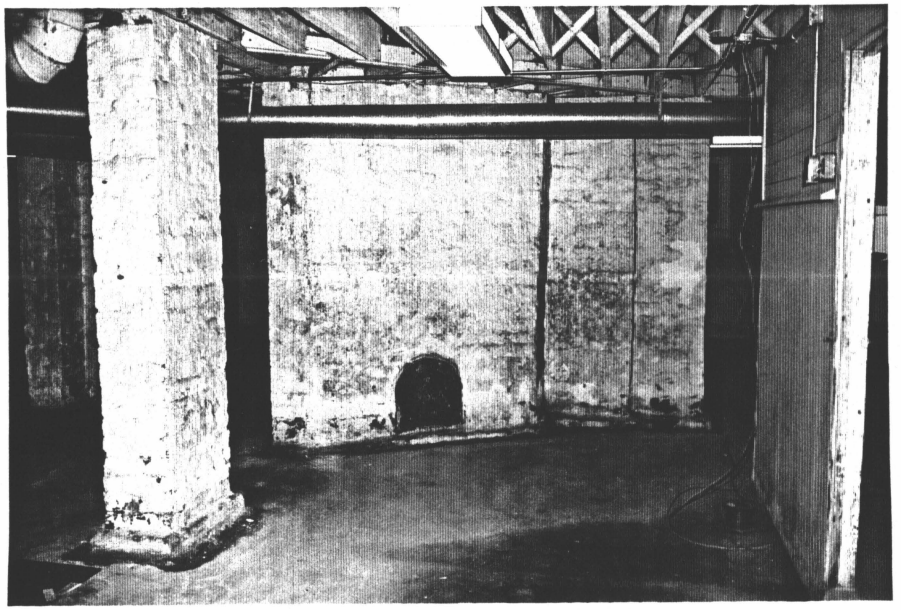
SECTION A-A

0 5 10 15 20

FEET 3/16"= 1'-0"


B
B09
B10
B05
MEAT ROOM
7'-6 3/4"
X
9'-4"
B08
B012
B001
UP
B01
64'-2 3/4" X 86'-6 1/4"
B04
B041
A
A
B014
B03
B02
WINE ROOM
10'-6 3/4"
X
10'-6 1/4"
B013
B031
B07
B071
14'-9" X 25'-2 1/2"
B06
B11
UP
B061
121'-8"
FOUNDATION PLAN
0 5 10 15 20
FEET 3/16" = 1'-0"

The basement is accessible through the kitchen and through a stair on the south facade.



ROOM B01

Floor: Poured concrete, unpainted. There are many cracks and paint and plaster stains.

Walls: Running bond brick, covered in plaster and painted white. The bricks are 7½" long x 3¼" wide x 4"deep. The mortar joints vary between ¼" and ½".

Ceiling: 2¼" x 11½" exposed joists, 1" on center with 11" - 18" planking above.

Doors: One original double and one original single door (HABS).No B011: 1⅜" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and brass keyhole escutcheon. Three 2¼" X 5½" brass hinges. No. B012: 1¾" board and batten door, painted white.

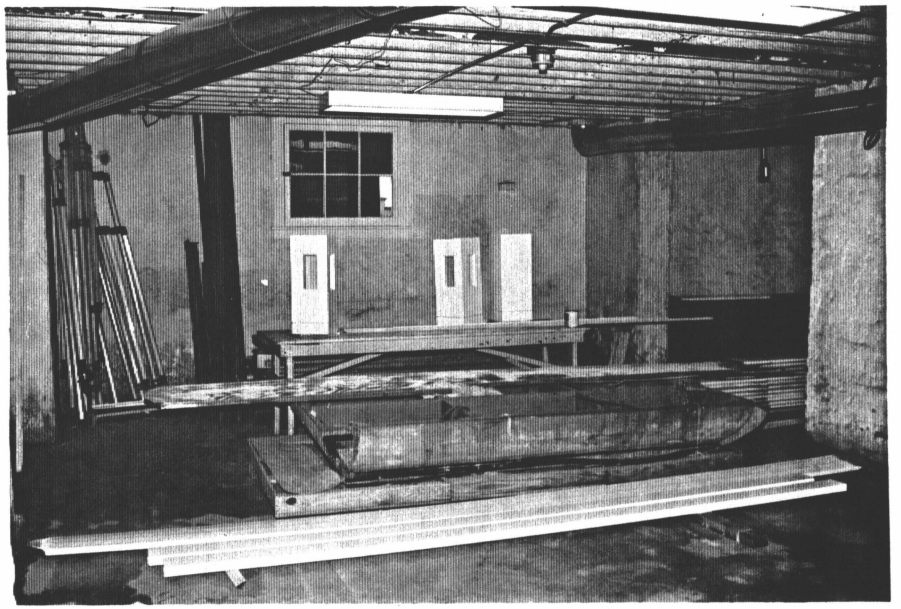
Windows: Sixteen original; single windows with six light sash, 4" side trim, 2½" top trim, 4⅛" apron and a turn latch.

Furnaces: There are five furnaces, each with iron ash pit doors.

Electrical Fixtures: Twenty one fluorescent light fixtures suspended from the ceiling.

Mechanical: 7' tall by 5' - 3" square HVAC system with round and square ducts running throughout basement.

Other Features: The stairs that lead to the basement from the kitchen are 4' - 2 ½" long and 1¼" thick. There are fifteen 7" risers and 11" treads. There is a 2" x 4" handrail, beveled on the top and painted white. There are sixteen original 7' - 7" x 3' half window screens painted green stored in this room.



ROOM B02

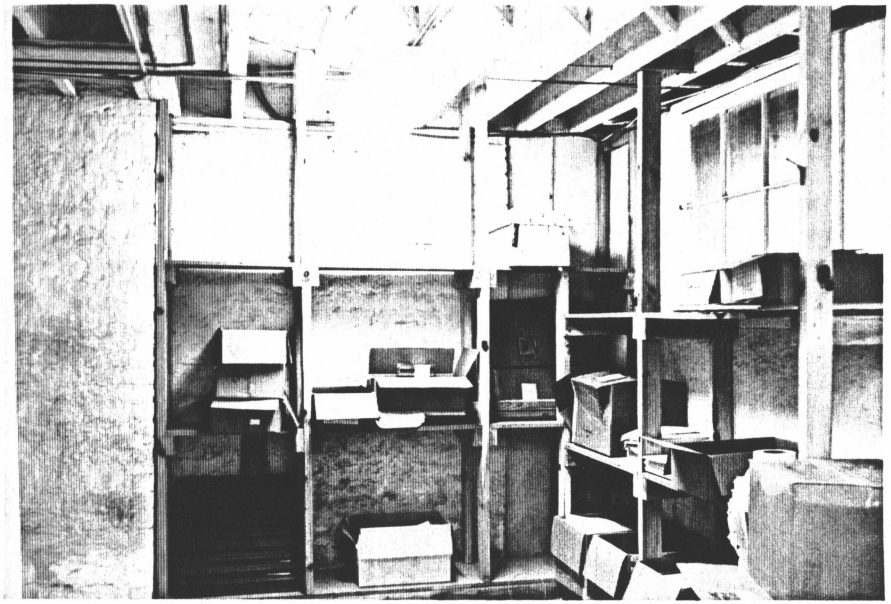
Floor: Plywood over wood joist, unpainted and cracking.

Walls: 1¾" x 3½" and 2" x 4" framing covered in 2¼" tongue-and-groove boards, painted white. The upper third of the north and east walls is covered in hardware cloth. The south and west walls have wine racks with nine shelves which are 3¼" thick with 6" in between. The bottle grooves are 5" on center.

Ceiling: plywood

Door: The opening on the north wall is 6'-6½" tall and 3' wide. The threshold is 6¼" off the concrete flooring of Room B01 and is a 4" wide wood member. There is a heavy bolt that runs from the wall to connect to a 1"x 1" eye latch at front left of the door.

Other Features: Heat detector on the ceiling. There are sixteen ½" screens and one screen door stored in this room.



ROOM B03

Floor: Poured concrete, unpainted.

Walls: Running bond brick, covered in plaster and painted white.

Ceiling: 2½" x 11½" exposed joists, 1" on center with 11" - 18" planking above.

Electrical Fixtures: Two fluorescent fixtures suspended from the ceiling.

Other Features: 2 x 4 frame shelves on south and east walls.



ROOM B04

Floor: Sheet vinyl over plywood over joists, green-tan color. There is a major hole running east - west about 16" inside the door which exposes the joists underneath that are severely rotting.

Baseboard: Simple 4" wood trim.

Walls: Blonde paneling over stud walls on east and west.

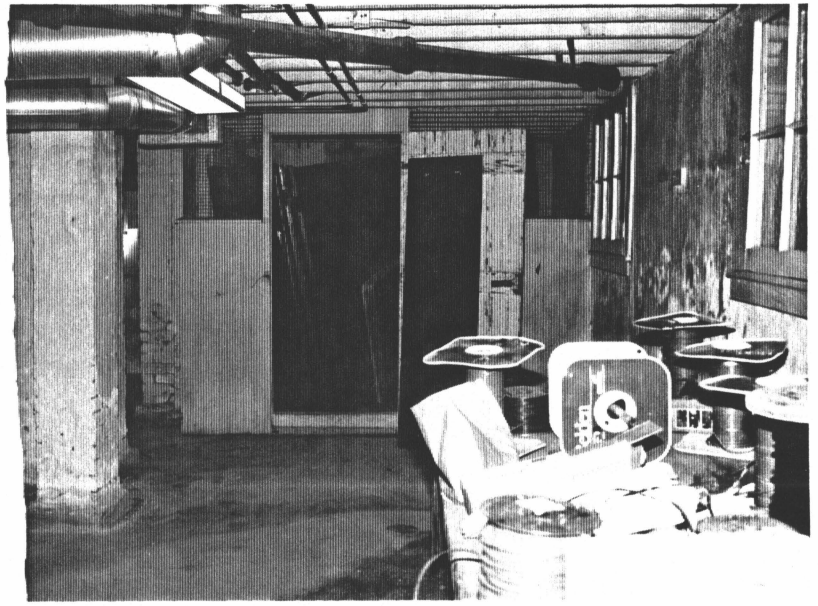
Cornice: 3" piece of trim at 45 degree angle between wall and ceiling.

Ceiling: Insulation board. *Door:* Hollow-core panel door with 2¼" architrave surround.

Electrical Fixtures: One fluorescent fixture on ceiling with switch on the south wall. Two outlets , one on south wall, one on north.

Mechanical Fixtures: 1'-4" x 1'-11" wall mounted heater on east wall.

Other Features: One phone jack and a heat detector.



ROOM B05

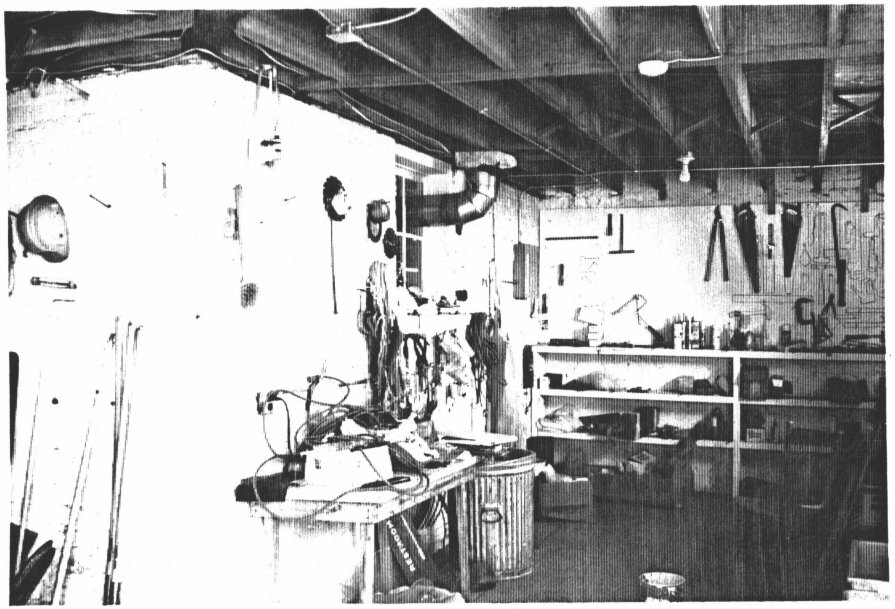
Floor: Concrete with 3'-1½" x 7" wood platform that run the length of the east wall.

Walls: 1¾" x 3½" and 2 x 4 framing lined in 2¼" tongue-and-groove boards, painted white. The upper third of the walls is covered in hardware cloth.

Ceiling: Joists 1' on center with four large meat hooks.

Doors: One original board and batten door with 2¼" tongue-and-groove boards nailed to three ¾" thick horizontal boards. There is a heavy bolt that runs from the wall to connect to a 1' x 1" eye latch on the door.

Other Features: The original shutters for the second story windows are stored in this room. They are diagonal 2¼" tongue-and-groove boards on one side with the square open panels on the other side, painted green.



ROOM B06 - NPS TOOL ROOM

Floor: Plywood over wood joists.

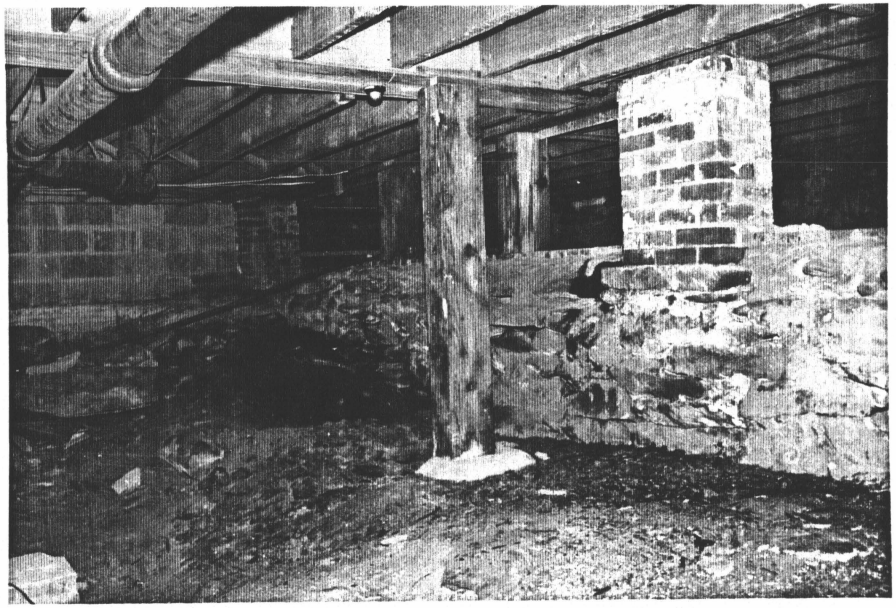
Walls: Running bond brick, painted white.

Ceiling: 2" x 10" exposed joists with porch flooring above.

Doors: One original single door with 7' single facia architrave surround and 7¾" cornice (HABS). No. B061: 1⅜" paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and brass keyhole escutcheon. Two 2¼" x 5½" brass hinges.

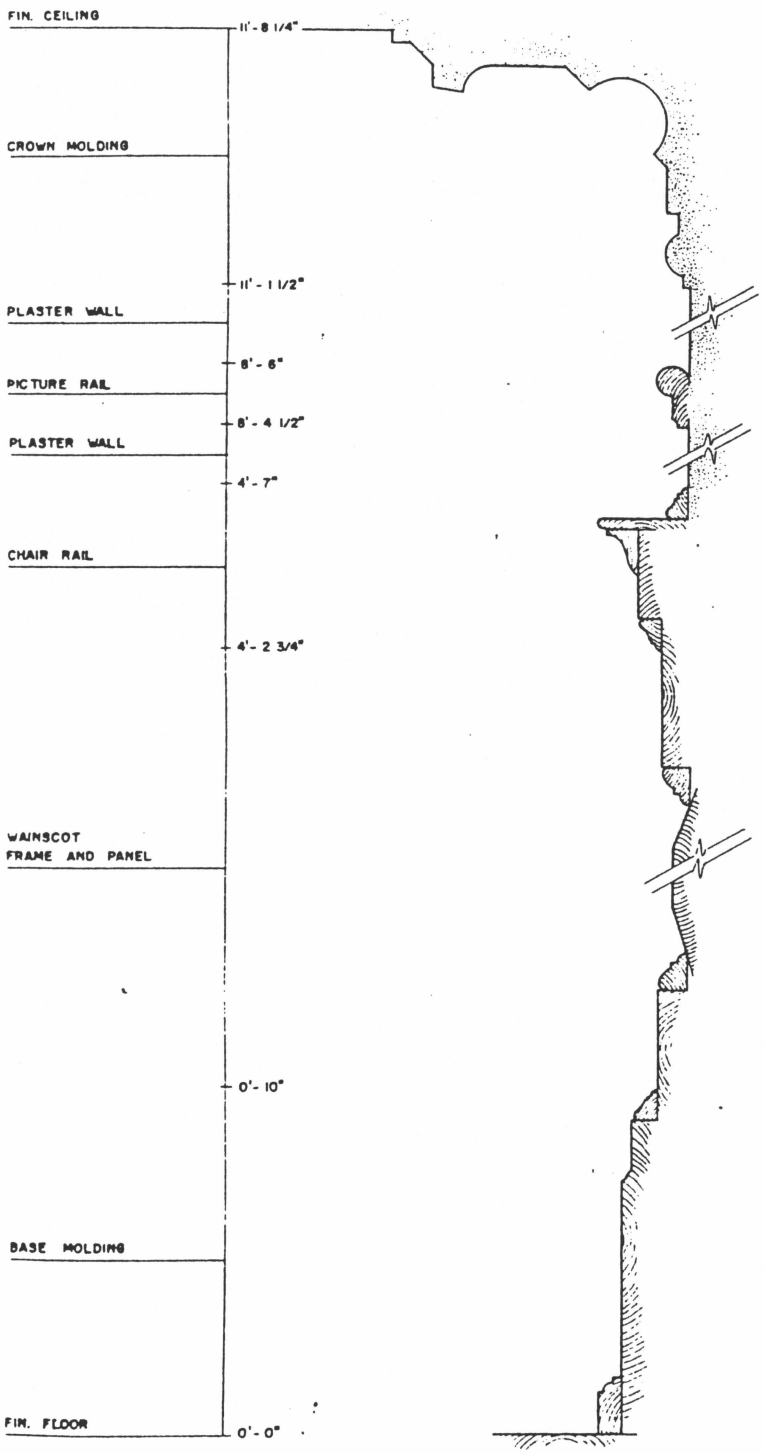
Electrical Fixtures: Two single bulb fixtures. Fuse box on the north wall. Two outlets on north wall and two on south.

Other Features: A PVC pipe runs through from floor to ceiling. There is a heat detector on the ceiling.

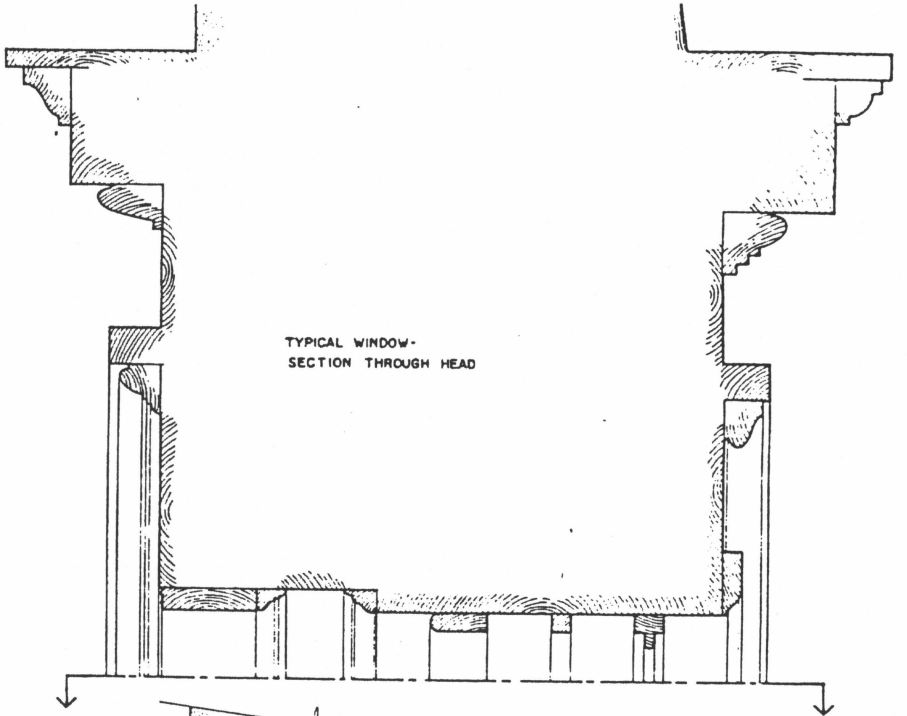


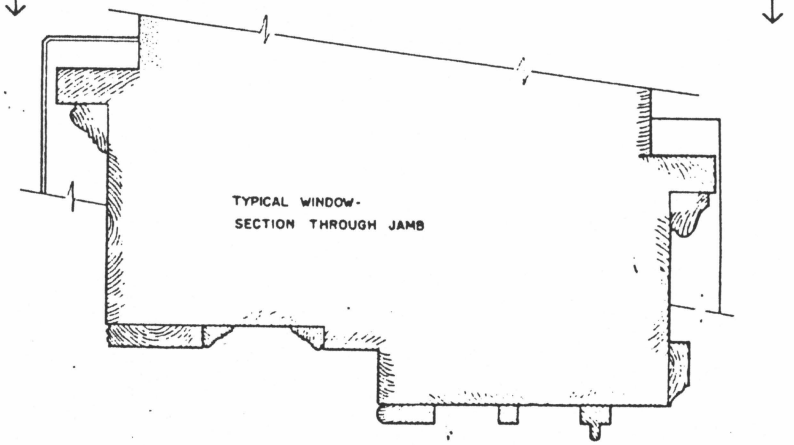
ROOMS B07-B11

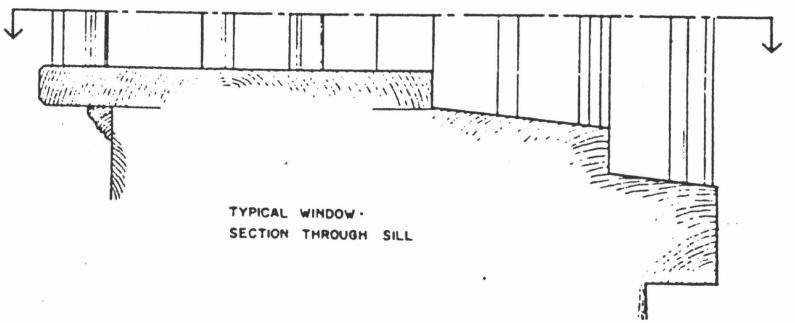
These rooms are foundation rooms with brick bearing walls and dirt floors. There are two 2'-4" x 3'-3' screens, six 3'-3' x 3'-3" screens and one screen door stored in Room B07.



INTERIOR WALL SECTION - FIRST FLOOR



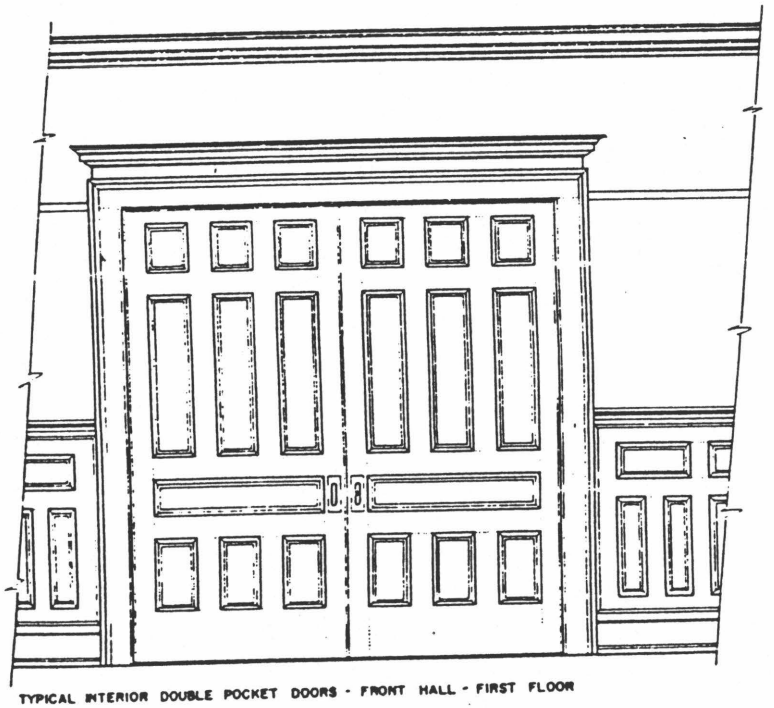




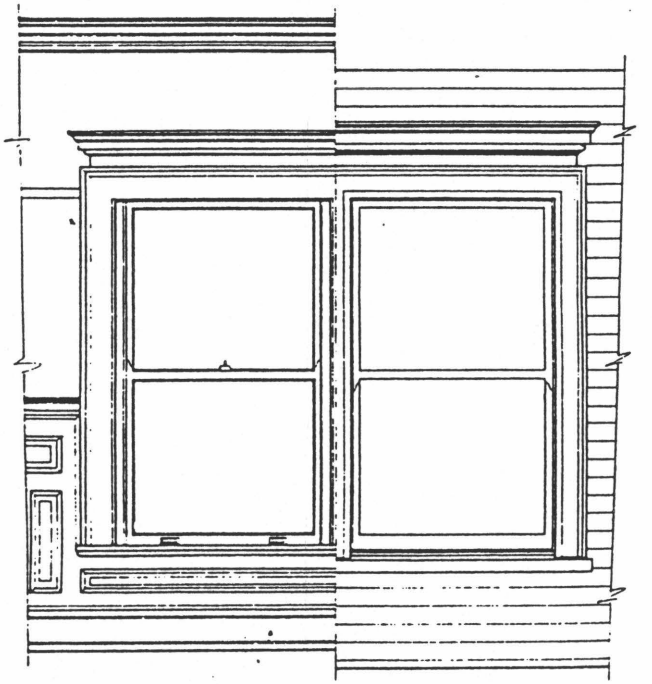
WALL SECTION
WINDOW SECTIONS
MOLDINGS

0 1 2 3 4 5 6

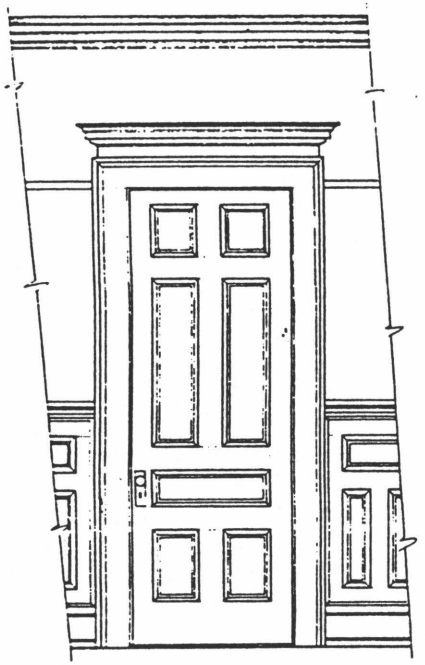
INCHES 1/2" = 1"



TYPICAL INTERIOR DOUBLE POCKET DOORS - FRONT HALL - FIRST FLOOR



TYPICAL DOUBLE WINDOW - INTERIOR/EXTERIOR - FIRST FLOOR

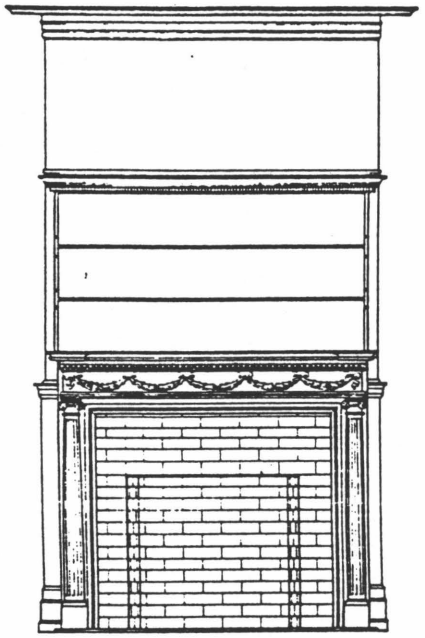


TYPICAL INTERIOR DOOR - FIRST FLOOR

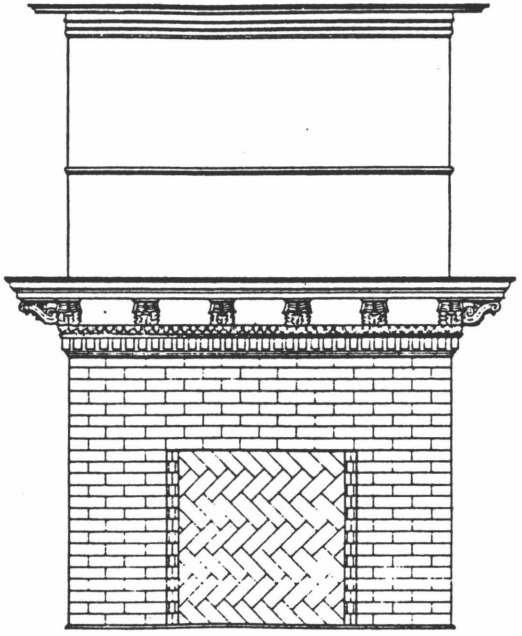
INTERIOR DETAILS

0 1 2 3 4 5

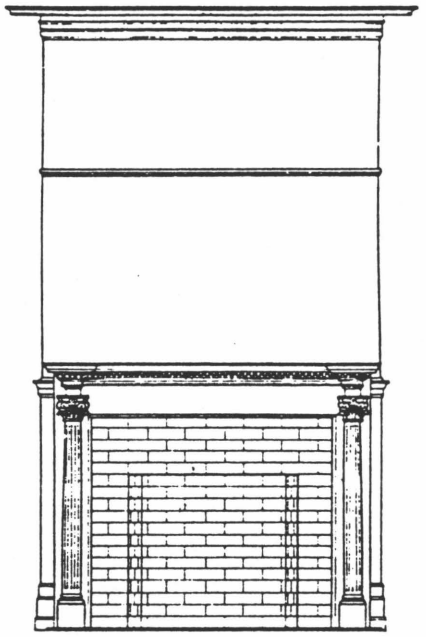
FEET 3/4" = 1'-0"



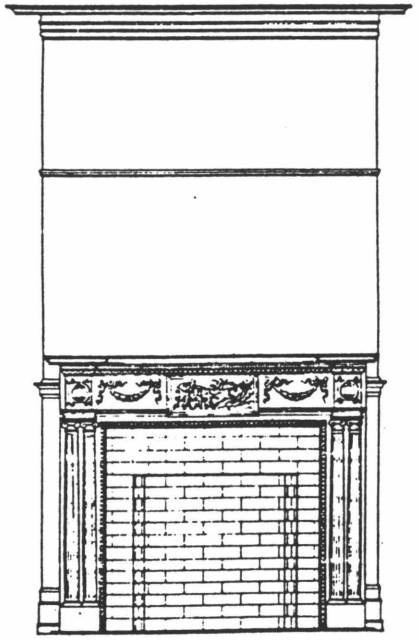
BILLIARDS ROOM FIREPLACE



FRONT HALL FIREPLACE



DINING ROOM FIREPLACE

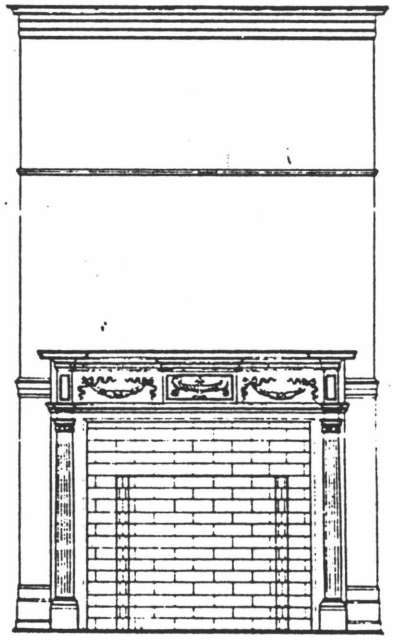


MUSIC ROOM FIREPLACE

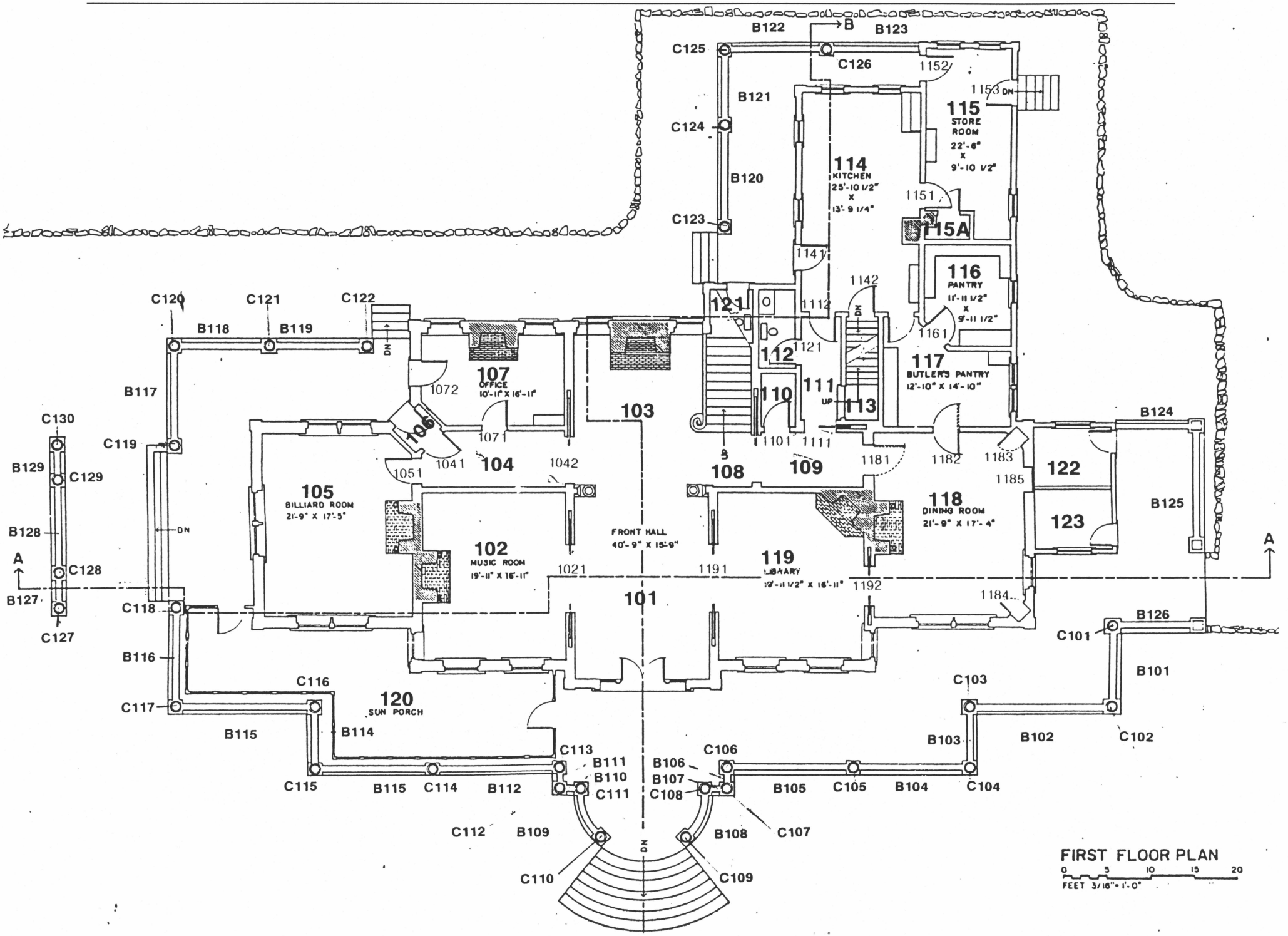
FIREPLACE DETAILS

0 1 2 3 4 5

FEET 3/4" = 1'-0"



LIBRARY FIREPLACE



FIRST FLOOR PLAN

0 5 10 15 20

FEET 3/16"=1'-0"



ROOM 101 FRONT HALL

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple with carpeting.

Walls: Canvas over plaster, painted white. On the east wall there is a crack above the left corner of the pocket door. On the south wall there are many cracks in the southeast corner and poor patching in the southwest corner. On the west wall there are cracks and some patching. The canvas is severely bowed above the picture mold on both sides of the panel door to the Music Room. On the columns between Room 101 and 103, there are cracks on the shafts and the east column has cracks through the capital on the south and north profile. There are cracks in the beam that run between the columns.

Baseboard: Original 10 ½" high wood baseboard, including 8" splash board, 2 ½" surbase and a 3" molding at base, painted white.

Wainscot: 4'-6" high paneled wainscot including top molding and 10 ½" baseboard (HABS). Wainscot on the east wall left of the pocket doors is damaged.

Picture Mold: Original 8'-3 ½" high wood rail painted white.

Cornice: 6¾" plaster crown molding, painted white (HABS).

Ceiling: Canvas over plaster, painted white.

Doors: There are two sets of original 2¼" thick paneled doors, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges. There are pairs of pocket doors, on the east and west walls.

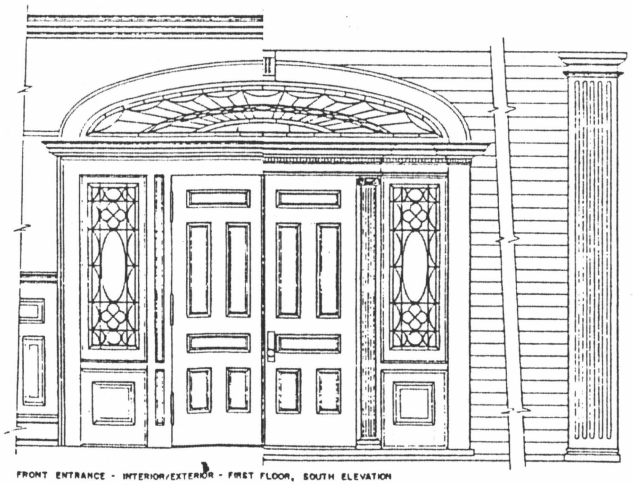
Doors No.1021 and 1191 are described in their respective rooms.

Windows: The front door has leaded glass sidelights and a decorative leaded glass transom window with radiating muntins.

Gas Fixtures: There is a four prong brass chandelier hanging from the ceiling.

Electrical Fixtures: There are four outlets on the east and west walls and a switch on the south wall left of the door.

Other Features: There are two phone jacks on the east wall and a buzzer on the west wall to the left of the pocket doors.



FRONT ENTRANCE - INTERIOR/EXTERIOR - FIRST FLOOR, SOUTH ELEVATION



ROOM 102 - MUSIC ROOM

Currently has cabinets, shelving and curved counter in room.

Floor: Original 2½" standard width tongue-and-groove maple boards running north-south; covered in grey carpet which is in good condition.

Walls: Canvas on plaster, painted white. Small paint cracks all over. Severe crack on south fireplace wall next to west wall.

Baseboard: Original 10½ high wood baseboard, including 8" splashboard, 2½" surbase, and 3" molding at base, painted white (HABS). Good condition.

Wainscot: 4'-6" high paneled wainscot including 3¾" top molding and 10½" baseboard, painted white (HABS). Good condition.

Picture Mold: Original 8'-7¼" high wood rail painted white (HABS). Section loose on east wall to left of pocket doors.

Cornice: 6¾" plaster crown molding, painted white (HABS). Some areas cracked and patched.

Ceiling: Canvas over plaster, painted white. Cracks running east-west are patched.

Doors: Door No. 1011 is described in detail in its respective room.

Windows: Three original single windows with 7" single facia architrave surround and 7¾" cornice (HABS). Each window has 1/1 double chain hung sash, sweep thumb latches on the meeting rails and a sash lift. All windows have the original hardware for holding the shades and the sheer curtain rods. South wall windows still have sheer curtain rods.

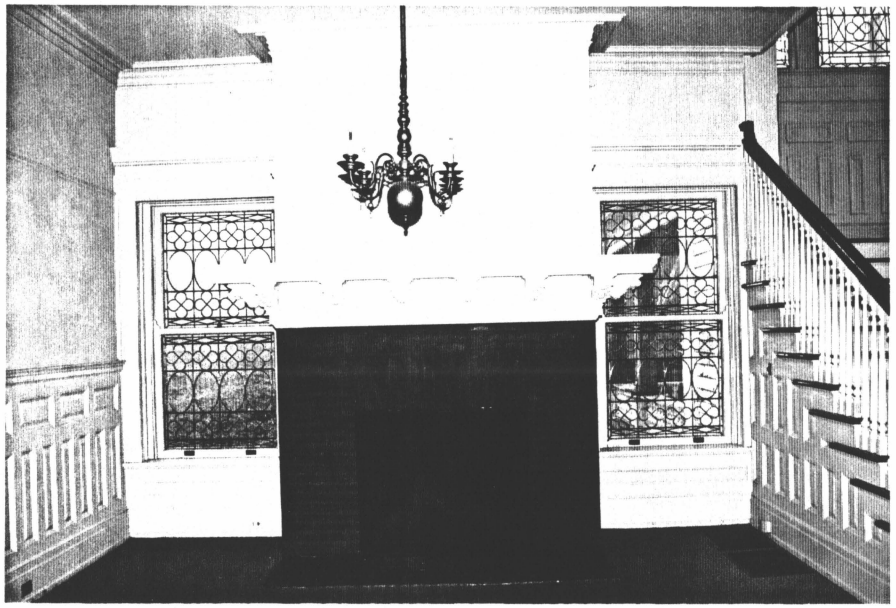
Fireplace: Fireplace is located against west wall. Carved wood mantle projects 12" off fireplace wall. Mantle is supported by double ionic columns and contains arabesques, egg-and-dart molding, and a central panel with a chariot scene (HABS). There is a 1'-4" deep by 5'-10" wide brick hearth with maple trim. The brick on the fireplace face has a red wash and the hearth brick is glazed.

Gas Fixtures: Original four prong brass chandelier suspended from center of ceiling.

Electrical Fixtures: Outlets on baseboard located center of south wall, west wall to left of fireplace, and two on east wall to left and right of pocket doors. Double spot light mounted over south wall pocket doors with wire molding running down left side of door to the light switch.

Mechanical: Original heat vent with rectangular ornate metal grill on north fireplace wall.

Other Features: Smoke detector located south of center in ceiling with wires running east-west to walls. Phone jack on south wall in southwest corner of room.



ROOM 103 MAIN HALL

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple, covered in grey carpeting.

Walls: Canvas over plaster, painted white. There are cracks in the north, south and west walls and the canvas is peeling severely on the south wall.

Baseboard: Original 10 ½" high wood baseboard, including 8" splash board, 2 ½" surbase and a 3" molding at base, painted white (HABS). Paint is peeling.

Wainscot: 4'-6" high paneled wainscot including top molding and 10 ½" baseboard (HABS). There are cracks in the west wall and the paint is severely peeling on the south wall's wainscot.

Picture Mold: Original 8'-3 ½" high wood rail painted white (HABS). Paint is chipped.

Cornice: 6¾" plaster crown molding, painted white. There are cracks in the west wall.

Ceiling: Canvas over plaster, painted white. There are many cracks. There is a finial on the ceiling edge near the stair hall.

Fireplace: Wood mantel projects 1'-3" off of fireplace wall. The fireplace is red brick with red wash and a 2'-3"deep hearth (HABS).

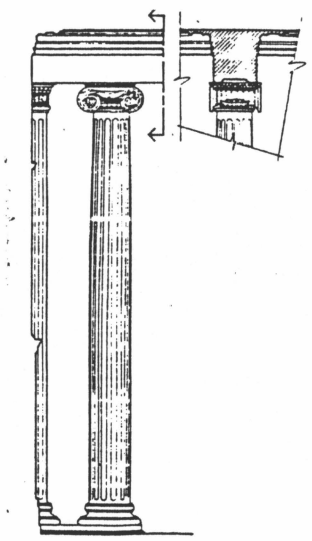
Windows: Two original leaded glass windows with 7" single fascia architrave surround and 7 ¾" cornice (HABS). Each window has 1/1 double chain hung sash, sweep thumb latches on the meeting rails and a sash lift. Each window has the original hardware for holding the shades and the sheer curtain rods.

Gas Fixtures: There is a four prong brass chandelier hanging from the ceiling.

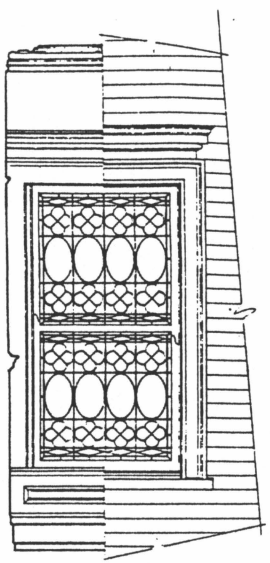
Electrical Fixtures: There is a single accent light over the west pocket doors. There are three outlets on the east, west and north walls.

Mechanical Fixtures: There are two modern return grills on the east wall against the main stair.

Other Features: Smoke detector on the ceiling and a fire alarm in the hall.



PILASTER AND COLUMN
FRONT HALL - FIRST FLOOR



LEADED WINDOW - INTERIOR/EXTERIOR -
FIRST FLOOR - NORTH ELEVATION



ROOM 104 - HALL

Floor: Original 2½" standard width tongue-and-groove maple boards running north-south; covered in grey carpet which is in good condition.

Walls: Canvas over plaster, painted white. South wall has many nail holes that are unpatched. There are several large cracks that have been patched, and some paint cracking in spots. East, west and northwest walls in good condition, with only small paint cracks (alligatoring). North wall has large cracks both sides of the door; there are three patches of exposed canvas to the right of the door and the canvas has pulled away from the wall at the right corner.

Baseboard: Original 10½" high wood baseboard, including 8" splashboard, 2½" surbase, and 3" molding at base, painted white(HABS). South wall has crack in wood 1'-8" from left corner. Paint peeling in areas throughout.

Wainscot: 4'-6" high paneled wainscot including 3¾" top molding and 10½" baseboard, painted white. Some paint cracks and peeling dispersed throughout.

Picture Mold: Original 8'-7¼" high wood rail, painted white(HABS) . Paint peeling down to wood in some spots.

Cornice: 6¾" plaster crown molding, painted white(HABS). Two cracks in north wall and south wall directly across from each other continue all the way across molding. Otherwise in good condition.

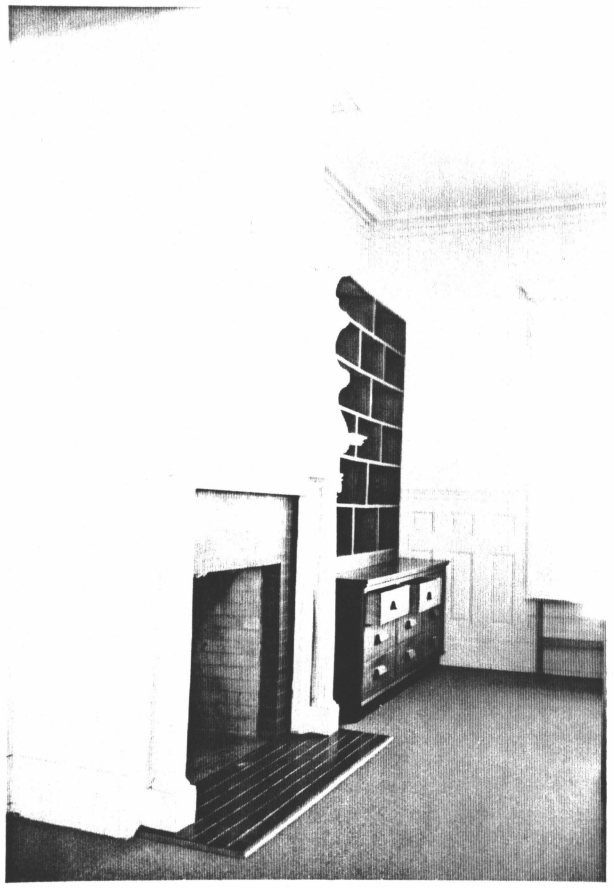
Ceiling: Canvas over plaster, painted white. Generally good condition, but possible mold spots at edge of cornice at south wall.

Doors: Two original doors with 7" single facia architrave surround and 7¾" cornice (HABS). No. 1041: missing. No. 1042: 2" thick single pocket door. Inoperable.

Gas Fixtures: One original brass spiral fixture on the south wall.

Electrical Fixtures: Outlet in baseboard centered on south wall. Single accent light above north wall door.

Mechanical Fixtures: Modern thermostat mounted on south wall to right of sconce. Two floor vents along south wall in left corner with modern 2'-1¾" by 1'-3¾" metal grills.



ROOM 105 - BILLIARD ROOM

This room is located at the west end of the house. It is rectangular in plan, except for the angled wall in the northeast corner. The room is entered off the hall (Room 104).

Floor: Original 2½" standard width tongue-and-groove maple boards running north-south; covered in grey carpet which is in good condition.

Walls: Canvas over plaster, painted white. The east wall has some paint cracking, with separation of canvas from plaster at north end. Some paint cracking on chimney walls. Canvas separating from plaster at corner of east and south walls. South wall has nail holes patched to left of window. There is a large paint crack above left side of window. There is water damage to right side of window with pieces of canvas missing. The west wall has paint cracking above window. The north wall and northeast diagonal walls are in good condition.

Baseboard: Original 10½" high wood baseboard, including 8" splashboard and 2½" surbase and 3" molding at base, all in good condition. There is a wood painted door-stop on northeast wall, 10½" from left side (HABS).

Wainscot: Wainscot is 4'-6" high paneled wainscot including the 10½" baseboard and 3¾" top trim, painted white(HABS). Paint on south wall of fireplace is peeling down to wood in around heat vents. Otherwise general condition is good.

Picture Mold: Original 8'-7¼" high wood rail, painted white (HABS). Generally in good condition. On north wall, there is a 1" piece of molding removed at left of window for wiring molding.

Cornice: 6¾" plaster crown molding, painted white. (HABS) On the east wall, there is a paint crack to the right of the doorway. The south wall has paint cracking and water damage throughout; the west wall has paint cracks that follow the cracks from the wall. The north wall has paint cracking and water damage throughout. The northeast wall is in good condition.

Ceiling: Canvas over plaster, painted white. There are several cracks running east-west at the northern end that have been repaired and painted over.

Doors: No. 1051: Door is missing. Door opening is 3'-0" by 8'-5½" with 7" single fascia architrave on right side and top left side is 5". There is a 7¾" cornice on top. There is a 6" wide maple threshold.

Windows: Three original double windows with 7" single facia architrave surround and 7¾" cornice (HABS). Each window has 1/1 double chain hung sash, sweep thumb latches at the meeting rails and a sash lift. The south and north windows have original sweep thumb latches, the west window has a modern sweep thumb latch. The south and west windows have the original curtain rods. Each window has the original hardware for holding the shades and the sheer curtain rods. The south and west windows have modern wood painted curtain rod brackets attached to the side architraves.

Fireplace: Carved wood mantle projects 1'-6" off fireplace wall. Mantle is supported by fluted ionic columns and contains carved swags and bows in the frieze (HABS). There is a 1'-5" deep by 5'-10" wide brick hearth with maple edge trim. The brick on the fireplace face has a red wash and the brick in the hearth is glazed. Painted wood shelving fixed above mantle is probably not original.

Gas Fixtures: West wall has a gas light connection to either side of the window, but fixtures are gone. There is a gas light connection in center of ceiling, but this fixture is also missing.

Electrical Fixtures: There are four outlets, all at baseboard level: one on the east wall to the right of fireplace, one centered on the south wall, one on the west wall to the left of the window, and one on the north wall to the left of the window. There are two accent lights centered above the north wall window.

Mechanical Fixtures: There is an original heat vent with rectangular ornate metal grill in the south chimney wall.

Other Features: There is a buzzer on the east wall mounted 3'-9" from the floor in the right side door trim. There is a heat sensor in the ceiling located next to the gas light connection, with exposed wires running north-south to the walls and down the walls to run into the wall cavities.



ROOM 106 - VESTIBULE

This small room was used as an entrance from the porte-cochère to the hall (Room 104) by family, friends, and business associates.

Floor: Original 2½" standard width tongue-and-groove maple boards running north-south; covered by grey carpet which is in good

condition.

Walls: Canvas over plaster, painted white. Northeast wall shows patched holes, probably from nails, with canvas peeling at left corner. Southeast and northwest walls in good condition. Southwest wall shows patched holes, probably from nails.

Baseboard: Original 10½" high wood, including 8" splashboard, 2½" surbase and 3" molding at base, painted white (HABS). All in generally good condition.

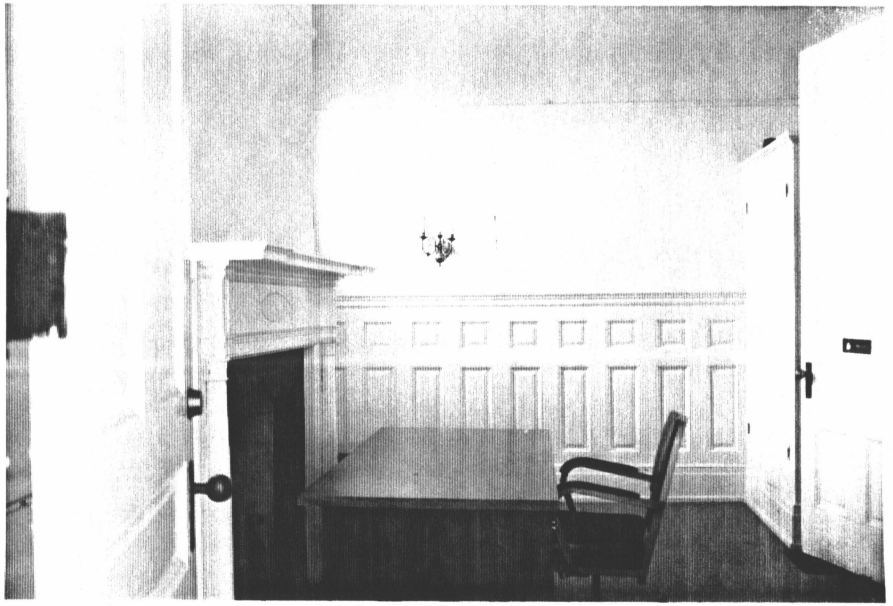
Wainscot: 4'-6" high paneled wainscot including 3¾" top molding and 10½" baseboard, painted white (HABS). Southwest wall shows patched holes from nails above left side of horizontal piece, some cracking in wood, nail in wood above right side vertical panel. Northeast wall shows some paint cracking, but is otherwise in good condition.

Ceiling: Canvas over plaster, painted white. Area above northwest door "wrinkling" slightly, possibly from water damage.

Doors: One original single door with 7" architrave surround and 7¾" cornice (HABS). No. 1061: 1⅜" thick paneled door, painted white (HABS). Hardware: Brass doorknobs, a brass rose and a brass keyhole escutcheon.

Door No. 1041 is described in its respective room.

Electrical Fixtures: Light bulb on electric cord hanging from bent nail in ceiling, heat censor in middle of ceiling wires running northeast and southeast to walls.



ROOM 107 - OFFICE

This room was originally used as the Manor's office, for taking care of business transactions such as keeping ledgers, meeting with farm foremen, and paying employees. This room was accessed from the hall (104) or from the wrap-around porch on the north side.

Floor: Original 2½" standard width tongue-and-groove maple boards running north-south; covered in gray carpet which is in good condition.

Walls: Canvas over plaster, painted white. South wall has some paint cracks at left corner and at right of door. Southwest has a large crack below picture mold. West wall has paint cracking to right of door. There is a large crack on the north chimney wall between mantle and picture mold, a large crack on the west chimney wall,

and cracking paint on the east chimney wall. A board ¾" x 10" stretching from wainscot to cornice is nailed into the right corner of the east chimney wall. The east wall has three large cracks below the picture mold and one large crack above the picture mold.

Baseboard: Original 10½" high wood baseboard including 8" splashboard, 2½" surbase and 3" molding at base, painted white (HABS). Some peeling paint on all walls. Wood painted doorstop on south wall 2'-9" to left of door.

Wainscot: 4'-6" high paneled wainscot including 3¾" top molding and 10½" baseboard (HABS). The north wall is in good condition. The east wall shows some separation between panels and moldings. The south wall also shows some separation and there is a nail in the last square panel to the right. The southwest wall is in good condition. The west wall shows some separation.

Picture Mold: Original 8'-7¼" high wood rail painted white (HABS). The mold has been cut 3½" to the right of the south wall door to allow wire mold to pass, and again at east side of chimney wall where a 10" board has been nailed.

Cornice: 6¾" plaster crown molding, painted white (HABS). The south wall is in good condition; the southwest wall is in good condition; the west wall has holes at the ceiling that have been crudely patched; the north wall is missing a 4'-0" section from the left corner of the north chimney wall, which in turn has been painted over. The east wall shows three large cracks.

Ceiling: Canvas over plaster, painted white, showing signs of water damage.

Doors: Two original single doors with 7" architrave surround and 7¾" cornice (HABS). No. 1071 and 1072: 1¾" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon.

Windows: Two original single windows with 7" single facia architrave surround and 7¾" cornice (HABS). Each window has 1/1 double chain hung sash, sweep thumb latches on the meeting rails and a sash lift.

Fireplace: Carved wood mantle projects 11½" off fireplace wall. Engaged plaster colonette columns support entablature which steps back in center and displays an oval shaped medallion with radiating lines and reverse curve ribbons in the center of the frieze. There is a 1'-3" deep by 5'-9¼" wide brick hearth with maple edge trim. The brick on the fireplace face has a red wash, and the brick on the hearth is glazed.

Gas Fixtures: One original brass spiral sconce on the east wall. Gas fixture in ceiling in northwest corner is missing.

Electrical Fixtures: Heat sensor in ceiling with wires running east-west to walls. The switch for porch light is to left of door with conduit running up wall beside door trim. Outlets are located on baseboards throughout: on the north wall under the left window; in the center of the east wall; on the south wall to the right of the door with exposed conduit running up the wall next to the door trim. There are two phone jacks under the left window on the north wall at baseboard with wire running up to window and outside through the hole in the window trim.

Mechanical Fixtures: Original 1'-2" by 1'-2" floor vent with circular ornate metal grill, to left of Door 1071 against south wall.

Other Features: Fire extinguisher mounted at the top of wainscot to right of Door 1071. Original built-in cabinet in southeast corner measures 3'-9" along south wall and 1-3½" along east wall. Right door has hole for key lock and left door has top and bottom bolts inside.



ROOM 108 MAIN STAIR (HABS)

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple. The varnish is worn away.

Walls: Canvas over plaster, painted white. Fluted pilasters with modified ionic capitals flank the landing.

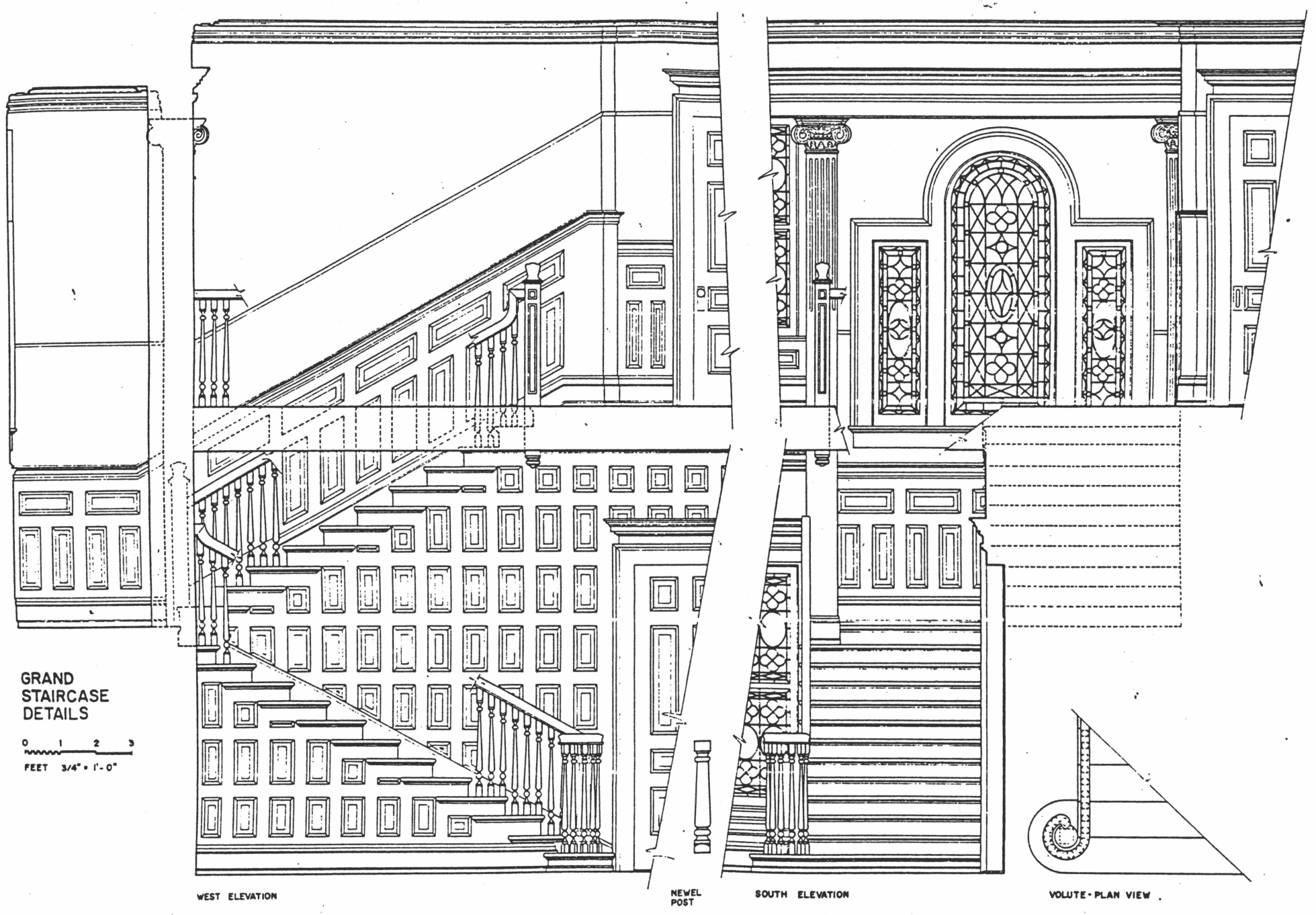
Wainscot: 4'-6" high paneled wainscot including top molding and 10 ½" baseboard (HABS). There is minimal paint damage.

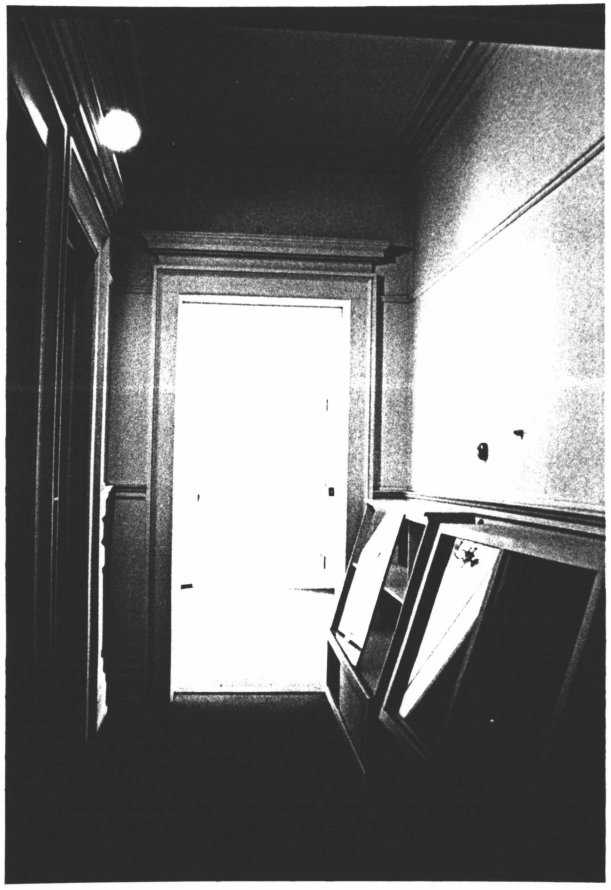
Cornice: 6¾" plaster crown molding, painted white.

Stairs: There are 24 maple risers with a heavy varnish. There are large crack on the second and tenth treads from the bottom.

Windows: There is an original 8'-3" wide leaded glass Palladian window on the north wall 7" with single fascia architrave surround and 7 ¾" cornice (HABS).

Gas Fixtures: There is an outlet on the west wall, but the fixture is missing.


GRAND
STAIRCASE
DETAILS
0 1 2 3
FEET 3/4" = 1'-0"
WEST ELEVATION
NEWEL
POST
SOUTH ELEVATION
VOLUTE - PLAN VIEW



ROOM 109 - HALL

Floor: Original 2½" standard width tongue-and-groove maple boards running north-south; covered in grey carpet which is in good condition.

Walls: Canvas over plaster painted white. South wall has three large paint cracks below picture mold and one large paint crack from wainscot to cornice. North wall has one large paint crack below picture mold in right corner. East and west walls are in good condition.

Baseboard: Original 10½" high wood baseboard, including 8" splashboard, 2½" surbase and 3" molding at base, painted white (HABS). North and south walls have spots of paint peeling down to wood.

Wainscot: 4'-6" high paneled wainscot, including 3¾" top molding and 10½" baseboard, painted white (HABS). The south wall on the left side has a 2" area of paint chipped down to wood at first horizontal panel.

Picture Mold: Original 8'-7¼" high wood rail painted white (HABS). North wall has 3 patches of paint chipped to wood. East and west walls in good condition. South wall has crack approximately 3'-0" from right corner.

Cornice: 6¾" plaster crown molding, painted white (HABS). South wall has 3 large cracks. West wall has portion missing in left corner. North wall has crack in left corner. East wall in good condition.

Ceiling: Canvas over plaster, painted white. Large paint crack running north-south to west of center.

Doors: One original single door with 7" single facia architrave surround and 7¾" cornice(HABS). No. 1091: 2" thick single pocket door. Inoperable. 6" maple threshold.

Gas fixtures: Gas connection for wall sconce centered on south wall, no fixture.

Electrical Fixtures: Outlet centered on south wall at baseboard above horizontal panel. Modern double spotlight above right door on north wall.

Mechanical Fixtures: Modern thermostat centered on south wall above wainscot.

Other Features: Buzzer centered on south wall wainscot.



ROOM 110 - CLOSET

Floor: Original 2½" standard width tongue-and-groove maple boards running north-south; covered in grey carpet which is in good condition.

Walls: Canvas over plaster, painted grey. West wall has 5 large cracks that have been repaired. East wall has 1 large crack that has been repaired. South wall is in good condition.

Baseboard: Original 10½ high wood baseboard, including 8" splashboard, 2½" surbase, and 3" molding at base, painted grey (HABS). Paint peeling to wood in spots

Wainscot: 4'-6" high paneled wainscot, including 3¾" top molding and 10½" baseboard, painted grey (HABS). Paint chipped to wood in some spots. East wall has wire coat hooks over horizontal panels.

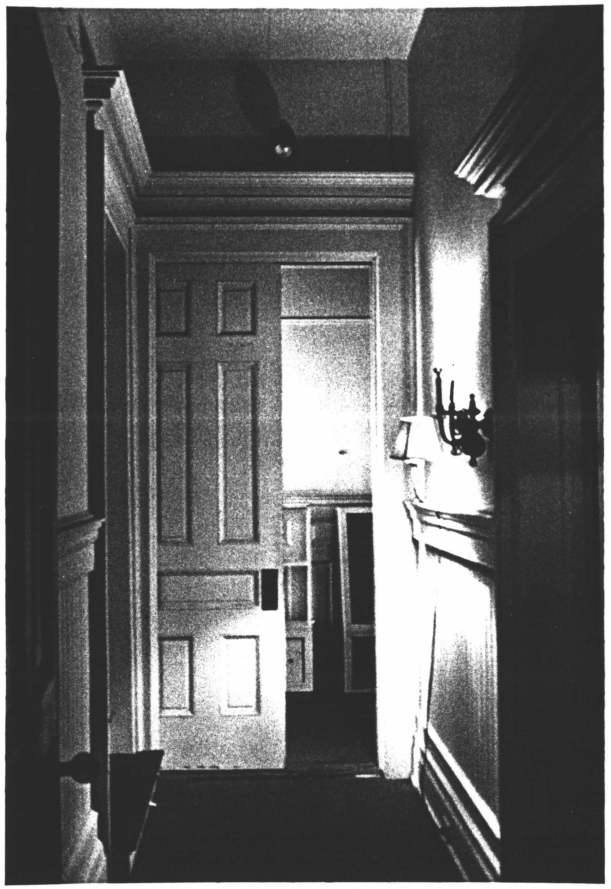
Ceiling: Canvas over plaster, painted grey, sloped to follow stairs above. Good condition.

Doors: One original single door with 7" architrave surround and 7¾" cornice (HABS). No. 1101: 1¾" paneled door, painted gray (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole in escutcheon. 6" maple threshold. Left side trim inside room has been cut to fit against corner. Door has paint chipped to wood in some spots.

Window: Single fixed casement window in north wall with 7" single fascia architrave at sides and top. Glass is translucent.

Electrical Fixtures: Single light bulb affixed to west wall with conduit running horizontally and vertically along wall. Bundle of electrical wires coming through ceiling run down southeast corner through floor.

Other Features: West wall has new wood shelf with metal brackets attached at right side. East and west walls have block molding mounted approximately 4" above wainscot on which various wire and cast metal coat hangers are attached. New large wooded shelving structure, free standing but immobile, uses about half of room, floor to ceiling, and obstructs view to window.



ROOM 111 - HALL

Floor: Original 2½" standard width tongue-and-groove maple boards running north-south; covered in grey carpet which is in good condition.

Walls: Canvas on plaster, painted white. West wall has 5 large paint cracks, with the canvas peeling up from wall at right of door. East wall has 4 large paint cracks. North and south walls in good condition.

Baseboard: Original 1'-1¾" baseboard, including 8" splashboard, 5¾" surbase and 3" molding at base, painted white. East and west walls have paint peeling to wood in spots. East wall has door stop 2'-9" from left margin.

Wainscot: 4'-7½" high tongue-and-groove wainscot including 7¾" top mold and 10½" baseboard, painted white. Good condition.

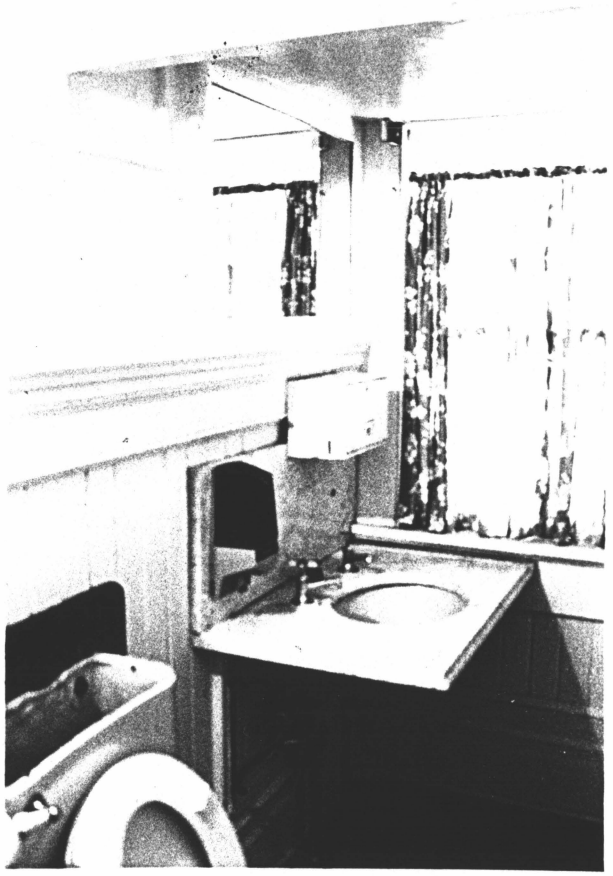
Ceiling: Canvas over plaster, painted white. There are two large cracks running east to west.

Doors: Two original single doors with 7" architrave surround and 7¾" cornice (HABS). No. 1111: 2" thick single pocket door, painted white. No. 1112: 1¾" thick single paneled door, painted white (HABS). Hardware: Spherical brass doorknobs, a brass rose and brass keyhole escutcheon. Left side of trim is narrower due to framed opening at stair which abuts this door frame in the southeast corner. 6" maple threshold.

Gas Fixtures: One original brass spiral sconce on the west wall.

Electrical Fixtures: Modern accent light on south wall above pocket door. Outlet in west wall baseboard centered between left corner and door. Modern sconce with shade directly in line with outlet and mounted above wainscot. Heat censor in ceiling just south of center with wires running north and south to walls. Conduit running down south wall right corner from ceiling to door cornice.

Other Features: East wall doorway and step to landing for stairs to second floor. Doorway is framed in same manner as typical interior doors.



ROOM 112 - BATHROOM

Floor: Original 2½" standard width tongue-and-groove maple boards running north-south, partially covered by two grey carpet scraps. Some wood rotting around toilet base. Severe rotting under sink. 2'-0" by 2'-0" marble base under toilet in fair condition.

Walls: Canvas on plaster, painted white. West wall has some paint cracks and canvas is peeling from wall above edge of wainscot. East wall has some cracks that are poorly patched.

Ceiling: Canvas over plaster, painted white. Ceiling is sloped following stair framing above and flat at north end under stair landing (approximately 6'-6" high). Sloped portion has two large paint cracks, one running east-west, one running north-south.

Doors: One original single door with 7" architrave surround and 7¾" cornice (HABS). No. 1121: 1¾" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. 6" maple threshold.

Windows: One original single window on the north wall with 7" architrave surround and 7¾" cornice (HABS). Each window has 1/1 double chain hung sash, sweep thumb latch on the meeting rail and a sash lift. Window in south wall is single fixed casement window 2'-2" wide by 2'-9" high. Glass is translucent with frosted pattern on surface to create opacity between bathroom and closet on other side. 7" single fascia architrave on sides and top with 2" molding running between edge of window and inner edge of architrave. Architrave runs right to ceiling with no cornice.

Gas Fixtures: One original brass spiral sconce.

Electrical Fixtures: New single light bulb mounted next to gas sconce with conduit running to south wall and through to closet and up to ceiling, across and down east wall to switch located left of door.

Plumbing Fixtures: Toilet located against center of west wall (Leader brand). Original porcelain handle, new seat and lid. Porcelain sink with marble surround and backsplash wall mounted and supported by wood bracing against wall and decorative metal bracket under left side. Separate hot and cold faucets with drain stop. Exposed metal piping runs into the wall and the ground. Sink is 2'-6¼" above floor. Marble surround is 3'-0" wide, 1'-10" deep, and 1¼" thick. Backsplash is 1'-2" tall and ⅞" thick.

Other Features: Modern soap dispenser mounted on wall to left of backsplash and above backsplash, respectively. Framed mirror 3'-0" wide by 1'-11¾" high wall-mounted between wainscot and ceiling. Metal towel rod mounted on wainscot top trim on east wall.



ROOM 113 - STAIRWELL

Originally a servant stair.

Floor: Wood floor landing at doorway with tongue-and-groove running north-south, and 19 risers. Treads are 11" with 1¼" nosing, 3'-8¼" wide and stained. Risers are 7½" high, painted white.

Walls: Canvas on plaster, painted white. East, west, and south walls have numerous small paint cracks.

Baseboard: Original 10½ high wood baseboard painted white, including 8" splashboard, 2½" surbase, and 3" molding at base (HABS). Baseboard runs along stairs as stringer.

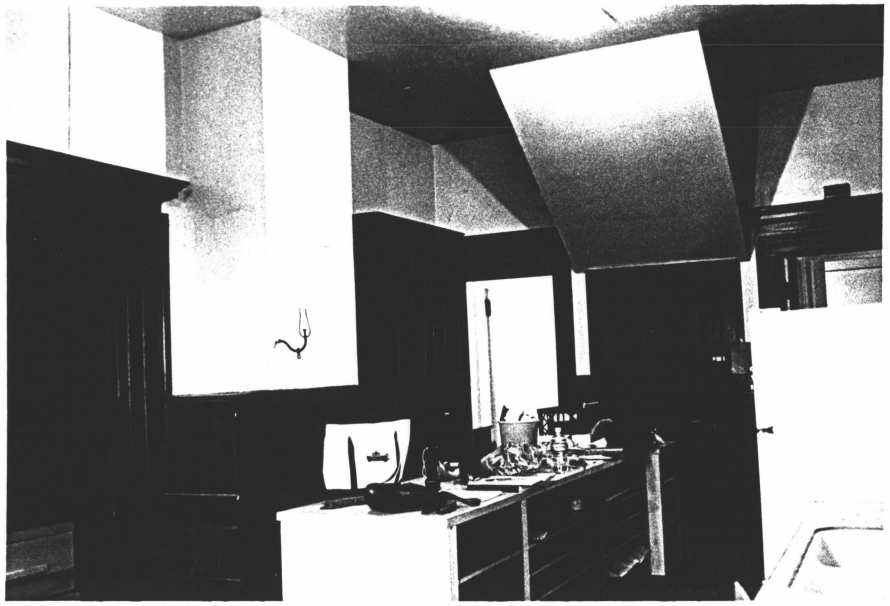
Wainscot: 4'-7½" high tongue -and-groove wainscot including 7¾" top mold, 1" trim and 10½" baseboard, painted white.

Ceiling: Canvas over plaster, painted white. Flat over landing, then sloped to follow stair line. Some paint cracks.

Doorway: Door opening is 3'-6" by 7'-4½" from landing with 7" single fascia architrave at sides and top and a 7¾" cornice on top. Some spots of peeling paint.

Gas Fixtures: One original brass spiral sconce.

Other Features: Fire hose coiled on wall mount on south wall. Fire extinguisher on east wall at landing level. Wood sign "For Fire Only" mounted on wainscot on east wall. ¾" diameter metal pipe handrail 3⅝" from wall to centerline of pipe, 2'-9" from stair nosing to top of rail. There are 3 brackets, one at each end and one centered.



ROOM 114 - KITCHEN

Floor: Beige, medium green and dark grey mottled linoleum tile.

Walls: Canvas on plaster, painted a putty color. Paint cracking dispersed throughout.

Baseboard: Original 1'-1¾" baseboard, including 8" splash board, 5¾" surbase and 3" molding at base, stained.

Wainscot: 4'-7½" high tongue-and-groove wainscot including 7¾" top mold, 1" trim and 10½' baseboard, stained.

Ceiling: Canvas over plaster, painted white. Some cracking.

Doors: Two original single doors with 7" architrave surround and 7¾" cornice (HABS). Nos. 1141 and 1142: 1¾" paneled door (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and brass keyhole escutcheon. *Doors No. 1112, 1171, and 1151 are described in their respective rooms.*

Windows: Four original single windows with 7" architrave surround and 7¾" cornice (HABS). Each window has 1/1 double chain hung sash, and a sash lift. The north wall windows have original sweep thumb latches on the meeting rails and the west wall window have modern latches.

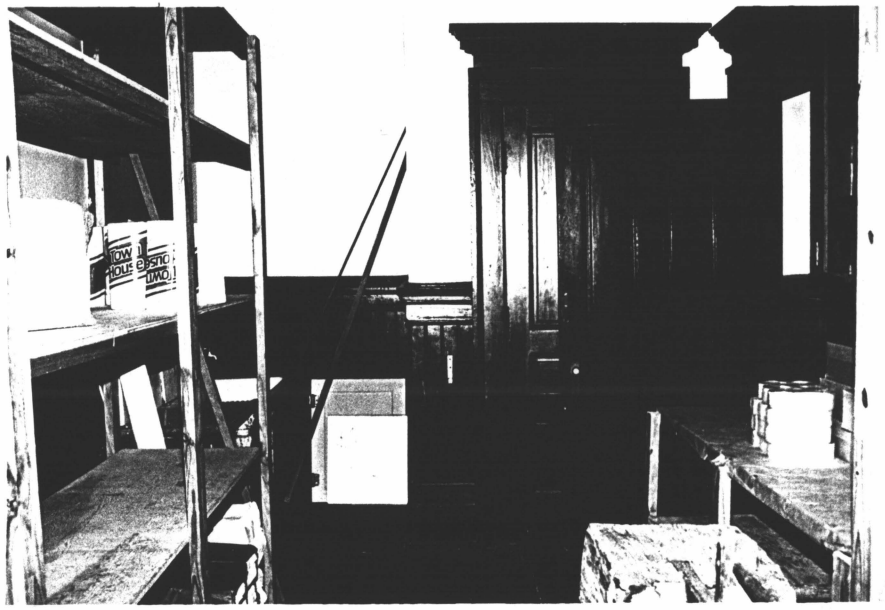
Gas Fixtures: One original brass spiral sconce on the east wall.

Electrical Fixtures: Three outlets at baseboard on east, west, and north walls. Three prong outlet on floor at north wall.

Mechanical Fixtures: Heat vent in northwest corner of floor.

Plumbing: Modern double-basin porcelain sink in counter above wood cabinet against west wall. Counter is 5'-8¾" wide by 2'-0" deep by 3'-2" high. Cabinet has two small drawers over a small door on left and 3 doors the right. Sink has a single faucet and a sprayer. Backsplash is 9½" high.

Other Features: Smoke detector in ceiling. Wood cabinet on wainscot 1'-2" off floor on the east wall. Unit is 3'-4½" tall, 2'-½" wide, and 1'-¼" deep. Possibly newer shelving for holding files. Modern built-in cabinet and counter in center of room. Two original built-in cabinets on east wall. Left cabinet is 8'-6¾" tall by 4'-6½" wide. Bottom cabinet is 1'-4¼" deep with two doors each having two vertical panels and two drawers above. Counter above drawers is 3'-6¾" above floor, 2'-0" deep, and top portion has three fixed shelves 1'-0" deep. Right cabinet is 8'-9" tall and 4'-0" wide. Lower cabinet is 1'-4¾" deep and has two doors with two vertical panels each and two drawers above. Counters is 3'-11¾" above floor. Upper cabinet is 1'-½" deep with two divided light glass doors and a fixed shelf inside. Left door top right pane is cracked. Both original cabinets are stained.



ROOM 115 - STOREROOM

Floor: Original 2½" standard tongue-and-groove maple board running north-south, covered by canvas-backed dark brown linoleum. Linoleum is cracking, peeling and has nicks from furniture being moved.

Walls: Canvas on plaster, painted white. All four walls have severe cracking. East wall has one large canvas seam exposed. Canvas is peeling away from west wall near both doors.

Baseboard: Original 10½" high wood baseboard painted white, including 8" splashboard, 2½" sub-base, and 3" molding at base (HABS), stained dark. All four walls have scuff marks. East wall has varnish chipped in many places.

Wainscot: 4'-7½" high tongue-and-groove wainscot including 7¾" top mold, 1" trim and 10½" baseboard, stained dark. South wall top mold is dented and chipped. East wall has some scrapes and dents, with one circular stain at right corner. Varnish has worn off at top of tongue-and-groove at left side. North wall varnish wearing away, some scrapes and dents.

Ceiling: Canvas over plaster, painted white. Some cracking and patches.

Doors: Four original single doors with 7" single facia architrave and 7¾" cornice (HABS). Nos, 1151, 1152, 1153 and 1154: 1¾" paneled doors (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and brass keyhole escutcheon.

Windows: Three original single windows with 7" single facia architrave and 7¾" cornice (HABS). Each window has 1/1 double chain hung sash, sweep thumb latches at the meeting rails and a sash lift.

Electrical Fixtures: Light switch on west wall near left door with conduit running up wall, across ceiling to single bulb, then towards south wall and halfway down south wall.

Plumbing Fixtures: Sink on east wall in right corner is 1'-6" by 3'-2" porcelain basin with 1'-6" by 2'-5" counter to left. Backsplash is porcelain and extends across sink and counter, with hot and cold faucets over sink with soap dish in between. Hot and cold faucets have differing handles. Sink is supported in front by two decorative iron legs, painted white but badly chipping.

Other Features: Smoke detector in ceiling. Built-in stained wood casing on west wall, to right of door to kitchen, mounted above wainscot with three shelves and two screened doors. The left door has a small brass knob. There are modern free-standing wood shelving units on the west wall and the east wall.



ROOM 116 - PANTRY

Floor: Original inlaid linoleum in pattern of 1" black squares set in 2¼" checkerboard of rust and taupe. Pattern set parallel to door, diagonal to wall. Some ripped portions repaired with tape.

Walls: Canvas on plaster, painted creme with greenish cast. West wall has access panel for waste stack from room above, now covered by 10½" wide pine board from wainscot to ceiling. Some minor cracking dispersed on all walls. South wall has damaged plaster to left of door (right of wall sconce).

Baseboard: Original 1'-1¾" baseboard, including 8" splashboard, 5¾" surbase and 3" molding at base, stained.

Wainscot: 4'-7½" high tongue-and-groove wainscot including 7¾" top mold, 1" trim and baseboard, stained.

Ceiling: Part plaster, part sheetrock (replaced plaster damaged from leaks from upstairs bathroom), painted grey. Poor condition.

Doors: One original single door with 7" single facia architrave and 7¾" cornice (HABS) No. 1161: 1¾" thick paneled single door (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon.

Window: One original single window on the east wall with 7" single facia architrave and 7¾" cornice (HABS). The window has 1/1 double chain hung sash, sweep thumb latch on the meeting rail and a sash lift.

Gas Fixtures: One original brass sconce.

Electrical Fixtures: Light bulb in center of ceiling with conduit running to south wall and down to light switch to left of door, below wall sconce.

Mechanical Fixtures: Original heat vent in floor, covered, but evidence of existence visible from basement.

Other Features: Built-in pine shelves, stained, on all four walls. South wall shelves: 5'10" wide, upper section 11½" deep and 3'-9¾" high with two 1" thick intermediate shelves and one 1" thick vertical intermediate support. Lower section under 22" deep counter is open down to floor with only one 1" thick vertical intermediate for upper section. West wall shelving: 5'-2" wide, upper section is 11½" deep and 4'-2½" high with three 1" thick intermediate shelves and one 1" thick vertical intermediate support. Lower section under 22" deep counter is open down to floor with only one 1" thick vertical intermediate support for upper section. North wall is similar to west wall but has two intermediate vertical supports at both sections. East wall has similar shelves to left of window, but they are only 32" wide and have no intermediate vertical supports.



ROOM 117 - BUTLER'S PANTRY

The Butler's Pantry was used for transferring food from cooking pans to good serving china, which was stored in the china cabinet on the west wall.

Floor: 2" white hexagonal tiles with a border of 3"x3" square tiles.

Walls: Canvas on plaster, painted white. Cracking and peeling in many places.

Baseboard: Original 10½ high wood baseboard painted white, including 8" splashboard, 2½" sub-base, and 3" molding at base (HABS).

Wainscot: 4'-6¾" high paneled wainscot including 3¾" top molding and 10½" baseboard (HABS). Windows extend over wainscot to eliminate top trim and horizontal panels, leaving just vertical panels.

Ceiling: Canvas over plaster, painted white. Good condition.

Doors: One original single door with 7" single facia architrave and 7¾" cornice (HABS). No. 1171: Spherical brass doorknobs on both sides, a brass rose and brass keyhole escutcheon. *Door Nos. 1161 and 1182 are described in their respective rooms.*

Windows: One original single window on the east wall with 7" single facia architrave and 7¾" cornice (HABS). The window has 1/1 double chain hung sash, sweep thumb latch and a sash lift.

Gas Fixtures: Two original brass sconces on north and south walls.

Electrical Fixtures: Two outlets at baseboards, one in south wall, one in north wall. Single light bulb in ceiling.

Mechanical Fixtures: Original heat vent with circular ornate metal grill located in floor in front of west wall cabinets.

Plumbing Fixtures: One west wall, porcelain sink in marble counter. Counter is 5'-11½" long, 2'-4" deep, 1¾" thick, 2'-7" off floor with 7" front face panel. Counter has ogee edge and is grooved on left side with sink in right side measuring 2'-7" by 1'-6", approximately 7" deep. Decorative curved silver tone leg supports at front right corner. Sink is supported by two metal legs behind marble counter face panel. Marble backsplash is 5'-11½" wide, 1'-8" tall, ⅞" thick, rests on the counter, and supports hot and cold faucets with porcelain handles and a decorative soap dish. Side back

splash at left is 2'-3⅛" wide, 1'-8" tall, and ⅞" thick, and is screwed into wood cabinet.

Drinking fountain on south wall right of swinging door has 1'-4" by 1'-4" marble with ogee edge, ⅞" thick, and supports two decorative metal cup holders. Tall curved faucet has single handle. Counter is 2'-7¾" above floor and is supported by two decorative metal brackets.

Other Features: Phone jack on north wall at wainscot. Heat censor on ceiling. Original built-in cabinet on east wall left of sink is 4'-5" including 1" bullnose cap and baseboard to match wall. Cabinet is 17" wide and 2'-7¾" deep. Door is 1¼" wide by 3'-3½" tall with one horizontal panel over one vertical panel and a closer. There is one shelf inside, with north and east walls being continuation of wall wainscot. Interior is unpainted. Original built-in cabinets on west wall with 9'-8½" overall height, with 3'-4" as height of base cabinets. Base cabinets are 1'-8¼" deep and top cabinets are 1'-1" deep. Base cabinets, left to right, have 2 panel doors at bays 1 and 3 with brass latches and 3 drawers with pulls on bays 2 & 4. Top cabinet has 4 divided light glass doors measuring 2'-½" wide by 4'-9¾" high with original brass latches. Doors 2 & 3 each have a cracked glass pane. There are four fixed shelves in each cabinet.



ROOM 118 - DINING ROOM

Floor: Original 2½" standard width tongue-and-groove maple boards running north-south; covered in grey carpet which is in good condition.

Walls: Canvas on plaster, painted white. Hairline crack in paint; canvas pulling off west wall at corner fireplace.

Baseboard: Original 10½" high wood baseboard painted white, including 8" splashboard, 2½" sub-base, and 3" molding at base (HABS). Some paint peeling at bottom trim.

Wainscot: 4'-6" high paneled wainscot including 3¾" top trim and 10½" baseboard, painted white (HABS).

Picture Mold: Original 8'-7¼" high wood rail painted white (HABS). Some paint peeling in spots.

Cornice: 6¾" plaster crown molding, painted white (HABS). Significant cracking and patching along west wall. Large crack in

north chimney wall.

Ceiling: Canvas over plaster, painted white. Some paint cracks.

Doors: Four original single doors with 7" single facia architrave and 7¾" cornice (HABS). No. 1181: missing No.1182: 1¾" paneled single door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides , a brass rose and brass keyhole escutcheon. Door Nos. 1183 and 1183 are not in place. They are the original doors for the china cabinets and are stored in the attic. Door No. 1184: 1¾" thick paneled door, painted white (HABS). This door is fixed due to the addition of the bathrooms on the east porch.

Windows: One original single window on the west wall and one original double window on the south wall, both with 7" single facia architrave and 7¾" cornice (HABS). Each window has a 1/1 double chain hung sash, sweep thumb latches on the meeting rails and a sash lift. Each window has the original hardware for holding the shades and the sheer curtain rods. The south wall has the original curtain rods in place.

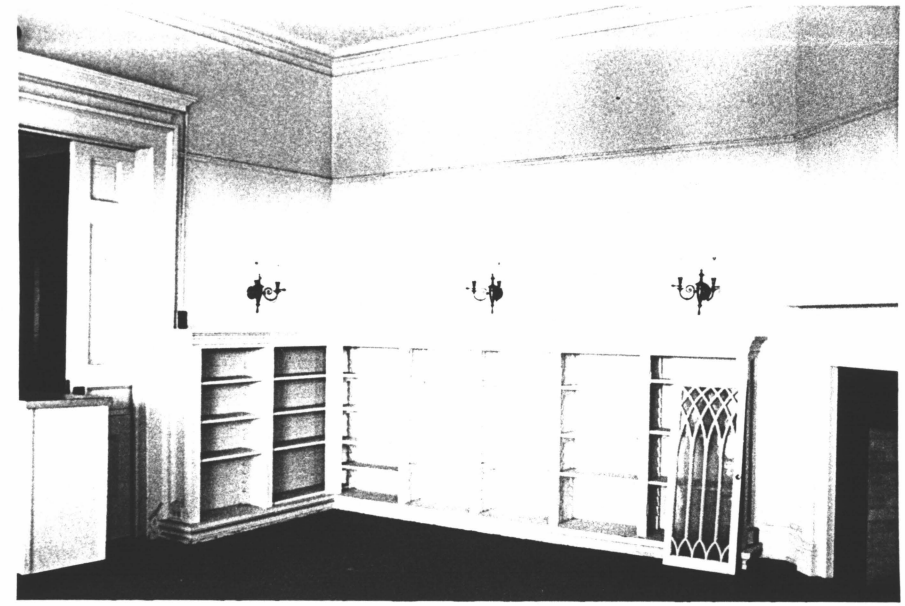
Fireplace: Fireplace is located on west wall. Carved wood mantle projects from fireplace wall 1'-1½". Mantle is supported by Corinthian column and pilaster each side with egg-and-dart molding and undecorated frieze. Brick hearth is 1'-5½" deep by 5'-9" wide with maple trim. Fireplace face brick has red wash and hearth bricks glazed.

Gas Fixtures: Six-light brass chandelier suspended from center of ceiling. Two three-light brass wall sconces on each side of north wall swinging door with spiral supports.

Electrical Fixtures: Five outlets at baseboards located at southeast corner cabinet, center of east wall, south wall on right side, west wall to right of fireplace, and north wall to the left of the swinging door. Double accent light over west wall pocket door with conduit running down left side of door to light switch. Conduit continues down to baseboard and across south wall.

Mechanical Fixtures: Original heat vent with rectangular ornate metal grill on north chimney wall.

Other Features: Phone jack in cabinet base at southeast corner. Heat sensor in ceiling to west of chandelier with wires running north and south to walls. Cabinets in northeast and southeast corners facing on diagonal are 3'-¼" wide with five ¼" fixed shelves 1'-2" deep. Door to porch through east wall has been blocked and built in with shelves.



ROOM 119 - LIBRARY

Floor: Original 2½" standard width tongue-and-groove maple boards running north-south; covered in grey carpet which is in good condition.

Walls: Canvas on plaster, painted white. Many hairline paint

cracks. East wall has major crack to left of pocket door from top of wainscot. North, south and west walls are all in good condition. Northeast wall (chimney wall) has canvas peeling away from plaster at left corner.

Baseboard: Original 10½ high wood baseboard painted white, including 8" splashboard, 2½" surbase, and 3" molding at base (HABS). East wall has paint peeling in spots at bottom trim.

Wainscot: 4'-6" high paneled wainscot including 3¾" top molding and 10½" (HABS).

Picture Mold: Original 8'-7¼" high wood rail painted white (HABS). Some paint peeling to wood in spots.

Cornice: 6¾" plaster crown molding, painted white (HABS).

Ceiling: Canvas over plaster, painted white. Some paint cracks.

Doors: Two original double pocket doors with 7" single facia architrave surround and 7¾" cornice (HABS). Nos. 1191 and 1192: 2" thick paneled pocket door, painted white (HABS). Both doors have the original hardware.

Windows: Two original single windows with 7" single facia architrave surround and 7¾" cornice (HABS). Each window has a 1/1 double chain hung sash, sweep thumb latch on the meeting rail and a sash lift. Each window has the original hardware for holding the shades and the sheer curtain rods. The right window has the original curtain rod in place.

Fireplace: Fireplace is located in the northeast corner and creates diagonal wall. Carved wood mantle projects 1'-0" off fireplace wall, and is supported by fluted pilasters with decorative capitals and arabesques on the frieze.

Gas Fixtures: Five double light brass wall sconces with spiral supports one on each side of west wall pocket door, 2 over shelves on north wall, and one between windows on south wall.

Electrical Fixtures: Four outlets at baseboards, two on south wall, one on west wall on bookshelf side, and one on north wall on bookshelf side. Double spotlight on west wall above pocket door with conduit running down right side of door to light switch mounted above wainscot.

Mechanical Fixtures: Floor vent in southeast corner of room.

Other Features: Buzzer located left of east wall of pocket doors. Heat detector in ceiling. Book cabinets located on west and north walls. Cabinet on west wall left of pocket doors has three bays each 18" wide; to right of doors are two bays each 23½" wide. North wall has 5 bays each 22" wide. There are two or three movable shelves in each bay which rest on cut end brackets. Cabinets are 4'-7" high with 5¼" base and top mold, 1'-1½" deep with 9½" deep and ¾" thick shelves. Glass front doors are all located in attic and painted creme on outside and green/yellow and creme on the inside. Door hardware is small round keyhole plate with skeleton key.



ROOM 120 - SUN PORCH

Floor: Tongue-and-groove decking 1⅝" wide, painted grey running north-south and east-west, with 1½" high beveled mold at outer edge for panels to rest on.

Walls: East wall consists of 3 wall panels totaling 9'-11½". Side panels are 3'-4¼" with divided light fixed window with six lights. Center panel with door is 3'-1¾" wide, with door at 8'-1¾" tall and transom above. South wall has eight panels each 3'-2¾" wide with 2½" fixed mullion and six lights. Panels were originally removable, with latches at the bottom and top corners. Base of Panel #7 (from left) is in poor condition. West wall has 2 original removable panels, the left 3'-8¾" wide and the right 3'-10" wide. The lower left pane of the right window panel is broken. South wall of the NPS addition is 5 panels wide totaling 17'-3½" long, each panel being 3'-5⅛" wide with 2¾" mullions. These panels have no hardware. West wall of NPS addition is 3 panels, each 3'-4" wide, 8'-⅝" tall with broken transom light above. The rest of north wall is exterior wall of house.

Ceiling: Tongue-and-groove boarding 2⅜" wide painted white and running parallel to corresponding faces of the house.

Doors: Two doors, as mentioned in wall description, are painted and each has four lights. Each door has two hinges, and elliptical brass knobs.

Electrical Fixtures: Outlets in north house wall approximately 1'-0" from floor and in west house wall under music room window.

Mechanical Fixtures: Floor vent between windows on north wall at music room.

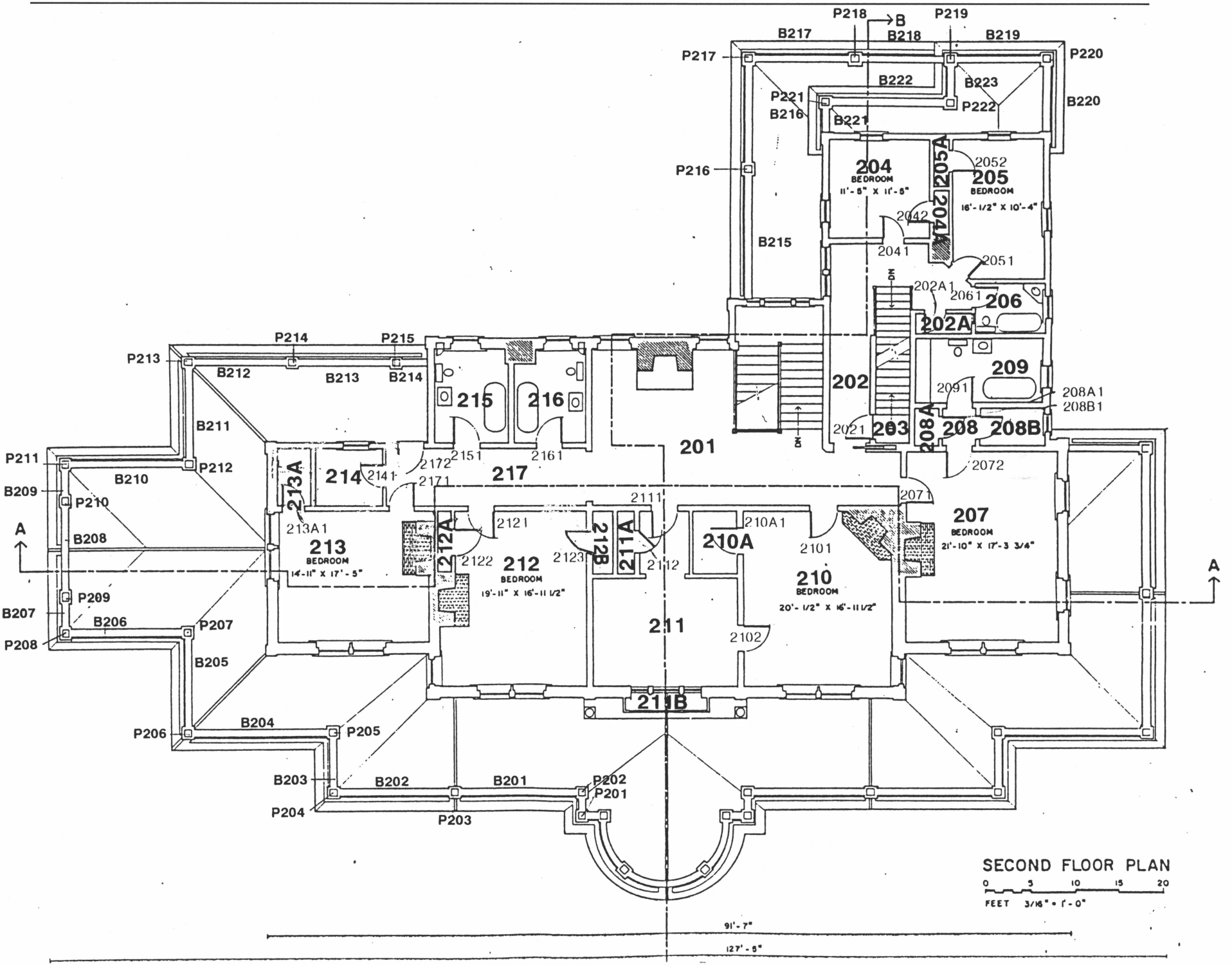
Other Features: Smoke detector on ceiling.

ROOM 121

This bathroom, which is located under the grand stair of Room 108 is unaccessible.

ROOMS 122 AND 123

These bathrooms are new wood frame additions to the east porch.


P218
B
P219
B217
B218
B219
P217
P220
B222
B223
P221
P222
B220
B216
B221
P216
204
BEDROOM
11'-8" X 11'-8"
205A
2052
205
BEDROOM
16'-1/2" X 10'-4"
2042
204A
B215
2041
2051
202A1
2061
206
202A
209
202
2091
208A1
208B1
2021
203
208A
208
208B
201
2072
P214
P215
P213
B212
B213
B214
215
216
B211
217
2071
P211
P212
B210
213A
214
2141
2172
2151
2161
2171
2111
B209
P210
207
BEDROOM
21'-10" X 17'-3 3/4"
A
213A1
213
BEDROOM
14'-11" X 17'-5"
212A
2121
212B
211A
210A1
210A
2101
B208
2122
212
BEDROOM
19'-11" X 16'-11 1/2"
2123
2112
210
BEDROOM
20'-1/2" X 16'-11 1/2"
A
P209
B207
B206
P207
P208
211
2102
B205
211B
B204
P206
P205
B203
B202
B201
P202
P201
P204
P203
SECOND FLOOR PLAN
0 5 10 15 20
FEET 3/16" = 1'-0"
91'-7"
127'-5"



ROOM 201 STAIR HALL

Floor: Original 2 ½" standard width tongue-and-groove boards running north-south, varnished maple. The floor is warped, many of the boards at the top of the stairs are bowed. Varnish is worn away at the center of the room Many stains on the floor.

Walls: Canvas over plaster, painted white. The paint is severely cracking on all walls. The north wall is discolored (turning grey) at the top.

Baseboard: Original 10 ½" wood baseboard, painted white including 8" splash board, 2 ½" surbase and 3" molding at base (HABS). Paint is peeling on north baseboard and on west it is peeling in small patches.

Wainscot: 4'-6" high paneled wainscot including 4½" top molding and 10 ½" baseboard (HABS). On the west and south wall the wainscot is cracking at the top molding. It is discolored on the south wall near the heating grate.

Picture Mold: Original 8'-3 ½" high wood rail painted white (HABS).

Cornice: Plaster painted white (HABS).

Ceiling: 6¾" plaster crown molding, painted white (HABS). Paint is severely cracking and peeling.

Doors: There is one original single pocket door leading into Room 202. There are three original single door leading into bedrooms. All doors have 7" single fascia architrave and a 7.¾" cornice.

No. 2011: 1 ⅜" thick paneled pocket door painted white (HABS). Hardware: Original brass door pull.

Doors 2071, 2101, 2111, 2121 are described in detail in their respective rooms.

Windows: Two leaded glass windows on the north wall. Both have 7" single fascia architrave surround and 7 ¾" cornice (HABS). Each window has a 1/1 double chain hung sash, sweep thumb latches on the meeting rails and sash lifts. Both windows have the original hardware for the curtain rods.

Fireplace: Wood mantel projects 1' off the fireplace wall. There are six carved wood balusters on the frieze that support the mantel and arabesques on the side friezes. The fireplace is composed of running bond red brick. The hearth is composed of 2 ½" x 8" dark red glazed brick and is 2'-2' deep by 6'-3" across.

Gas Fixtures: Four original brass spiral sconces. On the west wall there are two double fixtures: the fixture on the right end has broken glass cylinders. On the south wall there are two double fixtures: the fixture on the east end has two broken glass cylinders, the fixture on the west end has one broken glass cylinder. There is an original brass four prong chandelier on hanging from the ceiling.

Electrical Fixtures: There are two fixtures on the ceiling with exposed conduit.

Mechanical Fixtures: 1' x 1'-4" decorative iron heating grill on the south wall.



ROOM 202 HALLWAY

Floor: Original 2 ½" standard width tongue-and-groove boards running north-south, varnished maple. The varnish is uneven and worn away along the hall and at the top of the stairs.

Walls: Canvas painted white. All walls are severely cracked.

Baseboard: Original 10 ½" wood baseboard, painted white including 8" splash board, 2 ½"surbase and 3" molding at base (HABS). The base boards are scuffed and dirty. On the north wall it is cracked.

Wainscot: 4'-6" high wainscot composed on 3" dark varnished tongue-and-groove boards, a 2" cornice and a 4" trim piece above the baseboard. On the east wall near Room 204 and on the west wall the paint is chipping. There is a mirror mounted on the wainscot on the north wall that measures 1'-1" x 2'-8".

Picture Mold: Original 8'-3½" wood rail painted white (HABS).

Ceiling: Plaster painted white. The paint is severely cracking.

Doors: One original single door with 7"single fascia architrave on the north side and top and 3" single fascia architrave on the south side and a 7 ¾" cornice.

No. 2021: 1 ⅜" thick paneled door painted white on the west side and cream on the east (HABS). The paint on the east side door and architrave is scuffed and peeling. Hardware: Spherical brass door knobs on both sides, a brass rose and a brass keyhole escutcheon. *Doors 2041, 2051, 2061, 202A1 are described in detail in their respective rooms.*

Windows: One original double window on the west wall with 7" single fascia architrave surround and 7 ¾" cornice (HABS). Each side has a 9/1 double chain hung sash, sweep thumb latches on the meeting rails, and sash lifts. Each window has the original hardware to support the curtain rods.

Gas Fixture: Outlet for gas fixture on west wall, the fixture is missing.

Electrical Fixtures: There are two accent lights in the northwest corner on top of the window cornice.

Other Features: There is a phone jack on the west wall near door 2011 and a smoke detector on the ceiling.

ROOM 202A - WASHCLOSET

Floor: 2" hexagonal white ceramic tile.

Walls: Canvas on plaster, painted cream. The paint on the south wall is cracking.

Baseboard: Original 10 ½" wood baseboard painted cream, including 8" splash board, 2 ½" surbase and 3" molding at base (HABS). The paint is cracking.

Wainscot: 4'-6" high wainscot composed of 3" tongue-and-groove boards painted cream including a 2" cornice and a 4" piece of trim above the baseboard. The paint is cracking. There metal hooks on the cornice on the north and west walls.

Doors: One original single door with 7" single fascia architrave surround and 7 ¾" cornice (HABS). No. 202A1: 1 ⅜" thick paneled door painted cream (HABS). Hardware: Spherical brass doorknobs on both sides , a brass rose and a brass escutcheon.

Windows: One original interior casement window with on single pane of frosted glass. 7" architrave on south side and top, left architrave is 2". The cornice is 7 ¾". Hardware: One 1" x 3" turn bolt latch.

Plumbing Fixtures: 1'-8" x 1'-3" sink on the east wall with two chrome fixtures.

Other Features: On the east wall there are three ¾" shelves that are 1"-1" deep on the south wall and 11" deep on the north. The lowest shelf sits on the cornice of the wainscot and the other two are 1' above the other.



ROOM 203 STAIR HALL

Floor: Original 2 ½" standard width tongue-and-groove boards running east-west, dark varnished maple. The floor is scuffed.

Walls: Canvas painted dark tan. The canvas is peeling.

Baseboard: Original 10 ½" wood baseboard painted cream, including 8" splash board, 2 ½" surbase and 2 ½" molding at base

(HABS). The paint is wearing away.

Wainscot: 4'-6" high wainscot with 3' tongue-and-groove boards, 2" cornice and 4" trim piece above the baseboard. The paint is cracking and very dirty, it is completely worn away in many places on the east and west walls.

Ceiling: Canvas over plaster painted dark tan. The canvas is peeling away from the plaster.

Doors: *Door 2021 is described in detail in its respective room.*

Gas Fixtures: One brass double spiral fixtures on the south wall. Both glass cylinders are broken.

Plumbing Fixtures: 1 ½" diameter metal pipe with valve running up east wall.

Other Features: Stairs have 19 risers that are 7" high, the maple treads are 11" deep. The stairs are severely scuffed and the varnish is wearing away. There is a fire extinguisher on the south wall mounted to the wainscot.

ROOM 204 BEDROOM

Floors: Original 2 ½" standard width tongue-and-groove boards, varnished maple. The floor is warped and the varnish uneven.

Walls: Canvas over plaster painted white. The paint is severely cracking.

Baseboard: Original 10 ½" wood baseboard painted white, including 8" splash board, 2 ½" surbase and 3" molding at base. There are cracks along the bottom molding on all four walls and they are all scuffed.

Picture Mold: Original 8'-3 ½" wood rail painted white (HABS).

Cornice: 6¾" plaster crown molding, painted white (HABS).

Ceiling: Plaster painted white (HABS). There are medium cracks in the cornice on all four walls.

Doors: Two original single doors with 7" architrave surround and 7 ¾" cornice (HABS).

No. 2041 and 2042: 1 ⅜" thick paneled doors painted cream on both sides (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon.

Windows: Two original single windows, one on north wall, the other on the west each with 7" single fascia architrave surround and 7 ¾" cornice (HABS). . Each window has a 9/1 double hung sash and a sash lift. The north window has the original sweep thumb latch and the west window has a modern sweep thumb latch. Each window has the original hardware to support the curtain rods. The paint on the architrave on the west wall window is severely peeling.

Gas Fixtures: Two brass double spiral fixtures on the north and west walls. On the north wall both glass cylinders are broken.

Electrical Fixtures: There is an outlet on the baseboard on the east and west walls.

Mechanical Fixtures: 1' x 1' iron grill with circular decorative opening on the floor in the southeast corner of the room.



ROOM 204A CLOSET

Floor: Original 2 ½" standard width tongue-and-groove boards , varnished maple.

Walls: Plaster painted cream. They are very dirty and the paint is severely cracked at the southeast corner and on the east wall.

Baseboard: Original 10 ½" wood baseboard painted cream, including 8" splash board, 2 ½" surbase and 3" molding at base (HABS). The baseboards in the southeast corner are cracked.

Ceiling: 6¾" plaster crown molding, painted cream. The paint is cracked on the ceiling.

Doors: Door 2042 is described in detail in its respective room.

Other Features: Three ¾" x 3" pieces of trim supports three shelves that run along the entire east wall. The bottom piece of trim shows bare wood where hooks used to be mounted.



ROOM 205 BEDROOM

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple. The floor is warped and the varnish is uneven.

Walls: Canvas over plaster, painted white. The paint is severely cracked on all four walls. There are many large cracks on the west wall. The doorstops are missing, so the door knobs have made dents in the south and west walls.

Baseboard: Original 10 ½" high wood baseboard painted white, including 8" splash board, 2 ½" surbase and a 3" molding at base (HABS). The baseboard is cracked along the joint between surbase and splash board on west, north and south walls and at bottom molding in the northeast corner.

Picture Mold: Original 8'-3 ½" high wood rail painted white (HABS). The paint is cracking on west molding.

Cornice: 6¾" plaster crown molding, painted white. Severely cracked on west wall and over door No. 2051.

Ceiling: Canvas over plaster, painted white. Two medium cracks in the paint.

Doors: Two original single doors (HABS). No. 2051: 1 ⅜" paneled door painted white with 7" architrave on east side, 1 ½" architrave on the west and a 7 ¾" cornice (HABS). Hardware: Spherical brass doorknobs on both sides, brass rose, and brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges. The paint is peeling on both sides of the door. No. 2052: 1 ⅜" thick paneled door, painted white with 7" architrave surround and a 7 ¾" cornice (HABS). Hardware: Spherical brass doorknobs on both sides, brass rose, and brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges.

Windows: Two original single windows, on the north and east walls with 7" single fascia architrave surround and 7 ¾" cornice (HABS). Each window has 12/1 double chain hung sash, sweep thumb latches on the meeting rails, a sash lift and two tie back hooks. Each window has the original hardware for holding the shades and the sheer curtain rods.

Gas Fixtures: Two brass spiral sconces on the north and east walls. On the north fixture both glass cylinders are broken.

Electrical Fixtures: Outlet on the south and west walls mounted to the baseboards.

Mechanical Features: 1' x 1" iron grill with decorative circular opening on the floor near center of west wall.

Other Features: Smoke detector on the ceiling.



ROOM 205A CLOSET

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple. There are many circular cut marks and the varnish is scuffed.

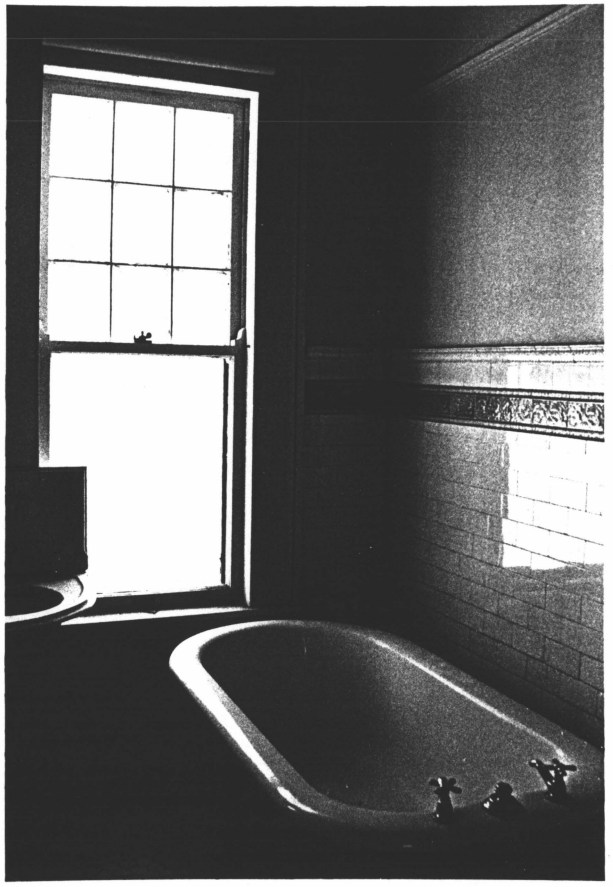
Walls: Plaster painted cream. The paint on all the walls is severely cracked.

Baseboard: Original 10 ½" high wood baseboard painted white, including 8" splash board, 2 ½" surbase and a 3" molding at base (HABS). the paint is scuffed.

Ceiling: Canvas over plaster, painted cream. The paint is very dirty and cracked.

Doors: Door 2052 is described in detail in room 205.

Other Features: Three shelves supported by ¾" x 3" trim runs along the entire west wall. There is a 1" diameter dowel that run north-south between the first and second shelves.



ROOM 206 WASHCLOSET

Floor: 2" hexagonal white ceramic tile. 1' x 1'-4" marble concave stone under toilet. The tile is cracked in some places near the tub, but the floor is in generally good condition.

Walls: Canvas over plaster, painted white. There are many small cracks on all four walls and there is a big patch of paint missing on the west wall. The is a big crack in the southeast corner.

Wainscot: 3" x 6" running bond white tiles cover the bottom 5' of the north, east and south walls. The top course of tile is 1" curved bullnose. Directly below the curved tiles are 5" x 6" blue decorative tiles. At the base of the wainscot there are 6" square tiles topped with ½" blue decorative tiles.

Ceiling: Canvas over plaster, painted white. The paint is severely cracked.

Doors: One original single door with 7" single fascia architrave surround and 7 ¾" cornice (HABS). No 2061: 1 ⅜" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, brass rose, and brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges on the south side of the door. There is a 2'-2" long chrome rail on the east side on the door. The paint is chipping.

Windows: One original single window with 7" architrave on the north side and top and a 4" architrave on the south side . The cornice is 7 ¾". Each window has 9/1 double chain hung sash, sweep thumb latches on the meeting rails and a sash lift. Each window has the original hardware to support the original curtain rods. The paint on the architrave is peeling and cracking.

Gas Fixtures: There is an outlet for a gas sconce on the north wall, but the fixture is missing.

Electrical Fixtures: There is a fixture over the sink on the north wall.

Other Features: There is a 2'-6" long chrome towel bar on the north wall. There is a 3'-3' framed mirror over the sink.



ROOM 207 - BERTHA'S BEDROOM

This large, elegant room was originally Moses and Bertha's bedroom. The room is adjacent to a vestibule on the north, which links the bedroom to two closets and the master bath. It is accessed from the grand stair through a hallway to the east.

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple. The varnish is worn away in the southwest corner and along the south wall.

Walls: Canvas over plaster, painted white. The walls are covered in many small cracks in the paint and the canvas is peeling off in large segments on the south wall. There is smoke damage on the west wall, south of the fireplace.

Baseboard: Original 10 ½" high wood baseboard painted white, including 8" splash board, 2 ½" surbase and a 3" molding at base (HABS). The paint is cracking along the joint between surbase and splash board on all four walls. Wood doorstops are mounted to the baseboards, one on the west wall fireplace projection, the other on the north wall, west of door 2072.

Picture Mold: Original 8'-3 ½" high wood rail painted white (HABS).

Cornice: 6¾" plaster crown molding, painted white (HABS). The ceiling is covered in many small cracks in the paint and it is peeling.

Doors: Two original single doors with 7" single fascia architrave surround and 7 ¾" cornice (HABS).
No. 2071: 1 ⅜" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, brass rose, and brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges on the south side of the door.
No. 2072: 1 ⅜" paneled door, painted white (HABS). Hardware: spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges on the west side of the door. The paint is cracking on architrave.

Windows: Two original single windows on the east wall and one double window on the south wall, all with 7" single fascia architraves surround and 7¾" cornice (HABS). Each window has 12/1 double chain hung sash, sweep thumb latches on the meeting rails and a sash lift. On the east wall, the northern window has two tie back hooks, 1'- 7" off the sill. The southern window also has black blinds. The south wall windows have two tie back hooks and blinds on the east side.

Fireplace: Wood mantel projects 10 ½" off the fireplace wall. There are three ornamental wreath reliefs across the frieze and two fluted pilasters flanking the fireplace. There is a 1' -7" deep by 6' - 1" wide brick hearth. The bricks measure 2 ¼" x 8".

Gas Fixtures: Four original double spiral fixtures. On the east wall, the left fixture's glass cylinder is broken. On the west wall, the left fixture's glass cylinder is broken.

Electrical Fixtures: On the north wall there is an outlet on the

baseboard 5' from the east wall. On the east wall there are two outlets, one 3' from the north wall, the other 3' from the south wall.

Mechanical Fixtures: There is a 1' x 1' - 4" ornate rectangular iron heating grill on the left fireplace wall.

Other Features: There is a phone jack on the north wall just left of the outlet. There is a buzzer on right architrave of Door 2071.



ROOM 208 VESTIBULE

This small square vestibule provides access to two closets and the master bath.

Floor: Original 2 ½" standard width tongue-and-groove running north-south, varnished maple. Varnish is scuffed and wearing away.

Walls: Canvas over plaster, painted white.

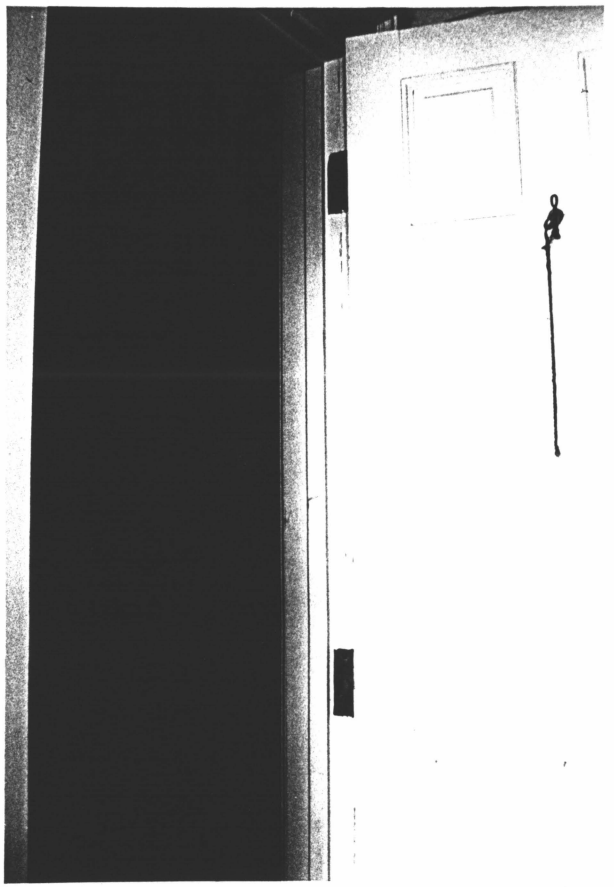
Baseboard: Original 10 ½" high wood baseboard painted white including 8" splash board, 2 ½" surbase and 3" molding at base (HABS).

Ceiling: Plaster painted cream. Good condition.

Doors: Four doors with single fascia architrave surround and 7¾" cornice (HABS).

No. 2081: 1⅜" thick paneled door. Architrave is 7" on all sides (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges. Door is painted white on east and cream on west.

Doors 2091, B and 2072 are described in detail in their respective rooms.



ROOM 208A CLOSET

Floor: Original 2 ½" standard width tongue-and-groove running north-south, varnished maple. The varnish is uneven.

Walls: Plaster painted cream. Paint on north and west walls is cracked. Paint on north wall has been patched.

Baseboard: Original 10 ½" high wood baseboard painted cream including 8" splash board, 2 ½" surbase and 3" molding at base (HABS). Paint is cracking and surbase is separating from splash board.

Ceiling: Plaster painted cream.

Doors: One door with single fascia architrave surround and a 7 ¾" cornice (HABS).

No. 208B1: 1 ⅜" thick paneled door painted white (HABS). Hardware: Spherical brass door knobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½"brass hinges.

Other Features: A ½"x 3¾" piece of trim on the north, west and south walls supports a 1" metal rod and a ¾" x 1' shelf. It also has two wire hangers on north and south walls. 1' above this shelf is a similar piece of trim supporting a shelf of the same dimensions. There is a smoke detector on the ceiling.



ROOM 208B CLOSET

Floor: Original 2 ½" standard width tongue-and groove boards running north-south, varnished maple. There is a burn mark on the south side.

Walls: Canvas over plaster, painted cream. Paint on east and

south walls is severely cracking and peeling, the ochre layer is exposed.

Baseboard: Original 10 ½" high wood baseboard painted cream, including 8" splash board, 2 ½" surbase and 3" molding at base (HABS). The surbase is separating from the splash board.

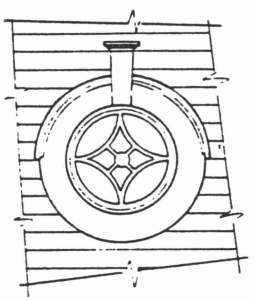
Ceiling: Plaster painted cream. The paint is cracking and peeling.

Doors: One door with 7" single fascia architrave surround and 7 ¾" cornice (HABS). Door is white on west and cream on east. No. 208B1: 1 ⅜" thick paneled door (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges.

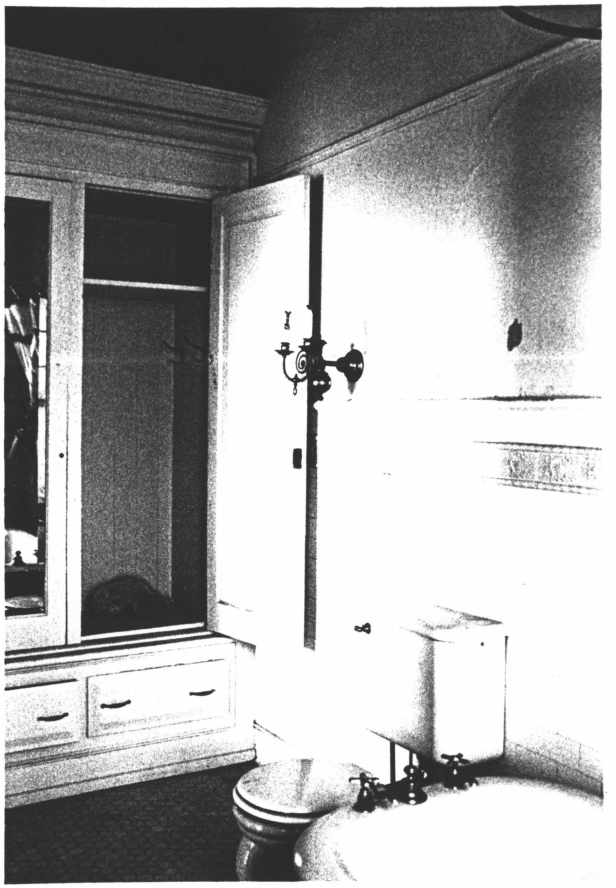
Windows: Circular window with diamond shaped muntins pattern, 4'-3" off the floor with 3" trim (HABS).

Gas Fixtures: One original brass double spiral fixture on the north wall. The right glass cylinder is broken.

Other Features: ½"x 3 ½" trim piece supports a ¾"x 1'-½" shelf that runs along the entire south wall. The trim has two hire hooks and three nails.. There is a smoke detector on the ceiling.



ROUND WINDOW -
SECOND FLOOR, EAST ELEVATION



ROOM 209 MASTER BATHROOM

Floor: 2" hexagonal white ceramic tiles. 2'-3" x 1'-10" marble concave stone under toilet. There are some cracks in the tile near the tub, but the floor is generally good condition.

Walls: Canvas painted white. North wall paint is severely

cracking, there is one large spot where ochre paint is exposed. East wall has a few medium cracks . On the south wall there is one large crack over the door. The top portion of all four walls are grey.

Wainscot: 3" x 6" running bond white ceramic tiles cover the bottom 5' of the north, east and south walls. The top course of tile is 1" bullnose. Directly below the curved tiles are 5" x 6" pink decorative tiles. At the base of the wainscot there are 6" square tiles topped with ½" pink decorative tiles. Some tiles are missing on the east end of the south wall.

Ceiling: Plaster painted white. There is one large crack in the paint running north-south and a few smaller cracks.

Doors: One door with 7" single fascia architrave surround and a 7¾" cornice (HABS).
No. 2091: 1 ⅜" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges. There is a wire hanger on the north side of the door, 5'-9" off of the floor.

Windows: One original single window on the east wall with 7" single fascia architrave surround and 7¾' cornice (HABS). It has 9/1 double chain-hung sash, a sweep thumb latch and original hardware for curtain rods.

Gas Fixtures: Two original brass spiral sconces. One double on the south wall and one double on the north wall. On the north wall fixture both glass cylinders are broken.

Electrical Fixtures: Fixture over sink on south wall.

Plumbing Fixtures: 1'-10" x 3" marble sink on the south wall with 1' x 1'-4" basin. It has a marble back splash ans a 3' x 3' framed mirror. The sink is attached to the wall and the front corners are supported by chrome clawfooted posts. There is a 2'-9" x 6' clawfooted porcelain tub in the northeast corner. The piping for the shower runs up the north wall to the shower head with a 3' diameter decorative metal ring for the curtains. The toilet is on the north wall 4'-3' on center from the wardrobe.

Mechanical Fixtures: Circular ornate iron grate on the floor near the door measures 1' x 1'.

Other Features: Steel towel bar to the right of the sink on the south wall measures 2'-6" long. There is a 3' wide by 1'-6" deep by 9' tall wardrobe that cover the entire length of the west wall. It has three 6' tall doors with a drawer under each door. The center door is covered with a beveled mirror. There is a smoke detector on the ceiling.



ROOM 210 BEDROOM

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple. There are some stains and signs of water damage.

Walls: Canvas over plaster, painted white. There are many small cracks in the paint on all four walls.

Baseboard: Original 10 ½" high wood baseboard, including 8"

splash board, 2 ½" surbase and a 3" molding at base, painted white (HABS).

Picture Mold: Original 8'-3 ½" high wood rail painted white (HABS).

Ceiling: Canvas over plaster, painted white. There are large cracks in the paint.

Fireplace: Wood mantel projects 11" off the fireplace wall. There is an ornamental wreath relief at the center of the frieze. The fireplace is flanked by fluted pilasters. There is a 1'-6" deep hearth.

Doors: Three original single doors with 7" single fascia architrave surround and 7 ¾" cornice (HABS). No. 2101 and 2102: 1 ⅜" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges. Door No. 210A is described in detail in its respective room.

Windows: There is one single and one double original window with 7" single fascia architrave surround and 7 ¾" cornice (HABS). The double window has 12/1 double chain hung sash and the single window has a 9/1 double chain hung sash. Each window has sweep thumb latches on the meeting rails and a sash lift. Each window has the original hardware to support the original curtain rods.

Gas Fixtures: Three brass circular spiral fixtures on the north, south and west walls.

Electrical Fixtures: There are three outlets on the south walls.

Mechanical Fixtures: 1' x 1'-4" iron grill with a decorative circular opening on the west wall.



ROOM 210A CLOSET

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple.

Walls: Canvas over plaster, painted white. There are major cracks in the paint on all four walls.

Baseboard: Original 10 ½" high wood baseboard painted white, including 8" splash board, 2 ½" surbase and a 3" molding at base (HABS). The paint is chipped.

Ceiling: Plaster painted cream. There are major cracks in the paint on the ceiling.

Doors: One original single door with 7" single fascia architrave surround and 7 ¾" cornice (HABS). No. 210A1: 1 ⅜" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges.

Electrical Fixtures: Fixture is missing, but there is an exposed outlet on the south wall.

Other Features: There is a heat detector on the ceiling. There are two storage shelves that on the south, west and north walls and a hanging bar running north-south on the west wall.



ROOM 211 SITTING ROOM

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple. There are a few scratches, but the floor is on generally good condition.

Walls: Canvas over plaster, painted white. There is substantial cracking in the plaster under the canvas on the west wall.

Baseboard: Original 10 ½" high wood baseboard painted white including 8" splash board, 2 ½" surbase and a 3" molding at base (HABS).

Picture Mold: Original 8'-3 ½" high wood rail painted white (HABS).

Cornice: 6¾" plaster crown molding, painted white.

Ceiling: Canvas over plaster, painted white. There is substantial cracking under the canvas.

Doors: Two original single doors with 7" single fascia architrave surround and 7 ¾" cornice (HABS). No. 2111 and 2112: 1 ⅜" thick paneled door, painted white (HABS). Hardware: Brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges. Door No. 2102 is described in detail in its respective room.

Windows: There is an original triple window on the south wall with single fascia architrave surround and a decorative transom window with radiating muntins above. The center window is 1/1 with original sweep thumb latch at meeting rail, and sash lift. The side lights are 9/1 with sash lifts. The west side light has the original sweep thumb latch, the east side light's sweep thumb latch is not original. Each window has the original hardware to support the original curtain rods.

Gas Fixtures: Three brass circular spiral fixtures on the south, east and north walls.

Other Features: Arched opening between the main space and the vestibule with 7" single fascia architrave surround and 7 ¾" cornice (HABS).



INNER ARCHED WINDOW - INTERIOR/EXTERIOR - SECOND FLOOR, SOUTH ELEVATION

ROOM 211A CLOSET

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple.

Walls: Plaster painted cream.

Baseboard: Original 10 ½" high wood baseboard painted white including 8" splash board, 2 ½" surbase and a 3" molding at base (HABS).

Ceiling: Plaster painted cream.

Doors: Door No. 2112 is described in detail in Room 211.

Other Features: There are two shelves above a hook rail with eight original hooks and front and back rods.



ROOM 211B WINDOW SPACE

Floor: Metal floor with 2" initial step down. There are cracks all over the floor and all joints are soldered or caulked.

Walls: East and west walls are beaded board that runs horizontally between the framing of the two sets of windows. The boards run horizontally. There are 8" x 3½" columns at the outside corners and the window panels fit these columns. There is metal flashing above the transom bar and above the architrave on the north wall windows. Also on the north wall, there are panels below the side light sills with slightly different panel trim.

Windows: There is an inward opening casement window with a twelve light transom above at the center flanked by 9/1/1 fixed sash side lights.

Cornice: 6¾" plaster crown molding, painted white.

Ceiling: Beaded boards running east-west, painted white.



ROOM 212 BEDROOM

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple. There is a large stain in the floor due to canvas fallen from the ceiling.

Walls: Canvas over plaster, painted white. There are large cracks on all the walls.

Baseboard: Original 10 ½" high wood baseboard painted white, including 8" splash board, 2 ½" surbase and a 3" molding at base (HABS). The paint is peeling on the east wall baseboard.

Picture Mold: Original 8'-3 ½" high wood rail painted white (HABS). The picture mold separating from the west wall near the closet.

Cornice: 6¾" plaster crown molding, painted white. Cracked in a number of places on all four walls.

Ceiling: Canvas over plaster, painted white. There are full length

strips of canvas removed from the center part of the ceiling. There is a 3' x 3' area where ceiling plaster has fallen, exposing the roof structure above. There are many large cracks all over the ceiling.

Fireplace: Wood mantel projects 10" off the fireplace wall. There is an ornamental plaster relief at the center of the frieze. The fireplace is flanked by columns. There is a 1'-4" deep by 6'-2" wide brick hearth.

Doors: Three original single doors with 7" single fascia architrave surround and 7 ¾" cornice. No. 2121, 2122 and 2123: 1 ⅜" thick paneled door, painted white. Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges.

Windows: One single original window and one double original window with 7" single fascia architrave surrounds and 7 ¾" cornices (HABS). Both windows on the south wall have a 6/1 double chain hung sash, modern sweep thumb latch and a sash lift. The double window on the south wall has aluminum supports for curtain rods. Each window has the original hardware to support the original curtain rods.

Gas Fixtures: Three original brass spiral fixtures on the east and west walls.

Electrical Fixtures: There are four outlets, two on the west, one on the east and one on the north.

Other Features: There is a heat detector in the center of the ceiling and a buzzer on the north wall near the door.



ROOM 212A CLOSET

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple.

Walls: Plaster painted cream. There are hairline cracks on the south and north walls and severe cracks on the west wall.

Baseboard: Original 10 ½" high wood baseboard painted white including 8" splash board, 2 ½" surbase and a 3" molding at base

(HABS). The baseboard is cracked and broken loose in places and separating from the walls.

Ceiling: Plaster painted cream. There are some minor cracks in the plaster.

Doors: One original single door with 7" single fascia architrave surround and 7 ¾" cornice (HABS). Door No. 2123 is described in detail in Room 212.

Other Features: There is one shelf above a hook rail with two original hooks and two hanging rods underneath.

ROOM 212B CLOSET

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple.

Walls: plaster painted cream. There are some minor cracks on all the walls.

Baseboard: Original 10 ½" high wood baseboard painted white, including 8" splash board, 2 ½" surbase and a 3" molding at base (HABS).

Ceiling: Plaster painted white. There is some minor cracking.

Doors: One original single door with 7" single fascia architrave surround and 7 ¾" cornice (HABS). Door No. 2122 is described in detail in Room 212.

Other Features: There is one shelf above a hook rail with three original hooks and two hanging rods underneath.



ROOM 213 BEDROOM

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple.

Walls: Canvas over plaster, painted white. There are major cracks on all the walls and dark stains near the ceiling on the south and west walls.

Baseboard: Original 10 ½" high wood baseboard painted white, including 8" splash board, 2 ½" surbase and a 3" molding at base (HABS). The surbase is separated from the splash board and there are some cracks, especially at the corners.

Picture Mold: Original 8'-3 ½" high wood rail painted white (HABS). The picture mold is separating from the wall, generally in poor condition.

Cornice: 6¾" plaster crown molding, painted white. There are small and large cracks in the northeast corner of the room.

Ceiling: Canvas over plaster, painted white. There are dark stains and many small cracks, especially near the cornice in the northeast corner of the room.

Fireplace: Wood mantel projects 10" off of the fireplace wall. The hearth is 1'-6"deep by 6'-2" across.

Doors: Doors No. 213A1 and No. 2171 are described in detail in their respective rooms.

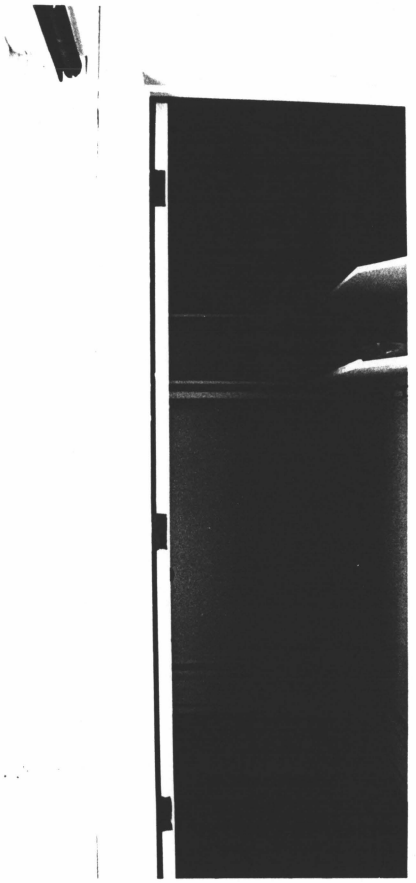
Windows: Two original double windows with 7" single fascia architrave surround and 7 ¾" cornice (HABS). Each window has 12/1 double chain hung sash, sweep thumb latches on the meeting rails and a sash lift. Each window has the original hardware to support the original curtain rods.

Gas Fixtures: Two original brass spiral fixtures on the south and west walls. There is an outlet on the east wall, but the fixture is missing.

Electrical Fixtures: There is one outlet each on the east, west, and north walls

Mechanical Fixtures: 1' x 1' iron grill with a decorative circular opening on the north fireplace wall.

Other Features: There is a heat detector on the ceiling and a buzzer on the north wall near the door.



ROOM 213A CLOSET

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple. The varnish is uneven.

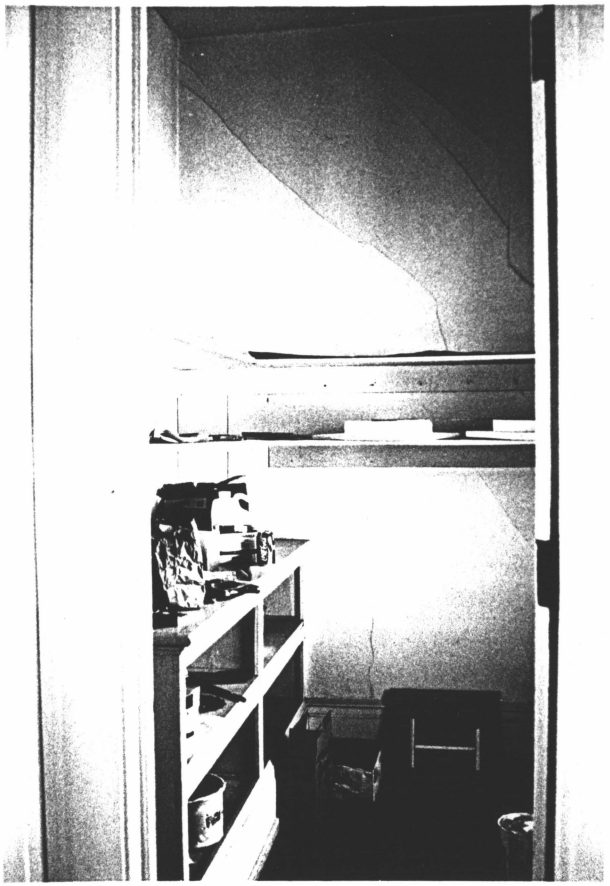
Walls: Plaster painted cream. There are minor cracks and some peeling on all the walls and major cracks on the west wall.

Baseboard: Original 10 ½" high wood baseboard painted white including 8" splash board, 2 ½" surbase and a 3" molding at base (HABS). The bottom molding is separated from the floor and there are some cracks.

Ceiling: Plaster painted cream. There are many small and large cracks.

Doors: One original single door with 7" single fascia architrave surround and 7 ¾" cornice (HABS). No. 213A1: 1 ⅜" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2¼" x 5 ½" brass hinges.

Other Features: There are two shelves each on the north and east walls. There are eight original hooks on the hook rails which support the shelves.



ROOM 214 CLOSET

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple. There are some scrapes and stains.

Walls: Canvas over plaster, painted white. There are large cracks on all the walls.

Baseboard: Original 10 ½" high wood baseboard painted white, including 8" splash board, 2 ½" surbase and a 3" molding at base (HABS). The paint is chipped.

Ceiling: Canvas over plaster, painted white.

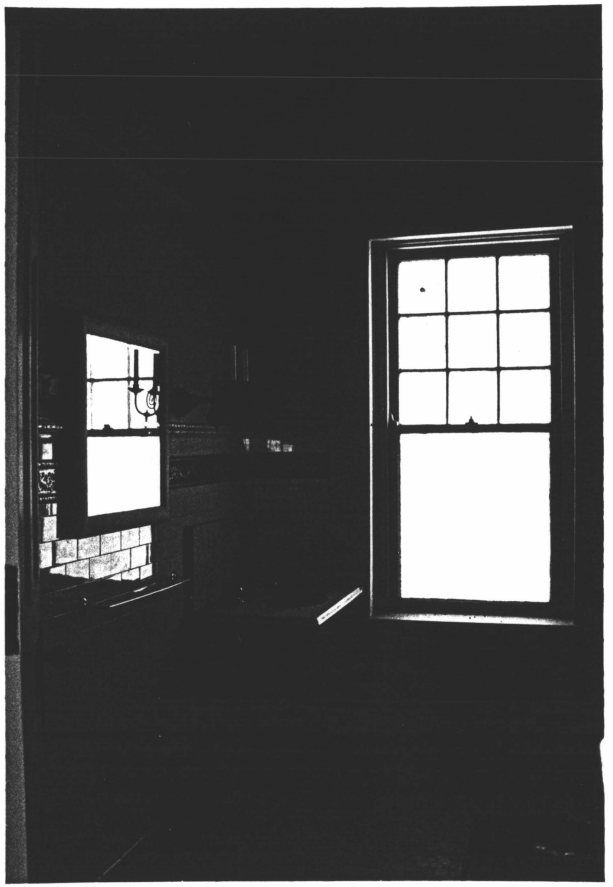
Doors: One original single door with 7" single fascia architrave surround and 7 ¾" cornice (HABS). No. 2141: 1 ⅜" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2¼" x 5 ½" brass hinges. The paint on the door is peeling.

Windows: One original single door with 7" single fascia architrave surround and 7 ¾" cornice (HABS). Each window has 9/1 double chain hung sash, sweep thumb latches on the meeting rails and a sash lift. Each window has the original hardware to support the original curtain rods. One of the original curtain rod supports has been replaced.

Gas Fixtures: There is an outlet for a gas light on the east wall, but the fixture is missing.

Electrical Fixtures: There is one bulb fixture on the ceiling .

Other Features: On the south wall there is a 2' x 6'-3" x 3'-2" shelf unit with baseboard including two layers of shelves and a counter top. There are 1'-6" deep shelves on hook rails running the length of the south, north and west walls.



ROOM 215 BATHROOM

Floor: 2" hexagonal white ceramic tiles. 2'-3" x 1'-10" marble concave stone under toilet. The floor is uneven.

Walls: Canvas painted white. There are small cracks on all the walls and there is severe damage in the northeast corner where the canvas and plaster have fallen to expose the wall structure.

Wainscot: 3" x 6" running bond white tiles cover the bottom 5' of the north, east and south walls. The top course of tile is 1" bullnose members. Directly below the curved tiles are 5" x 6" green decorative tiles. At the base of the wainscot there are 6" square tiles topped with ½" green decorative tiles. Some tiles are missing on the east end of the south wall.

Picture Mold: Original 8'-3 ½" high wood rail painted white (HABS). The picture mold is separated from the south wall.

Ceiling: 6¾" plaster crown molding, painted white. There is severe damage in the northeast corner where there is a 2' x 3' hole exposing the roof structure.

Doors: One door with 7" single fascia architrave surround and a 7 ¾" cornice (HABS). No. 2151: 1 ⅜" thick paneled door, painted white (HABS). Hardware: spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges. There is some paint damage on the north side of the door.

Windows: One original single window on the east wall with 7" wide single fascia architrave surround (HABS). It has 9/1 double chain-hung sash, a sweep thumb latch and original hardware for curtain rods.

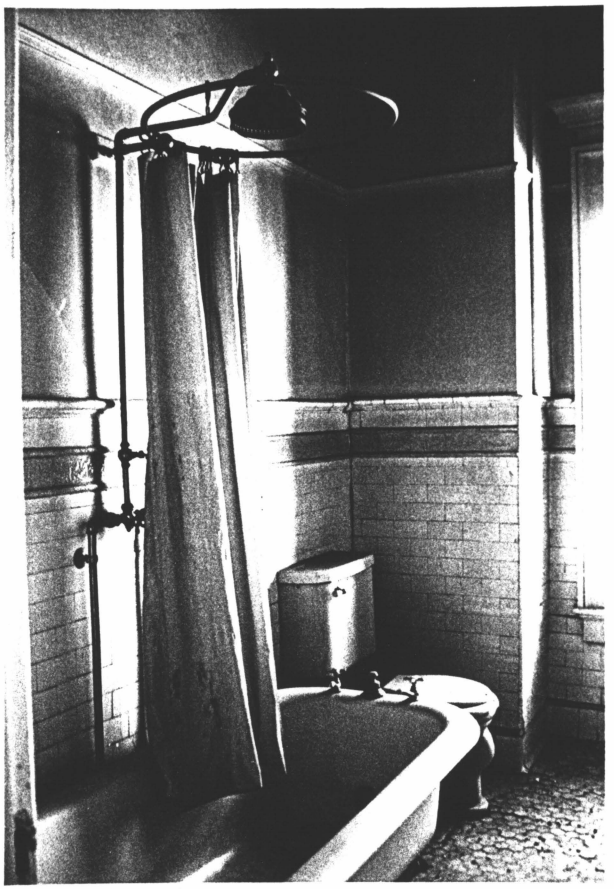
Gas Fixtures: Two original brass spiral fixtures on the south and west walls.

Electrical Fixtures: Fixture on south wall east of the door.

Plumbing Fixtures: 1'-10" x 3" marble sink in the northwest corner with 1' x 1'-4" basin. It has a marble backsplash and a 2'-4" x 2'-4" framed mirror. The sink is attached to the wall and the front corners are supported by chrome clawfooted posts. There is a 2'-9" x 6' clawfooted porcelain tub in the southeast corner. The shower head has a 3' diameter decorative metal ring for the curtains. The toilet is in the northeast corner.

Mechanical Fixtures: Decorative iron grate on the floor near the door measures 1' x 1'.

Other Features: There is a hook rail with five original hooks on the west wall. There is a 1'-4" x 2'-7" medicine cabinet on the north wall to the west of the window. There is a heat detector on the ceiling and a buzzer on the south wall east of the door.



ROOM 216 BATHROOM

Floor: 2" hexagonal white ceramic tiles. 2'-3" x 1'-10" marble concave stone under toilet. The floor is uneven.

Walls: Canvas painted white. There are small cracks on all the walls and they are heavily stained.

Wainscot: 3" x 6" running bond white tiles cover the bottom 5' of the north, east and south walls. The top course of tile is 1" bullnose members. Directly below the curved tiles are 5" x 6" green decorative tiles. At the base of the wainscot there are 6" square tiles topped with ½" green decorative tiles.

Picture Mold: Original 8'-3 ½" high wood rail painted white (HABS).

Ceiling: 6¾" plaster crown molding, painted white. There is a 5' x 5' hole exposing the roof structure and there are many large cracks.

Doors: One door with 7" single fascia architrave surround and a 7 ¾" cornice (HABS). No. 2161: 1 ⅜" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges. There is some paint damage on the north and south side of the door.

Windows: One original single window on the east wall with 7" wide single fascia architrave surround (HABS). It has 9/1 double chain-hung sash, a sweep thumb latch and original hardware for curtain rods.

Gas Fixtures: Two original brass spiral fixtures on the south and west walls.

Electrical Fixtures: Fixture on south wall west of the door. There is one bulb fixture in the center of the ceiling.

Plumbing Fixtures: 1'-10" x 3" marble sink in the northeast corner with 1' x 1'-4" basin. It has a marble backsplash and a 2'-4" x 2'-4" framed mirror. The sink is attached to the wall and the front corners are supported by chrome clawfooted posts. There is a 2'-9" x 6' clawfooted porcelain tub in the southwest corner. The shower head has a 3' diameter decorative metal rod for the curtains. The toilet is in the northwest corner.

Mechanical Fixtures: Decorative iron grate on the floor near the door measures 1' x 1'.

Other Features: There is a hook rail with three original hooks on the west wall. There is a 1'-4" x 2'-7" medicine cabinet on the north wall to the west on the window. There is a heat detector on the ceiling and a buzzer on the south wall to the east of the door.



ROOM 217 HALLWAY

Floor: Original 2 ½"standard width tongue-and-groove boards running north-south, varnished maple. There is some discoloration.

Walls: Canvas over plaster, painted white. There are large and small cracks on all four walls.

Baseboard: Original 10 ½" high wood baseboard painted white, including 8" splash board, 2 ½" surbase and a 3" molding at base (HABS).

Wainscot: 4'-6" high paneled wainscot including top molding and 10 ½" baseboard (HABS).

Picture Mold: Original 8'-3 ½" high wood rail painted white (HABS). There are minor cracks in the paint.

Cornice: 6¾" plaster crown molding, painted white.

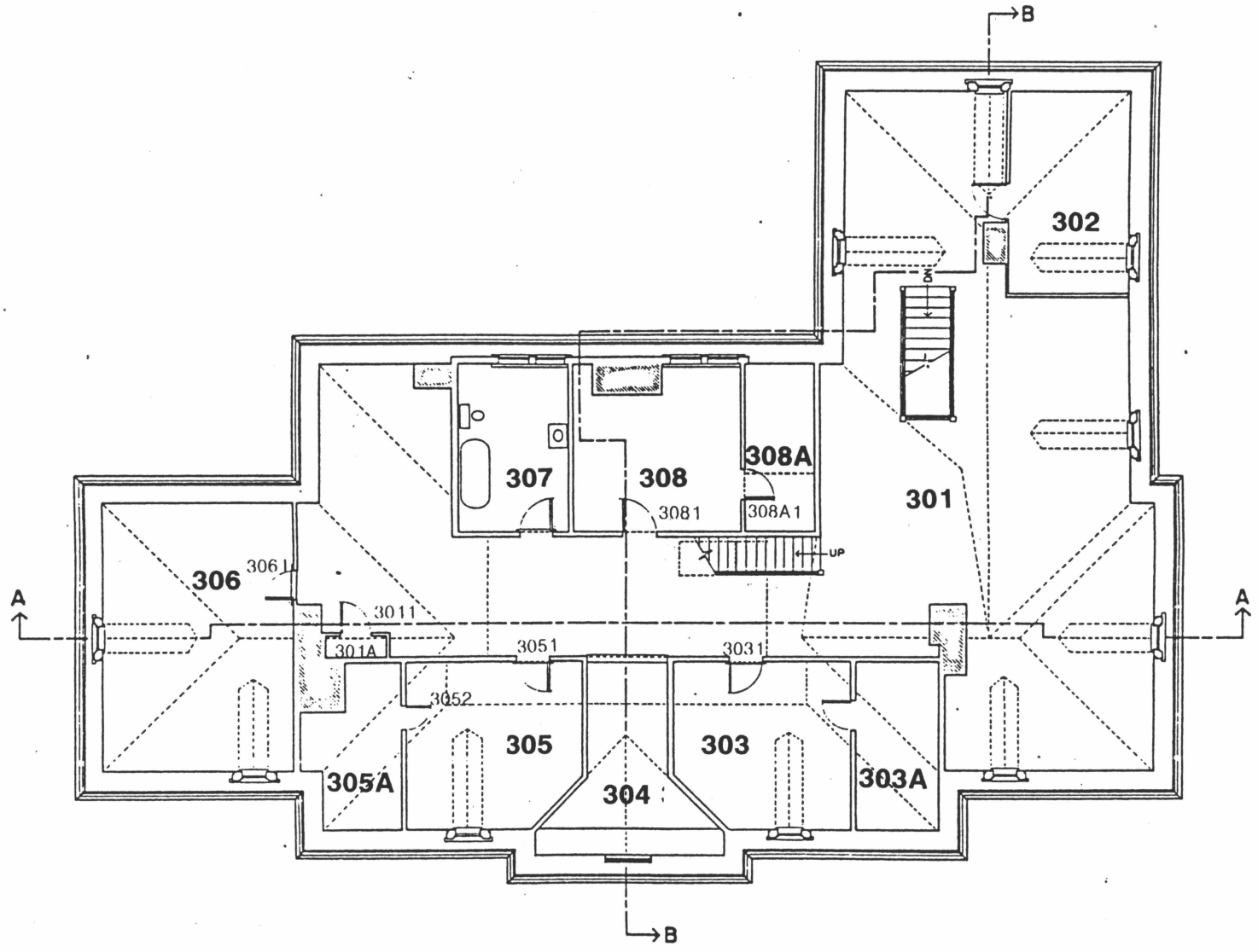
Ceiling: Canvas over plaster, painted white. There are severe cracks in the ceiling and there are exposed patches of repair visible.

Doors: Two original single doors with 7" single fascia architrave surround and 7 ¾" cornice (HABS). No. 2171: 1 ⅜" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges. No. 2172: 1 ⅜" thick paneled door, painted white (HABS). Hardware: Spherical brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon. Three 2 ¼" x 5 ½" brass hinges.

Gas Fixtures: One original brass spiral fixture on the north wall near door No. 2151.

Electrical Fixtures: There is one bulb fixture on the ceiling.

Other Features: There is a heat detector on the ceiling near Door 2171.



THIRD FLOOR PLAN

0 5 10 15 20

FEET 3/16" = 1'-0"



ROOM 301

Floor: Original 2¼" standard width tongue-and-groove pine, painted brown. Some warping on the north edge.

Walls and Ceiling: 2¼" pine beaded board throughout. Quarter round trim at top and base of walls. Some water damage south of hallway, near door No. 3081. Burn marks above door No. 3031 and along south wall near top trim.

Fireplace: Stuccoed chimneys run through at east end of room (HABS).

Windows: Five original dormer windows with rope hung sash, sweep thumb latches, 2½" side trim, 3½" top trim and 4" apron.

Gas Fixtures: Four single brass fixtures.

Electrical Fixtures: Three single bulb fixtures along the hallway.

Other Features: The banister is composed of four 4½" x 4½"chamfered posts with 6" diameter decorative ball atop and 1" x 1¾" plain balusters in between.





ROOM 302

Floor: Original 2¼" standard width tongue-and-groove pine, painted brown. Badly stained.

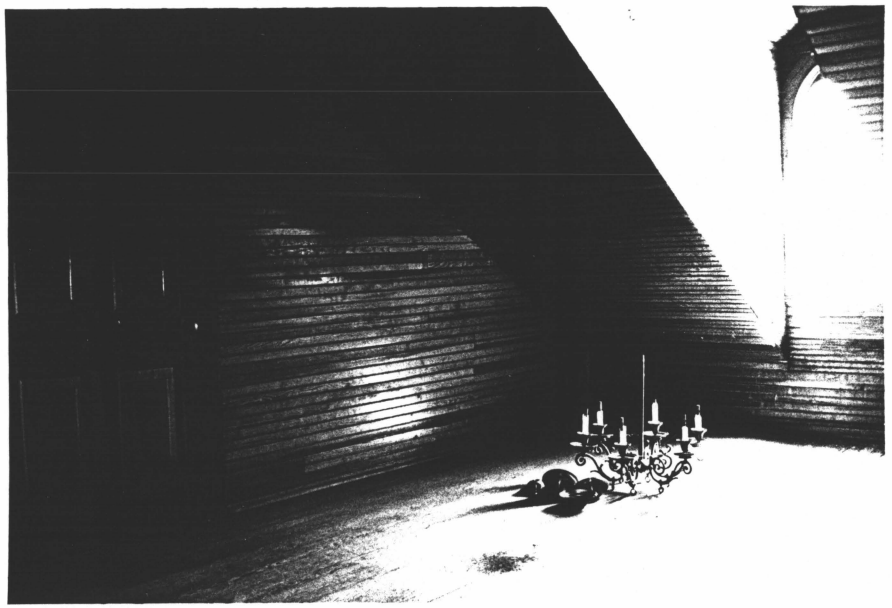
Walls and Ceiling: 2¼"pine beaded board throughout. Exposed framing members on south and west walls. Cracks on chimney and patches of earlier repair work visible. There are nails in the dormer walls.

Doors: One original single door with 3" trim surround.

No. 3021: 1¼" thick board and batten pine door. Hardware: Brass doorknobs on both sides, a brass rose, and a brass keyhole escutcheon.

Windows: One original dormer window with rope hung sash, original sweep thumb latch, 2½" side trim, 3½" top trim and 4" apron.

Other Features: Heat detector on the ceiling. There is a ¾" x 9" shelf on the west wall and two 1" x 11½" shelves on the south wall.



ROOM 303

Floor: Original 2¼" standard width tongue-and-groove pine, painted brown. Badly stained and scratched and there are signs of water damage under the dormer.

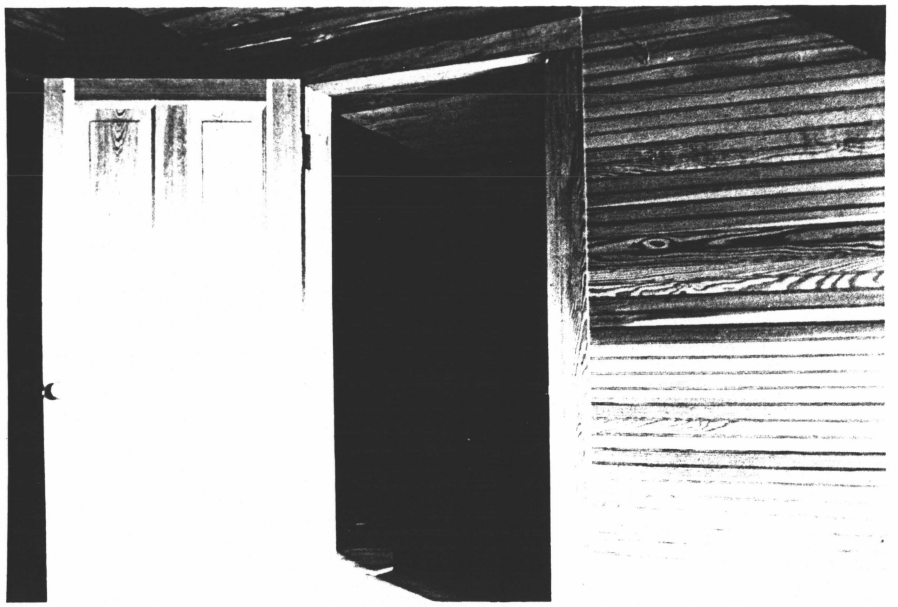
Walls and Ceiling: 2¼" pine beaded board throughout. Signs of water damage under the dormer. Warped and stained above west and south walls and signs of mold.

Doors: One original single door with 4" trim surround. No. 3031: 1⅜" thick paneled door, stained. Hardware: Brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon.

Windows: One original dormer window with rope hung sash, sweep thumb latch, 2½" side trim, 3½" top trim and 4" apron.

Gas Fixtures: One single spiral brass fixture on the west wall.

Other Features: Heat detector on the ceiling. Two original clothes hooks on dormer walls and a 1' x 4" metal strip at the corner of south and southwest walls.



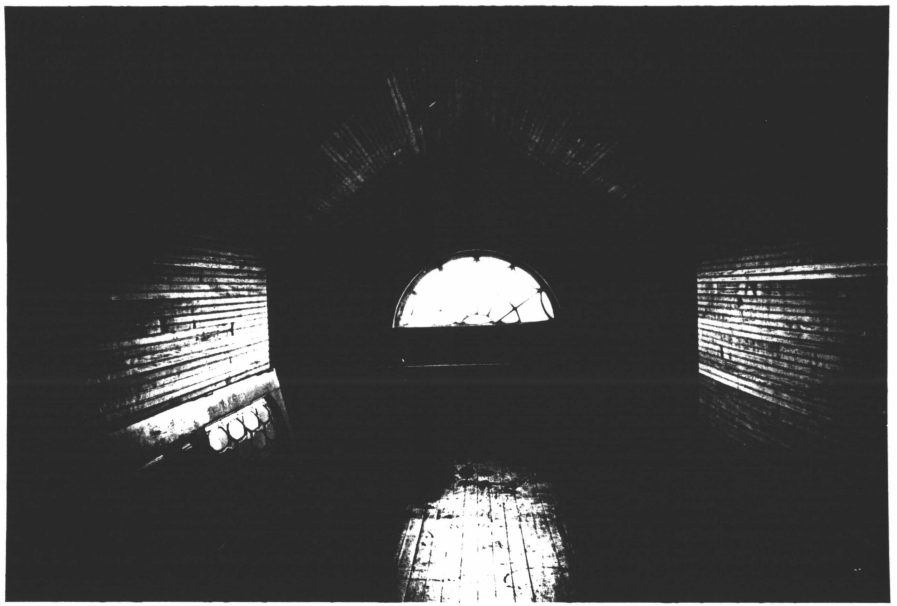
ROOM 303A

Floor: Original 2¼" standard tongue-and-groove pine, painted brown.

Walls and Ceiling: 2¼" pine beaded board throughout.

Doors: One original single door with 4" trim surround. No.303A1: 1⅜" thick paneled door, stained. Hardware: Brass doorknobs on both sides, a brass rose and a brass keyhole escutcheon.

Other Features: Two original clothes hooks. A ¾" x 11¼' shelf runs along the north wall.

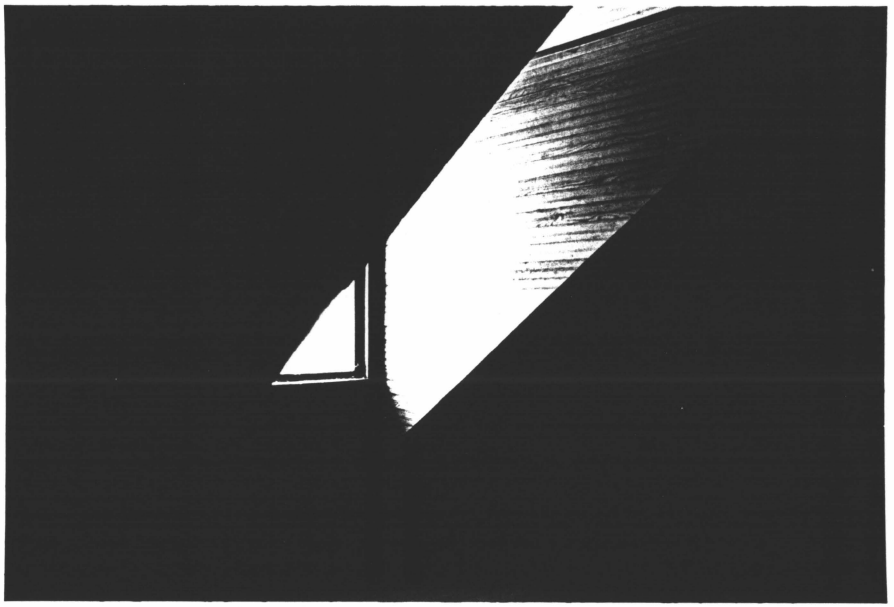


ROOM 304

Floor: Original 2¼" standard width tongue-and-groove pine, painted brown. The floor is stained and scratched. There is 2' - 3" high ledge that run the length of the south wall and is 4' - 9" deep.

Walls and Ceiling: 2¼" pine beaded board throughout. Poorly finished (no varnish). Severe water damage at north end of west wall. Also water damage at north side of ceiling.

Windows: One original semi-circular dormer with radiating muttens. The window is nailed shut. The sash is cracked and there is some water damage. The casing is also in poor condition.



ROOM 305

Floor: Original 2¼" standard width tongue-and-groove pine, painted brown. Severe water damage.

Walls and Ceiling: 2 ¼" pine beaded board throughout. Generally poor condition due to water damage.

Door: One original single door with 4" trim surround. No. 3051: 1⅜" thick paneled door, stained. Hardware: Brass doorknobs on both sides, a brass rose, and a brass keyhole escutcheon.

Windows: One original dormer window with rope hung sash, original sweep thumb latch, 2½" side trim, 3½" top trim and 4" apron. The window casing is in bad condition due to water damage.

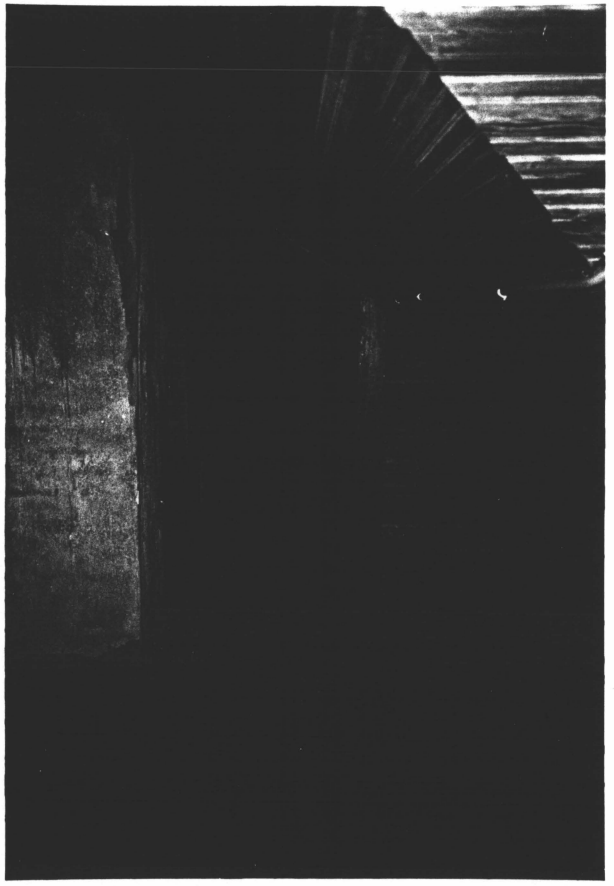


ROOM 305A

Floor: Original 2¼" standard width tongue-and-groove pine, painted brown.

Walls and Ceiling: 2¼" pine beaded board throughout. Severe water damage.

Doors: One original single door with 4" trim surround. No. 305A1: 1⅜" thick paneled door, stained. Hardware: Brass doorknobs on both sides, a brass rose and brass keyhole escutcheon.



ROOM 306

Floor: Original 2¼" standard width tongue-and-groove one, painted brown. Severe water damaged under dormer on the south wall.

Walls and Ceiling: 2¼" pine beaded board throughout. Water damage is evident.

Windows: Two original dormer windows with rope hung sash, sweep thumb latches, 2½" side trim, 3½" top trim and 4" apron. Two panes of glass broken on the west dormer.

Doors: One original single door with 4" trim surround. No. 3061: 1⅜" thick paneled door, stained. Hardware: Brass doorknobs on both sides, a brass rose, and a brass keyhole escutcheon. Door is cut at top to fit roof slope.

Gas Fixtures: One single brass fixture on the east wall.

Electrical Fixtures: Heat sensor on the ceiling.



ROOM 307

Floor: Original 2¼" standard width tongue-and-groove pine, painted black. Uneven surface and warping due to water damage. Strip of flooring replaced near north wall.

Walls and Ceiling: 2¼" pine beaded board throughout. Water damage to west wall. All walls in generally poor condition.

Baseboard: Original 1'-1¾" baseboard, including 8" splashboard, 5¾" surbase and 3" molding at base, stained.

Wainscot: 4'-7½" overall height, including baseboard, 2'-9" vertical tongue-and-groove paneling ⅜" wide, 7¾" top mold, and 1" trim, stained.

Windows: Two five light casement windows. Original operable

shades, left window has original curtain rod hooks and the right one has both original hooks and curtain rod.

Doors: One original single door with 4" trim surround. No. 3071: 1⅜" thick paneled door, stained. Hardware: Brass rose and brass keyhole escutcheon. The doorknobs are missing.

Gas Fixtures: The outlet for the original brass fixture is on the east wall. The fixture itself is missing.

Electrical Fixtures: Heat sensor on the ceiling.

Plumbing Fixtures: Original clawfooted porcelain tub on the west wall. Original toilet with wood seat on the east wall. The marble sink with 3' - 0" x 1' - 2" marble backsplash is located in the northeast corner. The original faucet is in place, but the handle is missing. Stains show location of original towel rack on the east wall. There are many plumbing pieces in the tub.

Other Features: Two clothes hooks on the east wall.



ROOM 308

Floor: Original 2¼" standard width tongue-and-groove pine, painted black. Prominent slope in floor.

Walls and Ceiling: 2¼" pine beaded board throughout. Water damage on south and east walls. Water damage at ceiling near windows.

Windows: Two five light casement windows, fastened with wire. Original shades.

Doors: One original single door with 4" trim surround. No. 3081: 1⅜" thick paneled door, stained. Hardware: A brass rose and a brass keyhole escutcheon. The doorknobs are missing.

Gas Fixtures: Two outlets on the east and north walls. The

fixtures are missing.

Electrical Fixtures: Heat sensor on the ceiling.

Other Features: ¾" x 1' shelf running the full length of the south wall.

ROOM 308A

Floor: Original 2¼" standard width tongue-and-groove pine, painted brown.

Walls and Ceiling: 2¼" pine beaded board throughout.

Doors: One original single door with 4" trim surround.

No. 308A1: 1⅜" thick paneled door, stained. Hardware: Brass keyhole escutcheon.

Other Features: Wood rail and ¾" x 11¼" shelf that runs along the east wall. Nine metal hooks: two on west, four on north and three on south.

CAUSES OF DETERIORATION

CAUSES OF DETERIORATION

This section of the report presents probable causes of deterioration based on analysis and documentation by the research team, but in many cases additional research will be required to prescribe an exact remedy. This section is organized by major causes - moisture, structural design, and general wear - with specific instances addressed in the appropriate category.

MOISTURE DAMAGE

The primary cause of deterioration at Flat Top Manor is excessive moisture in the foundation, the structure, and the decorative elements--columns, balustrades, pedestals, etc.-- of the house. This condition is caused when moisture enters through the foundation, through improperly designed members, and through failed roofing surfaces, particularly the flat porch roofs.

Exterior

Roof

In a memo dated March 19, 1973, James Aikens of the NPS states that "Approximately 20 years ago, an unfortunate decision was made to apply a built-up asphalt roof over an existing flat metal roof. The application of the later roof perforated the metal roof with nail holes. Since the expansion rate is much different...a bond could not be achieved, [resulting in] the roof leaking ever since." A new roof was installed in the summer of 1974, but was in need of repair by the second half of 1975, and continued to be troublesome throughout its lifetime. A second replacement roof was installed in 1980, but in 1983 Gary Everhardt, NPS Superintendent, was again discussing the need for a new flat roof, for which funds were allocated in 1984. Because bids came in higher than expected, the money was used to paint the exterior instead, with plans made to re-roof in 1985. The 1980 roof has not been replaced, but a protective membrane was installed in September 1986. There is regular mention in NPS records both of ongoing leaks and periodic repairs to both the flat roof and the shingle roof.

It would appear that the two previous flat metal roof installations were poorly designed and/or installed. Compounding the difficulty is the fact that the pedestal boxes have been nailed directly into the roofing and then flashed with discontinuous flashing instead of collared flashing.

Wood elements

The exterior elements of the house including wood siding, columns, balustrades, rails, capitals, and pedestals are particularly susceptible to moisture damage through prolonged exposure to the elements, poor design and substandard materials.

Specifically, the following problems need to be addressed:

Columns: Moisture is traveling through the columns from nail holes in the porch roof caused by nail holes in the metal roof and its coating. These holes create a direct path for rainwater to travel through the boxes, beams and into the columns, causing the deterioration of the capitals, shafts, bases, and pedestals.

In addition, three columns, C124 - C126, are missing at the rear of the kitchen wing and have been replaced with temporary posts.

Exposed Pedestals: The caps of the pedestals have been constructed with insufficient slope, or in some cases with no slope at all, which allows water to puddle on the cap. The moisture causes the cupping of the cap, which in turn allows for larger puddles and more damage. The pedestals have been replaced at different times with different construction methods, none of which have been effective in preventing moisture damage.

Balustrades: The hand and bottom rails were also constructed

with insufficient slope and are ineffective in directing water off the member, thus allowing rot. Some individual balusters are also lacking appropriate slopes in the base blocks.

Finishes: The exterior paint suffers from severe peeling and cracking. The addition of the public restrooms at the east side, and the proximity of the north side of the kitchen addition to the retaining wall creates a microclimate that retards moisture evaporation and air circulation.

In other areas, the grade of the wood substrate also affects the longevity of the paint finish. On many of the trim elements, the new wood is of substandard quality, making it difficult for the paint to adhere to the surface. For an in-depth discussion of exterior paint problems and remedies, please refer to the "Exterior Paint Recommendations" in the appendix of this report.

Drainage

The house was built with a nine to twelve-foot gap between the retaining wall and the north and east facades. This margin was decreased to less than three feet when the kitchen was expanded in 1909, and further narrowed at the east facade porch extension when the public restrooms were added. The narrow area between the wall and the house receives little air circulation in those locations, and moisture that would otherwise dissipate is retained in the area.

There is no drainage system in place to divert water around the house, so water flowing through the ground passes directly through and under the foundation. The basement floor, which is poured concrete, traps the moisture under the slab. It is absorbed up into the columns and piers of the house by capillary action known as "rising damp."

Structural Implications

The foundation of the house has experienced ongoing movement since its construction, as evidenced by the diagonal cracks in the walls of many of the rooms, and by the pronounced differential settlement of several of the walls on the second floor, particularly the wall between rooms 215 and 216, the south wall of room 206, and the south wall of room 210.

The movement of the foundation is probably due to the moisture content of the soil below the footings, however some settlement may also be due to the composition of the soil itself. A qualified geo-technical engineer could be hired to test the soil composition should the recommended remedial work not entirely halt the settlement. The diagonal cracks in the walls should be monitored carefully to check for signs of further foundation movement.

Without adequate drainage, the movement of the foundation will continue to cause damage to the structure of the house. The drainage system will be discussed at length in the "Proposed Treatment and Use" section of this report.

STRUCTURAL DESIGN

Room 201

The floor of the Main Hall (Room 201) on the 2nd story has noticeably deflected, possibly because of the under-design of the joists at either side of the fireplace and the connecting headers. To confirm this under-design, portions of the ceiling below should be removed to examine the three primary structural members. See Figures 2 and 3.

Room 308

The floor of room 308 is deflecting because of the load placed on the joists by the location of the widow's walk overhead and the resulting imposition of roof and floor loads. Here again, a structural engineer should be able to determine whether the joists are sized appropriately. A diagrammatic explanation is included in Figure 3 .

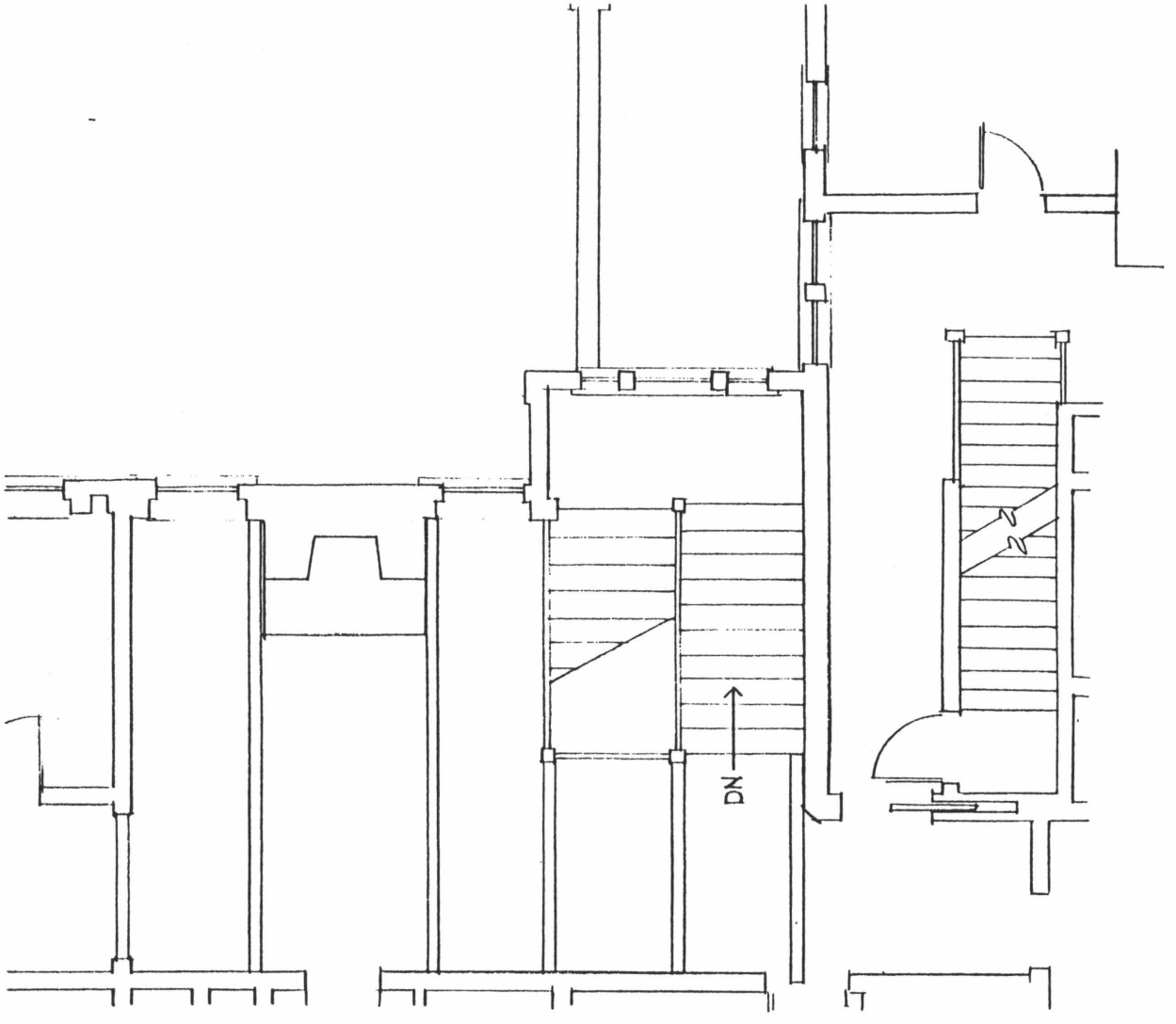


FIGURE 2 : Room 201 Joist Plan

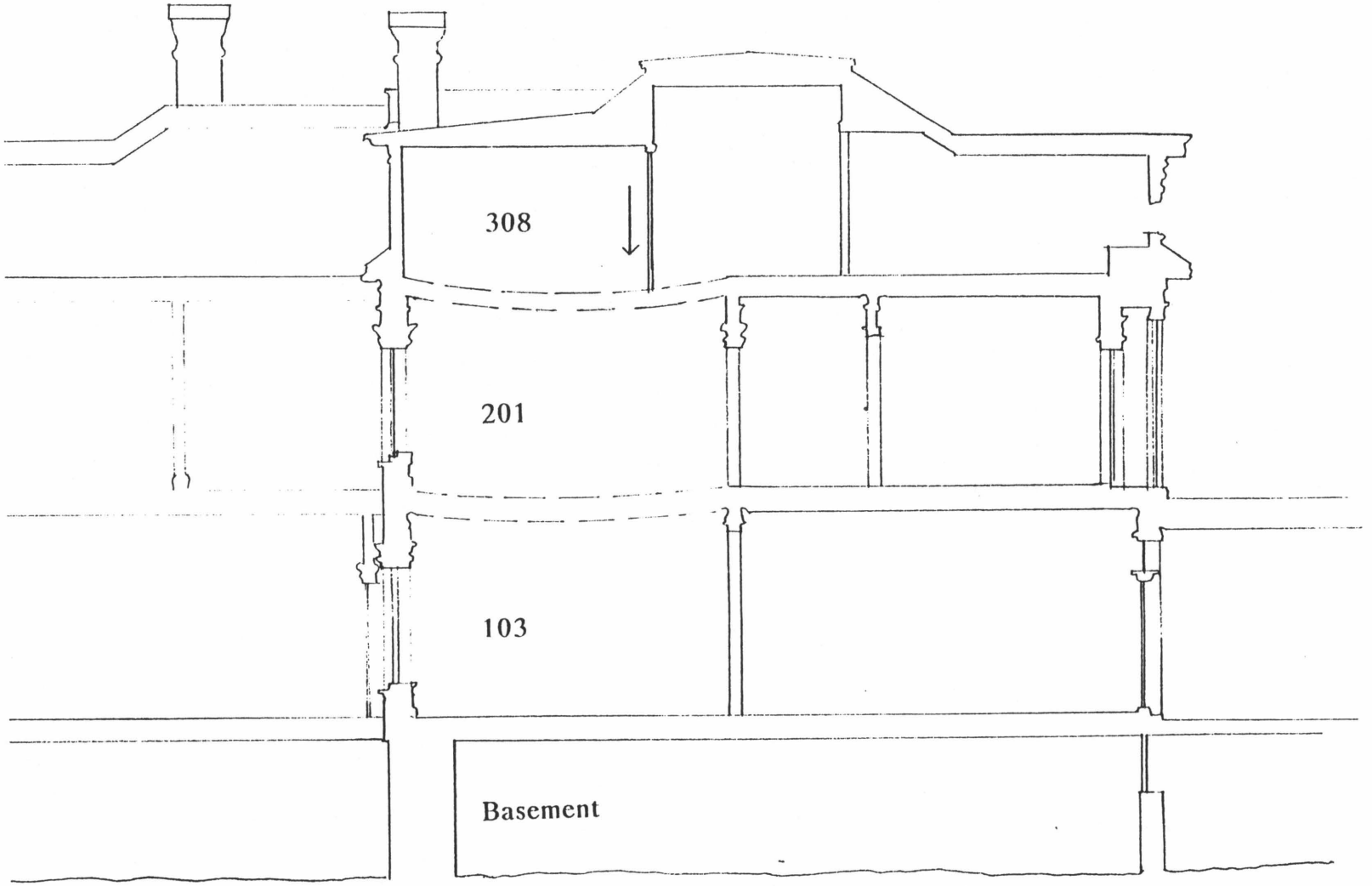


FIGURE 3 : Deflection Diagram

GENERAL WEAR

Exterior

The cedar shingle roof, which was replaced in 1980, is nearing the end of its life. The shingles themselves have lost approximately ½ their material over the last fifteen years as the result of normal wear.

Interior

The interior of the Flat Top Manor House is in remarkably good condition after nearly a century of use. Some of the features of the house--light and plumbing fixtures, hardware, and pocket door mechanisms, etc.--have become broken or inoperable over time through normal wear. Some, such as bookcase doors, china closet doors, and some light fixtures, have been removed and stored in the attic.

The paint on the wall surfaces and ceilings demonstrates pronounced "crazing" in addition to the structural cracks described above. This crazing -a myriad of fine cracks over the surface of the paint - is caused by over seventy years of paint accumulation on the canvas wall covering. It is not deterioration, but will continue to become more pronounced with additional layers of paint.

RECORD OF PRESERVATION TREATMENT

RECORD OF PRESERVATION TREATMENT

This section is a summary of maintenance and repair work performed both during the period of significance and after the Park Service acquired the property. To date, no Park Service records have been located to indicate what repairs were made between 1947 and 1973.

1899 to 1947: Moses and Bertha Cone

During the period of significance, the estate ledgers provide a glimpse of the maintenance activity at the house. The ledgers reveal that kegs of white lead for painting were purchased approximately every two years until 1933. There was, however, a considerable volume of construction happening at the estate, and rarely do entries identify the destination of materials used for maintenance and repair. There is no way to know whether these paint purchases point to regular painting of the house or of the outbuildings.

There are also regular mentions of lumber and shingles being purchased, as well as hardware, nails and labor expenses that could have been for the house or for other buildings. From the volume of shingles purchased, it appears that the original shingle roof was replaced with chestnut shingles in 1910, and again in 1921. NPS photographs reveal that several of the houses on the estate were built with construction materials similar to the main house so those early expenses could have been for buildings other than the manor house. However, it appears that the metal roofs were not replaced until 1938 - almost forty years after they were installed.

After her husband's death, Widow Cone made several changes to the house. In 1910, for instance, the ledgers divulge that Bertha Cone paid a plasterer $19.25 for 55 hours of work in the kitchen, indicating that this was when the kitchen was expanded to its present size. In 1913 the ledgers record the purchase, for an unrecorded amount, of plans and materials for the baluster fence that was constructed on the Bass Lake side of the road in front of the house.

The 1920's and 30's brought the modern age to Flat Top Manor. In 1915, the ledgers record a purchase of 6 inductive coils from Gunter Telephone Company, probably for the estate's private lines. In 1924 the manor house paid its first electricity bill, in the amount of $2.75, to the city of Blowing Rock, followed by the installation of a water meter in 1927 and the estate's first telephone bill, for $6.63, in 1931.

The look of the house also changed during this time. In 1924 the ledgers indicate that the estate paid $90.07 for "boarding paper hangers and other things." This is probably the time that a canvas was installed over the existing walls, which were previously painted plaster.

1947 to Present: The National Park Service

1947 - 1973

No maintenance records have been found for this period of time. Presumably, regular maintenance was occurring to repair or replace damaged exterior elements, update interior and exterior paint, and generally maintain the appearance and function of the house.

During this period, the chimney and foundations were painted white, the entrance drive was paved, and the parking expanded at the house. Sometime after 1950 the restrooms at the east side of the porch were added, and an asphalt roof applied over an earlier metal roof. The sunroom was expanded after 1960.

1973 - Present

The NPS ledgers are a valuable tool in identifying maintenance trends over the last twenty-two years. In the section below, maintenance work is summarized by location, rather than year-to-year, so that the overall patterns may be observed. A summary of Park Service records is located in the appendix of this report.

Roof

Available Park Service records begin in March of 1973, with a memo from James Askins to Exhibits Specialist stating that "Approximately 20 years ago, an unfortunate decision was made to apply a built-up asphalt roof over an existing flat metal roof. The application of the later roof perforated the metal roof with nail holes. Since the expansion rate is much different...a bond could not be achieved, [resulting in] the roof leaking ever since." A new roof was installed in the summer of 1974, but by 1975, the roof was already in need of repair. NPS records state that a new roof was installed in 1980, but do not indicate whether the roof in question was the flat metal roof or the cedar shingles. In 1983 Gary Everhardt was again discussing the need for a new flat roof, for which funds were allocated in 1984. Because bids came in higher than expected, the money was used to paint the exterior instead, with plans made to re-roof in 1985. The roof has not been replaced, and there is regular mention in NPS records of leaks and periodic repairs to both the flat roof and the shingle roof.

Foundation

The foundation of the house was repaired every year from 1974 to 1976 for unspecified damage, presumably moisture-related. In 1977, James R. Brotherton, NPS acting supervisor, stated that "in the near future we plan to begin restoration work on the Manor House [including] repairing the foundation plans and footings." A contract was awarded to Moretti Construction for $110,086, but the bid did not include a line item for adding a foundation drainage system. Moretti's first change order, dated August 15, 1979 included an estimate of $864 for repairing the foundation wall under the rear porch. These repairs were apparently effective at preventing some of the intrusion of water into the foundation; the next reference to foundation damage does not appear until almost six years later, in a memo dated March 18, 1985. In this memo, the chief of engineering and technical services also discusses the need to reinforce the stone retaining wall at the rear of the manor house, and install a subsurface drainage system. Portions of the stone retaining wall collapsed three months later, leading to speculation that the rest of the wall could soon follow. In January of 1986, funds were approved to reconstruct the rock wall and stabilize the building's foundation as part of an overall restoration plan totaling $500,000. Funding for the repairs to the retaining wall and foundation were approved in 1986, but the wall was not reconstructed until September 1987, at a cost of $23,550. Between 1987 and 1991, the only foundation work mentioned was the reconstruction of the pier beneath column C105 in 1989. In 1991, Georgia Institute of Technology conducted an Historic Structures Assessment Report that included in its recommendations that a drainage system be added at the rear of the house. Clearance approval was obtained in August of 1991 to install a subsurface drainage system, and the maintenance report for the second half of 1991 mentions the restoration of the foundation and the underground drainage system. Presumably, the drainage system in question is the one that was installed behind the retaining wall in 1987; at the time of this report we believe that there has not been a foundation drainage system installed at the foundation of the manor house.

Other

Park Service records indicate that there has been almost constant painting and repair to the manor house throughout the last two decades, consistent with the maintenance demands of such a sizable structure. The ornamental exterior elements seem to have suffered the most in that time; there has been ongoing repair and replacement of these elements, particularly the balusters. In 1991 the entire widow's walk balustrade was replaced, at approximately the same time that the balustrade fence in front of the house was removed.

Both the interior and exterior of the manor house have been painted at regular intervals. In addition, there have been several mentions of repairs made to second-floor walls which had been damaged by leaks coming from the widow's walk through the attic.

The records indicate that almost $985,000 has been spent on maintaining the manor house since 1973, an average of almost $50,000 per year.

PROPOSED TREATMENT AND USE

TREATMENT AND PROPOSED USE

The goal of this Historic Structure Report is to provide a set of guidelines that can be used to interpret the historic significance of the Flat Top Manor House to the public and give direction to the ongoing maintenance and repair of the building. All preservation and maintenance efforts should be directed at protecting the historic character of the structure and its components. The utmost care is required in selecting the methods and materials used to repair or replace any features of the house. All work should be completed using the recommendations for preservation treatment established in this report, and by employing the services of a preservation architect and engineer.

In making recommendations for preservation treatment, our philosophy has been that it is better to work with existing materials than to suggest a wholesale replacement of exterior elements, which would be expensive and a waste of good material. Existing pieces can be repaired with epoxy, and in some cases re-milled to better match original construction. Only as elements fail irreparably should they be completely replaced using the guidelines that follow. The four columns at the porte-cochère are exceptions; they are so obviously different from the originals as to warrant immediate replacement.

The degeneration of the flat roofs has posed a continuing maintenance problem for over forty years. Park Service records indicate that at some point in the early 1950s, the existing flat metal roof at the second story and the widow's walk was covered with a built-up roof. During this process a base layer was nailed through the original roof, causing leaks that have plagued the house ever since. The roof has been replaced twice by the Park Service, once in 1975, and again in 1980, but the problems have continued. This is an abbreviated life cycle, indicating that the replacement roofs were poorly designed and/or installed. The problems with the flat roof directly affect the deterioration of the porch below; moisture passing through the nail holes in the porch roofs has caused the rapid decay of the columns, balusters, and other wood members. In addition, the cedar shingle roof at the upper level of the house is nearing the end of its life, and will soon need to be replaced. A complete and thorough re-roofing of the manor house will be required in the near future. Replacing the roof should be considered the first priority of preservation treatment, for without intervention the roof will continue to leak and all work undertaken on the porches below will be short-lived.

Another important recommendation is that a foundation drainage system be added at the rear of the house and under the porches This suggestion has been made, first by Gary Everhardt in a memo to the Associated Regional Director Planning and Assistant in 1978, again in 1984 when Gary Everhardt wrote that exterior painting was being deferred " until engineering soils testing [could] be completed," several times from 1985-1986, and finally, in an emphatic letter from Bethanie Grashof of Georgia Tech to David Ates, NPS Historic Architect. Lack of proper drainage will continue to affect the foundation of the Moses Cone Manor House, and should be given immediate attention.

Finally, we recommend that the house be designated as a historic property by the State Historic Preservation Officer of North Carolina. If so designated, the house may be exempt from certain requirements of the North Carolina Building Code that would otherwise dictate that the house be altered to meet code. The Park Service should continue its efforts to place the Manor House and the estate in the National Register of Historic Places.

PRESERVATION TREATMENT

The recommendations for treatment have been organized in the following manner: Exterior - General, then facade by facade; Interior - Basement, First Floor, Second Floor, and Attic. Of these recommendations, three are top priority: replacing the roofs, installing a foundation drainage system, and correcting the deflection in the floor and ceiling of Room 201.

EXTERIOR

Exterior Wood Elements

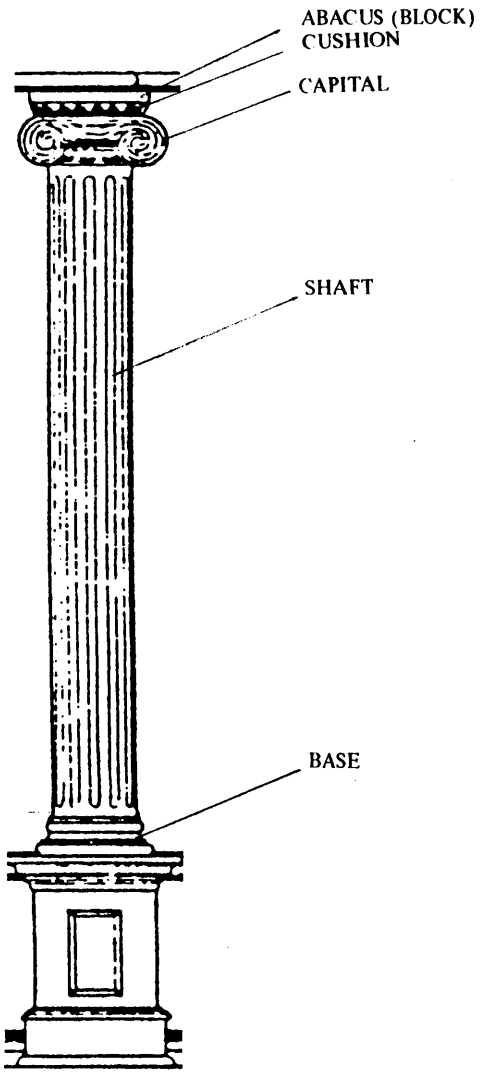
Whenever possible, every attempt should be made to restore a significant element before replacing it. Cracked or damaged members can be removed and patched with epoxy, painted to match the wood, and replaced. If restoration is not an option, replace affected members with a replica crafted from a durable, rot resistant wood such as redwood or cypress, except as noted below.

The following specific recommendations should be addressed:

Columns: There are three types of columns in use at Flat Top Manor. Each is composed of five basic parts: the abacus (block), cushion, capital, shaft and base (see figure at right.)

The first column type dates from Moses Cone's lifetime, and has a hand carved wooden capital and a shaft with 16 flutes and slight entasis. This is the most common type. Wherever possible, the column components should be repaired with epoxy and re-painted. When restoration is impossible due to advanced deterioration , replace the shafts with replicas crafted from redwood or cypress, and replace the capitals, abacus and cushion with cast aluminum members made from the existing mold stored in the Apple Barn.

The second column type dates from Bertha Cone's lifetime.



There were four of these located at the kitchen wing porch, although only one remains in its historic location. These have composition-material capitals with much more elaborate detail than the hand-carved capitals, and the shafts have 24 flutes and greater entasis than the Moses-era columns. Three of the four (C124 - C126) have been removed and are in the Apple Barn. The historic members should be repaired with epoxy, repainted, and replaced in their historic locations. If the historic members are too deteriorated to restore, replace the shafts with replicas crafted of redwood or cypress. Attempts should be made to repair the capitals, but if not possible the composition capitals (mass-made from molds) may still be available from Decorator Supply in Chicago, Illinois or other supply houses. If unavailable, a mold could be made by casting the best remaining elements and making duplicate capitals.

The third column type is installed at the porte-cochère. These have cast-aluminum capitals, and shafts with 14 flutes and no entasis. In this instance, the discrepancy between these shafts and the original shaft is great enough to warrant replacement with replicas of the 16-flute columns described above. All capitals originally faced west on the porte-cochère. When the shafts are replaced, the capitals should be reoriented to the original position.

Pedestals: There are three types of pedestal boxes (dies) in use. Each of these three types occurs in three variations: the corner pedestal, which has panels on two adjoining sides; the end pedestal which has panels on three sides and is located at stairways and other openings; and the third type that is found within a run of balusters, with panels on the front and back.

The first type of baluster is constructed with four pieces, two rails and two stiles per face, and those four pieces are each bevel cut to form the panel opening. The faces are miter-cut at each corner where they are joined. These pedestals should be repaired with epoxy and refinished. As they fail, they should be replaced with the type described below.

The second type is visible in photographs from the Bertha Cone period. Each face is a single piece of wood with a beveled panel cut out of the wider panel. The faces are butt-joined. Whenever possible, repair and refinish the existing boxes. If damage is irreparable, replace according to Figure 4.

The third type of pedestal was installed when the restrooms were added at the east side of the porch. Its construction matches the construction of the garden balustrade. Each face has rails and stiles, and rather than using a bevel cut, the panel is framed with panel molding. When the east side of the porch is reconfigured, these pedestals should be removed.

The pedestals of the garden balustrade stored in the Apple Barn should be preserved replacing the deteriorated caps and bases with new material and consolidating other damaged members.

Caps: The caps for the porch roof, widow's walk, and upper roof pedestals should be replaced with cast aluminum with a slope of 1" per foot.

Rails: The rails should be constructed according to the diagram shown in Figure 5 to be of proper thickness and slope.

Balusters: Some individual balusters are lacking proper slope and should be constructed according to Figure 5.

Clapboard Siding: As individual members fail, replace them with the highest quality wood available. Wood should be straight and tightly-grained, without knots or other flaws.

Finishes

The proper treatment of the exterior finishes should begin with experienced craftsmen and the highest quality materials. Mold and mildew should be removed with a mixture of bleach, TSP and water, and the cleaned completely by hand. Allow all treated areas to dry for at least 48 hours before priming and painting.

Where there are existing layers of paint, scrape and sand gently by hand. There should be no obvious demarcations between layers of paint.

When choosing the finish paint, look for a top grade oil/alkyd exterior paint of semi-gloss or higher gloss level. The white pigment should be of non-chalking titanium dioxide, and the ratio of cheap

fillers as low as possible. Use only the primer recommended by the maker of the finish paint.

The foundation should be painted a dark brick-red to match the original color. In addition, the dormer cheeks should be painted to match the siding and trim when the roof is replaced. The chimneys, which are currently painted white, should be repainted to match the foundation.

For a complete analysis of the condition of the exterior paint and its treatment, please refer to the "Exterior Paint Recommendations" in the appendix of this report.

Windows

Many of the second floor windows were originally shuttered during the winter months. This practice should be reintroduced to protect the windows of the house and to prevent damage to the floors of the second story rooms by driving rain storms and bleaching sunlight. The original shutters are stored in the basement of the house. These should be washed with a TSP solution (Spic-n-Span) and water, and rinsed well. Any loose paint should be scraped gently and lightly sanded by hand. Apply one coat of dark primer followed by two coats of highest quality oil paint color matched to the original.

In addition, many of the windows originally had half screens, which are also stored in the basement. These should be repaired and reinstalled in their original locations. If the original bronze screening needs to be replaced, care should be taken to find a close match.

Roof

The manor house has two roofing systems: the upper, which is composed of cedar shingles and the flat roofs of the widow's walk, porches and shed dormer.

Both of these roofs are nearing the end of their lives and need to be replaced. The flat metal roofs should be stripped down to the sheathing, and re-installed using a plan designed by a qualified roofing consultant. Any deteriorated sheathing or structural members should be replaced before the new roof is installed. A separate support block should be built into the roof at each pedestal and covered by the roofing material. The pedestal box would then be installed over that block without penetration of the roofing system (see Figure 4B). The new flat roofs should last for many years, provided care is taken to protect the roofing material against punctures.

The shingles on the upper roof should be removed, and the sheathing checked for signs of decay. If solid decking was installed during the 1980 or earlier roofing efforts it should be removed and an open decking system installed. Any deteriorated sheathing or structural members should be replaced. An examination of the area behind the warped beaded board in the attic revealed fiberglass insulation, probably installed when the roof was replaced in 1980. The insulation fills the air space between the structure and the roof, making is harder for the shingles to dry completely. It should be removed from this area before re-roofing. Shingle life is extended when air can reach the under side of the shingles and is not restricted by building paper, closed decking, or insulation.

In addition, a lightning protection system should be installed in the position of the original, which was removed in 1978.

Gutters and Downspouts

The gutters and downspouts of the house are galvanized, unpainted steel. They need to be thoroughly cleaned to remove rust, primed with a rust-inhibiting primer, and finished with two coats of paint to match the rest of the trim.

North Facade

Foundation Drainage

In 1986, the retaining wall at the north side of the house was rebuilt and a drainage system added behind it. This directs run-off water around the wall on either side and away from the house. Although this system captures some of the water that would

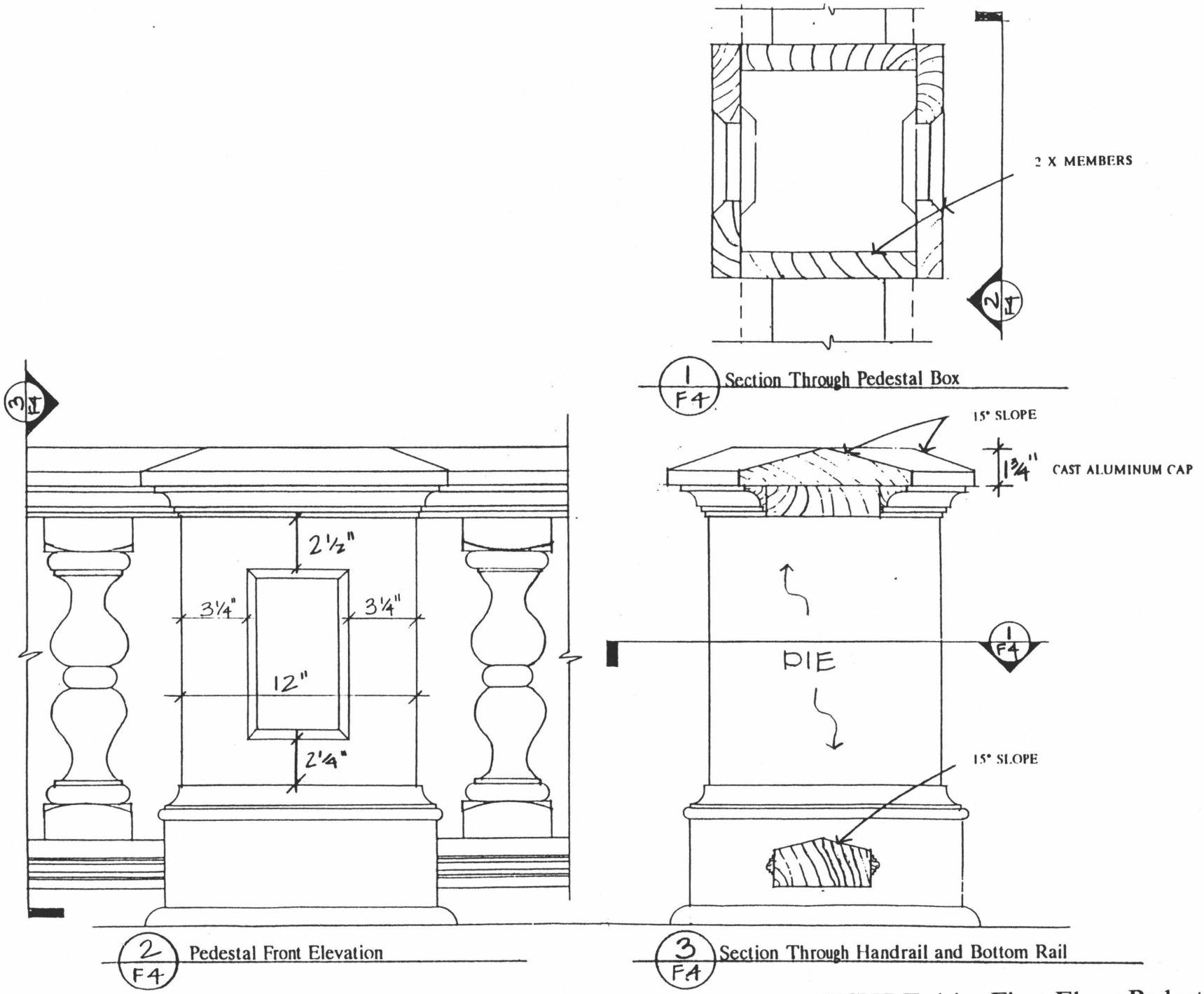


FIGURE 4A : First Floor Pedestal Diagram

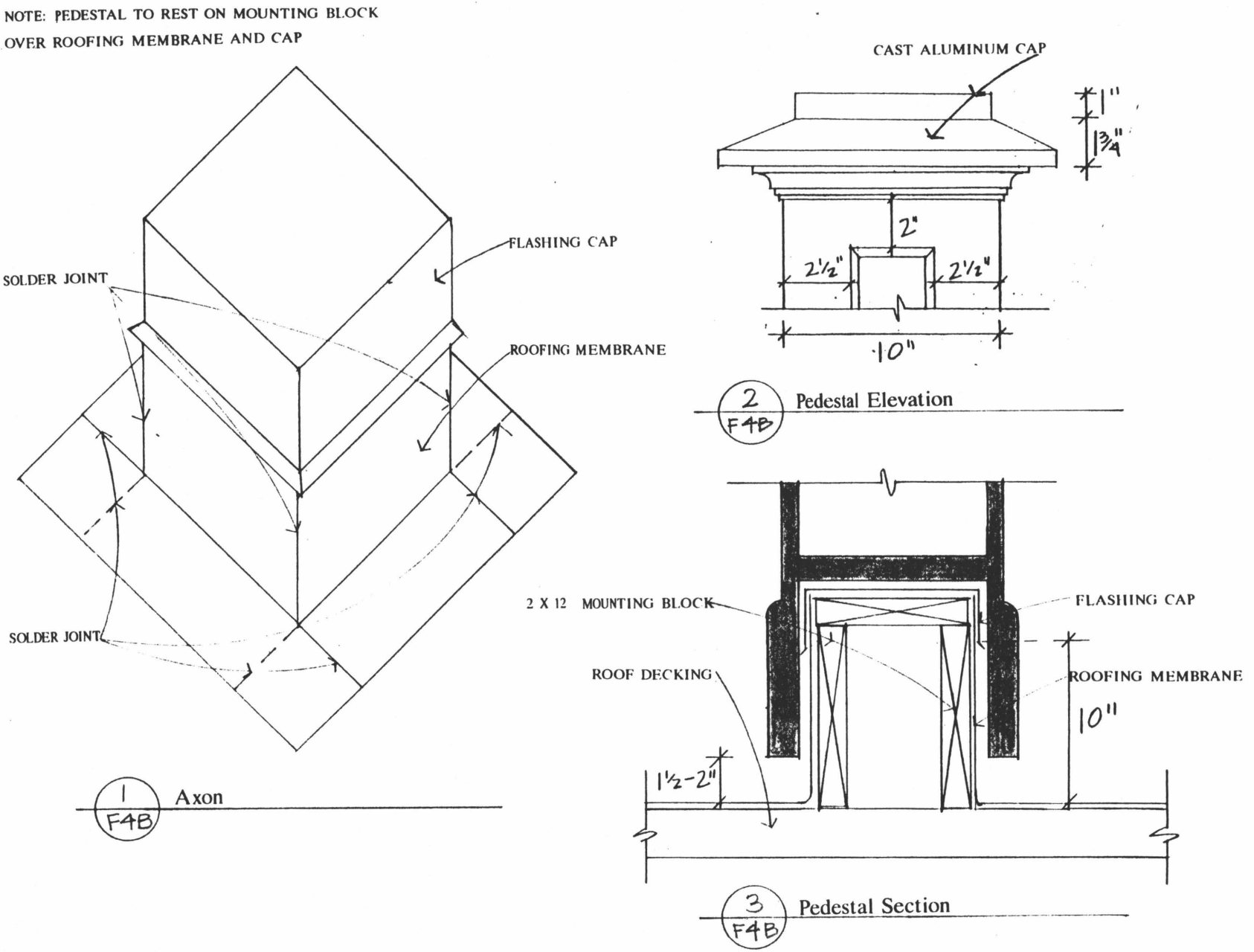
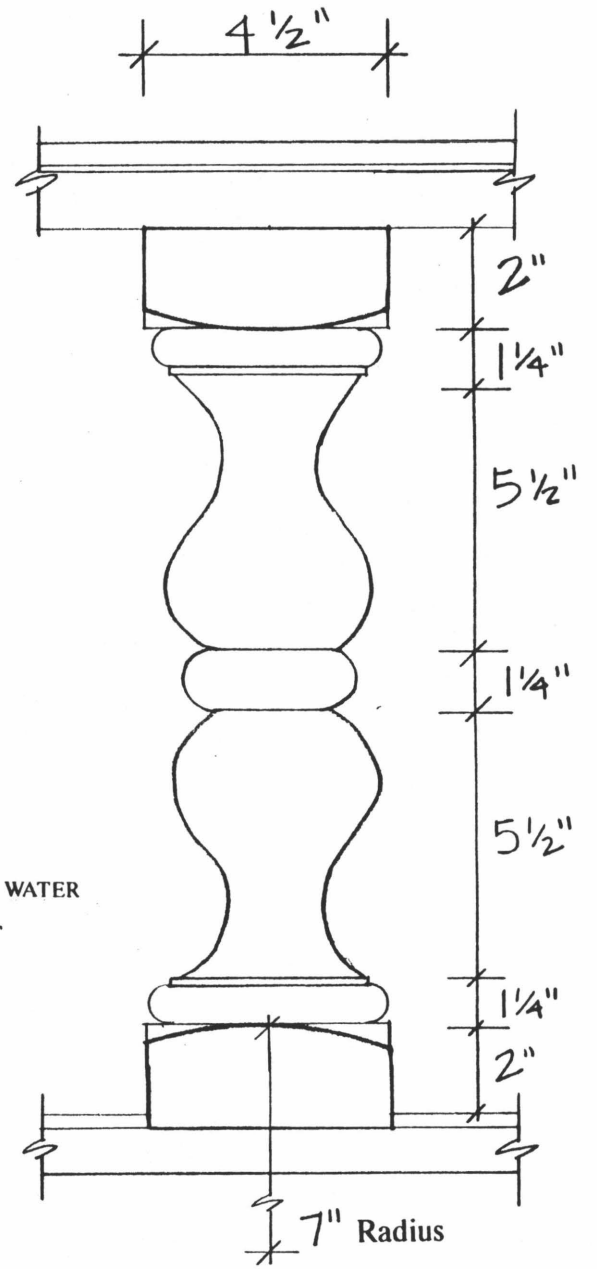


FIGURE 4B : Second Floor Pedestal Diagram



THESE MEMBERS MUST HAVE SUFFICIENT SLOPE TO DISCOURAGE WATER FROM SETTLING ON THE MEMBER, CAUSING THE MEMBER TO ROT

FIGURE 5 : Baluster Diagram

otherwise flow under the house, it does not constitute a complete solution. A foundation drainage system should be added at the east and north sides of the house and along the west side of the kitchen addition. At the north side of the kitchen addition, the proximity of the retaining wall to the house makes the addition of a foundation drainage system virtually impossible. This area should be paved with stone and slightly sloped from the center directing the water to the east and west sides of the kitchen addition. Catch basins at each end of the paved portion should connect to the underground drainage system at the east and north facades and along the west side of the kitchen porch. See Figures 6 and 7.

This work should be completed under the direction of a structural engineer, as the topography of the site will probably require that all trenches be shored to prevent the collapse of the retaining wall.

An additional drainage system should be added under the porch at the south side of the house. This system should consist of two independent conduits placed under the structure of the porch to collect water accumulating under the porch and discharge it away from the house.

East Facade

Public Restrooms

The public restrooms added in 1955 at the east end of the porch should be removed. They distract from the symmetry of the house and block air circulation to the east facade, contributing to the paint failure. The door to the dining room from the porch should be reinstalled in its original opening.

Bridge

The bridge that connects the porch extension to the walkway is currently built to imitate original construction. This should be rebuilt of a material, such as stone, that is complementary to, but can be distinguished from, the original materials. Column C-101 should be returned to its original location and a replicated column installed at the corner of the porch where the original was removed for the rest room addition.

Vegetation

The dense screen of rhododendron at the east side of the house along the path from the parking lot to the porch addition should be trimmed significantly, other understory plants removed, and trees pruned to admit sunlight and allow air circulation to the east facade of the house.

South Facade

Sun Porch

The latches on the glass panels of the sun porch have been painted into place over the course of many years. These latches should be cleared of all paint build-up so that the windows can be demounted as originally intended.

The addition to the sun porch, which was installed after 1960, should be removed and the original demountable panels and door returned to their original location.

Balustrade Fence

The balustrade fence should be repaired and reinstalled using the description found in the ledgers, the original drawings, and the remaining portions of the original balustrade that are stored in the attic of the apple barn as guides. The replacement material should be crafted of a rot-resistant wood such as redwood or cypress, and painted according to the recommendations found in the appendix of this report. The fence should be installed in the original location, according to the 1940's site map, centering the middle section of the fence on the main entrance of the house.

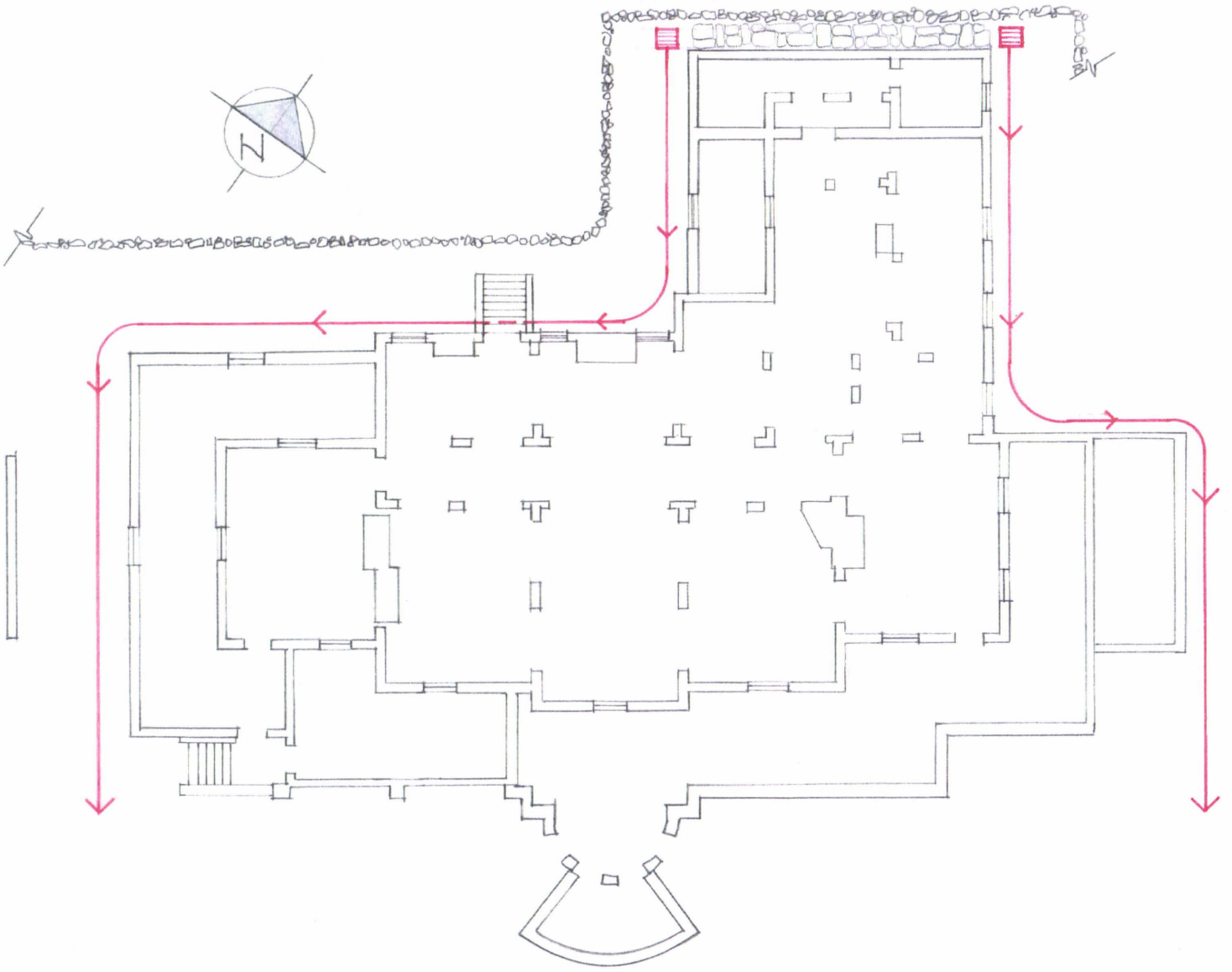


FIGURE 6 : Drainage Diagram - Plan

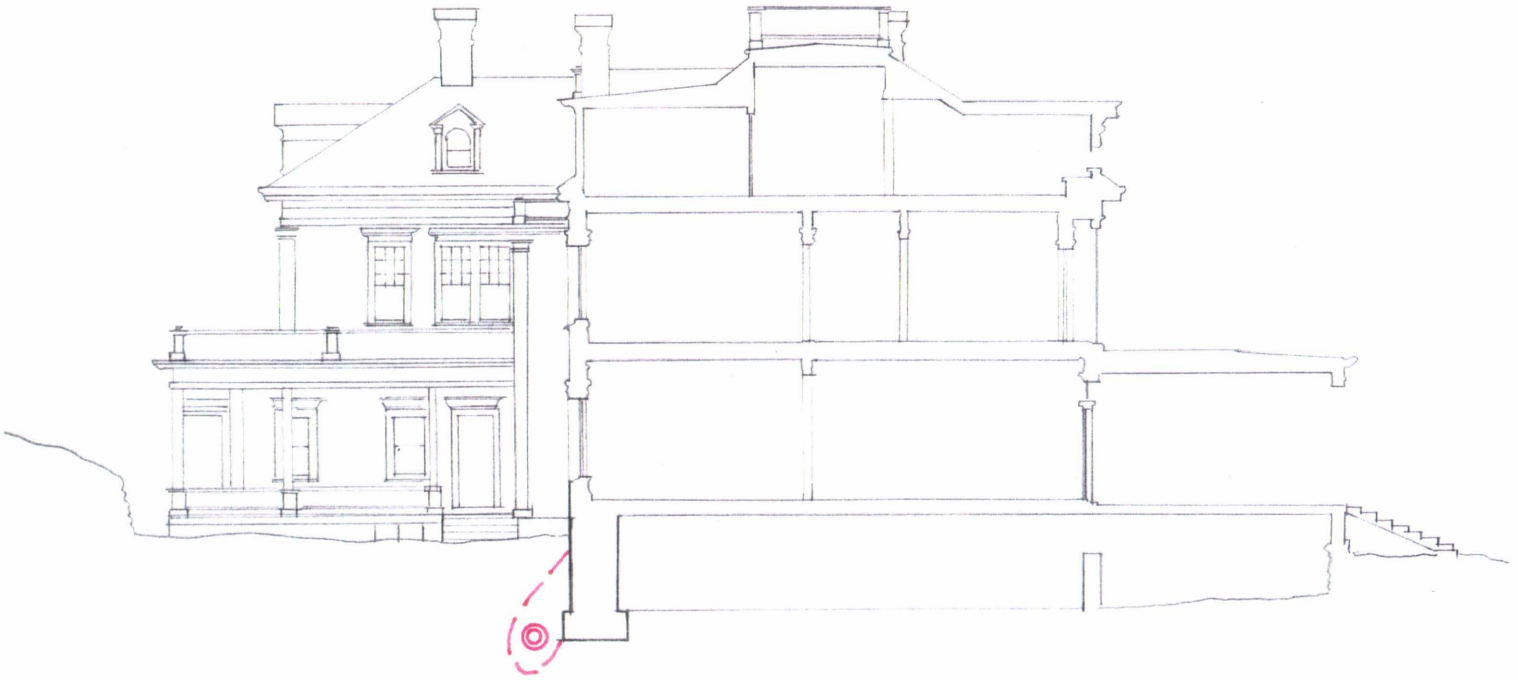


FIGURE 7 : Drainage Diagram - Section

West Facade

Port-Cochère

The grade at the port-cochère should be lowered to match as closely as possible the original slope of the drive. The bottom edge of the screens in the lower step should be uncovered and used as a guide. During this process, the asphalt should be removed and replaced with gravel to return this area to its 1947 appearance. The screens should be secured or repaired if damaged.

INTERIOR

The interior spaces of the house have, in general, been altered little since Bertha Cone's death. Although the presence of the craft center has brought about several changes, such as the addition of carpet on the first floor and the use of non-original paint colors, these alterations are minor and will pose no obstacle to restoration.

Wall Finishes

The layers of paint on most walls date to 1924, when canvas was first hung on the first and second floors. Further paint application would intensify the current crazing.

The recommended solution is to hang a new layer of wall canvas directly over the existing wall surface. This would preserve the layers of paint intact, allowing for future study. The new wall canvas should be applied directly on top of the existing paint finishes as follows: first, clean all surfaces with a TSP and water solution. Allow to dry completely before proceeding, at least 48 hours. Adhere the canvas with a mildew-resistant adhesive, making sure that there are no sags or wrinkles. Size the canvas using a high quality acrylic sizing such as Glidden's GAC 100 (Golden). The canvas should be primed and finished as described in the "Interior Paint Recommendations" section of this report.

Before applying a new layer of canvas, the major cracks in the walls should be filled and patched. Wherever the cracks extend from a canvas boundary such as a corner or baseboard, the canvas should be steamed and peeled back as a whole to expose the crack. In an area where the crack is more than 10' from a margin, make a straight cut perpendicular to the ceiling through the center of the crack. Steam and peel back the canvas on either side of the cut to expose the crack. The cracks should be repaired according to the National Park Service's *Preservation Briefs: No. 21.* When the patch is complete, readhere the canvas. Make sure that all paint flakes loosened by this process are removed before adhering a new layer of canvas.

Floor Finishes

The floors on the first and second floors require only minimal treatment. Care must be taken not to damage the flooring material, therefore sanding is **not** recommended except in cases of severe damage, and then only if performed by a specialist who has extensive and documented experience working with historic flooring materials.

Basement

If the addition of a foundation drainage system fails to eliminate rising damp, a one-foot section could be cut out around the base of every pier and filled with a layer of sand and a course of unmortared brick at the slab level to facilitate the evaporation of moisture that has been trapped under the basement floor slab.

First Floor

Floor Finishes

The wall to wall carpeting, which has undoubtedly preserved the floors against the constant traffic in the craft center, should be removed, and the floors buffed and waxed. Since the first floor floors were refinished just one year before carpet was installed, they should be in good condition. Once the floors are refinished, carpet runners

or replacement rugs based on historic research should be laid along the circulation paths and in rooms.

Doors

The doors to the china cabinets and the library book shelves should be reinstalled. These pieces still retain the original palette of ivory paint. If the paint on the doors shows signs of deterioration, wash with a TSP solution and water, and rinse well. Any loose paint should be scraped gently by hand and rough areas should be lightly sanded, again by hand. Prime and finish the doors according to the "Interior Paint Recommendations" section of this report.

Second Floor

Floor Structures

The services of a structural engineer should be employed to correct the deflection in the floor and ceiling of Room 201. As discussed in the "Causes of Deterioration" section of this report, the under-structuring of the joists is probably the cause of the deflection in these members. Small openings in the plaster ceiling of Room 103, directly under the location of the joists at either side of the fireplace, should reveal the size of the members. If the joists are found to be under-sized, portions of the plaster ceiling in Room 102 below should be removed carefully, and the joist members jacked up and sistered with steel channels to correct the sag in the floor. Similar investigation should be made in the ceiling of 201.

Floor Finishes

The floor finishes should be stripped and refinished in Rooms 210 and 212 where water stains and bleaching from the sun have caused severe damage.

Attic

Floors

The most appropriate place to install insulation is under the attic floor. Small sections of the flooring could be removed, and insulation could be blown in between the members. The floors should be cleaned, waxed and buffed. Where water damage has occurred, apply a chemical stripper to remove the stain, and refinish to match original finish.

Finishes

In the attic, the original wood beaded board on the walls and ceiling shows evidence of water damage, as described in the "Causes of Deterioration" section of this report. Where the beaded board has been warped by moisture, remove affected boards, soak, clamp to a flat surface until dry, and reinstall. Carefully sand damaged areas and reseal with varnish that has been color-matched with the original.

PROPOSED USE

Since 1951, the Moses H. Cone Manor House has functioned as a craft center. It is very important that the Manor House remain in continuous use since deterioration will go unnoticed if the house is not used. The recommendations consist of three parts, but should not be done in three phases: **Part One** - Convert the house into an interpretive center; **Part Two** - Build a visitor's center on the site of the old laundry building to house restroom facilities, visitor orientation and the craft shop; **Part Three** - Redirect the entrance road to its original approach, providing a view of the house in relation to its surroundings.

Part One

The Manor House should be an interpretative center, not a historic house museum nor a shop. House museums are successful when the house has its original furnishings. The Cone's belongings were widely dispersed after Bertha's death. As a historic house museum the Moses H. Cone Manor House would pale in comparison to nearby Biltmore, unless large sums of money were spent to re-acquire the original furnishings and artwork. The interpretation of the house would also be limited to the time of the furnishings.

An interpretive center, on the other hand, could address a wide range of issues: the lives of the Cone family, Moses Cone's success as a "captain of Industry", the concept of the model farm, the Cone mills, the life of mill workers, are just some of the possible subjects. To provide a complete experience for visitors, the second floor and attic should be opened, after the structural problems have been corrected.

The issue of accessibility needs to be resolved. In order to make the house accessible from the parking lot, a gently sloping ramp should be worked into the landscape between the parking lot and the house (See Figure 8). The access to the porch should be rebuilt using a stone terrace/bridge instead of the current wooden deck. In order to comply with the American with Disabilities Act, the first floor should contain an exhibit that interprets the upper levels of the house to handicapped people who are unable to experience it firsthand.

Part Two

A visitors' center should be built behind the house on the site of the former laundry building, and be made thoroughly handicapped-accessible. Although not a recreation of the laundry building, the center should re-establish the relationship between the two buildings. Ideally two stories tall, it should be visually compatible with the manor house.

The visitors' center could offer a wide variety of services. Tickets to the house could be purchased there, carriage rides and tours arranged. A lobby could house a model of the entire estate, showing the locations of the manor house, laundry building, out-buildings, apple orchards etc. A small theater could show a five-to-ten minute long video about the estate and the Cone family. Public restrooms should be housed here as well. The visitors' center could also feature exhibits not able to be presented in the manor house.

The new building should also house the craft center which could offer not only the works of southeastern craftsmen, but also samples of the produce of the Cone apple orchards - apple butter, cider, vinegar, pomadors and the like.

As an interpretative center, a nominal admission charge could fund the ongoing maintenance of the house. If the Park Service charged $3.00 per person, and the house received 200,000 visitors per year, as it did in 1991, the revenues would total $600,000 per year. Compared to the Biltmore Estate's $24.95 admission price, the Moses H. Cone Manor House would be a bargain and affordable for families traveling along the Blue Ridge Parkway.

Part Three

In order to fully experience the house in relation to its surroundings, the entrance route should be changed to bring visitors along the original approach road. A connecting drive should be built between the approach road and the parking lot at the rear of the

manor house so that the view from the front porch is not marred by passing vehicular traffic. (See Figure 8.)

In addition, a new bridle path could be built at the location of the original lower carriage road to separate horse and vehicular traffic. This road would connect to the carriage road that leads to the apple barn as shown in Figure 8.

For the first half of the 20th century, Flat Top Manor served as the country home of wealthy industrialist Moses Cone and his wife Bertha. For the second half of the 20th century, the Manor House has served as the Parkway Craft Center. Since 1951, the Park Service has emphasized the recreational and not the historical resources of the Moses H. Cone Memorial Park.

Over the years millions of visitors have enjoyed its mountain scenery, traveled its carriage roads by horse or by foot and fished in its lakes. In addition to its recreational assets, the estate is of historical significance and interest. In 1991 alone, approximately 500,000 people visited Cone Memorial Park, and 200,000 people visited the Parkway Crafts Center. As an interpretive center, Flat Top Manor could not only entertain these visitors, but provide insight and education about Moses and Bertha Cone's place in American history.

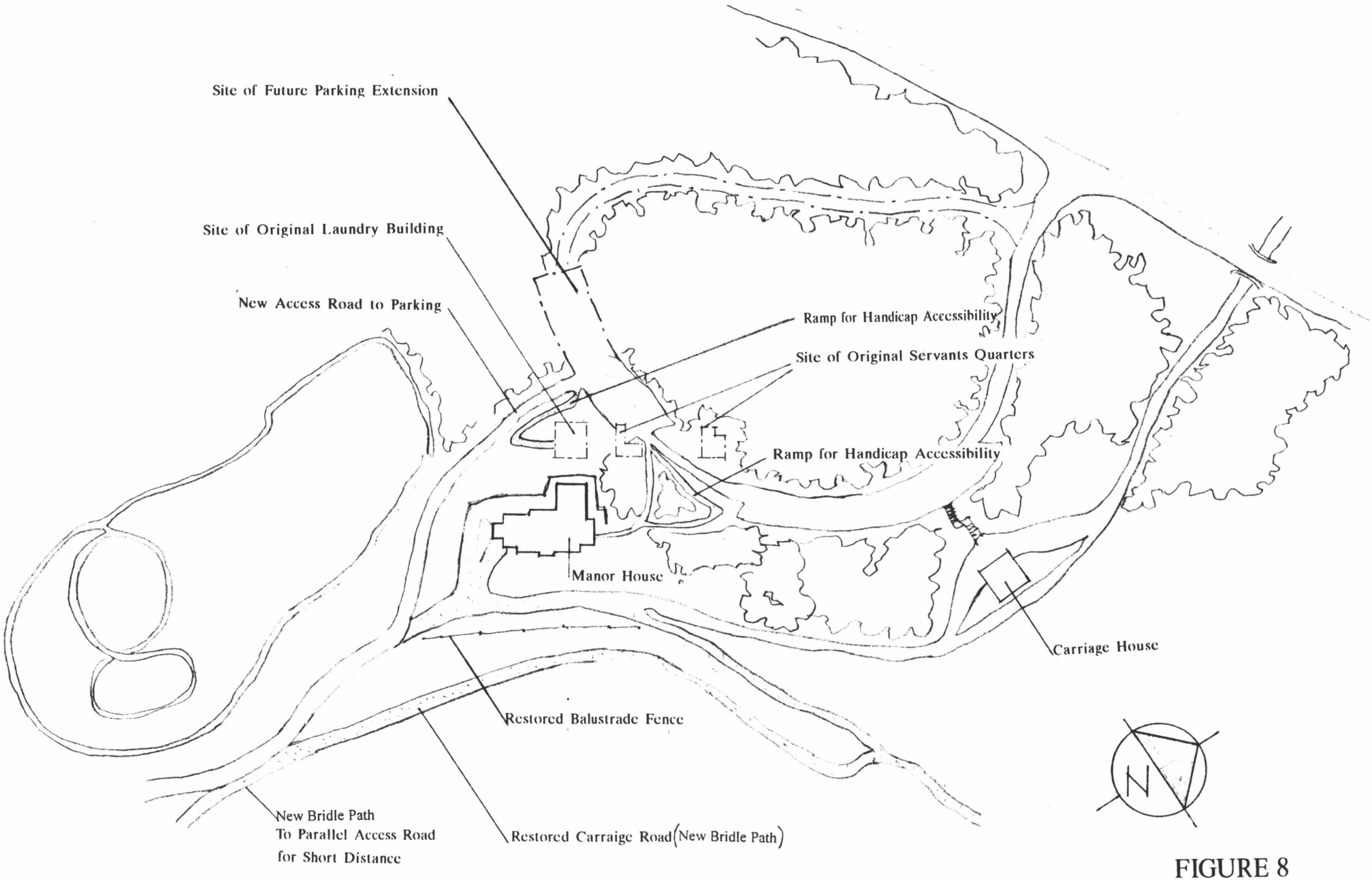

Site of Future Parking Extension
Site of Original Laundry Building
New Access Road to Parking
Ramp for Handicap Accessibility
Site of Original Servants Quarters
Ramp for Handicap Accessibility
Manor House
Carriage House
Restored Balustrade Fence
N
New Bridle Path
To Parallel Access Road
for Short Distance
Restored Carraige Road (New Bridle Path)

FIGURE 8

COST ESTIMATE

22 August, 1995
Moses H. Cone Manor House
Historic Renovation

Prices are current day and assume competitive bidding to qualified contractors from bidding documents prepared by an architect and include all mark–ups.

FIRST PRIORITY ITEMS:

1.	Roof:					
	– Remove Existing Roofing	7,700 SF	@	$0.65 / SF	=	$5,005
	– Cedar Shingle Roofing	3,900 SF	@	$9.50 / SF	=	37,050
	– Lead Coated Copper	3,800 SF	@	$18.00 / SF	=	68,400
	– Flashing	1,700 SF	@	$12.00 / SF	=	20,400
	– Replace Gutters & Downspouts	750 LF	@	$18.00 / LF	=	13,500
	– Remove Insulation	5,200 SF	@	$0.35 / SF	=	1,820
	– New Blown–In Insulation	4,100 SF	@	$2.10 / SF	=	8,610
				SubTotal		$154,785
2.	Site Elements & Drainage:					
	– Re–Grade at Porte Cochere	20 CY	@	$40.00 / CY	=	$800
	– Sloped Paving Behind Kitchen	150 SF	@	$3.50 / SF	=	525
	– Catch Basins	2 EACH	@	$650.00 / EACH	=	1,300
	– Rear Foundation Drainage System	270 LF	@	$16.00 / LF	=	4,320
	– Under Porch Drainage System	130 LF	@	$16.00 / LF	=	2,080
	– Underpin Columns & Walls	1 LS	@	$5,000.00 / LS	=	5,000
	– Replace Paving With Gravel	8,000 SF	@	$1.50 / SF	=	12,000
				SubTotal		$26,025

22 August, 1995
Moses H. Cone Manor House
Historic Renovation

LONG TERM REPAIR:

1.	Exterior Wood Elements:					
–	Replace Defective Members – Siding & Trim	858 SF	@	$10.50 / SF	=	$9,009
–	Painting by Brush	8,580 SF	@	$1.50 / SF	=	12,870
–	Recondition Shutters With New Hardware	12 PAIR	@	$400.00 / PAIR	=	4,800
–	Remove Restrooms, Repair Deck	152 SF	@	$25.00 / SF	=	3,800
–	Trim Vegetation	1 LS	@	$750.00 / LS	=	750
–	Free Glass Panel Latches	10 EACH	@	$50.00 / EACH	=	500
–	Balustrade Fence	280 LF	@	$210.00 / LF	=	58,800
–	Pedestal Foundations & Saddles (Balustrade Fence)	18 EACH	@	$275.00 / EACH	=	4,950
–	Reconfigure Enclosed Porch	10 LF	@	$100.00 / LF	=	1,000
–	Remove Glass Panels	32 LF	@	$18.00 / LF	=	576
–	Replace Front Stair Treads	133 LF	@	$55.00 / LF	=	7,315
–	Handrail @ Front Stair	9 LF	@	$80.00 / LF	=	720
–	Stair At Side Porch	8 RISER	@	$250.00 / RISER	=	2,000
–	Relocate Column @ East Porch	1 EACH	@	$650.00 / EACH	=	650
–	Replace Roof Balusters	66 EACH	@	$135.00 / EACH	=	8,910
–	Repair/Repaint Shingles	800 SF	@	$3.75 / SF	=	3,000
–	Repaint Porch Deck	3,800 SF	@	$1.35 / SF	=	5,130
–	Paint Doors and Windows	84 EACH	@	$125.00 / EACH	=	10,500
				SubTotal		$135,280

22 August, 1995
Moses H. Cone Manor House
Historic Renovation

Unit Prices for Exterior Elements Replacement:
Assumes Piece Meal Replacement

- Replace Columns @ $850/Each
- Replace Bases @ $225/Each
- Replace Pedestals @ $550/Each
- Cast Aluminum Caps @ $450/Each
- Rails & Balusters @ $300/LF

2. Basement					
– Cut Slab	362 LF	@	$6.50 / LF	=	$2,353
– Brick in Sand Bed	340 SF	@	$12.00 / SF	=	4,080
– Item	0 SF	@	$0.00 / SF	=	0
– Item	0 SF	@	$0.00 / SF	=	0
			SubTotal		$6,433

22 August, 1995
Moses H. Cone Manor House
Historic Renovation

3. Interior, First Floor:

– Remove Carpeting	3,270 SF	@	$0.35 / SF	=	$1,145
– Floor Repair	1 LS	@	$1,000.00 / LS	=	1,000
– Strip, Buff & Wax Floors	4,100 SF	@	$1.10 / SF	=	4,510
– New Canvas, Painted	6,470 SF	@	$8.50 / SF	=	54,995
– Paint Ceilings	4,100 SF	@	$1.15 / SF	=	4,715
– Paint Doors	28 EACH	@	$95.00 / EACH	=	2,660
– China Cabinet & Library Doors	12 EACH	@	$175.00 / EACH	=	2,100
– Pantry Floor Repairs	180 SF	@	$25.00 / SF	=	4,500
– Paint Kitchen Walls	2,200 SF	@	$1.05 / SF	=	2,310
– Refinish Kitchen Paneling	600 SF	@	$2.00 / SF	=	1,200
– Paint Woodwork &Trim	2,200 LF	@	$2.65 / LF	=	5,830
– Re–Plaster Pantry Ceiling	180 SF	@	$10.00 / SF	=	1,800
– Repair Pocket Doors	3 PAIR	@	$350.00 / PAIR	=	1,050
– Repair Entry Hall Plaster	15 SF	@	$12.00 / SF	=	180
– Miscellaneous Repairs	1 LS	@	$1,500.00 / LS	=	1,500
– Item	0 SF	@	$0.00 / SF	=	0
– Item	0 SF	@	$0.00 / SF	=	0
			SubTotal		$89,495

22 August, 1995
Moses H. Cone Manor House
Historic Renovation

4.	Interior, Second Floor:					
	– Level & Reinforce Framing	520 SF	@	$35.00 / SF	=	$18,200
	– Re–Plaster Ceiling After Frame Reinforcement	520 SF	@	$10.00 / SF	=	5,200
	– Strip Water Stained Flooring	800 SF	@	$3.50 / SF	=	2,800
	– Strip, Wax & Buff Floors	4,100 SF	@	$1.10 / SF	=	4,510
	– Clean & Repair Plumbing Fixtures	12 EACH	@	$85.00 / EACH	=	1,020
	– Patch Wall Cracks	500 LF	@	$4.50 / LF	=	2,250
	– New Canvas, Painted	8,800 SF	@	$8.50 / SF	=	74,800
	– Paint Woodwork &Trim	2,400 LF	@	$2.65 / LF	=	6,360
	– Paint Ceiling	4,100 SF	@	$1.15 / SF	=	4,715
	– Duplicate Plaster Crown	6 LF	@	$80.00 / LF	=	480
	– Item	0 SF	@	$0.00 / SF	=	0
				SubTotal		$120,335
5.	Interior, Attic:					
	– Strip, Wax & Buff Floors	3,700 SF	@	$1.10 / SF	=	$4,070
	– Correct Water Damaged Floors	700 SF	@	$3.50 / SF	=	2,450
	– Correct Warping – Walls	100 SF	@	$21.00 / SF	=	2,100
	– Refinish as Required	200 SF	@	$3.25 / SF	=	650
	– Item	0 SF	@	$0.00 / SF	=	0
	– Item	0 SF	@	$0.00 / SF	=	0
				SubTotal		$9,270

22 August, 1995
Moses H. Cone Manor House
Historic Renovation

6. General Items:

– Electrical Code Corrections	12,000 SF	@	$0.75 / SF	=	$9,000
– Repair/Rebuild Screens	69 EACH	@	$45.00 / EACH	=	3,105
– Clean & Repair Light Fixtures	60 EACH	@	$65.00 / EACH	=	3,900
– Conceal Electrical Wiring	1 LS	@	$7,500.00 / LS	=	7,500
– Install Lightning Protection	7,700 SF	@	$0.90 / SF	=	6,930
– Repair Roof Hatch	1 EACH	@	$1,250.00 / EACH	=	1,250
– Re–Create 6 x 8 Skylight	48 SF	@	$125.00 / SF	=	6,000
– Install D.R. Door To Porch	1 EACH	@	$200.00 / EACH	=	200
– Second Floor H.C. Access	50 LF	@	$225.00 / LF	=	11,250
– Item	0 SF	@	$0.00 / SF	=	0
– Item	0 SF	@	$0.00 / SF	=	0
			SubTotal		$49,135

22 August, 1995
Moses H. Cone Manor House
Historic Renovation

PROPOSED USE:

1.	Gravel Carriage Road					
	– Clearing	1 LS	@	$1,500.00 / LS	=	$1,500
	– Grading	500 CY	@	$35.00 / CY	=	17,500
	– Gravel Paving	7,920 SF	@	$1.50 / SF	=	11,880
	– Item	0 SF	@	$0.00 / SF	=	0
	– Item	0 SF	@	$0.00 / SF	=	0
				SubTotal		$30,880
2.	Paved Access Road					
	– Clearing	1 LS	@	$3,000.00 / LS	=	$3,000
	– Grading	1,000 CY	@	$35.00 / CY	=	35,000
	– Asphalt Paving	1,760 SY	@	$16.00 / SY	=	28,160
	– Item	0 SF	@	$0.00 / SF	=	0
	– Item	0 SF	@	$0.00 / SF	=	0
				SubTotal		$66,160
3.	Visitors Center	3,600 SF	@	$150.00 / SF	=	$540,000
4.	Parking	5,000 SF	@	$2.50 / SF	=	$12,500

22 August, 1995
Moses H. Cone Manor House
Historic Renovation

SUMMARY

FIRST PRIORITY ITEMS	$180,810
LONG TERM REPAIR	$409,948
PROPOSED USE	$649,540
TOTAL	**$1,240,298**

Surber & Barber Architects, Inc.
1389 Peachtree Street, NE
Suite 350
Atlanta, Georgia 30309



MOSES H. CONE MANOR HOUSE

HISTORIC STRUCTURE REPORT

MOSES H. CONE MEMORIAL PARK
BLUE RIDGE PARKWAY,
NORTH CAROLINA

APPENDIX

Part Two of Two

U.S. Department of the Interior
National Park Service
Southeast Regional Office

United States Department of the Interior

NATIONAL PARK SERVICE
Blue Ridge Parkway
400 BB&T Building
One Pack Square
Asheville, North Carolina 28801

IN REPLY REFER TO:

H30

March 1, 1996

Memorandum

To: Team Coordinator, Education and Visitor Services, Gulf Coast System Support Office

From: Superintendent, Blue Ridge Parkway

Subject: Approval of the Final Moses H. Cone Manor House Historic Structure Report

We are pleased to accept as final the subject Moses H. Cone Manor House Historic Structure Report (HSR). Parkway acceptance of this HSR is conditioned on the clear understanding that specific HSR recommendations for use or management, and for treatment or technical improvements will be implemented within the planning and fiscal constraints of the Parkway.

This document is an outstanding addition to the two previous Moses Cone Estate documents: the Historic Resource Study by Barry Buxton, and, the Cultural Landscape Report by Ian Firth. We want to recognize the excellent performance of the HSR contractor Surber and Barber Architects, Inc., as well as the superior project coordination conducted by historic architect Ali Miri of your staff. Again, our hearty congratulations to all those who made this significant report a reality.

Gary Everhardt

Gary Everhardt

APPENDICES

A. ORLO EPPS, ARCHITECT
B. CONE ESTATE LEDGERS
C. BERTHA CONE'S WILL & CONE EFFECTS SUMMARY
D. PARK SERVICE MAINTENANCE RECORDS,1973-1994
E. HISTORIC STRUCTURE ASSESSMENT REPORT, 1991
F. PAINT ANALYSIS - MOSES H. CONE MANOR HOUSE, 1995
G. COLUMNS & BALUSTRADES - CONDITION DOCUMENTATION & ASSESSMENT
H. BIBLIOGRAPHY

APPENDIX A

ORLO EPPS, ARCHITECT

Compiled by:
Surber & Barber Architects, Inc.

Compiled from:
North Carolina Department of Cultural Resources
Division of Archives and History
(Catherine W. Bisher, Architectural Survey Coordinator)
University of North Carolina at Greensboro Archives
(Betty H. Carter, Archivist)
Cornell University, Ithaca, New York
(Rare Book Collection, Cornell University)
Exerpt from In Old Oneonta
(provided by Phil Noblitt, NPS-BLRI)

IN OLD ONEONTA

BY

Edwin R. Moore

VOLUME FOUR

PUBLISHED BY

Upper Susquehanna Historical Society

1965

PRINTED BY THE
STAR JOB SHOP
ONEONTA, N. Y.

PARLOR PINKS

Orlo Epps was a Socialist in a day when a member of that political party was held in suspicion by the average citizen. And this despite the fact that the Socialist of the 'teen years was much less advanced in his thinking than is the liberal Democrat or Republican of today.

This architect, who designed many of Oneonta's buildings, was born in Elkhart, Indiana, in 1860 and was the son of Edward and Helen (Blanchard) Epps. He came to Oneonta when he was sixteen and continued his education here, graduating from the local high school in 1882. He studied architecture at Cornell and was graduated from that university in 1888.

Returning to Oneonta he became associated with Lyman H. Blend, a prominent builder, and practiced his profession here until 1894 when he became professor of mathematics and physics at the Agricultural and Mechanical College at Greensboro, North Carolina. He taught there and did architectural work in Greensboro and in Washington, D. C., until 1905 when he returned to Oneonta.

At first he engaged in the hardware business in the firm of Epps and Kerr but after the Wooden Row fire of 1908 he re-entered his profession and helped Mr. Blend design the row of brick blocks which replaced the burned structures.

In 1911 he opened his own office and operated as an architect until his death in 1926. Among the many buildings for which he prepared plans were the old State School at Delhi and the Morris Brothers, Elmore and West-Nesbitt feed mills and grain elevators.

He was a devoted member of the Fortnightly Club where he was highly respected for the originality and clarity of his views on issues of the day. A Mason for forty years, he had been Royal Arch High Priest.

Mr. Epps and Frank G. Sanford of the Oneonta Normal faculty were leaders in the small Socialist party of the city. They were theorists rather than hot-eyed advocates of radical social change. To George I. Wilber and other proponents of the status quo, however, any person who advocated such extreme measures as woman's suffrage, the direct election of United States senators and the referendum and recall was a dangerous individual.

We were unwittingly involved in a witch hunt which illustrates our point. Frank Sanford taught much more than manual training to the boys in the Normal School grades. From him they learned to ski, to swim and to handle a canoe and got their first appreciation of the satisfactions and benefits of life in the fields and woods.

He was a Socialist of deep conviction but never did he try to force his views upon his pupils. One night Lincoln Kellogg and ourself went to a Socialist meeting out of intellectual curiosity. We were harmed not one bit but Judge Kellogg, who was Lincoln's dad, was aghast. Soon Mr. Wilber, who was chairman of the local board of managers of the Normal, heard about the incident. Frank Sanford was not rehired for the next year.

The day in which Orlo Epps and Frank Sanford lived was not in the dark ages but in some ways it was not in the Age of Enlightenment either.

graduate.

FUNERAL OF ORLO EPPS

Services Held Yesterday Afternoon From Family Home Were Largely Attended—Burial to Be Held Today.

Largely attended funeral services for Orlo Epps were held yesterday afternoon from the family home on South Side, with Rev. Dr. J. C. Russell of the First Presbyterian church, officiating. According to the desire of Mr. Epps, burial will not be made until 9 o'clock this morning when with past masters of the Oneonta Masonic lodge as bearers the body will be laid to rest in the family plot at Glenwood cemetery.

Among the many floral tributes sent for the service were pieces from Oneonta lodges, R. A. M. and F. & A. M., from Govern Brothers of Stamford, and from McKenney Brothers of Albany. Among those from out of the city in attendance were Miss Helen Epps of Wildwood, N. J., Prof. Frank A. Sanford of Ridgewood, N. J., William Epps of Susquehanna, Pa., and many friends from Albany, Delhi, Walton, and Stamford.

Mr. Epps, following his graduation from Cornell in 1888 was for a number of years in the United States army, heavy artillery, and afterward was active in national guard affairs in Greensboro, N. C., and in this city.

Dr. Russell took his text from Revelations 14:13: "And I heard a voice from Heaven saying unto me, 'Write, "Blessed are the dead which die in the Lord from henceforth,"': Yea, saith the Spirit, that they may rest from their labors; and their works do follow them." After a brief explanation and application of the words to the occasion, he spoke of the life and character of the deceased in part as follows:

"Here was a man who was really worth while—he left a vacancy that will be hard to fill. Every inch a man, he made the most of himself and lived a modest unassuming life. There was nothing coarse or vulgar or selfish about him. He was rather retiring in his manner. You had to meet him half way and he did not open his heart to everybody.

"But when you came to know him, you greatly valued his acquaintance and appreciated his friendship. He had a kindly disposition and was a man of broad sympathies."

Dr. Russell here spoke of his personal friendship for the deceased.

"He possessed strong mentality and had a very active brain. He was a close thinker and a voracious reader; and had a wide range of thought. He had a comprehensive grasp of many of the problems of our time and during the many years of the existance of the Fortnightly club he was an ardent member and contributed much that was of deep interest to its meetings.

"Of extended litetrary and scientific culture he was a man of deep convictions, thinking things out for himself. You did not always agree with him, but you always respected him.

"Moreover he was broad minded and tried to see the other man's point of view. Besides in his own profession, he was also a close student of economics and wrote much and spoke often on the subject, possessing his own clearly defined views on the subject.

"He was a good citizen and took his citizenship seriously, conscientious here as in everything. He was a master builder in more senses than one. As a valued member of the Masonic fraternity he built according to the compass and square and bowed reverently before the supreme architect of the universe, into whose presence he has now entered.

"He has passed from labor to refreshment where we can safely leave him with all those wise master builders who have gone before.

"We are glad to have known him—his influence will abide for a long time to come."

Lutheran Ladies

RARE AND MANUSCRIPT COLLECTIONS, CARL A. KROCH LIBRARY, CORNELL UNIVERSITY LIBRARY, ITHACA, NEW YORK 14853-5302—(607) 255-3530

PROMINENT ONEONTA MAN

Orlo Epps, Long Prominent Architect in This City, Taken by Diabetes and Anaemia.

Orlo Epps, a well known and respected resident of this vicinity, for many years a prominent architect in this part of New York state, died at his home on South Side early Tuesday morning following four years of failing health with diabetes and anaemia. Mr. Epps had been growing steadily worse for the past year, but nothing immediately alarming in his condition was noticed until Monday afternoon when he dropped into a coniatose state. Funeral services will be held from the family home Thursday afternoon at 2 o'clock with Rev. Dr. J. C. Russell of the First Presbyterian church officiating. According to his wishes, burial will be made Friday morning at 9 o'clock with the Masonic committal service at the grave in Glenwood cemetery.

Mr. Epps had been a practicing architect in Oneonta for nearly 20 years and was associated with L. H. Blend in the reconstruction of the buildings on the southerly side of Main street between the First National bank and the Hazelton blocks which were razed in the fire of December 27, 1908. He also prepared the plans for the State School of Agriculture at Delhi and for many Oneonta business houses, including Morris Brothers, Elmore's and West & Nesbitt grain elevators.

Mr. Epps also received statewide recognition when he was chosen as an appraiser in the condemnation proceedings instituted by the New York city department of water supply in securing lands for its Gilboa project.

Mr. [illegible] in Elkhart, Ind., 61 years ago, the son of Edward and Helen Blanchard Epps. Coming to Oneonta when a lad of 16 years he entered the schools and graduated in the class of 1882. He later entered Cornell university, graduating in the class of 1888.

He then returned to Oneonta and was employed by L. H. Blend for two years and associated with him from 1890 to 1894 before going to A. & M. college at Greensboro, N. C., to become professor of mathematics and physics. He opened an office in Greensboro during his stay there for the practice of his profession and later was engaged at Washington, D. C.

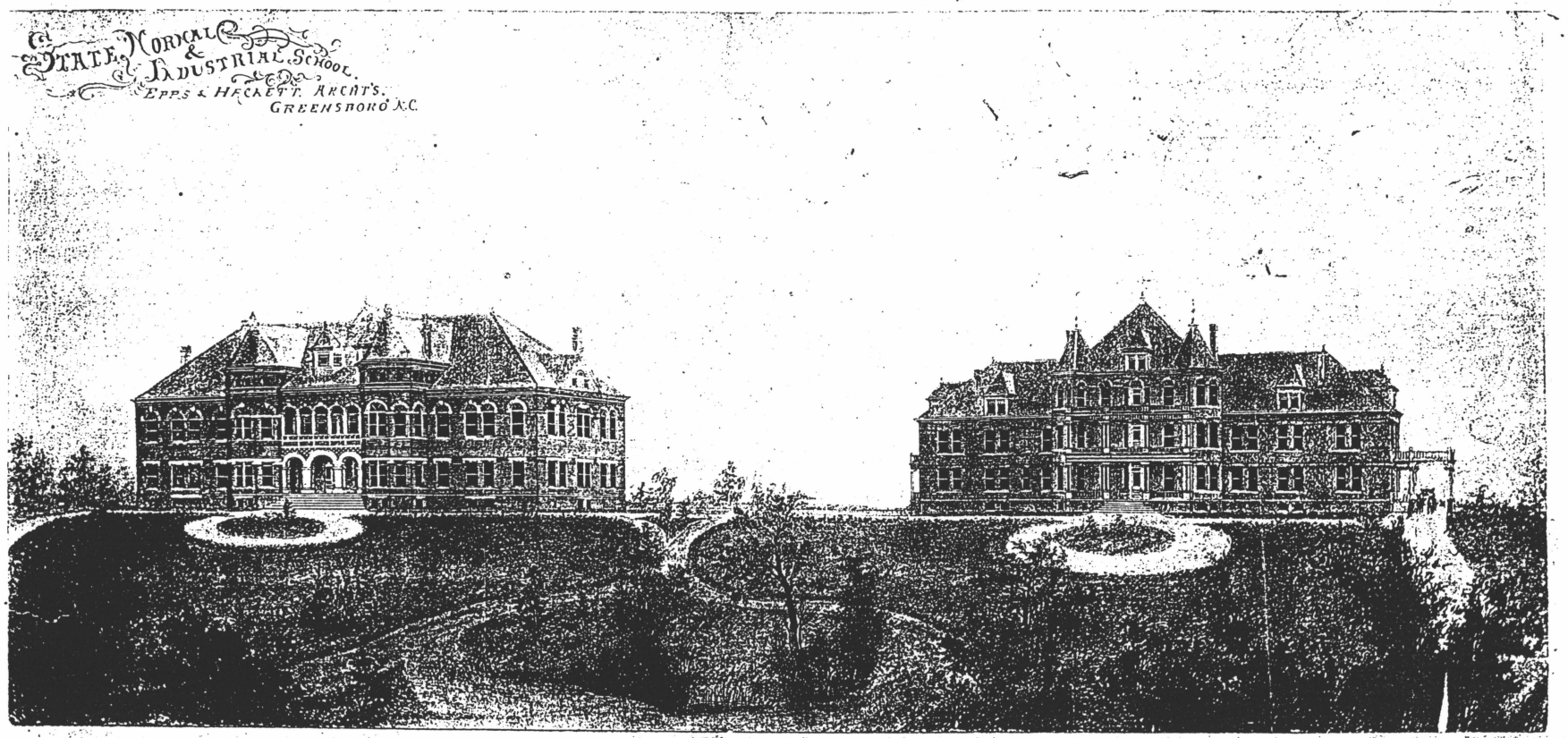
He returned to Oneonta 31 years ago and was first engaged in the hardware firm of Epps & Kerr, having married Charlotte Makley of Oneonta in Washington in 1900. During the years of 1910-1911 Mr. Epps was engaged with Mr. Blend in the reconstruction work in Oneonta mentioned before.

Upon its completion he opened his own office, but was always closely connected with Mr. Blend. Mr. Epps was always prominent in affairs in Oneonta and was a member of the Fortnightly club and for 40 years had been a member of the Masonic fraternity, being a past master of R. A. M. lodge in this city.

His family, his wife, daughter, Miss Helen Epps, a teacher at Wildwood, N. J., and a son, Max Epps, residing at home and attending Oneonta High school, will have the sympathy of a wide circle of friends in their loss of a kind and loving husband and father.

CATHERINE W. BISHIR
ARCHITECTURAL SURVEY COORDINATOR
SURVEY AND PLANNING BRANCH
STATE HISTORIC PRESERVATION OFFICE
N.C. DEPT. OF CULTURAL RESOURCES
DIVISION OF ARCHIVES AND HISTORY
109 E. JONES STREET
RALEIGH, N. C. 27601-2807
(919) 733-6545

Town/County/State	Building	
Greensboro Guilford Co. NC	Knights of Pythias Building, 3-story Epps & Hackett	mr 1891
Greensboro Guilford Co. NC	Buildings, block 4-stories, brick, iron & stone Epps & Hackett B.J. Fisher	mr 1892
Greensboro Guilford Co. NC	B.J. Fisher Hotel, 5-story Epps & Hackett B.J. Fisher	mr 1892
Greensboro Guilford Co. NC	Office Building(3 stories, 36'x120') Cone Export & Comm. Co. Otto Epps	mr 1902
Greensboro Guilford Co. NC	State Normal & Industrial School for Girls Epps & Hackett	mr 1891


STATE NORMAL & INDUSTRIAL SCHOOL.
EPPS & HACKETT. ARCH'TS.
GREENSBORO N.C.

Mrs. Carrie C. Epps—
(Mrs. Orlo Epps)

Wildwood New Jersey
May 30, 1949

Architectural firm of Epps and Hackett was established in Greensboro, N.C. in 1891.

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COLLEGE COLLECTION
W. C. U. N. C.

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Photographs
from
ROBT. G. WHITE.
GREENSBORO. N.C

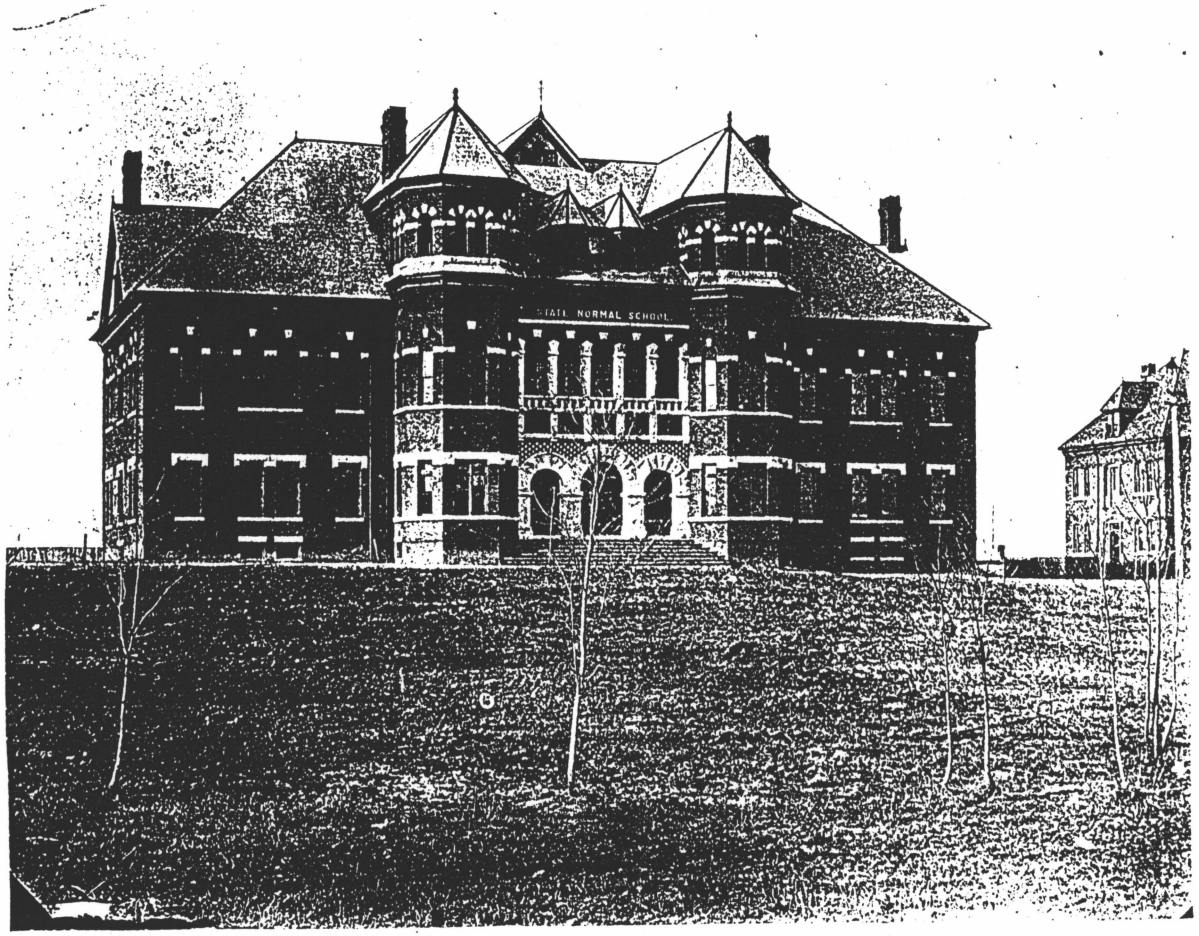
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G2A7

Arnett, Ethel Stephens
Greensboro, North Carolina...Chapel Hill, N.C.
UNC Press, 1955

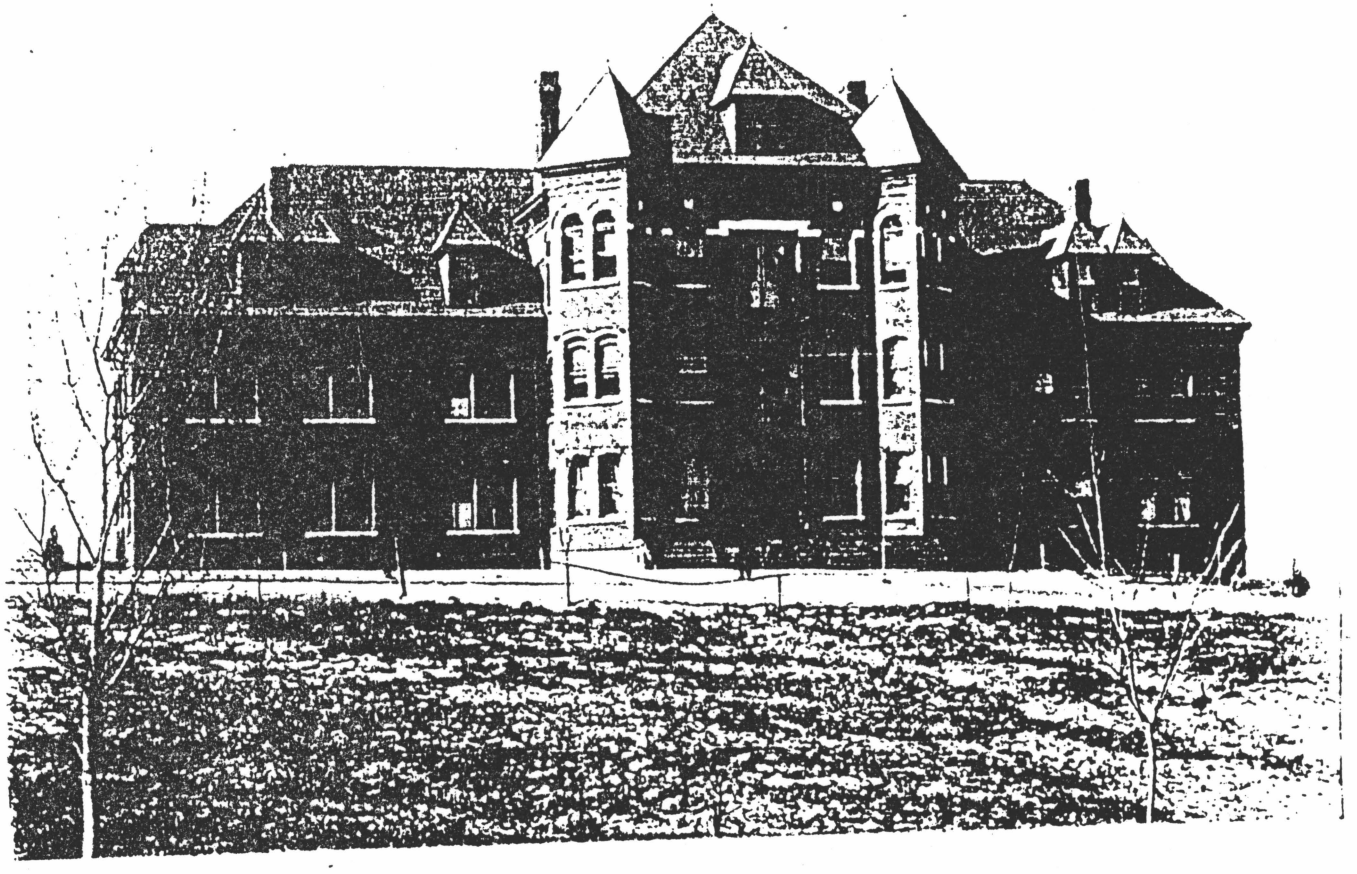
"Before the 1890's most of the buildings (in Greensboro) went up through plans "talked over" between promoters and self-taught builders. By 1891, however, the architectural firm of Epps and Hackett was established in Greensboro..."
pp. 223-224

UNIVERSITY
ARCHIVES
UNC-G

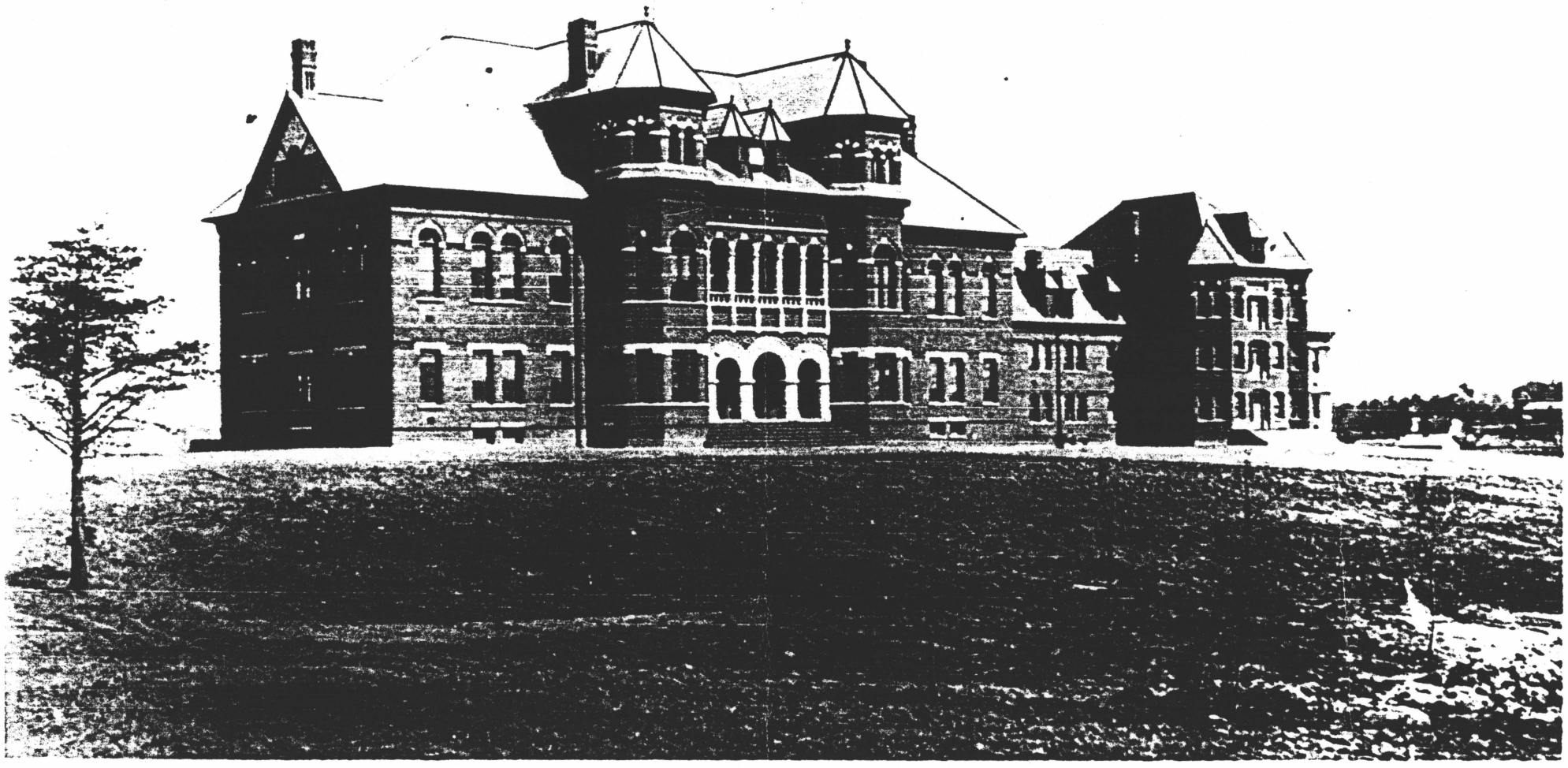
Back view of architect's drawing with Mrs. Epps name and signature



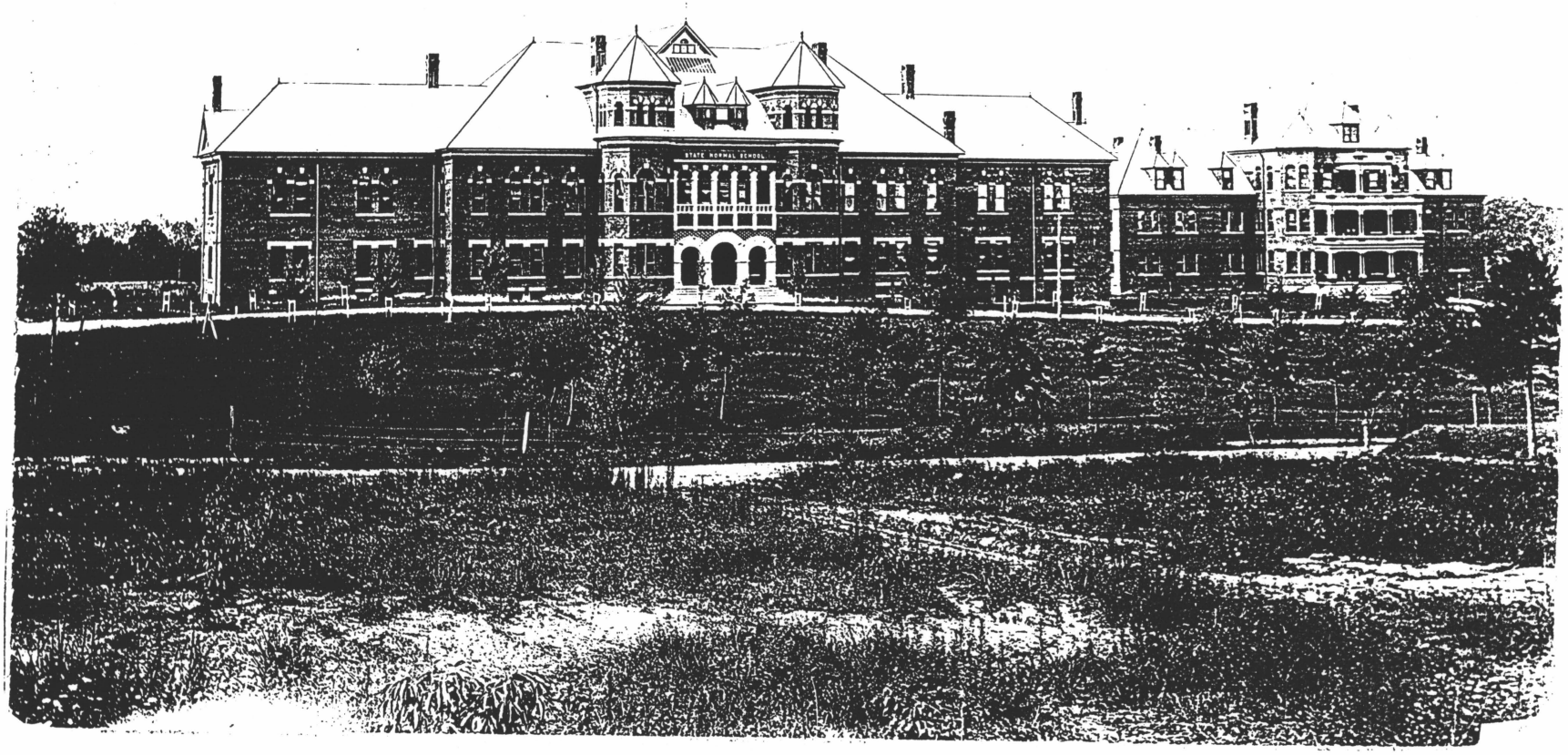
Main Building--Now called Foust Building
1892-1895



Brick Dormitory before the "porches" were added



Foust and Brick Dormitory--prior to 1895

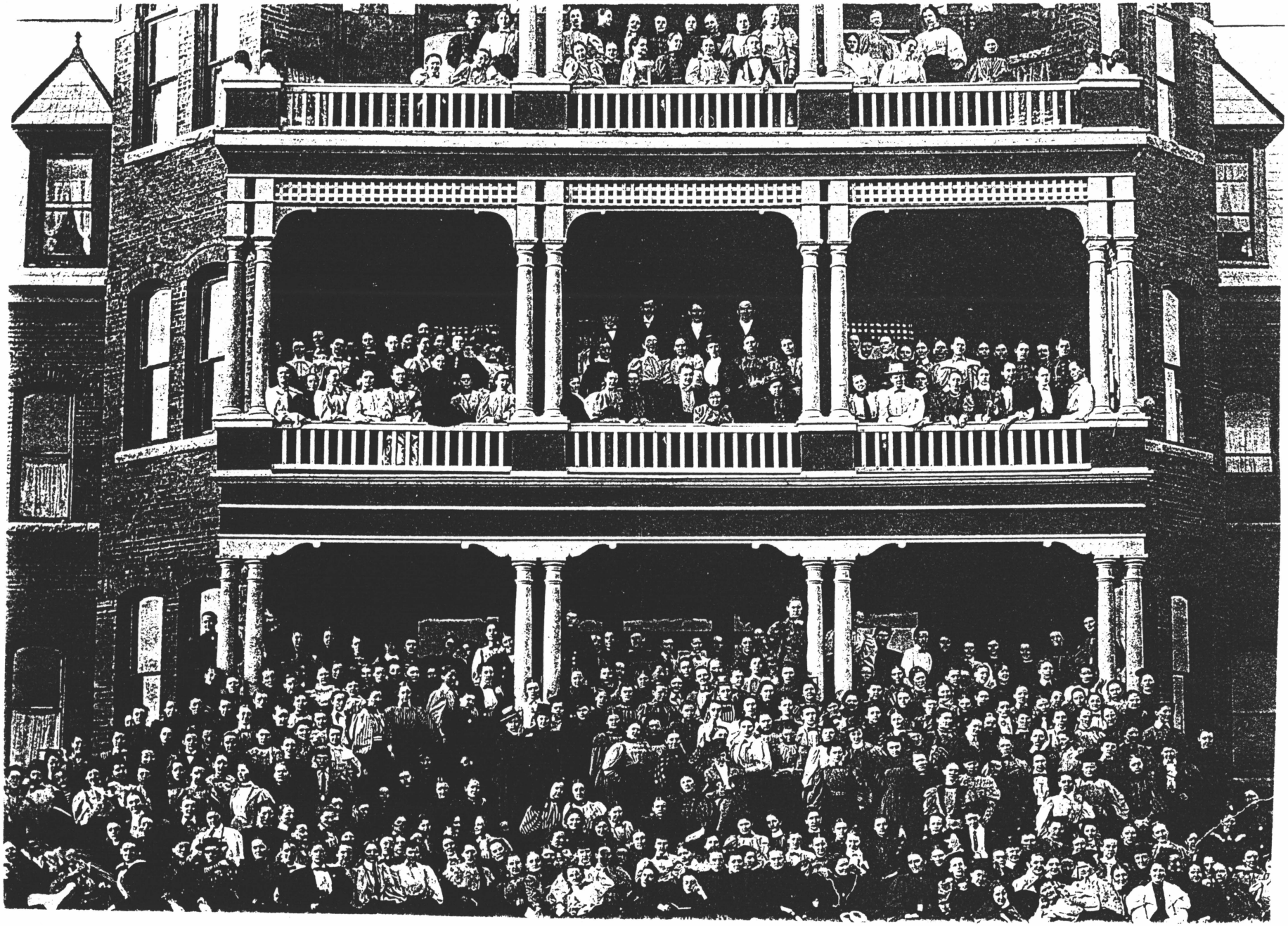


Foust and Brick Dormitory after 1895
The wings were added to Foust in 1895--and I think that is probably when the porches were added to Brick



Closeup of Foust Building, with student body

Brick Dormitory--after the "porches"--c.1895



Directory

OF

ONEONTA, WEST ONEONTA, LAURENS, MT. VISION, HARTWICK, MILFORD, PORTLANDVILLE, COLLIERSVILLE, UNADILLA WELLSBRIDGE and OTEGO

1919

Including a Classified Business Directory, Street Directory and a Record of the City Government, Societies, Institutions, Incorporated Companies, Etc. of the City of Oneonta . . . .

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Reynolds' and The Corner Bookstores

JAMES M. MILNE LIBRARY
SUC AT ONEONTA, N. Y.

CLASSIFIED BUSINESS DIRECTORY OF ONEONTA

Agricultural Implements.

Butts, Arthur M., 252-254 Main St.
Clute, George J., 121 Spruce St.
Murdock, Albert H., S-10 Market St.

Architects.

Epps, Orlo, South Side.

Art Goods.

Bolton, Ernest W., 55 Chestnut St.
Ward, Eugene L., 149 Main St.

Attorneys at Law.

Becker, Owen C., 191 Main.
Bockes, George L., 170 Main.
Bolton, W. Irving, 54 Chestnut.
Close, Sheldon H., Municipal Bldg.
Gibbs, Holmes & Holmes, (George L. Gibbs, Clarence E. Holmes, Everett B. Holmes), 135 Main.
Hathaway, Lynn W., 169 Main.
Hayward, Edson A., 19 Elm.
Hemstreet, M. C., Citizens Bank.
Huntington, Frank C., 191 Main.
Huntington, Shirley L., (Otsego Co. Surrogate), 143 Main.
Johnson, John G., 5½ Spring.
Johnson, William H., (Referee in Bankruptcy), 15 Spring.
Kellogg, Abraham L., (Justice Supreme Court), 159 Main.
Kilkenny, Dennis J., 143 Main.
McLaury, Henry D., 170 Main.
Seybolt & Seybolt, (Alva Seybolt, Arthur Seybolt), 169 Main.
Shove, Henry, (City Judge), 170 Main
Smith, Claude V., 191 Main.
Thompson, John Fremont, 246 Main.
VanWoert, Lee D., (Police Court Attorney), 159 Main.
Wohlleben, George, 198 Main.

Automobile Dealers.

Butts, Arthur M., 252-254 Main St.
Camp, S. G., 19 Grand St.
Dewar, J. A., 92 Chestnut St.
Francis Motor Sales Co., 299 Main St. and 3 Elm St.
Hume, Robert W., 3 Wall St.
Oneonta Sales Co., 53-57 Market St. Ford and Dodge cars, (after Apr. 1, 1920, 27-31 Market).
Stevens' Hardware Co., Inc., 153 Main Street.
VanWie, Fred N., 14-16 Dietz St.

Used Cars.

Johnson, R. C., 1-3 Hamilton Ave.
Ludlam, Dorr S., 94 Chestnut St.
Mann, M. A., Factory St.

Automobile Repair Shops.

Butts, Arthur M., 252-254 Main
Blanchard & Bleeker, 299 Main.
Brannaman, W. O., 14½ Dietz.
Cook & VanWie, 12 So. Main.
Crippen, Gardner & Archer, 440 Main.
Dibble & Hotaling, 115 River.
Dunn & Youmans, 446 Main.
Edmunds, R. M. & H. W., 350 Main.
Edwards, Wm., (*Painting*), 350 Main.
Helmes, Frank L., 26-30 Broad.
Kelly, O. C., 31 Grove.
Ludlam, Dorr S., 94 Chestnut.
Oneonta Sales Co., 53-57 Market.
Rex Garage, 25 Market.
Thompson, Leslie F., 37 Gilbert.
VanWie & Cook, 12 South Main.

Automobile Supplies.

Brannaman, W. O., 14½ Dietz. (*Exide Battery*).
Butts, Arthur M., 252-254 Main.
Central N. Y. Tire & Tube Co., 307 Main.
Francis Motor Sales Co., 299 Main and 3 Elm.
Helmes, Frank L., 26-30 Broad. (*Vesta Battery Supplies*).
Johnson, R. C., 1-3 Hamilton Ave.
Joles, M. G., 115 Main.
Lane Battery Shop, 111 Main. (*Willard Service*).
Leal & Irish, (Brunswick Tires), 12 Broad.
Oneonta Dept. Store, 155-161 Main.
Oneonta Sales Co., 53-57 Market.
Robinson, D. E., 436 Chestnut.
Stevens' Hardware Co., Inc., 153 Main
VanWie, Fred N., 14-16 Dietz.

Bakers.

Becker, Claude S., 15 Dietz.
East End Bakery, 511 Main.
Fote, John, 15 Fonda Ave.
Mayer, City Bakery, 291 Main.
Mulkins, Stanley, 10 Dietz.
Nye, Arthur E., 34 Chestnut.
Walsh's Home Bakery, 27 Chestnut.
VanAuken, (F. & V.), 168 Main.

Banks.

Citizens' National, 189 Main.
Wilber National, 237 Main.

APPENDIX B

CONE ESTATE LEDGERS

Compiled by:
Preservation Consultants
(Maurie Van Buren)

Compiled from:
Blue Ridge Parkway Archives
Asheville, North Carolina
(Jackie Holt, Curator)

MOSES H. CONE HISTORIC SITE
LEDGERS, NOTES AND RECEIPTS & PAYROLL
from Blue Ridge Parkway Files, Asheville, NC

Received of W.J. Palmer in full for shingles dellivered to MH Cone this Dec 15, 1899 Jordan Hampton

1899

DUDLEY LUMBER COMPANY, GRANITE FALLS, N.C., SEPT 2, 1899

24 Window frames 12x16	25.00
24 pr sash 12x16	27.00
24 pr blinds 12x16	16.80
12 outside door frames & doors (?) 2-0x6-0	20.40
16 inside " " " "	27.20
4 front door " 3x7	2.80
1100 lin ft 3/12" crown mold	7.15
2000 " " 3/4 1/4 round	6.
16 turned columns 4 1/2x4 1/2 7 " (?)	12.
600 lin ft 2 1/2 Brl (?) mold	3.
24 Casns Stels (?) 1 1/4x4 10'	2.52
24 " " " x3 "	2.20
4 " " 11x1 1/4 "	.20
4 " "" x " 8'	.16
8 mantls #15	10.00
	55.68
4 front door to follow	14.30

ODELL HARDWARE COMPANY, GREENSBORO, N.C. SEP 4, 1899

82 kegs of different size nails: charge	279.80
SEP. 16, 1899: 1 doz. Cotton lines; charge 1.00	7.50
SEP. 21, 1899: 50 rolls #8 paper .85	42.50
20 rolls #14 paper .50	10.00
20 rolls Deadening felt 2.15	43.00
	95.50
SEP 28, 1899: Valley _____ 150 ft 14"	1.80
120 5-7 shingles	3.90
3 doz. 3 1/2x3 Butts	3.60
1/3 doz 4x4 "	.53
2 1/2 doz. 02 1/2 locks	5.00
5/6 doz. 966 1/4	3.33
4 Gro. (?) 1 1/4-10 Screws	.92
2 pr. 10" Strap hinges	.40
2 10"Hasps & Staples	.15
1 Pad Lock	.33
2 doz. sash locks	1.50
2 doz. lifts	.40
6 rolls sash cord 13 1/2 #	2.70
	32.06

SOUTHEASTERN LIME AND CEMENT CO., SEPT 20, 1899

100 bbls. Hammer p.c.320.00	
less frt	88.00
	232.00

Sept 28, 1899 window & door hardware from **ODELL HDWR.**, Greensboro pg. 115,

DUDLEY LUMBER COMPANY, SEPT 28, 1899

4 front door 3x7 1/38	13.00
200 lin ft 1 3/4x2" Bick (?) mold	1.30
	13.90

G.T. GLASCOCK & SON, GREENSBORO, N.C., OCT 14, 1899

6 ashpit doors	6.00
11 ash dumps	2.75
6 ventiltors	.50
	10.25

MOORE & LUTZ, LENOIR, N.C., OCT 16, 1899

50 m shingles 1.80	90.00

ODELL, NOV 1, 1899

1/2 Bbl. #1 Crescent Japan 29 Gal. .60	17.40
1/2 Barrell	1.50
	18.90

ODELL , NOV 1, 1899

5 Bbls Ran (?) Linseed Oil 233.13 Gal. .47	109.92

ODELL, NOV 15, 1899

5/6 ft 8 1/2x 13 flue lining 81.27
342 ft 13x13 " " 70.11
162 ft. 8 1/2x8 1/2 17.82
169.20

DUDLEY LUMBER COMPANY, NOV 15, 1899
1200 ft resawed hcky (?) 10.00 120.00
118.6 ft 3/8 13.00
500 ft 1x3 floorg 8.

274.06

ODELL, DEC 8, 1899
400 lbs. Buck (?) Lead 24.50
1000 lbs. French Ochre 60.00
84.50

DEC. 14, 1899 (ODELL)
Flue lining 174.90

ODELL, DEC 22, 1899
1 Bbl. Turpentine 53 1/2 gal. 32.10

1900

Jan. 1900 (pg. 81) KNOXVILLE BRICK CO., 6500 no. 1 Pressed

ODELL, JAN 6, 1900
1 Bbl Richmond Metallic (?) Brown 300# 4.50
1 Bbl. Venetian Red 336 8.40
12.90

KNOXVILLE BRICK COMPANY, JAN 8, 1900
6500 No. 1 pressed 135.00

ODELL, JAN 12, 1900
2000 Lls. French Zinc Green Seal 10 3/4 215.00

KNOX. BRICK CO., JAN. 31, 1900
Less frt. 40,000 lbs @ 13 1/4 53.00
82.00

CAPE FEAR MANUFACTURING CO., GREENSBORO (JAN 31, 1900)
Flooring 10,000,7/8 X 2 and 1/4 maple, $40/1000
+930 feet of Alley Stock (for bowling alley), 42.50/1000=
39.57
gives number of bundles of lengths, from 5' to 16' long
3/6/1900 324 Balusters @.18= 58.32
4 main receipts for millwork listing dormers, windows, door frames, coves, dentals, cornice, railings--
Also, barn bill and service house, 1 major list of each (Apr. 9,1900)
Smaller invoices 3, 4/17/1900
Dormer cornice, screens, and modillions--porch soffit
Then large bill 4/17/1900 for columns and rails
Then large bill (no date) for window sash
(includes list of 23 lengths, no. of bundles floor., no. bundles ally stock)

Feb 23, 1900 hair for plaster, Dennis H. Hall, Dr., Plain and Ornamental Plaster

CAPE FEAR MANUF. CO. March /6/1900:
TO 324 BALBALUSTERS 18 $58.32
2 twin frames 2L 40x36 Jamb 5 7/8,
4 single frames " 40x36 jamb 5 7/8,
2 twin frames " 36x36 " 5 7/8
5 single frames " 36x36 " "
5 twin frames " 36x34 " "
4 single frames " 30x34 " "
1 single frames " 26x34 " "
1 tripple center 3x6, sides 1 6x5 0 Jamb 7 1/2
1 twin frame 2L 26x26 " "
4 single frames 2L 26x26 " "
1 single " " 26x36 " "
1 single " " 26x20 " "
8 dormer frames 2-0 1/2x3-6 " 5 1/2
2 dormer frames " x4 " "
1 large tripple frame as peditive " 13 3/4
1 single frame 2 L 30x34 Jamb 7 1/2
1 twin " " 26x34 " "
5 single " " " " "
2 single door frames 3-0x8-6 " 13 1/4
1 " " " " " 7 1/2

2 " " " 3-0x7-6 " "
1 door frame 2-6x6-6 " "
1 front door frame jamb 13 1/4
1 door frame same hight as front triple 2nd story
2 plain twin frames, each 2-6 1/2 x 41,
less 7%=329.22

CAPE FEAR 3/6/1900: Main Cornice bill

600 lin feet 5/8 cove;
600 lin feet 1 1/2 half round;
400 lin feet 7/8x8 3/4;
400 " " 7/8x 11 1/2
600 " " 3/4 Tr round
600 " " 1 5/8x1 3/4
400 " " 1 & 1/4 x 4
400 " " 1 1/8 x 3 1/4
1200 B.M. of T. & G. Planier (?)
600 lin feet 10 1/2 facia
600 " " gutter mold
2400 dentals 1 1/8 x 3"

Deck finish: 100 lin feet deck mold 3 members
Porch cornice: 700 lin feet half round
350 lin feet 1 3/4 x 1 3/4
350 " " 7/8 x 6 1/2
350 lin feet 7/8 x 13 1/2
350 " " 5/4 Qr Round
350 " " 7/8 x 14
350 " " 2x2
350 " " 7/8 x 5 1/2
350 " " 4 1/2 crown mold
1700 Dentals 7/8 x 1 1/4--2 1/2
Rear Cornice: 64 lin feet 7/8 x 11
64 lin feet 3/4 x 11
64 " " 11 1/2 crown mold
64 " " 1 1/4 x 4
64 " " 1 1/8 x 3 1/4
256 Dentals 1 1/8 x 3" $180.00
Short on this order: Modillions for main cornice:
350 lin feet 1 1/4x10 1/2 porch will be sent next car.

Mar. 1900--42 M lath (pg 97)
pg. 99 50m Shingles @ 1.80--90.00, Moore & Lutz, Dr., Lenoir

ODELL, MAR 19, 1900

2 #8 Perfect Wood Furnaces and cases with back pipes @110 each = $220.

Apr. 14, 1900, 6 lbs. Chrome Green, 3 lbs. Chrome Yellow, Brushes, pg. 123.
pg. 125, 50 lbs Venetian Green.

J.A. MARTIN WHOLESALE HARDWARE, HICKORY, N.C., MCH 24, 1900

To 42 m 1 1/4X3/8x 4ft Lathes	@1.65
	69.30
	18.50

CAPE FEAR MANUFACTURING CO., APR. 9,1900

BARN BILL *{not included in this listing}*

CAPE FEAR MANUFACTURING CO., APR. 9,1900

MR. M.H. CONE BY W.A. FRIES
SERVICE HOUSE *{not included in this listing}*
TEN PIN ALLEY *{on same page--not included in this listing}*

CAPE FEAR MANUFACTURING CO., APRIL 9, 1900, GREENSBORO, N.C.

To 31 Column Dies 14"x14"	108.50
To 3 step Dies	7.50
Deck Main Roof	
To 6 corner Dies	12.00
" 2 top Rails 9-6	1.00
"4 " " 11-0	2.20
Rear Deck	
2 Top and Bottom Rails 11-o	4.40
1 " " " " 24-6	2.50
2 Corner Dies	4.00
Deck over main Stair	
1 Top and Bottom Rail 10-6	1.10
1 " " " " 4-0	.40
1 Corner Die	2.00
Deck on Porch Roof	
28 Dies	56.00
3 Top Rails 11-0	1.65
3 " " 16-0	2.40
2 " " 7-0	.70

4 " "	14-0	2.80
3 " "	9-0	1.35
1 " "	18-6	.95
4 " "	2-3	.40
1 " "	10-6	.55
1 " "	5-0	.25
2 " "	13-6	1.40
2 " "	4-0	.40
Porch Rail		
4 Top Rails	16-0	7.68
1 " "	16-6	2.13
4 " "	13-6	7.00
4 " "	2-0	1.00
1 " "	6-6	.88
1 " "	5-0	.62
1 " "	8-0	1.00
1 " "	11-6	1.50
4 " "	11-0	5.30
1 " "	9-6	1.25
		$ 242.81

CAPE FEAR MANUF. CO (next page, no date)

Porch Rail con(tinued?)		
2 Top Rails	3-4	1.00
1st story sash		
8 prs sash 2 L (?)	40x36--1 3/4	8.00
9 " " "	36x36 "	9.00
1 " " "	26x36 "	1.00
6 " " "	26x26 "	6.00
1 " " "	26x20 "	1.00
2 " " "	36x34 "	2.00
2 " " 1L	13 1/2x54 1/2	2.00
2 " " 1L	17 1/2x54 1/2	2.00
		$274.81

Memo of Sash for 2nd story
8 bottom sash 1L 36x34

5 " " 1 L 30x34
8 " " 1L 26x34

CAPE FEAR MANUFACTURING CO., APRIL14/1900
MR. M.H. CONE BY W.A. FRIES AGENT

To 14 Door & window screens	12.00

CAPE FEAR MANUFACTURING CO., April 17, 1900
MR. M.H. CONE BY W.A. FRIES, AGENT

To 200 feet dormer cornice, 6 members & Dental	10.83
Shipped in first car from this place--	

DUDLEY LUMBER COMPANY, MAY 14, 1900

5000 ft 3/4 x3 Reft (?) Heart flog. (flooring?)	30	150.00
5539 ft 1x3 Blu Coly (ceiling?)		88.62
1109 ft 1/2" Celly (?)		14.40
1186 ft. 3/8 "		13.04
500 ft 1x3 floog. (flooring?)		8.
274.06		

CAPE FEAR MANUF. CO., MAY 17, 1900

525 modillions 2 3/4x3 3/4-18"		
350 feet 1x10 net porch soffitt		
250 feet 7/8x13 1/2		
225 " 7/8x14		
No charge. To complete items in former shipments.		

CAPE FEAR, MAY 17, 1900

For Lenoir, N.C.		
To 31 porch columns with capitals	19.00	589.00
" 2 Balcony " " "	22.50	45.00
" 2 fluted pilasters with carved capitals		27.50
" 2 turned " " turned "		
" 2 columns with Comp. Capitals		60.00
" 2 Pilasters " " "		
Porch deck:		
" 3 Bottom Rails	11'	1.65
" 3 " "	16'	2.40
" 2 " "	7'	.70
" 4 " "	14'	2.80
" 3 " "	9'	1.35
" 1 " "	18-6	.95
" 4 " "	2-3	.40
" 1 " "	10-6	.55
" 1 " "	5-0	.25

" 2 " " 13-6	1.40
" 2 " " 4-0	.40
Porch	
To 4 Bottom Rails 16-0	5.12
" 1 " " 16-6	1.36
" 4 " " 13-6	4.48
" 4 " " 2-0	.64
" 1 " " 6-6	.56
" 1 " " 5-0	.40
" 1 " " 8-0	.64
" 1 " " 11-6	.96
" 4 " " 11-0	3.52
" 1 " " 9-6	.80
" 2 " " 3-4	.64
Deck	
To 2 " " 9-6	1.60
" 4 " " 11-0	3.52
" 204 Balusters	36.72
" 100 Lin feet 1 1/4x7 1/2 outside base and cap	3.50
" 350 " " 1x8 porch base & cove (?)	12.25
" 12 " " 3x10 plinth for CorBoard	.90
" 36 " " 3x6 " " " "	.90
To 45 Lin feet 1x2 1/2 Cap on plinth	.60
Trim for Corner Board Capitals	
To 300 Lin feet 1 3/4x3	
" 300 " " 2 1/4x 2 12 mold	
" 150 " " 1x1 1/8 mold	
" 150 " " 7/8x1 1/2	12.75
	816.21
Should be	826.21
Bottom sash with previous shipments:	
To 8 prs sash 2L 36x34 Top 17 (?) L	10.00
" 5 " " 2L 30x34 Top 9 L	6.25
" 8 " " 2L 26x34 Top 9L	10.00
" 10 " Semi Circle hand dormer sash	35.00
" 1 set sash for front triple window	12.50
" 1 side lights Transom front door	3.50
" 1 Circular Sash Right Elevation	4.00
" 1 semi Circular Front	5.00
" 2 prs sash for 2 twin frames	4.00
" Glazing plate glass	5.00
" 2 sets corner boards 11-1 5/8	
" 5 " " " 11-1 1/8	
" 1 " " " 11-2 1/8	
" 1 " " " 10-11	
" 1 " " " 9-10	
" 3 " " " 10-2 1/2	
" 1 " " " 10-9 1/2	
" 1 " " " 10-3	
" 2 " " " 22-9 1/4	
" 1 " " " 21-3 1/2	
" 2 pilasters " 9-5	
" 2 Angle Strips 1 1/2x1 1/2 -22-9 1/4	
" 1 " " " x " 21-3 1/2	
" 2 " " " x " 10-2 1/2	
" 1 " " " x " 10-3	
" 1 " " " x " 11-2 1/8	
To 4 Angle Strips 1 1/2x 1 1/2 11-1 1/8	
" 1 " " " x " 9-10	
" 1 set Corner Boards 9-10	75.00
" 800 feet Board measure behind Corner Boards	15.20
" plate glass cut to pattern for transom & circular window	7.75
" 96 plate glass 8 11/16x11 1/16	
" 45 " " 9 3/4x11 1/6	
" 72 " " 8 3/8x11 1/16	
" 18 " " 6 7/16x7 3/4	
" 12 " " 5 5/16x7 3/4	72.80
" 75 feet molding F	1.12
" 75 " " G	1.12
	084.45
Should be	1094.45

CAPE FEAR JUNE 4, 1900

To 100 feet 4 1/2 crown mold	1.50
To 40 feet 1 3/4x2 crown mold	.60
FOB here	2.10
	19.68

BLOWING ROCK,N.C. JUNE 9, 1900

Recd from WA Fries one hundred and ten dollars in payment for 40 m shingles at 2.75 per m---Jordan Hampton

DUDLEY LUMBER COMPANY, JUN 10, 1900

5000 lin ft 1 3/16x1 3/4	10.00

CAPE FEAR, JUNE 16, 1900

To 60 feet 1 1/8x4 1/2	.75

JULY 10, 1900

To 5 doors 2-10x6-10	5.50

JULY 12, 1900

To 4 P.P. 1/8" glass	18.00
" 4 P.P. 1/8 glass	20.40
To boxing	1.00
	39.40

JULY 13, 1900

July 3 To 6 window frames	23.40
" 72 feet 4" cornice	.90
	24.30

JULY 16,1900

1 #11 Desk Outfit (Wrag call)-? $6.50, July 16, 1900.

AUG. 1, 1900

To 412 porch balusters	74.16
To 100 upper deck balusters	18.00
To 80 rear deck balusters	14.40
" 26 stair deck balusters	4.68
" 12 lbs sash cord	2.70
Less freight at car load rates	113.94

AUG. 6, 1900

To invoice balls & pins	31.60

HUTCHINSON BROS., BALTIMORE, JULY 21, 1900

1 No 500 steel range for wood	125.00
1 double plate sheet	15.00
1 set flues	10.00
1 improved water back	15.00
1 17" charcoal broiler and base	45.00
Less 30% & 10%	132.30

KNOX. BRICK CO., JULY 24, 1900

800 #1 press brick barreled for	12.85

HUTCHINSON BROS., JULY 30, 1900

1 22 Iron Laundry stove boiler top	14.00
1 pipe coil in same for 40 gall boiler	4.50
To invoice 5% Cone (?) on same	1.58
	33.18

DUDLEY LUMBER COMPANY, AUG 8, 1900

4880 ft #1 Blue 1x3 flooring @ 17.00				63.32
7850 ft. #1 Blue 1/2x3 ceiling (?) @ 12.00				94.20
3300 ft #1 " 1x3 Sqr ____ (?) 14				46.20
600 ft 3/4x11 nut dr___ (?)				8.40
400 ft 3/4x 11 " "				6.00
200 lin ft. 1 3/8x1 1/2 nut dr___(?)				.80
" " " " x 2 " "				1.00
" " " " x 2 1/2 " "				1.25
200 " " x 3				1.50
200 " " x 3 1/2				1.75
200 " " x 4				2.00
200 " " x 4 1/2				2.10
200 " " x 5				2.20
200 " " x 5 1/2				2.30
30 Per (?) 1 3/4x 3 1/2	12'			3.60
13 Treads 1 1/8x11 1/2	4-6			1.95
15 Rises 7/8x7	4-6			.75
5 Treads 1 1/4x13 1/2	8'			1.50
5 Treads " x 13 1/2	7'			1.40
5 Treads " x "	6			.75
16 Treads " x "	5			2.50
5 Rises 7/8x6 1/2		8		.60
5 " " x "		7		.40
5 " " x "		6		.25
10 " " x "		5		.50
Less frt			10.50=	237.02

AUG. 8, 1900

To 1200 feet Sash chain	54.00
" 60 Fasteners	3.00
	57.00

AUG. 8, 1900

To 10 prs sash 1x14-12	16.00
" 2 ps " 12x14-4	1.50

" 18 glass 12x16 1.62
" 10 " 10x14 .65
" 8 " 10x16 .72
" 6 doors 2-10x6-10 7.50 27.99
" 2 Rails (?) 14x5-4-11 .50
" 1 " 1 3/4x 5 1/4 --9'-6" .25
" 2 Bottom Rails 9'-6" 1.00
" 1 " " 12'-0" .60
" 1 Cap " 12'-0" .40
" 250 feet 1 1/8 Qr Round 1.50
" 64 " rail molding .80
29.55

Less freight at car load rate

AUG 14, 1900

To Rail for half circle 13'-11 1/2" dia 12.50
" " " " " 14'-5" " 12.00
" 2 rails 1 3/4x5 1/4 -11 .50
" 1 " 1 3/4x5 1/4--9'6" .25
To 2 bottom rails 9'6" 1.00
To 1 bottom rails 12'-0" .60
" 1 Cap 12'0" .40
" 250 feet 1 1/8 Qr round 1.50
" 64 feet rail molding .80
Less freight at car load rate 29.55

EAGLE GENERATOR CO., ST. LOUIS, AUG 20, 1900

1 #E 212 gen 144.00
10% discount 14.40
1000 lbs carbide 40.00
169.60

DUDLEY LUMBER COMPANY, AUG 30, 1900

600 ft 7/16x1 3/8 1.75 10.50
4 lin ft rail 2x8 1.20
180 lin ft steps 1 1/12x13 3/4 5.50
10 step 1 1/4x15 1/2 12' 4.80
10 rises 7/8x6 1/2 12' 1.20
5 pr. (?) 2 1/2x14 16' 4.45
160 lin ft 1" cove mold .40
2 Pr (?) 1 1/4x13 1/2 18 nose (?) 1.08
2 " 3/4x6 1/2 12 drs 4 S (?) .25
30.68

MILLER MANUFACTURING CO., MILWAUKEE, WIS., SEPT 7, 1900

"manufacturers of sliding, folding and venetian inside blinds, window screen and screen doors and fine stair work"

56 Sliding Pine Sample finish Brze wire
1 pr. doors " " " #39 design Brze wire
5 doors " " " #40 " " "
1 door " " " #217 " " "
1 door " " " #38 " " "

Net 250.00 To 5% com to Cape Fear Co. 12.50=$262.50

THE BRUNSWICK-BALKE-COLLENDER CO., CHICAGO FACTORY, SEPT. 14, 1900

3 reg bowling balls with holes 4.00 12.00
3 " " " " " 2.25 6.75
18.75
Frt. 5% com .93

DUDLEY LUMBER COMPANY, SEPT 13, 1900

2000 ft 1x3 flooring 14 28.
1500 ft 1/2x3 cely (ceiling?) clear 14 21.
3000 ft 1/2x3 " blue 12 36.
72 lin ft 1 3/8x2
72 lin ft 1 3/8x1 1/2
72 lin ft 1 3/8x2 1/2
72 lin ft 1 3/8x3
72 lin ft 1 3/8x3 1/2
72 lin ft 1 3/8x4
72 lin ft 1 3/8x4 1/2
72 lin ft 1 3/8x5

DUDLEY LUMBER COMPANY, SEPT 13, 1900 (cont.)

72 lin ft 1 3/8x5 1/2
24 treads 1 1/8x13 1/4 6' 4.80
24 rises 7 1/2x6 1/2 6 .96
6 rises 2x10 12 1.68
98.17

CAPE FEAR MANUF. CO., SEPT 29, 1900 or 1899?

To 2 sliding door frames 8'0x8'6 & trim 12.50
2 " " " 5'6x8'6 " 10.00
1 " " " 3'8x8'6 " 4.50

1 " " " 3'6x8'0 "		4.50
1 " " " 4'8x8'6 "		5.00
1 door frame 3'6x8'6 J. 13 1/2 Cap trim 2 sides		4.50
3'0x9'6 " 7 3/4 "		3.50
1 " " 3'x8'6 " 5 1/2 "		3.00
1 " " 3'x8'0 " " "		3.00
4 " " 3'0x7'6 " 7 3/4 "		14.00
1 " " 2'6x7'6 " 5 1/2 "		3.00
1 " " 2'10x8'0 " 7 3/4 "		3.50
9 " " 3'0X8'0 " 7 3/4 "		31.50
CAPE FEAR MANUF. CO., SEPT 29, 1900 ?(cont)		
3 " " 2'6x8'0 " 5 1/2		9.00
1 door frame 2'6x8'0 J. 7 3/4 "		3.50
2 closet door frames 2'0x8'6 J. 18" Cap trim 1 side D. Room		7.00
1 door frame 3'0x8'6 " 7 3/4 " " " "		3.00
1 " " 3'0x7'0 " 7 3/4 " " "		3.00
1 " " 3x7 " 7 3/4 No cap		2.50
1 " " 3x7'6 " 7 3/4 Cap trim 1 side		3.00
1 " " 2'6x8'0 " 5 1/2 " " 1 "		2.50
2 " " 2'6x8'0 " 7 3/4 " " 1 "		5.00
1 " " 2/6x8'0 " 5 3/4 " " 1 "		2.50
2 " " 3'0x8'0" 5 3/4 " " 1 "		5.00
2 " " 2'10x8'0 " 7 3/4 " " 1 "		2.50
3 " " 2'6x8'0 " 5 1/2 " " 1 "		7.50
1 " " 3'0x8'0 " 5 1/2 " " 1 "		2.50
5 " " 2'10x6'10 " 5 1/2 plain casing attic		7.50
1 Inside w. frame 1-4x4-7 1/2 Cap trim 2 sides		2.50
1 " " " 2-6x2-11 No cap		1.75
Trim for 1 outside door frame 2'6x6'6		1.50
" " 3 " " " 3'0x8'6		4.50
" " 1 " " " 3'0x7'6		1.50
" " 1 front " "		6.00
" " 1 Tripple window 2nd story		4.50
" " 1 Circle window 24" dia		1.25
" " 1 Tripple stair window		3.00
		199.50
To trim for 2 double windows 2 L 40x36		6.50
2 " " 36x36		6.50
5 " " 36x34		16.25
4 single " " 36x34		9.00
4 " " " 30x34		9.00
4 " " " 40x36		9.00
5 " " "36x36		11.25
2 " " "30X36		4.50
2 " "26X34		4.50
1 double " " 26x26		2.00
4 single "26x26		5.00
1 single "26x36		2.00
1 " " "26x20		1.25
To trim for 1 single window 2L 30x34		2.00
5 " " "26x34		7.50
1 double " "26x34		2.25
1 arch 4-8x8		7.00
1 arch 5-11x8		8.00
1 arch 9-10x114-0 5/8 without cap		12.00
To 1 set outside steps		35.00
2 turned base newals 5 1/2x 5 1/2		3.00
2 " angle "4 1/2x4 1/2		2.50
30 Turned Balusters 2x2-2-6		3.00
2 Rails 1 3/4x5 1/2--14-6 Bevel 1 E (?) Net		
1 " " "-- 13 " 1 "		"
1 " " "-- 3-6 " 1 "		"
5 " " "-- 12 " 1 "		"
3 " " "-- 10 " 1 "		" 3.00
CAPE FEAR MANUF. CO., SEPT 29, 1900 (cont.)		
4 " " "-- 14-6 Square		
2 " " "-- 13 "		
2 " " "-- 3-6 "		
10 " " "-- 12 "		8.24
6 " " "-- 10 "		
12 " " "-- 12 "		
400 Lin feet 1 1/8x2 mold		3.00
1000 " " picture "		7.50
1 skylight sash		2.00
Forward		$391.94
CAPE FEAR, (NODATE) continued--		
To 360 Lin feet vertical Wainscot with cap, base etc-		120.00

Material for back stairway	8.00
18 treads 1 1/8x11--4	
18 Rises 3/4x7 3/4--4	
1 tread 1 1/8x11---4-6	
2 rises 3/4x7--4--6	
12 feet rail	
40 feet Lin Skirting 13/16x9	
120 feet flooring 1 1/8x2 1/4	
Material for attic stairs	5.00
18 Treads 1 1/8x11 3/8--4	
19 Rises 3/4x7 1/8--4	
40 feet skirting 1 3/16x9	
60 feet Nosing 1 1/8x1 1/4	
Material for deck stairs	6.50
18 Treads 1 1/8x10 3/8--3--6	
19 Rises 3/4x8--3--4	
1 Rail 7-6	
1 Rail 14-0	
40 square Balusters 1 1/4x2	
426 feet 1 1/8 shelving for stores	10.65
200 feet 13/16x9 Base with mold & shoe	6.00
700 " 1 1/8x9 1/2 " " " " "	28.00
1 Sash 1-4x4-7 1/2 1L	1.50
1 Sash 2-6x2-11 1L Chipped	2.00
2 Prs open sash 2 L 30x36	2.00
4 Prs open sash 2L 36x34	20.00
Top sash 12L 8 11/16x11 1/16 Plate glass	
1 Pr open sash 2L 32x24	1.00
2 panels 2--0 1/2x16"	1.50
1 " 3-0x16"	1.00
2 " 1-8x2-2	1.50

CAPE FEAR, OCT. 8, 1900

To 2 Lts. 5/8 wire glass 25"x70"	10.33

DUDLEY LUMBER COMPANY, OCT. 8, 1900

727 ft flooring 1x3	9.45
600 ft " 1 14x6	6.00
50 Per 2x4 12 clrs 4 S (?)	3.20
2 per 3/4x5 5 " "	.10
6 per " 4	
8 per " 7-1	
80 lin ft 2" staps	
21 per 3/4x3-4	
240 lin ft 1 1/8 " Staps (?)	
21 stools 1 1/8x1 1/4 4-2	
21 per 3/4x4 "	
42 " " "	
180 lin ft 1 1/4x1 1/4	
12 per 2x14 12 dro 2S (?)	
8 per 1 1/2x12 14 " 1S	28.59

CAPE FEAR, OCT. 23,1900

To 2 Composition Capitals	11.00

NOV 14, 1900

1 ashpit door	1.00

DUDLEY LUMBER COMPANY, NOV 26, 1900

1 towel closett 8x24 Jamb 10"	1.00
1 " " 10x24 " "	1.00
2 cupboards for detail	20.00
130 Linl ft Rail and Shoe	3.00
2 doors 2'6"x5'6"	2.00
1 " "	1.00
1 " See cut 150 linl ft 1/2"x1 1/4 wind stops	.45
	29.95

CAPE FEAR, DEC. 3, 1900

To 1 door 3-6x8-6--10 Pan 1 3/4	5.00
6 door 3-0x8-6 7 " "	21.00
1 " " " 1L "	3.50
6 " 3-0x7-6 5 Pan "	21.00
2 " 3-0x7-0 " " "	7.00
1 " 2-10x8-0 7 " "	3.50
9 " 3-0x8-0 7 L Pan "	31.50
1 " " x8-6 1L "	3.50
1 " 2-6x6-6 " "	2.50
1 " 2-8x8-0 7 Pan "	3.50
2 " 3-0x8-0 7 " "	7.00
1 " 2-10x8-0 7 " 1 1/2	3.50
1 " 2-8x8-0 7 " "	3.50
11 door 2-6x8-0 7 Pan 1 1/2	38.50
2 china closet doors	6.50
1 stairway as per estimate	145.00

450 Lin feet Wainscot	450.00
1 cupboard	30.00
300 feet stair scotia	1.20
4 Newels 4 1/2x4 1/2 Turned and chamfered	4.00
28 feet stair rail	2.80
60 Balusters	2.50
192 feet 1 3/8x3 1/2 for ladders	4.80
60 feet base, mold & shoe	1.80
120 Ps (?) Wainscot 3-2	3.20
48 feet molding	.60
2 inside door frames	6.00
300 Lin feet 1/2x3 1/2 stop	3.00
48 Lin feet 1/2x6 1/2 stop	.75
6 Lamppost 5 1/2x5 1/2	9.00
5 Doors 1 1/2 oy(?)	7.50
160 feet maple Qr round	4.00
10 1/4 feet leaded glass china closet door	25.62
1 polished plate 36x34 1/8	7.00
Sash for Sun Parlor	90.00
	959.77
Less on cupboard and glass	30.62
	929.15

CAPE FEAR, DEC. 4, 1900

To 1 glass 20x26	.75

CAPE FEAR, DEC. 7, 1900

To 2 prs sliding doors 8-0x8-6	25.00
1 " " " 4-8x8-6	10.00
1 " " " 3-8x8-6	6.25
1 " " 3-6x8-0	6.25
1 pr front " 5-0 1/4x7-4 1/4	12.50
	60.00

CAPE FEAR, DEC. 8, 1900

To 1 mirror 64x20 1 1/2 Bevel	11.50

CAPE FEAR, Dec 15, 1900

To 1 door 3-0x8-6 1 3/4 for G 26x46	3.50
1 " 3-0x8-0 "	3.50
1 " 2-6x7-6 "	3.50
4 Peices (?) 1 1/8x9--10--0	
4 " " --5--6	
3 " " --5--0	
6 " " --4--6	3.50
2 " Wainscot Rail 1 5/8x4-12	14.00
To 1 Ground Glass 9 7/8x47 1/8	1.00

CAPE FEAR, Dec. 21, 1900

To 2 sliding doors 5-6x8-6--2"	22.50

CAPE FEAR, Dec. 27, 1900

{Record of Bills Rendered, plus the following 2 items:}	
July 23: Priming & Crating Sash	2.50
Aug 27: 1 Ice Box 20"x9'0	4.00
Total	*2373.73*
By freight & by Cash (subtracted)	*1072.27*
Less overcharge on freight	*5.50*
	1296.96

CAPE FEAR, Dec. 27, 1900

(Repeat of charges on 2 items above plus:)	
Bill Rend Sliding Doors	22.50

1901

CAPE FEAR, Jan. 4, 1901

To memorandum as quoted	10.00
60 Lin feet Base, mold & shoe	1.80
36 " " 3/4x15 #12 Ht (?)	1.20
120 Lin feet 3/4x14 #1 "	4.00
1100 " " Glass Bead	2.50
40 Lin feet 2 3/4x3 Rail	2.00
6 Post 4x4--3--6	.75
24 steps 1 1/8x12 1/2--4 #1 Ht (?)	4.00
24 rises 3/4x7 1/2--4	1.50
24 strips 1 1/4x3 1/2--12	3.60
6 stringers 2x12-6 26 each	1.44
7 Ps 1x14--4--0	
1 " " 7--0	
2 " 1x9 --4--6	
1 " 1 1/4x4--7--0	
3 " 1 1/4x4--6--0	
3 " 1 1/4x3--7--0	
2.50	
60 Lin feet MirrorFrame	1.00
	36.29

CAPE FEAR (no date)

To 36 feet picture mold	.54

250 feet Panel Mold 1.88
2.42

CAPE FEAR, JAN. 18, 1901

To 3 mirrors 24"x24" 9.75
1 " 32"x32" 7.00
1 " 20x32 3.75
20.50

CAPE FEAR, JAN 18, 1901

To 1 door 2-11 1/4x8-6 3.50
2 door 19"x6-0 2.50
4 feet bed sash 12.00
8 stair balusters 1.00
19.00

Pg. 50-1 set Bath Tub Legs-Ivory white 3.50, June 1901.
Weather stripping, 5.50, May 1901.

CAPE FEAR, FEBY 14, 1901

To 11 Book case doors 66.00

1903

800 ft. #1 ceiling $12.80, page 42, 1903.
200 ft. #1 floor 3.20
16.00 for Mr. Underdown
Heart pine shingles--3 M (sq.?) @ 2.00/6.00, Feb 27, 1903.
6 pairs window blinds 1.10/1.60, Dec 31, 1903, pg. 53.
32 ft. Sewer pipe, Aug. 1903, pg. 55.

1907

3/18/1907 3 kgs Lead

1911

Brick Paint 25#--1911 (Bernhard).
May 19, 1911: Receipts from Odell Hardward, Greensboro, NC
Mrs. M.H. Cone $26 range, tea kettle, pots, pans, pie pans, roasters, muffin pans, knives, etc. Total 35.61

1912

5/8/12- 1ct. chairs & 1 mirror from Camden, NJ
11/13/12 Mrs. Cone in Baltimore
12/11/12 Warren Chemical Mfg. Co., 22 rolls roofing paper 89 cents
Jan. 26, 1912, 3 cents G. Generator 190 lbs.

1913

PROXIMITY MANUFACTURING CO. AND WHITE OAK COTTON MILLS, GREENSBORO, NC, AUG. 1, 1913: LETTER TO MR. UNDERDOWN confirming order of 100 lineal feet of 3" down spout
135 feet of 4" moulded guttering
12 3" elbows
plus, elevator is being shipped.
Aug. 18, 1913: Plans for "Balusters" for Mrs. Moses Cone (Series 24)
13 hand rails 20' long
4 hand rails 5'-0" long
13 foot rails @ 20' long
4 foot rails @ 5' long
18 posts; 315 balusters. N. M. Sullivan- Greensboro
1913 Arsenate of Lead 685#
" " " " 920#

1914

3/20/14 12 kegs of nails (Barrels?)
3/26/14 to Rich Plumbing/ 1 box pol marble (120 lbs)
3/30/14 Brass pipe, etc.
11/27/14 2700 lbs building material, High Point

1914:

Feb 15: W.G. Winkler 1124 ft. lumber @ .80=9.00
" " 9950 shingles @4.00= 39.80
Feb 28: Sam Austin 2nd paymt on sawing lumber 75.00
Mar 31 D. Bourne for boarding "plummer" 8 1/2 day at .40/day=4.15
Apr 30 D.C. Hartly for 597 currips (?) "rhodendron" @ 5 cents=75.66
May 15 J.M. Bolick for 17,000 shingles @ 4.00 delivered 68.00
Fred Bradshaw for 8,000 shingles @ 4.00 del'd=32.00
June 15 E.G. Alislyne for tuning your piano =5.00
Balance on Sam Austin bill for sawing lumber =395.84

July 15: Sam Austin for cutting 16,925 shingles at 1.75 per 1000=29.70
July 31 Blowing Rock Band 15.00
Oct 31: 13 names of workers paid for making approx. 21,000 lbs. Reeding at 30 cents incl. making splice Bars, wire cable, and hoisting machine --all workers paid at 30 cents an hour.
Clint Bolick for hauling 1700 lbs. "Teracotta pipping" 5.10
Pd. freight on hoisting machine 4.76
Nov 30: Express bill for 3 deer pd by Moody to Washington City=5.31
Freight on bedstead, mattress, and springs 2.20
Nov 15: R. Underwood for hauling 1000 ft ceiling=5.00

1915

3/16/15 Paint
4/9/15 8 kegs white lead
6/19/15 Devoe Co., N. York, 1 co. paint in met. cans 100 lbs.
6/16/15 Odell, Turp. Oil paint
Sept 15, 1914, Mrs. Cone in Atl. City, NJ.
11/23/15 "
11/24/15 "
Dec. 10, 1915: Receipts from Lenoir Mfg. Co., Lenoir, NC
1000 ft. #2 ceiling 17.00
Ct. 12 L 55 (0) ft #2 flg. (flooring?) 13.20
850" #2 ceiling 14.45
1000 ft. #2 flg 24.00
1 pc. sash 12 x 16 sh 1.75

1915:

Jan 31:Gunter Telephone Co. for 1/2 doz inductive coils 3.60
J.W. Hartley 12,000 shingles at 4.00@ per 1000 del'd=48.00
Feb 28: Pd. Ance Cretcher for hauling dormer and brackets--10 at 50 cents each
J.W. Hartley for 13,000 shingles at $4=52.50
Mar 31 JW Hartley 1000 shingles 40.00
J.M. Hasted-- building stone floor (30 hours)
J.W. Hartley 10,000 shingles 40.00
May 31: "It will take them most of this month to finish your stone"...E.G. Underdown

July 15 Mrs. Jean Alstyur Bill for tuning "piano" 5.00

1916

shipped venison/honey/apples/coops of chickens/potatoes (Brother Lindow, Atlantic City, Nov 1916.)
2/22/16 2 Brts arsenate Lead paste, wt 1160
8/18/16 1 bu paint #500 from S. Cabot, Boston
9/12/16 1 roll TW (?) roofing paper #550
9/17/16 9 kegs wire nails from Lynchburg, #972
10/28/16 1 Bcl bricks and castings
INVOICE FROM BELKNAP HARDWARE & MFG. CO., 11/6/16 closet bowls, sink strainers, roofing, plus mattocks, axe hdls, etc.
11/7/16 1 bdl Brick cslgs.

1916:

Mar 15: S.M. Austin bill for lumber 53.37
Aug 31 Mrs. T.M. Greene for washing blankets and sheets 2.50

1917

2/15/17 Bath tub supplies (30 lbs)
3/29/17 10 kegs white lead
4/9/17 12 kegs nails
5/21/17, 5 crt chairs, 2 crt couches

1917:

Apr 15: Sam Austin bill for lumber 7567 feet at 85 cents= 64.32
April 30: Hu___let paid 2 boxes (or buns ?) paint 1.12
May 15 S.T. Icenhour paid for Telephone fixtures 2.16 (1st mention of telephone)
June 30 John Lewis for boarding 4 painters 19 1/3 days at 57 cents per and feeding each 44.32
July 31: paid C.R. Teague for 3250 shingles at 4.50 per 1000=14.62
Sept 30: J.W. Moody 600 ft lumber at 1.20=7.20 pd freight on guttering 3.00
Sept. 15: Mrs. Greene for washing and ironing your sevants bedding 3.25
Oct 31 Pd freight on 2 Bbls paint 18.71
pd freight on corogated boards 1.21
pd Blowing Rock Developing Co. for 1290 feet lumber 12.90

1918

Feb 28: Blow. Rock Devel. Co. 34.84
Mar. 30: Sam Austin for 2000 lumber at 85 cents 17.00
Dec 15: C.W. Woody's bill for lumber 32.00
Dec 31: Freight on 20 bags oil coler (color?) 12.14

1919

8/28/19 1 Billard table from N.Y. 610#
Oct. 8/19-- Series 3 B.R. "F" 1917-22, 1 bdd. lumber, 4 bdls flooring, 1 bdls flooring, 5 bdls flooring.
1919:
Jan 15 Woody for one barrel tar 9.00
Feb 15 Freight on arsenals of lead 7.77
Fred Andrews bill for sawing lumber 19,418 feet at 40 cents =77.67
C.W. Woody for 5931 feet lumber at 12.00 per 1000 feet=77.17
Mar 15: Fred Andrews for cuttin 16,050 shingles at 2.00=32.10
Apr 30 F_____ Lumber Co. bill 60.63
May 31 G.C. Robbins for hauling 2000 ft. ceiling
C.W. Woody bill for lumber 31.00
Walter Collars for lumber 10.00
Oct 15: Pd. E.G. Underdown for freight on lumber 12.20
Oct 31: C.W. Moody for 560 feet of Sills at 2.00 per 100=11.20
Smith Bros. bill for hauling 133.58

1920

10/23/20 Maryland Workshop for Blind, 1 crt, 1 chair
KENT-COFFEY MFG. CO.
1/29/20 1000 #2 floor $45.00
2000 #2 ceiling $74.00
2/10/20 2000 ft. #2 ceiling 74.00
1200 ft. #2 flooring 54.00
4/10/20 500 #2 ceiling
833 #1 flooring
4/16/20 300 #2 ceiling 10.50
450 #2 German siding 22.50
4/29/20 210 #3 side
290 #2 side
400 #2 flooring Total 67.17
plus 204 ft. of wood (?)
125 ft #2 flooring 6.25
10/26/17 10,000 shingles cedar @ 6.00= 60.00
10/29/20 2 crts-stove- Brunson, value 335, 2 box 55, 165, 85
1920:
June 15: W.L. Holshown bill for servants 12.19
Dec. 15: Paid freight on arsenal of lead 22.80
Bill for _____ for little steam boiller 35.99

1921

JULY 28, 1921, WATAUGA FURN. AND LUMBER CO., BLOW. ROCK,
16,000 shingles @ 5.50= 88.00
9,000 shingles @ 5.50 = 49.50
137.50
July 29 " " " " " " =4.50
Aug 5 " " " " " " =6.00
Aug 13 pd A.D. Bryant for 2000 shingles @ $3 per 100=
$6.00
Aug 15 " " " " " " =6.00
Credit by check paid "italians" 56.25
Credit by Fred Lyons for window light .35
Sept 30 Sam Austin for 28,890 shingles at 4.00=95.56
" " " 7,960 " " " =31.84

11/14/21 1 ct. wood sash Glsen Gts, 1 box Glazing stops-wd, 160#, 3 box glass windows, 210 #, Series 3, BR "F" 1917-1912
Inc. elsewhere 16,000 shingles @ 5.50 July 28/21
9,000 " " "
11/30/21 S. Cabot 3 Bx paint--1650#
12/7/21/ 2 crt. Gas Generators
Dec 19, 21--Watauga: 3 & 1/2 windows @ 3.50
1/2 window @4.00
1 door 3.50
1 crt screen 2/18/22
300 ft. no 2 flooring @ 35+1= 10.50
200 ft. no 2 ceiling 22.00= 4.40
1921:
Mar 15: John Foard for putting in flues in steam boiler 10.75
Apr 15: John Foard 1st payment on sawing lumber 100.00
May 31: Credit by 125 ft. flooring and 150 ft. siding at 5.00=13.75
June 15: John Foard for 2nd payment on sawing lumber 100.00

Nov. 15: Credit by check to pay painters 350.00
Dec 31: Bal. due John Foard for sawing lumber 124.95
Dec 15: John Foard for sawing lumber 150.00

1923

Feb 15: Blowing Rock Devel Co. for 357 ft. of lumber at 2.00 @= 7.14
Mar 31: paid Boone mail carrier for "bring" 115 rolls "building paper" .75
May 31: Wal_____ F. and Lumber Co. bill 68.25
July 15: Fred Andrews 6745 ft. lumber at $25.00=168.72 -5.00 per 1000 for hauling 134.90

1924

Mar 15 Paid Blowing Rock Hardware for 7 windows and for mortising doors 1.00
May 15 Wm. Teague Rack (?) trim 80 1/2 @2.00=16.10
June 15 pd C.W. Moody for work on screens 1.00
May 31 S.T. Icenhour for boarding paper hangers and other things 90.07
July 30: T.J. Callahan Co. for 11 Hot Bed sash (?)
Sept 15 T. Icenhour pd. for 25 lbs finishing nails 1.50
Oct 31 S.T. Icenhour paid Cook Electric Co. for Tues. 2.75 (first mention of electricity)

1925

Feb 15? Will Estes for 1620 ft lumber at 20.00 per 1000=32.40
Mar 15 Watauga Frt. Lumber Co. 63.78
Feb 28 C.R. Walser for lumber 81.53
June 30 Clarrid Shoares bill for lumber 92.49
Oct 31 Christian Tin & Metal Works bill 7.50

1926

1926:
Mar. 31 Rob Walser bill for lumber 40.68
June 15 pd freight on 1 "arenate" of lead 15.62
May 31 A.C. Moody paid Sandy Shores for lumber 9.74
July 15 Hamp Sims for 1000 feet lumber at 15.00 per 1000=15.00
" " " 863 " " " " " " =12.94
Aug 31 H. Sims bill for 882 ft lumber at 15.00=13.23
Oct 15 Icenhour paid Pitts for 3 lbs. plaster Parris .30
+ electrician tape, tubes for wire .55
Sept 15 Rob Walser for lumber 14.75
Nov 15 paid Mrs. Hollars bill your cook owed 2.00
Dec 15 G.M. Sudderth Lumber Co bill 82.55

1927

1927:
Feb 28 Sandy Shores for 2245 ft. lumber at $1.80 per 100 ft 40.41
pd. town of Blowing Rock for one water meter (1st mention)

1928

1928:
Jan 31 Blowing Rock Light & Power Co. .75
Feb 29 A.C. Moody paid Light Bill 1.50 (1st mention of light bill; hereafter paid ever month around 1.50, unless noted)
Mar 31 Fred Andrews bill for lumber 26.12
May 31 S. C. Icenhour pd. for 152 ft ceiling 4.66, 85 ft flooring 3.40
Sept 30 Dave Shoures for 400 ft. sheeting at 1.60=6.40
Nov. 15 B.H. Moody bill for lumber 20.50

1929

1929:
June 30 S.T. Icenhour pd for tub to mix floor paint in .75

1930

1930:
Feb 15 Icenhour pd for 8 bags cement at 65cents 5.20
Feb 15 Teague pd for 4 1/2 yds sand 6.75
Walser pd for dressing lumber 2.05
Lenoir Mills bill 93.00
Mar 17 Icenhour pd for 400 brick 4.80
May 15 W.S. Christian for 3 lbs Soldes (?) 1.50 and 5 lbs copper 2.75
June 15 Hickory Novelty Co. (?) 31.36
May 31 pd Freight on Arsenate of lead 11.52
July 16 Icenhour pd for dressing lumber 1.00
July 31 Dave Shore bill for lumber 8.71

Oct. 15 pd Holshouser for 50 ft guttering 4.50
Boone Cash Coal Co. 3.50 (first mention of coal)
Nov 15 Icenhour pd for pipe and pipe fixtures for bathroom 17.89
Bost Lumber Co. 47.03
Dec. 31 Icenhour pd M_____ "for looking our furnices" 5.00

1931

1931:
Jan 15 Hickory Novelty Co. beill 42.00
Jan 31 Icenhour for 10 rolls pipe hanging wire 1.00 (for hanging furnace pipes ?)
Feb 28; Icenhour pd. Cook Bros for 800 ft lumber 12.00
Mar 31 Loyd Robbins for 2 1/2 yds sand 6.25
May 15 Icenhour pd J.B. Cott Gas Co. for gas fixtures 7.10
June 16 Icenhour pd for "elbo" for laundry stove .25
July 31 Telephone Co. Bill 6.63 (1st mention)
one front door bell .75
Sept 15 Icenhour pd for telephone fixtures .50
Aug 31 Cook Bros. bill for lumber 248.27
G..M. Sudderth for dressing 13,460 ft lumber 40.38
Sept 30 Cook Bros. Bill 37.50
Cash Coal Co 1.75
Oct 15 Cook Bros for lumber 10.40, 13.00, 15.52
Nov 16 Bost Lumber Co. 26.20
Cook Bros for lumber 10.87, 39.70
Jim Underdown for 2 tons coal 14.00
R.N. Barbee bill for painting 104.50
Underdown bill for boarding 3 men one week 24.00
Dec 15 Barbee bills for painting $228; $28; $2.
Underdown bill for boarding painters 2 weeks 48.00
Nov 30 R.N. Barbee bill for "labors" painting 216.00
Underdown for boarding 3 men 2 wks each 48.00

1932

1932:
Jan 15 Watauga Lumber Co. bill 22.64
May 15 freight on lead 17.75
Barbee bill for painting 51.50
Underdown for boarding 2 men 5 days 11.40
Apr 30 Cook Bros bill for lumber 21.97
Barbee labor bill for painting 81.60
Underdown for boarding 2 men 9 days 20.60
May 31 Watters pd for 2 1/2 loads sand 1.00
June 30 Icenhour pd for 2 1/2 yds sand .90
Oct 15 Cook Bros pd for lumber 12.28
Dec 15 Spencer Henderson for 600 feet lumber 6.00

1933

1933:
Apr 30 Freight on arsenate of lead 17.27
May 15 Bill for 2 windows Pied. Bldg Supply Co. 3.00
Aug. 31 W.B. Estes for one lot lumber 26.68
Sept 30 roofing nails & 2 can "Brown liquid" 1.30
Nov 30 Icenhour bought from D. Shoe 350 ft timber 4.08
Dec 16 dressing one lot lumber 3.00
Green Lumber Co. 21.00

1934

1934:
Jan 31 Lathe for turning porch "collums" 5.00
Feb 16 pd one plainer 100.00
Mar 31 12 yds sand 4.88
Apr 30 Coal Co. 10.15
Mather bills for lumber 231.37
Bills for sawing " 1.68
July 16 Cook Bros lumber bill 68.65

1935

1935:
May 16 Mrs. Winkler for cleaning house 58.94 (very large amount ?)
July 31 1000 bricks 15.00
Oct 1 (Payroll not signed :E.G. Underdown" for almost 1st time since ledger begins in 1909!)

1936

1936:
Jan 31 for refinishing mirror 2.50
June 1 Muse Hardware Co. 103.11
Oct 31 pd R.M. Coffey for 500 lbs coal 2.12

Nov 30 Greene Lumber Co. 56.36
_____Hollars careing for house 2.67

1937

1937:
Jan 31 Chilhouse (?) Milling Co. 123.48
June 30 Ice bill 22.50 (1st time)
Greene making 2 coils & putting in water heaters 18.00
June 15 Ice bill 23.75
Carl Hollars careing for house 8 days 26.25
July 1-15 Coffey ice bill 26.25
Aug 31 Coffey ice bill 45.00
Aug 15 " " " 23.75
Nov 30 Icenhour pd for awning and turkeys 45.94
B.F. Bolick Lumber Co. 166.20

1938

1938:
Mar 31 Barger Ashe roofing co. bill 43.28
Mar 15 Lenoir roofing co. 20.50
Apr 30 J.C. Ford surveying "china" land 14.00
Minkley's bill (painting) 346.55
May 31 " " " 443.00
May 15 Coffey bill for lime and cement 22.45
May 15 Minkley's bill for painting and material 488.23
June 30 " " " " 411.40
June 15 " " " " 416.90
July 16 " " " " 253.40
Aug 31 Muse Hdwre. Co. for roofing bill 182.85
Aug 15 " " " " " " 169.61
Oct 31 Coffey for sand and cement 19.25
Oct 15 bill for gutter 3.00

1939

1939:
May 16 Maymead Lime Co. 161 tons 161.00
June 15 Coffey ice bill 31.25 +other ice bills on 8/31, 16.50; 8/15, 14.71; 10/16, 7.50.

1940

1940:
Feb 15 Greene Lumber Co. flooring for houses 45.56
May 15 Farmers Hdwre. Co. Roofing bill 10.35
Coffey lime and cement 27.05
Apr. 30 Cook Bros. lumber bill 32.96
June 15 Shore lumber bill 38.19
Aug 1 Muse Hdwre roofing bill 205.80
Oct 31 Coffey cement 42.80

1941

1941:
Feb 28 Farmers Hdwre Co. bill for brackets 1.90
Feb 17 ____Ashe roofing co. for tin 10.09
Apr 15 Moody pd for crushed stone 175.00
May 15 Coffey lime cement, and dynamite 33.68
June 30 Farmers Federation Inc. Lead and blue stone 38.52
Aug 15 Farmers Hdwre. Co. for roofing and repair parts 37.38
Nov. 15 Cook Bros lumber 70.63

1942

1942:
June 15 Cook Bros. lumber bill 138.78
Aug 15 " " " " 72.00
Sept 15 " " " " 21.72
Oct 31 Greene Bros lumber Co. 44.17
Dec. 15 Christian tin Works 38.25

1943

1943:
May 15 Cook lumber bill 177.32
Nov 15 Shore saw bill 52.50

1944

1944:
May 15 (Five workmen paid $264.00 for-) PAINTING 264.00
June 30 Arthur Townsen lumber and sawing 30.69
Oct 31 " " " " " 12.75

1945

1945:
Mar 16 A. Townsen lumber bill 43.88
Feb 28 A. Townsen for 1884 ft. lumber 75.36

1946

1946:
Jan 31 Townsen lumber bill for "Tolbert's" 200.00
May 31 Oakboro Lumber Co. for Tolbert's rooms 121.05
Coffey for sawing lumber 115.20
Aug 31 Howard Mast roofing 100.53

1947

1947:
May 1 Icenhour paid bill for toilet 35.17
Castle painting to April 30 215.60
May 31 B. Castle painting 343.20
May 15 Castle painting to date 462.00
June 15 Townsen for 2000 ft lumber 180.00
Aug 1-15 (last entry)

PHOTOS, Classification #728

Neg. # 2835A- Reconstruction of Porte Cochere (steel beams) 10-24-73
#2835 ---Porte Cochere and rear porches, 10-24-73
#2865-----Front, 3-10-73

#5182 (894B_ rear showing servants quarters and relationship to house, 7/13/47.
#7561 (9350.C) Side porch and servants' house beyond, Sept., 1948.

APPENDIX C

BERTHA CONE'S WILL & CONE EFFECTS SUMMARY

Compiled by:
Surber & Barber Architects, Inc.

LAST WILL AND TESTAMENT
OF
BERTHA L. CONE

I, Bertha L. Cone, a citizen and resident of the Town of Blowing Rock, in Watauga County, North Carolina, being of sound mind and memory, but considering and realizing the uncertainty of my earthly existence and desiring to provide for the final disposition of all my worldly goods and estate, do hereby revoke and declare utterly void, ineffective and invalid all wills, codicils and testamentary instruments heretofore made and executed by me and do make, declare, publish and constitute this as and for my last will and testament, in manner and form as follows, to-wit:

Item One

I direct that my body shall be cremated and buried beside that of my husband, Moses H. Cone.

Item Two

I direct that my Executor shall pay out of the general principal funds of my estate;

(a) as soon as practicable after my death, all my funeral expenses and just debts; and

(b) at the proper time or times, all administration expenses, including court costs and attorneys' fees, and all inheritance, estate or succession taxes, dues or levies, Federal or State, which may be properly or lawfully charged, assessed and levied against my estate or against any of the beneficiaries hereunder, or against any interest of any of the beneficiaries hereunder.

Item Three

I hereby nominate and appoint Security National Bank of Greensboro, a corporation organized and existing under the laws of the United States, with its principal office in Greensboro, North Carolina, as Executor of this my last will and testament.

Item Four

I give and bequeath to Security National Bank of Greensboro, as Trustee, to be by it held, managed and disposed of in the manner and for the uses and purposes and subject to the terms and conditions hereinafter set out, the sum of ($160,000.00) One Hundred Sixty Thousand Dollars:

(a) The Trustee shall pay out of the income of the trust estate, or out of the principal of the trust estate if necessary, all taxes, fees and expenses incurred by the Trustee in the administration and preservation of the trust estate, including commissions, trustee's fees and attorneys' fees, if any. The Trustee shall also pay out of the income of the trust

estate, or out of the principal of the trust estate if necessary, all other taxes, liens, charges and liabilities which may accrue or exist against the trust estate from time to time.

(b) Except as provided otherwise in subparagraph (c) hereof, the Trustee shall pay out of the net income of the trust estate, or out of the principal of the trust estate if necessary:

(1) the sum of $100 per month to Mrs. Jacob W. Lindau, 1718 Etaw Place, Baltimore, Maryland, for life;

(2) the sum of $125 per month to J. W. Lindau, Jr., 301 East 38th Street, New York, New York, for life;

(3) the sum of $167 per month to Mrs. S. J. Lindau, 301 N. Tremont Drive, Greensboro, North Carolina, for life;

(4) the sum of $100 per month to Miriam Lindau, 301 N. Tremont Drive, Greensboro, North Carolina, for life, provided however that in the event Mrs. S. J. Lindau shall predecease Miriam Lindau, the amount to be paid to Miriam Lindau thereafter for life shall be increased from the sum of $100 per month to the sum of $167 per month;

(5) the sum of $100 per month to Louis Adler, 2101 Dennison Street, Baltimore, Maryland, for life;

(6) the sum of $100 per month to Flora Adler, 2101 Dennison Street, Baltimore, Maryland, for life, provided however that no such payments are to be made during the life of Louis Adler;

(7) the sum of $100 per month to Mrs. Evelyn B. Walsh, 1800 Etaw Place, Baltimore, Maryland, for life;

(8) the sum of $100 per month to Mrs. Margaret G. Wroe, 1800 Etaw Place, Baltimore, Maryland, for life;

(9) the sum of $10.00 per month to Thomas Johnson (colored), 822 Carrollton Avenue, Baltimore, Maryland, for life;

the first of such payments to be made on the first day of the calendar month following the date of the qualification of my Executor, as such.

(c) At any time after the death of Mrs. Jacob W. Lindau, Mrs. S. J. Lindau, Louis Adler, Flora Adler, Mrs. Evelyn B. Walsh, and Thomas Johnson (colored), the Trustee in its discretion:

(1) may purchase and pay for a single premium annuity contract which shall provide for the payment of the sum of $125 per month to J. W. Lindau, Jr., 301 East 38th Street, New York, New York, for life, and may cause said single premium annuity contract to be delivered to the said J. W. Lindau, Jr., in lieu of and in full satisfaction of any and all further payments under subsection (2) of subpara-

graph (b) hereof;

(2) may purchase and pay for a single premium annuity contract which shall provide for the payment of the sum of $[illegible] per month to Miriam Linder, 301 N. Tremont Drive, Greensboro, North Carolina, for life, and may cause said single premium annuity contract to be delivered to Miriam Linder, in lieu of and in full satisfaction of any and all further payments under subsection (4) of subparagraph (b) hereof;

(3) may purchase and pay for a single premium annuity contract which shall provide for the payment of the sum of $100 per month to Mrs. Margaret G. Wroe, 1800 Etaw Place, Baltimore, Maryland, for life, and may cause said single premium annuity contract to be delivered to Mrs. Margaret G. Wroe, in lieu of and in full satisfaction of any and all further payments under subsection (8) of subparagraph (b) hereof;

and such single premium annuity contracts shall be purchased from a legal reserve life insurance company to be selected by the Trustee and shall be without guarantee of a minimum number of payments or other refund provisions, and shall be paid for by the Trustee out of the net income from the trust estate or out of the principal of the trust estate if necessary.

(d) The trust shall be terminated when all of the obligations provided for in subparagraph (b) hereof have been discharged in full either by payments as therein set out or with single premium annuity contracts as provided for in subparagraph (c) hereof, or otherwise; and the trust estate as constituted at that time, including any undistributed income, shall be divided among and distributed to my then living next of kin under the laws of the State of North Carolina in force and effect at that time, per stirpes.

(e) Each and every successor or substitute trustee, if any, shall succeed to and be vested with and shall exercise all the rights, titles, powers, authorities and privileges, including all discretionary powers, and shall be subject to all the duties, obligations and responsibilities conferred upon and charged to his, her, or its predecessor trustee.

(f) Any person, firm or corporation involved in any transaction in which the trust estate is interested shall be entitled to accept as conclusive evidence of the facts therein stated a writing signed in the name of and by any two officers of any corporation which is at the time acting as a trustee, or in the name of and by any individual who is at the time acting as trustee, and shall be fully justified and protected in relying upon the facts as set forth in any such writing and shall be under no obligation or liability whatever to make any further inquiry in connection therewith.

(g) Whenever the trustee shall sell, exchange, convert, transfer, or otherwise dispose of the trust estate, or any part thereof, any and every person, firm or corporation who in good faith and for a valuable consideration shall acquire any or all of said property shall be relieved of the duty, liability, obligation and necessity to inquire into or see to the proper appli-

cation of any property funds, cash or assets paid, delivered, transferred, sold, exchanged or assigned to the trustee as a part of any such transaction or transactions.

(h) The trust is to be administered free of the control and direction of and without accounting or reporting to any court, but the trustee shall keep and maintain complete records and accounts concerning the trust and its receipts, income, disbursements and expenditures, and upon being requested so to do by any beneficiary the trustee shall render a written statement and report of the status of the trust estate, including an itemized statement of all receipts and disbursements and of all transactions in connection with the trust estate not included on the statements and reports previously rendered.

Item Five

I give and bequeath the following described rugs, furniture, furnishings, fixtures, silver, china, etc., all of which are located in my residence at Flat Top Manor, in Blowing Rock, North Carolina, as follows, to-wit:

(a) To Mr. and Mrs. Jules W. Lindau III, share and share alike, the entire contents of my bedroom except the sewing table and the large rug; and two rugs in the corner spare room;

(b) To Betty D. Lindau, the sewing table in my bedroom;

(c) To Dr. and Mrs. Allan Roos, share and share alike, one drop-leaf table, two rugs in the front hall, one Booth couch, the Pecasso woman with loaf on head, and the small rug in the parlor with a red square center design;

(d) To Jules W. Lindau, Jr., a large rug in the music room;

(e) To Mrs. C. D. Mackey, one drop-leaf table and the red rug at the foot of the front stairs in the front hall;

(f) To Mr. and Mrs. Norman Lindau, the entire contents of the dining room, the large bronze in the downstairs hall, my white and gilt china set, two Renoirs in the upper hall, and a large rug in my bedroom;

(g) To Judith Lindau, one silver service set and the drop-leaf table in the parlor;

(h) To Nancy Lindau, one game table in the hall, two silver trays and one complete set of table silver for six;

(i) To Mrs. S. J. Lindau and Miriam C. Lindau, share and share alike, one sofa in the upper hall, four chairs in the upper hall, one runner rug, and all china in general use;

(j) To Mr. and Mrs. Lewis G. Lederer, share and share alike, one large rug in the library, one small rug in the library, and the two pictures in the downstairs hall;

(k) To Mrs. A. M. Lindau, one drop-leaf table;

(l) To Mr. and Mrs. Alfred Lindau, share and share alike, the large pink rug by the fireplace in the upper hall and one pink runner rug in the upper hall;

(m) To Mrs. Milton Ellis, the rug in front of the fireplace in the downstairs hall;

(n) To Mr. and Mrs. Sigmund Lindau, share and share alike, the two rugs in the middle guest room on the second floor;

(o) To Mr. and Mrs. Albert Lindau, one silver sugar and cream set and tray;

(p) To Mrs. Fred Friedlander, two rugs in the room used by my sister Sophia;

(q) To Dr. Mary C. Warfield, the pink rug at the door of my bedroom which has a diamond design in its center, the oval table in the parlor and the white vase on the table;

(r) To A. C. Moody, the rug in the office and the picture in the office of my husband, Moses H. Cone;

(s) To Charles J. Isenhour, the rug by the desk in the upper hall;

(t) To Rebecca Isenhour, the oak desk and the chair in the second guest room;

(u) To Mrs. Evelyn B. Walsh, the large rug in the room used by my sister Sophia, and one small runner rug;

(v) To Mrs. Margaret G. Wroe, the crescent writing table, the chair and the three rugs in the room which she used;

(w) To Carl Hollers, the clock on the mantel in the billiard room;

(x) To Norman Lindau, the two couches, the fender and andirons, and the large center rug in the front hall, the books in cases 1, 2, and 3 in the library, the billiard table, the porch furniture and the sun parlor furniture;

(pp) To Mrs. Langston Talbert, the hall rack in the back hall; the bed in the room used by Mrs. Margaret G. Wroe, the four white chairs and two white tables in the bathrooms, and four of the chairs in the billiard room;

(qq) To Mrs. Charles J. Isenhour, the entire contents of the middle guest room except for the desk and chair and two rugs; and three of the chairs in the billiard room;

(rr) To Mrs. Tilden Isenhour, one rug in the second bathroom, and two rocking chairs in the back room;

(ss) To Mrs. A. C. Moody, the couch in the room used by my sister Sophia, and two chairs and table in the office;

(tt) To Carrie Young, one of the rugs in the back room;

(uu) To Pearl Gordon, one of the rugs in the back room;

(vv) To Louise Neal, one of the rugs in the back room;

(ww) To Mattie Phillips, one of the rugs in the back room;

(xx) To Areta Giles, one of the rugs in the back room;

(yy) To Mae White, one of the rugs in the first bathroom;

(zz) To Kathryn Armstrong, one of the rugs in the first bathroom;

(aaa) To the Y. M. H. A., of Baltimore, Maryland, the books and bookcases in the upper hall;

(bbb) To the Blowing Rock Library, the books in the library not otherwise specifically given and bequeathed;

(ccc) To Mr. and Mrs. J. W. Lindau, Jr., share and share alike, one rug in the sun parlor.

My Executor shall cause the rugs, furniture, furnishings, fixtures silver, china, etc., bequeathed by this item of my will, to be delivered to the respective legatees and shall pay the expenses incident thereto out of the general principal funds of my estate, and in connection therewith shall have such items delivered by truck by A. C. Moody as far as may be practicable.

Item Six:

Subject to the terms and conditions hereinafter set out, I give and bequeath severally unto:

(a) Blowing Rock Hospital, Blowing Rock, North Carolina, the sum of $10,000;

(b) Jules W. Lindau III, 625 Henderson Street, Columbia, South Carolina, the sum of $5,000;

(c) Jules W. Lindau IV, 625 Henderson Street, Columbia, South Carolina, the sum of $1,000;

(d) Betty D. Lindau, 625 Henderson Street, Columbia, South Carolina, the sum of $1,000;

(e) Susan T. Lindau, 625 Henderson Street, Columbia, South Carolina, the sum of $1,000;

(f) Bertha L. Lindau, 625 Henderson Street, Columbia, South Carolina, the sum of $1,000;

(g) Norman Lindau, Bedford, Massachusetts, the sum of $1,000;

(h) Nancy Lindau, Bedford, Massachusetts, the sum of $1,000;

(i) Judith Lindau, Bedford, Massachusetts, the sum of $1,000;

(j) Mrs. Margaret Lindau, Bedford, Massachusetts, the sum of $1,000;

(k) Alfred Lindau, 262 Central Park, New York, New York, the sum of $1,000;

(l) Mrs. Constance Lindau, 262 Central Park, New York, New York, the sum of $1,000;

(m) David Lindau, 262 Central Park, New York, New York, the sum of $1,000;

(n) Susie Lindau, 262 Central Park, New York, New York, the sum of $1,000;

(o) Jacline Lindau, 262 Central Park, New York, New York, the sum of $1,000;

(p) Mrs. Ruth L. Lederer, 514 Woodlawn Road, Baltimore, Maryland, the sum of $1,000;

(q) Lewis G. Lederer, 514 Woodlawn Road, Baltimore, Maryland, the sum of $1,000;

(r) George Lederer, 514 Woodlawn Road, Baltimore, Maryland, the sum of $1,000;

(s) Albert Lindau, 5312 Hyde Park Boulevard, Chicago, Illinois, the sum of $1,000;

(t) Mrs. Charlotte Lindau, 5312 Hyde Park Boulevard, Chicago, Illinois, the sum of $1,000;

(u) John Rogers Lindau, 5312 Hyde Park Boulevard, Chicago, Illinois, the sum of $1,000;

(v) Mrs. Cecile L. Thomas, 1722 Sylvan Road, Greensboro, North Carolina, the sum of $1,000;

(w) Mrs. A. M. Lindau, 1722 Sylvan Road, Greensboro, North Carolina, the sum of $2,000;

(x) Sigmund Lindau, 1110 West Water Street, Elmira, New York, the sum of $2,000;

(y) Mrs. Mabel Lindau, 1110 West Water Street, Elmira, New York, the sum of $2,000;

(z) Mrs. Phylis L. Converse, 1110 West Water Street, Elmira, New York, the sum of $2,000;

(aa) Mrs. Barbara L. Carter, 1110 West Water Street, Elmira, New York, the sum of $2,000;

(bb) Patricia Lindau, 1110 West Water Street, Elmira, New York, the sum of $2,000;

(cc) Mrs. Fred Friedlander, 6295 Saunders Street, Forest Hills, New York, the sum of $2,000;

(dd) Mrs. Dean L. Roos, Ridgefield, Connecticut, the sum of $5,000;

(ee) A. C. Moody, Blowing Rock, North Carolina, the sum of $2,500;

(ff) Charles J. Isenhour, Blowing Rock, North Carolina, the sum of $2,500;

(gg) Tilden Isenhour, Blowing Rock, North Carolina, the sum of $2,500;

(hh) Carl Hollers, Blowing Rock, North Carolina, the sum of $1,000;

(ii) Lloyd Edgar Coffey, Blowing Rock, North Carolina, the sum of $1,000;

(jj) Langston Owens Talbert, Blowing Rock, North Carolina, the sum of $1,000;

(kk) Edward Bumpus (colored), Blowing Rock, North Carolina, the sum of $2,000;

(ll) Charles Butler, 1337 Myrtle Avenue, Baltimore, Maryland, the sum of $100;

(mm) Mrs. Carrie Young, 1824 N. Caroline Street, Baltimore, Maryland, the sum of $100;

(nn) Mrs. Pearl Gordon, 1922 E. Madison Street, Baltimore, Maryland, the sum of $100;

(oo) Mrs. Louise Neal, 1216 E. Monument Street, Baltimore, Maryland, the sum of $100;

(pp) Mrs. Mattie Phillips, 205 Powell Street, Greensboro, North Carolina, the sum of $100;

(qq) Mrs. Mae White, 121 Benson Street, Reidsville, North Carolina, the sum of $100;

(rr) Mrs. Nancy Berry Blake, 4653 Fairmont Avenue, West Philadelphia, Pennsylvania, the sum of $100;

(ss) Mrs. Kathryn Armstrong, 2131 Madison Avenue, Baltimore, Maryland, the sum of $100.

None of the foregoing bequests shall be paid until after the bequest contained in Item Four of this will has been paid in full, and in the event my net estate is not sufficient to pay all of the foregoing bequests after paying in full the bequest contained in Item Four of this will, the amount of each of the foregoing bequests shall be reduced proportionately without any reduction whatever in the amount of the bequest contained in Item Four of this will.

Item Seven

I give and bequeath severally unto:

(a) Judith Lindau, my diamond bar pin; and

(b) Nancy Lindau, my pearl bar pin;

Item Eight

I give and bequeath all of the rest, residue and remainder of my personal effects, household articles, linens, silver, ornaments and pictures, including one drop-leaf table in the parlor next to the billiard room, the Girandole on the mantal in the library and the center table in the upper hall, to my sister Sophia Lindau. Norwithstanding anything which may be contained, expressed or inferred herein, it is my will, desire and intention that the property specified in this item of my will shall not and does not include or cover any real estate or interest therein or any cash, stocks, bonds, promissory notes, accounts receivable, or any other intangible property or assets whatever.

Item Nine

I give, bequeath and devise all the rest, residue and remainder of my estate, real, personal and mixed and wherever located, including any property over which I may have power to appoint, to the Security National Bank of Greensboro, as Trustee under the trust created by Item Four of this will, in trust, to be by it held, managed and disposed of in the manner and for the uses and purposes and subject to the terms and conditions herein set out.

Item Ten

Notwithstanding the provisions of the indenture which I entered into under date of May 30, 1911, with The Moses H. Cone Memorial Hospital, Incorporated, under which I transferred, conveyed and assigned to said hospital, as trustee, shares of stock in Cone Export and Commission Company and Proximity Manufacturing Company, upon the trusts, conditions and limitations therein set out, it is my purpose, intent and desire that the bequests made in this will shall be in addition to and not in lieu of the annuities and specific gifts provided for in said indenture, or any part thereof, and that The Moses H. Cone Memorial Hospital shall not be entitled to any credit against or deduction from any of the annuities or specific gifts provided for in said indenture on account of the bequests made in this will.

Item Eleven

Without in any way limiting any of the powers conferred upon them by law, my Executor, in connection with the administration of my estate, and the Trustee of the trust created by the terms and provisions of this will, in connection with the administration of the trust estate, is hereby authorized and empowered, without the approval or consent of any court:

(a) To sell all or any part of the real estate and personal property of which I shall die seized or entitled, or which shall constitute a part of the trust estate, except such items as are specifically bequeathed by this will:

(1) at public or private sale;

(2) for cash or on credit and on such terms and conditions as shall seem expedient.

(b) To carry on any business in which I shall be engaged or financially interested at the time of my death, for such time and in such way as to the Executor or Trustee shall seem best, and for that purpose to retain and employ therein the capital which shall be employed in it at the time of my death, and such additional capital as the Executor or Trustee shall think fit to advance from time to time from my general estate or the trust.

(c) To compromise and settle all claims in favor of or against my estate or the trust, and to forgive debts.

(d) With regard to any stocks or obligations which may be held or acquired by the Executor or the Trustee, to:

(1) vote such stock in person or by proxy;

(2) delegate discretionary powers in connection with any proxy;

(3) exchange such stocks or obligations for stocks or obligations of the same or other corporations, and apportion the securities so acquired between income and principal;

(4) consent to any reorganization, consolidation or merger of a particular corporation, or sale of a particular corporation's property, and accept and retain new stocks or obligations resulting therefrom;

(5) pay subscriptions, assignments or other levies to protect stocks or obligations held;

(6) exercise any option for conversion and hold and retain the stocks or obligations resulting therefrom;

(7) exercise rights to subscribe to stocks or obligations, and retains the stocks or obligations so acquired; and

(8) generally, exercise all rights and privileges which a person owning such stocks or obligations in his own right might lawfully exercise.

(e) To retain, invest and to continue to keep my estate and the trust estate invested in the securities, or in the manner in which it may exist or be invested at the time of my death, or at the time said trust is originally segregated and set aside.

(f) To invest and reinvest and keep my estate and the trust estate invested in such stocks, bonds or other securities for the trust, without being restricted to securities of the character that may now or hereafter be authorized by law for trust investments.

(g) To lease real estate for periods that may extend beyond the life of the trust in which it is held or to be held.

(h) To purchase securities at a premium without being required to set aside any part of the income therefrom as a sinking fund to retire or absorb such premium.

(i) To determine whether expense incurred or losses or depreciation suffered shall be charged against principal or income.

(j) To allocate between income and principal:

(1) dividends of cash or stock, whether they be regular, extraordinary, special or liquidating dividends, and whether they be from ordinary, mining or wasting asset enterprises; and

(2) payments or distribution on account of bonds or other obligations.

(k) To hold any and all property of the trust estate in bearer form or in the name of the trustee, or in the name of a nominee or nominees.

(l) To pay such charges and expenses as may be deemed expedient or desirable for the protection of any property belonging to my estate or to the trust estate.

(m) To borrow money for the benefit of my estate or of the trust estate; to execute notes, bonds or other evidences or debt, and to secure such debts, mortgages, deeds of trust or other instruments of security upon or against any or all of my estate or the trust estate.

(n) To make final settlement and distribution of my estate, including the articles bequeathed by Item Five of this will, and of the trust estate in kind or in cash, or partly in kind and partly in cash, and the determination of the Executor or the Trustee as to the advisability of the type of distribution or as to the property to be distributed shall, in the absence of negligence or wilful wrong, be conclusive.

(o) To execute such deeds, contracts and other written instruments as may be necessary to enable my Executor and the Trustee to exercise the foregoing powers, or any of them.

(p) Generally, to exercise for the benefit of my estate and the trust estate all rights, powers and privileges of every kind which might or could be exercised by one owning the properties absolutely and in his own right.

Item Twelve

Security National Bank of Greensboro shall have and retain for its responsibilities and services as my Executor, commissions and compensation as follows, and not otherwise, to-wit; On the combined receipts and disbursements of personal property, 5 per cent of the first $25,000; 3 per cent of the next $75,000; $2\frac{1}{2}$ per cent of the next $400,000; and 1 per cent of the balance.

Item Thirteen

Security National Bank of Greensboro shall have and retain for its responsibilities and services as Trustee under the trust hereinbefore provided for, commissions and compensation as follows, and not otherwise, to-wit:

(a) On principal - nothing, either at the inception or termination of the trust.

(b) On gross annual income received - 5 per cent on the first $10,000 and 2½ per cent on all over $10,000, to be taken annually.

(c) On annual income disbursed - nothing.

Item Fourteen

It is my will and desire that after my death my residence at Flat Top Manor, in Blowing Rock, North Carolina, shall be closed and not maintained or kept open for any purpose whatever.

Item Fifteen

It is my will and desire that my Executor, in connection with the administration of my estate, and the Trustee of the trust created by the terms and provisions of this will, in connection with the administration of the trust estate, shall employ W. H. Holderness, of Greensboro, North Carolina, as its attorney in the event the services of an attorney are needed for any purpose whatever.

IN WITNESS WHEREOF, I, the undersigned Bertha L. Cone, have hereunto set my hand and affixed my seal to this my last will and testament on this the 27 day of October, 1945.

(signed) Bertha L. Cone (SEAL)

The foregoing instrument was signed, sealed, published and declared by the said Bertha L. Cone to be her last will and testament, in the presence of us, who, at her request and in her presence and in the presence of each other, have hereunto subscribed our names as witnesses, this the 27 day of October, 1945.

Witness	Address
(signed) H. P. Holshouser	Blowing Rock, N. C.
(signed) C. H. Berryman, Jr.	Blowing Rock, N. C.
(signed) O. W. Stone	Blowing Rock, N. C.

NORTH CAROLINA

COUNTY OF WATAUGA

I, Fred M. Gragg, Clerk of the Superior Court of Watauga County, North Carolina, do hereby certify that the foregoing is a true, perfect and exact copy of the LAST WILL AND TESTAMENT of Bertha L. Cone, late of Watauga County, as probated in my office in "Book of Wills" C, at page 82 and following.

This the 9th. day of June, 1947.

Fred M. Gragg
Clerk Superior Court
Watauga County, N. C.

CODICIL TO LAST WILL AND TESTAMENT
OF
BERTHA L. CONE

I, Bertha L. Cone, a citizen and resident of the Town of Blowing Rock, in Watauga County, North Carolina, do hereby make, publish and declare this codicil to my last will and testament dated October 27, 1945, this codicil being as follows, to wit:

Item One

Except in so far as said will is expressly or by necessary implication changed by this codicil and is in conflict herewith, I do hereby ratify, republish and reaffirm said will and each and every part thereof.

Item Two

I give and bequeath severally unto:
(a) Oheb Shalom Congregation of Baltimore City, Eutaw Plane and Lanvale Street, Baltimore, Maryland, in memory of my mother and father, the sum of $5,000.

(b) The Jewish Welfare Fund of Baltimore, Incorporated, 319 West Monument Street, Baltimore, Maryland, the sum of $5,000.

(c) The Community Fund of Baltimore, Incorporated, 22 Light Street, Baltimore, Maryland, the sum of $5,000.

Each of the foregoing bequests to charitable or religious institutions is made without restriction as to the use to which the particular institution may put its bequest, and shall be paid by my Executor at such time but not more than two years after my death as my Executor may consider proper, without regard to loss of income which may be suffered by my residuary estate or trust or by the legatee institutions as the case may be.

IN WITNESS WHEREOF, I, the said Bertha L. Cone, have hereunto set my hand and seal this the 11th day of March, 1946.

BERTHA L. CONE (SEAL)

The foregoing instrument was signed, sealed, published and declared by the said Bertha L. Cone to be a codicil to her last will and testament, in the presence of us, who, at her request and in her presence and in the presence of each other, have hereunto subscribed our names as witnesses, this 11th day of March, 1946.

WITNESS	ADDRESS
Elizabeth F. Reilly	4606 Roland Ave. Baltimore, Md.
Stanley Maxocey	402 Westgate Rd., " "
R. Austin Tydings	317 Murdock Rd., " "

Room-By-Room Description
Bertha Cone's Will

"Parlor" (a.k.a Reception Room and Music Room)

"Pecasso [sic] woman with loaf on head"***
Small rug with a red square center design.
Drop-leaf table
Books and Bookcases
Marble Buddha and table
3 Large vases
Suit consisting of 4 chairs and one small couch with pillows
Andirons
Oval table with white vase

Front Hall

2 Couches
Mirror
5 Drop-leaf tables
2 Rugs
Fender and andirons
Large center rug
Red rug at foot of front stairs

Library

Gerandale on the mantel
Books
2 Tables
Andirons
One large rug
One small rug
Entire set of furniture

Back hall (perhaps Main Stair Hall)

Hall rack

Corner Guest Room (assume SW corner)

Oak desk and chair
2 Rugs
2 Single beds
10 Single sheets
12 Pillow Slips
12 Bath Towels
2 Dozen small napkins
6 Bed pads
4 Double blankets
24 Linen towels
2 Embroidered bath mats

Middle Guest Room

Oak desk
Chair
4 Rugs

Sophi's Room

1 Large rug
1 Small runner rug
Couch
Beds
2 Rugs

"The Hall"

Large vase with top
Large vase
Large vase on steps

Second Bathroom

One rug

Bathrooms

4 White chairs
2 White tables

Back room (assume room above Kitchen)

2 Rocking chairs
5 rugs
Bureau
Drop leaf table with claw feet

Sun Parlor

One drop-leaf table
One rug
2 Rugs
White vase
1 Large vase

First Bathroom

2 Rugs

Office

Picture of Moses H. Cone
2 Chairs
1 Table
1 Rug

Step

1 Large vase

Billiard Room

4 Chairs
3 Chairs
3 Chairs
4 Chairs
Clock on mantel
Billiard tables

Kitchen

Clock with Cone name on it.

Upper Hall

2 Renoirs ***
Rug at desk
1 Pink runner rug
Center table
Books and bookcases
2 Oil paintings
Desk and chair
One sofa
Wicker furniture
Large pink rug by fireplace
4 Chairs
1 Runner rug
2 Pictures

Help's Cottage

Help's dinning room furniture
Kitchen utensils in closet in dinning room.

Music Room

Large rug

Nellie's Room

Third floor

Bathroom (To Nellie's Room)

White table and chair

Her Bedroom (Nellie's)

Rug at door with diamond design in center.
Large rug
Sewing table
2 Large rugs in corner spare room

Mrs. Wroe's Room

Crescent writing table
Bureau and glass
Chair
3 Rugs
1 Bed

Downstairs Hall

2 Pictures
Rug in front fire place

Miscellaneous

White and gilt china set
Silver service set
2 Silver trays
6 Pieces sterling silver set
One drop-leaf table (5K)
One drop-leaf table (4C)
Silver cream and sugar holder

APPENDIX D

PARK SERVICE MAINTENANCE RECORDS
1973-1994

Compiled by:
Surber & Barber Architects, Inc.

Compiled from:
National Park Service Files
Southeast Reginal Office in Atlanta
(Ali Miri, Historic Architect)
Blue Ridge Parkway Files in Asheville
(Al Hess, Cultural Resource Specialist)

Source	Date/From/To	Time Period	Work Performed/Subject

NOTES REGARDING SOURCES OF INFORMATION:
1. BLRI = Blue Ridge Parkway offices in Asheville; materials collected from BLRI file no. D-3423, c/o Al Hess, Cultural Resource Specialist. Please note that no periodic maintenance reports from BLRI to the Moses H. Cone Memorial Hospital were available before that listed for "First Half 1984". Maintenance reports from BLRI on file with the Office of Finance at Cone Memorial Hospital begin with 1984.
2. NPS-Atl = National Park Service SE Regional offices in Atlanta; materials collected from NPS-Atl files c/o Ali Miri, Historic Architect, SE Region

NPS-Atl (File #3)	March 19, 1973 From James Askins to Exhibits Specialist (Restoration)	**March 19, 1973**	**Memo of Inspection** states that "most of the deteriorated woodwork has been caused by the roof leaking on the near flat roof surfaces. Approx. 20 years ago, an unfortunate decision was made to apply a built-up asphalt roof over an existing flat metal roof. The application of the later roof perforated the metal roof with nail holes. Since the expansion rate is much different between the two types of roofing a bond could not be achieved. This has resulted in the roof leaking ever since. The application of asphalt and stone chips has clogged the concealed guttering... damage to the woodwork is quite evident by the staining and crushed capitals and misalignment of the columns..." Mentions dormers in bad condition, nails rusted and wood members coming apart; mentions not painting over problems, but applying Hydrozo wood preservative until a full preservation program can be funded; porch floors need replacement; wood shingles at comb and hips beginning to unravel and need attention.
BLRI	July 17, 1974 From Granville B. Liles, Supt. to T. F. Williams, Controller Moses H. Cone Memorial Hospital Greensboro, North Carolina	**First Half 1974** Maintenance Report	**EXTERIOR** **Roof** - "Heavy spring rains delayed roof repairs on Manor House... anticipate by mid-August the work involved in installing a new roof, gutters and banisters will be completed" **INTERIOR** **Floors** - "the downstairs floors were refinished, varnished and waxed" **Painting** - "interior painting was finished where necessary"
BLRI	February 24, 1975 From Granville B. Liles, Supt. to T. F. Williams, Controller MHCMH	**Second Half 1974** **EXTERIOR** Maintenance Report	**Roof** - "The work of installing a new roof, gutters and banisters is almost complete... We expect all work to be completed by May 1 (1975)." **Foundation** - "During summer months... damaged foundation walls under the porch were repaired and deteriorated moldings and fascia boards around the porch were removed and replaced with new material." **HVAC** - "During the fall months... the two furnaces in the Manor House were relined with firebrick and new combustion chambers were installed in each one." **Paint** - "before June 30 of (1975)... repaint the porches on the Manor House" **INTERIOR** **Floors** - "before June 30 of (1975)... refinish all floors on the first floor of the house."
BLRI	July 24, 1975 From Joe Brown, Supt. to T. F. Williams, Controller MHCMH	**First Half 1975** Maintenance Report	**EXTERIOR** **Columns** - "Five column bases and pedestals were replaced on the porch." **Porch** - "porch steps and floors were painted." **Paint** - "All exterior walls, moldings and balusters were spot painted." **INTERIOR** **Ceilings** - "ceilings on the first and second floor were patched with plaster." **Steps** - "The steps from the first to second floor were refinished." **Paint** - "All interior walls and ceilings were spot painted." **Carpet** - "Installed commercial carpet on the first floor of the Manor House"
BLRI	January 13, 1976 From James R. Brotherton Acting Supt. to T. F. Williams, Controller MHCMH	**Second Half 1975** Maintenance Report	**EXTERIOR** **Paint** - "painted a portion of the house exterior" **Roof** - "repairing the roof" **Foundation** - "repairing the foundation"

Source	Date/From/To	Time Period	Work Performed/Subject
BLRI	November 14, 1975	**4/1/75 to 11/14/75**	**LUMP SUM CONTRACT FOR WORK ON EXTERIOR** **Roof** - Lump Sum Contract with Guaranteed Supply Company for reroofing Cone Manor House showing 100% complete and a total contract sum of **$31,122.**
BLRI	February 2, 1977 From James R. Brotherton Acting Supt. to T. F. Williams, Controller, MHCMH	**Second Half 1976** Maintenance Report	**EXTERIOR** **Steps** - "repairs to the front steps and masonry foundation" **Porch** - "painting of all porch floors" **Paint** - "spot painting of exterior" **Roof** - "cleaning and repairing gutters; repairs to roof" **INTERIOR** **Plaster** - "repairs to cracked plaster inside house" **HVAC/Plumbing** - "repairs to plumbing and heating systems" **Carpet** - "cleaned carpet"
BLRI	July 7, 1977 From James L. Bentley Acting Supt. to T. F. Williams, Controller MHCMH	**First Half 1977** Maintenance Report	**EXTERIOR** **Porch** - "Painted porch floors and steps; repaired broken steps" **Windows** - "Replaced three broken window glasses" **Fence** - "Scaled and cleaned white fence" **INTERIOR** No work reported.
BLRI	January 16, 1978 From James R. Brotherton Acting Supt. to T. F. Williams, Controller MHCMH	**Second Half 1977** Maintenance Report	**EXTERIOR** **Fence** - "Painted white mortise fence" **Roof** - "Cleaned and repaired guttering; repairs made to roofs" **Paint** - "Spot painted portion of exterior" **Future Work Noted** - "In the near future we plan to begin restoration work on the Manor House and grounds. The work will include replacing or repairing the masonry foundations and footings; replacing or repairing structural members; removing existing paint, and repainting all wood surfaces..." **INTERIOR** **HVAC/Water** - "Repairs to furnace and water system... winterized water system" **Fire Protection** - "Repairs to fire alarm system"
NPS-Atl (File #3)	December 13, 1977 Signed by Gary Everhardt, Supt. and A. L. Altice, Chief of Maint.	**December 13, 1977**	**NPS Development/Study Package Proposal #321, Revision #3** - "Proposal for repair of all masonry foundations, brick piers, chimneys and footings. Replace or repair all structural members such as joists, foundation sills, flooring, ceiling, lattice and all necessary carpentry and millwork. Restore grounds and carriage roads."
NPS-Atl (File #3)	May 9, 1978 From Gary Everhardt, Supt. to Assoc. Reg. Dir. Planning & Assist, SER	**May 9, 1978**	Memo stating "#100,000 was reserved from our OMPS historic pres. program... we should be able to accomplish foundation repair and stabilization, reroofing, porch and step repairs, much if not all carpentry and millwork repair such as balustrades, railings and columns, and paint removal and repainting... we expect to receive Advisory Council clearance no later than the first part of July (1978)."
NPS-Atl (File #6)	July 24, 1978 Author unknown	**July 24, 1978**	**"Contract Bid Schedule - Moses H. Cone House"** Typed document with dollar amounts hand written in. Masonry - $6,000; Carpentry and Millwork - $28,675; Roof Insulation - $4,400; $Roof - $21,500; Glass and Glazing - $5,000; Stucco - $50 ($2 sq. ft.); Painting and other finishing - $32,100; **Total - $97,725.**

Source	Date/From/To	Time Period	Work Performed/Subject
NPS-Atl (File #3)	July 27, 1978 From Gary Everhardt, Supt. to Assoc. Reg. Dir. Planning & Assist., SER	**July 27, 1978**	Memo reviewing contract documents including amendments to work on windows, roof, foundation drainage system, and that a project supervisor be provided by SERO.
BLRI	August 2, 1978 From Gary Everhardt, Supt. to Donal M. Mitchell, Controller MHCMH	**First Half 1978** Maintenance Report	**EXTERIOR** **Paint** - "Painted exterior" **INTERIOR** **Window Hardware** - "Installed new window locks" **Walls** - "Made repairs to walls and baseboards" **NPS Restrooms** - "Repairs to public-use restrooms and installed new lavatories" **Water** - "Dewinterized water system" **Fire Protection** - "Repairs made to fire alarm system"
NPS-Atl (File #7)	September 28, 1978 Park Service Document	**September 28, 1978**	**"Statement and Certificate of Award"** to Moretti Construction for low bid of #110,086. This document followed by the "Abstract of Bids" with high bid of $145,489 from Beaver Contracting; $141,980 from Brownlee Kesterson, Inc.; $120,420 from William Bowen Construction. Moretti's bid included Masonry - $6,476; Carpentry and Millwork - $36,370; Roof Insulation - $9,775; Roof - $28,378; Glass and Glazing - $6,589; Stucco - $125.00; Painting and other finishing - $39,721.
NPS-Atl (File #7)	1978 Author Unknown	**1978**	In this same file is a document providing areas and cost estimates for Moses Cone Manor as follows: 1st Floor =$3,900 s.f.; 2nd Floor = 3,900 s.f.; Porches = 2,700 s.f.; Roof = 5,000 s.f.; Cost Estimates for Porches = 2,700 s.f. @ $15/s.f. = $40,500; Roof = 50 squares @ $250/sq. = $12,500; Painting = 350 l.f. x 24 feet high = 7,200 s.f. @ $3/s.f. = $22,000. **Total Est. Cost = $75,000**.
NPS-Atl (File #7)	December 12, 1978	**December 12, 1978**	**"Notice to Proceed"** to Moretti Construction, Contract No. CX500081543.
BLRI	January 2, 1979 From Gary Everhardt, Supt. to Donal M. Mitchell, Controller MHCMH	**Second Half 1978** Maintenance Report	**EXTERIOR** **Paint** - "Completed painting exterior" **INTERIOR** **Water** - "Winterized water system" **HVAC** - "Made repairs to furnaces"
BLRI	July 16, 1979 From Gary Everhardt, Supt. to Donal M. Mitchell, Controller MHCMH	**First Half 1979** Maintenance Report	**EXTERIOR** **Rehabilitation** - "The rehabilitation of the Manor House's exterior is under contract, and the contractor will be working full time this summer to complete all necessary work before winter." **INTERIOR** **Visitor Information Station** - "Last winter (winter of 78/79)... we opened an information station in the Manor House."
NPS-Atl (File #7)	August 10, 1979 Letter to Moretti Const. from Keith Warner, Contracting Officer	**August 10, 1979**	Letter granting extension of 122 calendar days to Moretti due to unfavorable conditions for performing the work and stating that all work shall be completed by January 6, 1980.
NPS-Atl (File #7)	November 28, 1979 Letter to Moretti Const. from Keith Warner, Contracting Officer	**November 10, 1979**	Letter telling Moretti to cease work on November 13, 1979 due to unfavorable conditions and to resume work on April 15, 1980.

Source	Date/From/To	Time Period	Work Performed/Subject
BLRI	January 24, 1980 From James R. Brotherton Acting, Supt. to Donal H. Mitchell, Controller MHCMH	**Second Half 1979** Maintenance Report	**EXTERIOR** **Rehabilitation** - "Rehabilitation work on the Manor House's exterior by the Historic preservation contractor continues and we expect completion later this spring."
NPS-Atl (File #7)	April 18, 1980 Letter to Moretti Const. from Keith Warner, Contracting Officer	**April 18, 1980**	Letter agreeing with Moretti to wait until May 5, 1980 to resume work.
NPS-Atl (File #7)	April 21, 1980 3 Letters to Charles Goode, Contracting Officer - NPS from Fred Moretti, Moretti Const.	**April 21, 1980**	Letter contains prices for "additional work" as follows: Repair Roof sheathing (500 s.f.) with Hemlock @ $2.05/s.f.; Repair existing columns, lump sum of $2,200; Repair 10 capitals as necessary @ $60/capital; Replace 5 capitals @ $225/capital; Repair two front porch brick sills, lump sum of $100; Repair 50 l.f. of top rails @ $7/l.f., replace 25 l.f. top rails @ $12,65/l.f.; Repair 80 l.f. bottom rails @ $6/l.f., replace 50 l.f. bottom rails @ $10/l.f.; Flush existing rainwater disposal system, lump sum of $800. Second letter on same day for: Painting all valley flashing and the inside of all gutters with Pittsburgh Paint, Ironhide Metal Paint, color-Inhibitive Red 8-2, lump sum of $2,000; and Soil poisoning for termites, lump sum of $2,100. Third letter provides quotes for the following: Replace sills, 50 l.f. @ $35/l.f.; Repair front porch ceiling, lump sum of $965; Replace 2 cellar doors, lump sum of $750; replace 10 screen sills @ $45/each sill; Replace fascia boards, 50 l.f. @ #1.80/l.f.; Replace pilaster bases, lump sum of $292; Replace gutters and downspouts, 200 l.f. @ $8.50/l.f.; replace valley and dormer flashing, lump sum of $1,900; Repair 10 existing boxes @ $175/each; Replace 5 boxes @ $260/each; repair front steps (front yard), lump sum of $2,200.
NPS-Atl (File #3)	June 9, 1980 Signed by Gary Everhardt, Supt.	**June 9, 1980**	**NPS Development/Study Package Proposal #379** for restoration of Flat Top Manor and Grounds. Package includes: "(1) investigation into alternative uses of Manor House; (2) complete all interior work: painting, minor repair to walls and ceilings on first and second stories, repair/replace plumbing, repair copper roof, **remove added sunroom**; (3) out buildings and grounds: repair and repaint carriage barn, rehab. 3,500 feet of dry wall along carriage roads, rehab. 26 miles of carriage roads. At completion of rehab. approx. $40,000 will be required annually to maintain the Manor House and estate."
BLRI	July 18, 1980 From James R. Brotherton Acting Supt. to Donal H. Mitchell, Controller MHCMH	**First Half 1980** Maintenance Report	**EXTERIOR** **Rehabilitation** - "The contracted rehabilitation of the Manor House exterior continues. We now anticipate completion by early fall."
NPS-Atl (File #7)	July 28, 1980 Letter to Moretti Const. from Keith Warner, Contracting Officer	**July 28, 1980**	Letter stating October 16, 1980 as new completion date.
NPS-Atl (File #7)	August 12, 1980 From Gary Everhardt, Supt. to L. Boyd Einch, Assoc. Reg. Dir. Planning & Assistance SE Region	**August 12, 1980**	Memo stating that balustrade fence in front of house is in advanced state of deterioration; post and rail immediately adjacent needs repair and repainting with request for additional funds.
NPS-Atl (File #7)	August 21, 1980 From L. Boyd Einch to to Gary Everhardt	**August 21, 1980**	Memo back stating that funds are not available, but possibility of using the park's maint. funds or donated funds to accomplish additional work.

Source	Date/From/To	Time Period	Work Performed/Subject
BLRI	October 23, 1980 From James R. Brotherton Acting Supt. Donal H. Mitchell, Controller MHCMH	**Interim Report 1980**	**EXTERIOR** **Rehabilitation Work Completed at a cost of $175,000 in NPS funds:** **Roof** - "A new roof was installed" **Paint** - "Old paint was removed and the entire exterior repainted" **Windows** - "All broken glass panes (both leaded and plain) were replaced" **Millwork** - "All deteriorated millwork was replaced" **Balustrade Fence** - "...the balustrade fence across the front of the manor house was repaired and painted"
NPS-Atl (File #7)	November 14, 1980 Signed by Keith Warner NPS Contracting Officer	**November 14, 1980** Date Contract Signed	**Final Estimate** of Moretti's Unit Price Contract states: Masonry - $7,720; Carpentry & Millwork - $36,370; Roof Insulation - $9,775; Roof - $28,378; Glass & Glazing - $6,589; Stucco - $430; Paint and Finishing - $21,129; Change order #1 - 6,132; #2 - 9,172; #3 - 15,175; #4 - 4,100; #5 - $34,408. **Total of $179,379.** **CHANGE ORDERS FOR MORETTI CONTRACT AS FOLLOWS:**
NPS-Atl (File #7)	August 15, 1979	**August 15, 1979**	**Change Order #1:** Remove debris from under rear porch - $95; Replace 2 deteriorated sills at rear porch @ $350 - $700; Place concrete footings under front porch girders - $100; Replace all deteriorated sheathing board, 100 s.f. @ 2.65/s.f.- $265; Replace all deteriorated balusters, 10 @ $52/ea. - $520; Repair 2 electrical service entrance lines @ $220 ea.- $440; Repair foundation wall under rear porch - $864; Repair 3 masonry chimneys @ $425 ea. - $1,275; Replace all deteriorated rear porch framing - $958. **Total here is $5,217**. (Note total listed above is $6,132)
NPS-Atl (File #7)	May 1, 1980	**May 1, 1980**	**Change Order #2:** Replace roof sheathing - 700 l.f. @ $2.05/l.f. - $1,435; Repair existing columns, lump sum of $2,200; Repair 19 existing capitals @ $60 ea. - $1,140; Replace 5 capitals @ $225 ea. - $1,125; Repair front porch brick sills - $100; Repair 50 l.f. top rails @ $7/l.f. - $350; Replace 25 l.f. of top rails @ $12,65/l.f. - $316.25; Repair 80 l.f. bottom rails @ $6/l.f. - $480; Replace 50 l.f. bottom rails @ $10/l.f. - $500; Rebuild 4 brick piers @ $150 ea. - $600; Flush existing rainwater disposal system -$800. **Total here is $9,046.** (Note total listed above is $9,172)
NPS-Atl. (File #7)	May 6, 1980	**May 6, 1980**	**Change Order #3:** Replace 90 l.f. of sills @ $35 - $3,150; Repair front porch ceiling - $965; Replace 2 doors to cellar - $750; Replace 9 screen sills @ $45 ea. - $405; Replace 50 l.f. fascia boards @ $1.80/l.f. - $90; Replace pilaster bases - $292; Replace 200 l.f. gutters and downspouts @ $8.50/l.f. - $1,700; Replace valley and dormer flashing - $1,900; Repair 10 existing boxes @ $175 ea. - $1,750; Replace 6 boxes @ $260 ea. - $1,560; Repair front steps to yard - $2,200. **Total here is $14,762.** (Note total listed above is $15,175.
NPS-Atl (File #7)	May 6, 1980	**May 6, 1980**	**Change Order #4:** Paint all valley flashing and inside of gutters - $2,200; Soil poisoning for termites - $2,100. **Total here is $4,300.** (Note total listed above is $4,100)
NPS-Atl (File #7)	August 27, 1980	**August 27, 1980**	**Change Order #5:** Repair and repaint baluster front yard fence - $20,000; Repair and repaint front rail fence - $2,000; Replace and paint 30 6x6 posts on front yard fence @ $24 ea. - $720; Replace and paint 50 2x6 rails on front yard fence @ $11 ea. - $550. Total amount $23,270. Second memo with same date shows Replace 1,000 s.f. of siding @ $4.60 - $4,600; Replace 300 s.f. porch flooring @ $3.36 - $1,089; Replace top flashing on 20 2nd story windows @ $30 ea. - $600; Replace 120 l.f. of 2x4 studs @ $8/l.f. - $960; Repair 60 balusters @ $11 ea. - $660; Replace deteriorated framing front porch ceiling - $460; Caulk sun porch doors - $300; Remove existing paint and repaint bay window - $350; Replace 50 s.f. framing under porches @ $25/s.f. - $1,250. Total amount $10,269. **Grand total here is $33,539.** (Note total listed above is $34,408.
BLRI	January 26, 1981 From Gary Everhardt, Supt. to Donal H. Mitchell, Controller MHCMH	**Second Half 1980** Maintenance Report	**EXTERIOR** **"All Rehabilitation Work Now Complete"**

Source	Date/From/To	Time Period	Work Performed/Subject
BLRI	[November 26, 1991] **Maintenance Summary** Memo to File	**FY 1980** "Major Accomplishments at MHC Estate"	**Contract awarded to Moretti Construction, Charlotte, NC for $179,380 to preserve/rehabilitate Moses Cone Manor**, including masonry work, carpentry and millwork, roofing, roof insulation, glass and glazing work, stucco and painting. Added to the contract were: repair post and rail fence and balustrade fence across front.
BLRI	March 17, 1981 From Maint. Super. Caudill (handwritten) to Facility Mgr. Collins	**March 17, 1981** Memo	**Roof** - On March 16, 1981, Mr. Fred Moretti, Joe Townsend and Maintenance Supervisor Caudill inspected the roof and found that some of the soldered joints were cracked in the copper roof. Moretti agreed to repair as soon as weather permitted."
BLRI	August 4, 1981 From James R. Brotherton Acting Supt. to Charles H. Wessell Dir. Fin. Svcs. MHCMH	**First Half 1981** Maintenance Report	**EXTERIOR** "Exterior of the Manor House is now in excellent condition after the recent refurbishment work." **INTERIOR** "Interior needs extensive renovation..." **Paint** - "we did some repainting in the downstairs area"
BLRI	January 29, 1982 From Gary Everhardt, Supt. to Charles H. Wessell Dir. Fin. Svcs. MHCMH	**Second Half 1981** Maintenance Report	**INTERIOR** **Doors/Trim** - "minor repairs to doors and other trim in the Cone Manor House" **Water Lines** - "166 feet of hot waterlines in the Cone Manor House were insulated" **Future Work Noted** - "we plan to replace old oil furnaces and to install new fire and burglar alarms in the near future"
BLRI	[November 26, 1991] Maintenance Summary Memo to File	**FY 1981** "Major Accomplishments at MHC Estate"	**HVAC** - "replaced 2 fuel oil tanks, replaced 2 furnaces" (not sure if at Manor House)
BLRI	July 29, 1982 From James R. Brotherton Acting Supt. Charles H. Wessell Dir. Fin. Svcs. MHCMH	**First Half 1982** Maintenance Report	**EXTERIOR** **Paint** - "Cyclic repainting... included the Cone Manor restrooms" **Porch** - "(repaint) the porch and other misc. touch-up in and around the Cone Manor House" **INTERIOR** **Fire Protection/Burglar** - "Requests for price quotations... are in process" **HVAC** - "Two fuel oil tanks were removed from basement; a new tank was installed outside; two furnaces replaced in our continuing energy conservation efforts"
BLRI	December 30, 1982 From Andrew R. Kardos Acting Supt. to Charles W. Weill Chairman of the Board MHCMH	**Second Half 1982** Maintenance Report	**EXTERIOR** **Chimneys** - "some repairs to... brick chimneys" **INTERIOR** **Fire Alarm System** - "Installation... was completed, linking it to Blowing Rock Police Department" **Plumbing** - "some repairs to plumbing"
BLRI	[November 26, 1991] Maintenance Summary	**FY 1982**	**FIRE & SECURITY** - "Installed fire and burglar alarms" "Major Accomplishments at MHC Estate"
BLRI	April 20, 1983 From Gary Everhardt, Supt. to Reg. Dir., SE Region	**April 20, 1983**	**Roof** - "We have discussed with Ron Bishop of your office the problems we continue to experience with the flat roof section of the Cone Manor House. Continual expansion and contraction of the metal roof sections causes joint openings allowing the intrusion of water into the roof structure and portions of the building's interior. Routine maintenance and repairs to the roof sections do not fully solve the problem of water intrusion. Additional efforts are needed to insure a water-tight roof; possibly a new roof. We would like Mr. Bishop to field review the Manor House roof and provide recommendations that will assist in the correction of this problem."

Source	Date/From/To	Time Period	Work Performed/Subject
BLRI	[November 26, 1991] Maintenance Summary Memo to File	**FY 1983** "Major Accomplishments at MHC Estate"	**Paint** - "Reroofing of Cone Manor House planned, but costs were beyond funding available. Funds were used to paint entire exterior of Moses H. Cone Manor"
BLRI	April 6, 1983 From James Gentry, Director Southern Highlands Handicraft Guild to Richard Wyatt, Concessions Analyst	**Winter 1983?**	**PAINT** - "...The change from **Glenwood Gray to Golden White** is an excellent one." "Critical areas for painting due to **water leakage**: 1) Upstairs - central hall ceiling at top of stairs and on down hall overhead to beyond light fixture. 2) Downstairs - ceiling to left of double doors main entrance; shop office - ceiling in front of fireplace bubbling plaster is falling; kitchen - corner ceiling above wall pantry - ceiling is dropping; storage room - ceiling damage is more extensive; butler's pantry - overhead - plaster is falling - needs to be replaced; wall to right of window on stair landing should be checked for leak - painter will remove and patch.
NPS-Atl (File #3)	1983 Author Unknown	**1983**	"1983 Annual Safety Inspection" - This report lists 27 specific safety-related maintenance items, including need for first aid kits, removing hazardous solvents from kitchen, repair of fire alarm system in stalled in 1982, additional fire extinguishers, installing non-grounding adapters, emergency lights, etc.
BLRI	July 7, 1983 From James R. Brotherton Acting Supt. to Dennis R. Barry, President, MHCMH	**First Half 1983** Maintenance Report	**EXTERIOR** **Porch** - "porch and steps... painted" **Roof** - "Additional repairs were made to roof" **Future Work/Roof** - "Plans are being made to replace this roof in 1984 should funding be made available..." **Future Work/Fence** - "painting fence in front of the Cone Manor House" **INTERIOR** **Paint** - "interior portions were repainted"
BLRI	September 11, 1983 GA Tech Center for Arch. Conservation; Team: Jesse Osborne, Eng. Tom Milner, Arch. Scott Reed, Operations	**April 1, 1983** Date of Inspection	This report, conducted by the **Georgia Tech Center for Architectural Conservation**, is similar to the Historic Structure Assessment Report conducted by Georgia Tech in 1991. Total cost estimate for recommended work was $77,533. Recommendations included: "LIFE SAFETY - install emergency lighting on stair and exist with NC battery, cost $3,784; ROOF solder joints, remove and repair damaged copper plates; AND EXTERIOR WORK, - paint roof soffit, decks, trim with 1 coat primer and 1 coat paint, cost for roof and painting $12,188; PLUMBING - replace plumbing for building; cost $29,100; ELECTRICAL - rewire building and install new 400 amp service, cost $32,460."
NPS-Atl (File #3)	November 21, 1983 From Gary Everhardt, Supt. to James Gentry, Director Crafts of Nine States, Inc.	**September 14, 1983** Inspection Report Date	Cover letter to and maintenance agreement with Crafts of Nine States, Inc. Work which was deemed the responsibility of Crafts of Nine States included: (1) adjust door closer in men's restroom - "too fast". Responsibilities of the Blue Ridge Parkway included: (1) install metal liners in three log receptacles; (2) replace three caps for balustrade bases - use solid material; (3) repair ceilings in storage rooms next to kitchen; (4) touch-up paint on downspouts, (5) chimneys and (6) exterior paint; (7) trim vegetation; (8) install new commodes in three problem bathrooms...
BLRI	January 5, 1984 From James L. Bently Acting, Supt. to Dennis R. Barry, President, MHCMH	**Second Half 1983** Maintenance Report	**EXTERIOR** **Gutters** - "the gutters and downspouts... were cleaned, dried out and coated with tar" **Fence** - "the Manor House fence was scaled and painted" **Future Work/Porch/Columns** - "In the next six-month period, we plan to rebuild some of the Cone Manor porch support pillars; redo some of the decorative plaster caps atop the support pillars" **Future Work/Roof** - "you'll be pleased to know that $20,000 has been allotted from NPS hist. pres. funds to re-roof the Cone Manor House... contrated in the Summer of 1984" **INTERIOR**

Source	Date/From/To	Time Period	Work Performed/Subject
			Future Work/Plumbing - "change all of the commodes and work on the plumbing system to bring it to updated stds."
BLRI	July 16, 1984 From Gary Everhardt, Supt. to Robert L. Newton Dir. Fin. Svcs. MHCMH	**First Half 1984** Maintenance Report	**EXTERIOR** **Balustrade** - "replacing several balustrade caps" **Future Work/Roof** - "Because estimates to re-roof the Cone Manor House were much higher than anticipated, the available funding will be used instead to paint the entire exterior. The deferred re-roofing needs have been put into program plans for 1985" **INTERIOR** **Windows** - "(replacing) a window glass" **Front Door** - "repairing the front door lock" **Plumbing** - "replacing valve assemblies in all existing commodes, installing faucets and dewinterizing the Manor House and restrooms"
NPS-Atl (File #3)	September 14, 1984 From Regional Safety Officer, SER to Gary Everhardt, Supt.	**September 14, 1984**	"Corrective Actions Needed: (1) emergency lighting, (2) handrails, (3) electrical system"
NPS-Atl (File #2)	August 3, 1984 From SE Cultural Resources Completion Report, below) Preservation Center, Dunwoody, Georgia	**FY 1984**	**Owner's Copy of Procurement for "Preservation of Moses Cone House"** (see October 9, 1985
BLRI	October 23, 1984 Memo from Bob Caudill & Joe Townsend of Maintenance to Jim Bentley	**October 23, 1984**	**WORK NEEDED AT CONE MANOR HOUSE** A. Replace roof $70,000 B. Replace plumbing $150,000 C. Replace electric wiring $150,000 D. Replace balusters $25,000 E. Replace columns $10,000 **Total: Manor House $405,000**
NPS-Atl (File #3)	October 24, 1984 From Arthur Allen, Acting Supt. to Alan W. Cone, Greensboro, NC	**Up to 1994**	Letter responds to a letter from Alan Cone regarding deterioration at Cone Manor. Arthur Allen's letter states that up to 1980, the house had been painted every two years. Examining the thickness of paint removed in 1981 showed about 45 individual layers and that the 2-year painting cycle appears reasonable considering the adverse environment. Mentions the next painting effort to start in the Spring of 1985 and cost $20,000.
NPS-Atl (File #3)	December 6, 1984 From James Brotherton Acting Supt. BLRI to James Gentry, Director, Crafts of Nine States, Inc.	**June 20, 1984** Inspection Report Date	Cover letter to and maintenance agreement with Crafts of Nine States, Inc. Work which was deemed the responsibility of Crafts of Nine States included: (1) install new door closer on men's restroom door. Responsibilities of the Blue Ridge Parkway included: (1) install waterproof electrical outlet on porch in demonstration area; (2) **repair/replace two damaged columns**, one on front porch, one on back porch.
BLRI	January 14, 1985 From Gary Everhardt, Supt. to Robert L. Newton Dir. of Fin. Svcs. MHCMH	**Second Half 1984** Maintenance Report	**EXTERIOR** **Columns** - "repairs to column posts" **Roof** - "repairs to roof, repairing/cleaning gutters and downspouts" **Future Work/Foundation** - "discovered some apparent foundation problems that are affecting the rock wall at the rear of the Manor House and might be affecting the House itself... we are deferring the needed exterior painting work until an engineering soils investigation can be completed" **INTERIOR** **Plumbing** - "general plumbing repairs... and winterizing the Manor House"

Source	Date/From/To	Time Period	Work Performed/Subject
			Fire Protection - "repairs to the fire alarm" **Lighting** - "repairs to a light fixture"
BLRI	[November 26, 1991] Maintenance Summary Memo to File	**FY 1984** "Major Accomplishments at MHC Estate"	"Inventory and cost estimate was completed within Park outlining work needed. Cost estimates totalled $1 million"
BLRI	March 18, 1985 Memo from A. L. Altice, Chief, Eng. & Tech. Svcs. to Asst. Supt., Maint & Eng.	**March 18, 1985**	After meeting with Ron Bishop at house on March 12, 1985: **Problems:** 1) **Roof leaks** (bad design and probably poor construction) 2) **Foundation settlement** and movement of house evidenced by 45 degree cracks in foundations and walls (likely caused by moisture under foundation and freeze-thaw cycle over the past 5-6 years when no heat was maintained in the building during winter months) 3) **Gutters** inadequate to carry flow during heavy storms; one downspout at back of building has been dumping water down by foundation; one drain line plugged; the entire drainage system from the roof was found to be connected to the sewage disposal system. 4) **Embankment at back of house** moving which is causing the dry laid stone retaining wall to fail. If area becomes thoroughly saturated, the complete failure of the stone wall could be rapid and dramatic and cause considerable damage to house. **Recommendations:** 1) Parkway day labor complete temporary repairs to wood areas at front entrance and on porch ceiling and other areas as soon as possible. 2) SERO should get painting contract underway for first of April (contract for painting only $10,000) 3) **Separate roof drainage system** from sewage disposal system. Gutter downspouts should be connected to drainage devices to carry water away from foundation. All roof drainage pipes should be free flowing and unplugged. 4) Temporary bracing by means of screw jacks and timbers should be installed in the basement along the foundation walls. Porch floor to visitor restrooms should have temporary bracing and supports. 5) 2-3 test holes should be drilled into embankment behind house to determine depth of bed rock. A backhoe used to remove overburden from the rock wall... embankment flattened, smoothed and reseeded until a permanent solution is completed... 6) Consider installing temporary roof sealer (Ron Bishop has info on membrane sealer) 7) **Emergency exit lights** should be installed in upstairs hallway and stairwell and 2 exit points in case of fire. 8) **Minimum heat** should be maintained in house in winter months. **Recommendations (Long-Term):** 1) $500,000 plus should be obtained so that a complete rehab of building, utilities and site can be completed a.s.a.p. 2) A **reinforced concrete retaining wall** faced with the existing stone wall and subsurface drainage should be constructed in back of the house; reinforced concrete wall should extend below grade of first floor level in the basement or into bedrock (est. $50,000).
NPS-Atl (File #2)	April 7, 1985 Letter from Scott Cumbaugh of Custom Painting to Zandra Dillon, NPS Contracts	**April 1985**	Letter states that Custom Painting's notice to proceed was delated from September 4, 1984 to April 2, 1985 and that during those 8 months the house had deteriorated badly. "The porch roofs and gutters... are in bad condition, needing replacement. The leaking, damaged roof and gutters have caused severe water damage to the wood creating separated boards, peeling paint, buckling and swelling of the wood below. The park service inspectors have informed me that the roof is to be replaced as well as the porch foundation which had rotted due to leakage." The letter goes on to state that the sun porch interior was not included in his original bid and that he wants an additional $1,375, plus an additional $3,560 to cover the deterioration due to severe weather conditions (28 degrees below zero) which occurred between September 1984 and April 1985 when they received the notice to proceed.

Source	Date/From/To	Time Period	Work Performed/Subject
NPS-Atl (File #2)	April 19 & 26, 1985 **PHOTOGRAPHS**	**April 1985**	**Paint** - This file contains 8 color Polaroid photos showing before and after paint conditions.
NPS-Atl (File #3)	May 1, 1985? Handwritten memo entitled "Scope of Work by May 1, 1995" Author unknown	**May 1, 1985?**	Scope of work noted includes (1) repair millwork (baluster and porch boxes, porch ceiling board, column capital, misc. trim); (2) reinstall window screens; (3) patch leaky areas of flat roof (front porch roof, widow's walk roof, roof over attic restrooms); (4) test bore in back yard; (5) rainwater disposal system; (6) heat building in winter months -- and states "2 year old interior paint peeling - woodwork, ceilings, walls"; (7) **New heating system installed, 1984 @ $12,000**; (8) stabilize stone foundation under bathroom and front porch; (9) park landscape architect to develop new drainage system.
NPS-Atl (File #2)	June 7, 1985 Contract Memorandum from Joe Townsend, BLRI to Don Spillman, Reg. Solicitor	**June 7, 1985**	Memo is record of phone call regarding final inspection of paint job by Custom Painting. Highlights include: "He said that he (Thomas R. Townsend) and Larry Hampton had conducted the final inspection with Scott Cumbaugh 5/17/85, and that everything was fine -- he had done a good job. He did not do the **sun porch**. I also asked him again about whether the house was really in better condition in April 1985 than in August-September 1984, he said it definitely was -- they had done **patch and repair work on the columns and dome and had replaced a number of the balusters**."
BLRI	July 26, 1985 From Gary Everhardt, Supt. to Robert L. Newton Dir. Fin. Svcs. MHCMH	**First Half 1985** Maintenance Report	**EXTERIOR** **Paint** - "The entire exterior of the Cone Manor House has recently been painted" **Porch** - "prior to this painting, substantial repairs were done to the porch deck, columns and ceilings" **Roof** - "some roof repairs" **INTERIOR** **Paint** - "Painting interior restrooms and the sun porch" **Plumbing** - "general plumbing repairs including replacing one commode, dewinterizing the Manor House"
BLRI	July 29, 1985 Memo from Ron Bishop to Gary Everhardt, Supt.	**July 29, 1985**	**ARCHITECTURAL ASSESSMENT - MHC MANOR HOUSE** **Complete Restoration** - "The structure had major exterior preservation work accomplished during the period of Dec. 1978 to October 1980 under direction from this office (SE Cultural Resources Pres. Ctr.). At that time, all historic fabric found deteriorated was repaired or replaced. The flat seam roofs were resoldered and repaired. In addition, the rain water disposal system was repaired and made functional." **EXTERIOR PROBLEMS** **1. Deteriorated Porch Floor** - "deteriorated porch floor and structural members in area of semi-circular front steps; probably caused by water leakage from the faulty porch roof and porch decking" **2. Deterioration of Porch Foundations** - "Differential settlement of the stone foundation wall was observed, causing settlement of the porch, piers, columns and roof." **3. Rear Retaining Wall Collapse** - "Portions of the stone retaining wall... has collapsed and the future collapse of the entire wall is probable" **4. Soil Conditions** - "soil conditions of the slope at the rear of the house showed signs that the soil was moving towards the house causing concern that ground water was present and eroding the slope" **5. Front Porch Ceiling Structural Members** - "the park staff removed some of the ceiling boards to expose the structural system of the porch ceiling. During the 1978-80 preservation contract, the area of the semi-circular ceiling was removed and the deteriorated structural members were repaired. Again this area was removed by park staff and most structural members were found to be damp, sections were wet, other areas showed marks of moisture staining, and fasteners were found to be in advanced states of corrosion" **INTERIOR** **Basement** - "Due to the failure of some of the downspouts, the basement has standing water in some areas" **First Floor** - "the structural system needs to be assessed for deflection under live loads"

Source	Date/From/To	Time Period	Work Performed/Subject
			Kitchen/Pantry - "Falling plaster was observed" **Interior Walls** - "are lath/plaster, much of which has falling latex paint and settlement cracks are apparent on the second floor bedroom walls" **Attic** - "evidence of roof leaks on the wood paneling and chimney flues" **RECOMMENDED ACTIONS FOR FURTHER STUDY AND EVALUATION** **1. Retaining Wall** - "areas of failure be removed and a new reinforced concrete retaining wall be constructed behind the stone wall... allowance for proper drainage will be built in" **2. Complete Structural Analysis** - "should include written and photographic description of all existing conditions, the recorded results of all instrumented monitoring and inspections carried out, detailed conclusions explaining the state of deterioration of the structure and the interaction and interdependency of the various structural members involved, and recommendation of preservation actions to implement... should include preliminary cost estimates" **3. Comprehensive Preservation Program for the MHC Manor House** - "divided into phases and ranked according to the critical structural needs of the structure..." **4. Development Concept Plan** - "to include a historic structure report for the entire MHC Estate should be started a.s.a.p. The DCP may indicate a need for additional work to completely restore the grounds and other buildings and facilities on the estate. **Also the question of the continued use as a cultural center should be addressed"** **COST ESTIMATES** 1. Repair all Masonry Foundations $55,000 (stone foundations, brick piers, chimney foundations, waterproof basement walls) 2. Carpentry $100,000 (repair/replace floor joists under porch, porch flooring, sill and lattice, porch ceiling joists) 3. Millwork $150,000 (repair/replace all columns, bases, capitals and pedestals; repair handrails, balustrades and steps; repair all window sash and trim; repair all doors and trim; reinstall historic shutters) 4. Roofs $75,000 (repair cedar shingle roofs, replace flat seam metal roofs, repair all flashing) 5. Painting $35.000 (" a preservation conservator should be employed to study the interior finishes, i.e., plaster, wallpaper and paint -- both interior and exterior") 6. Grounds $25,000 TOTAL $440,000 7. HABS Recording $35,000 8. Historic Structures Report $50,000 9. Structural Analysis $30,000 TOTAL $115,000 **TOTAL ALL WORK** **$555,000**
NPS-Atl (File #3)	October 8, 1995 From James Brotherton Acting Supt. BLRI to James Gentry, Director Crafts of Nine States, Inc.	**June 21, 1985** Inspection Report Date	Cover letter to and maintenance agreement with Crafts of Nine States, Inc. Work which was deemed the responsibility of Crafts of Nine States included: (1) repair/repaint int. walls and ceiling at entrance; (2) repaint employees bathroom near kitchen; (3) clean/vacuum and wax bathroom floor; (4) replace toilet seat; (5) **Repaint walls and doors in upstairs hallways and bedrooms**; (6) Clean, vacuum and wax upstairs wood floors; (7) remove litter... Responsibilities of the Blue Ridge Parkway included: (1) installing a roofing membrane before winter of 1985 until a permanent solution can be financed; (2) repairing damaged ceilings in kitchen and store room (remove plaster, install sheetrock); (3) repair damaged ceiling in gift storage room (pantry); (4) inspect fire extinguishers; (5) replace missing fire extinguisher; (6) shut off water to attic.

Source	Date/From/To	Time Period	Work Performed/Subject	
NPS-Atl (File #2)	October 9, 1985 Report signed by Ron Bishop, Hist. Arch. and William Harris, Chief, SECRPC	Work started **4/10/85** Work completed **5/17/85**	**Completion Report for: PAINTING OF MOSES CONE HOUSE** Contract price was $10,480 for painting and finishing work, including paint removal, surface prep. and priming of: all exterior siding; all exterior millwork; all exterior doors and windows and their screens; exterior porch floorings, ceilings and steps; masonry surfaces to include brick, stone and stucco; and gutters, downspouts, elbows and fasteners. **PAINT SAMPLES INCLUDED:** House exterior: Glidden Gel-Flo White, Y-1901, 1 coat; window and door screens: Glidden 76-08 (green); porch flooring: Glidden 79-58 (grey).	
BLRI	[November 26, 1991] Maintenance Summary Memo to File	**FY 1985** "Major Accomplishments at MHC Estate"	"Some foundation problems were discovered which were affecting rock wall at the rear of Cone Manor House and possibly the house itself. Planned painting of exterior was deferred pending an engineering soils investigation." "SER's Cultural Resources Preservation Center completed an architectural assessment of Moses Cone Manor House. The estimate included costs: $555,000 - MHC Manor House; $870,000 - Remainder of MHC Estate = $1,425,000 total." "Prior to painting, substantial repairs were done to the Moses Cone Manor porch decks, columns and ceilings. **Exterior painting was done April - May, 1985 under contract with Custom Painting & Design for $10,480.**"	
BLRI	January 17, 1986 From Gary Everhardt, Supt. to Robert L. Newton Dir. Fin. Svcs. MHCMH	**Second Half 1985** Maintenance Report	**EXTERIOR** **Roof** - "a protective layer was installed over the roof to provide protection until a complete reroofing can be done" **Future Work/Foundation** - "funds have tentatively been approved in 1986 to correct peripheral drainage problems, reconstruct the rock wall and stabilize the foundation... **This is the first step toward overall restoration measures totalling some $500,000 recommended by our Reg. Office hist. structural engineers**" **INTERIOR** **Ceilings** - "repairs to ceilings... and plaster" **Plumbing** - "(repairs to) plumbing" **Electrical** - "installation of electrical outlets on the sun porch.. and emergency lights" **HVAC** - "as a preventative measure... now maintaining a minimum temp. of 50 degrees during winter months"	
BLRI	June 13, 1986 Author Unknown	**June 13, 1986** Job Status Report	**CONE MANOR MAINTENANCE WORK/Completion Dates** Install emergency lights - 10/8/85 Winterize Cone Manor - 11/29/85 Dewinterize - 4/11/86 Paint Fire Hydrants - 4/11/86 Repair Porch Floor - 4/29/86 Dewinterize Restrooms - 4/29/86 Paint Restrooms - 4/29/86 Repair 3,000 linear feet of rock wall - 9/30/83 Replace Electric Wiring - 10/1/83 **Repair Ceiling in Storage Rooms - 4/30/84** **Repair Plaster - 12/31/85** **Install SAM Roof - 9/6/85** **Clean gutters/downspouts - 10/30/85** **Repair Kitchen Ceiling - 4/15/86** **Repair Storage Room Ceiling - 4/15/86** **Clean Attic - 0/0/0** Repair Leak - 10/4/85 Replace Metal Roof - Manor House - 9/30/86	**COSTS** $275 $97 $104 $39 $103 $97 $219 $0 **$0** **$0** **$86** **$1,055** **$37** **$71** **$172** $259 $23 $0**

Source	Date/From/To	Time Period	Work Performed/Subject	
BLRI	July 1, 1986 From James R. Brotherton Acting Supt. to Robert L. Newton Dir. Fin. Svcs. MHCMH	**First Half 1986** Maintenance Report	**EXTERIOR** **Foundation** - "work is underway to reconstruct rock retaining wall and stabilizing foundation" **Porch** - "repairs to porch flooring" **INTERIOR** **Ceilings** - "repairs to ceilings" **Paint** - "painting of restrooms" **Attic** - "cleaning of attic" **Safety** - "installation of emergency lights on stairs and painting fire hydrants"	
BLRI	January 7, 1987 From Gary Everhardt, Supt. to Robert L. Newton Dir. Fin. Svcs. MHCMH	**Second Half 1986** Maintenance Report	**EXTERIOR** **Paint** - "Repairing and repainting of all peeling areas at the Cone Manor House" **Gutters** - "cleaning gutters/downspouts" **Retaining Wall** - "reconstruction of the adjacent rock retaining wall completed" **Roof** - "install SAM roof" **INTERIOR** **HVAC** - "servicing of furnaces" **Plumbing** - "winterize Cone Manor" "winterize restrooms"	**COSTS** $1,097 $37 $60,000 $1,812 $52 $105 $55
NPS-Atl (File #5)	April 27, 1987 Signed by Ron Bishop	**November 6, 1986** Date Work Completed	Ron Bishop signed the completion report for retaining wall project, final cost listed was $53,830.	
BLRI	[November 26, 1991] Maintenance Report Memo to File	**FY 1986** "Major Accomplishments at MHC Estate"	**Heat** - "Decision to provide minimum heating (50 degrees F) in winter months within Moses Cone Manor to preserver interior fabric. Estimated cost - $3,500/year." **Roof** - "A protective layer was installed over roof to preserve it until a complete reroofing can be done." **Foundation** - "$100,000 approved to correct peripheral drainage problems, reconstruct rock walls and stabilize Moses Cone Manor House foundation." **Retaining Wall** - "Contract awarded 8/86 to New Systems Inc. to repair stone retaining wall at a cost of $49,330."	
BLRI	July 8, 1987 From Gary Everhardt, Supt to Robert L. Newton Dir. Fin. Svcs. MHCMH	**First Half 1987** Maintenance Report	**EXTERIOR** **Porch** - "replace handrails and post" **Paint** - "repair/repaint all peeling areas" "paint exterior restrooms" **Walk** - "reset stones in walks" **Waterline** - "repair waterline in Cone Estate"	 $628 $2,715 $291 $120 $96
BLRI	January 22, 1988 From Gary Everhardt, Supt. to Robert L. Newton Dir. Fin. Svcs. MHCMH	**Second Half 1987** Maintenance Report	**EXTERIOR** **Porch** - "repairs made to Cone Manor porch" **Restrooms** - "and to the visitors restroom"	
BLRI	[November 26, 1991] Maintenance Summary Memo to File	**FY 1987** "Major Accomplishments at MHC Estate"	**Retaining Wall** - "Contract awarded 9/87 to Intram Co., Icard, NC, to repair stone retaining wall $23,550."	

Source	Date/From/To	Time Period	Work Performed/Subject
BLRI	July 8, 1988 From Gary Everhardt, Supt. to Robert L. Newton Dir. Fin. Svcs. MHCMH	**First Half 1988** Maintenance Report	**EXTERIOR** **Porch** - "was repaired and painted... steps were repaired" **Screen Door** - "was repaired" **Paint** - "exterior of Manor House has been pressure -cleaned and a consultant with the U.S. Forest Service's Wood Surface Chemistry Section was engaged to examine and make recommendations to improve the exterior's paint retention and performance" **"Board Fence"** - "the board fence fronting the Manor House will have been completely rehabilitated and painted by our Youth Conservation Corps enrollees"
BLRI	January 3, 1989 From Gary Everhardt, Supt. to Robert L. Newton Vice President - Finance	**Second Half 1988** Maintenance Report	**EXTERIOR** **"Panel Fence"** - "in front of Manor House was replaced at a cost of $10,000" **INTERIOR** **Floors** - "the hardwood floors in the Manor House were cleaned and waxed"
BLRI	[November 26, 1991] Maintenance Summary Memo to File	**FY 1988** "Major Accomplishments at MHC Estate"	"6/21/88 memo from Gary Everhardt to Historic Architect Division, SER, requesting comprehensive condition survey from foundation to roof." **Paint** - "Exterior of Cone Manor House pressure-cleaned and a consultant engaged from U.S. Forest Service Wood Surface Chemistry Section to examine and make recommendations to improve paint retention/performance." **Board Fence at Front** - "Board fence fronting Cone Manor House completely rehabilitated and painted by YCC enrollees."
BLRI	July 10, 1989 From Gary Everhardt, Supt. to Robert L. Newton Vice President - Finance MHCMH	**First Half 1989** Maintenance Report	**EXTERIOR** No work reported - but comments made regarding difficulties with the exterior painted surfaces, especially the porches, columns and balustrades creating a need for even more dollars.
BLRI	August 28, 1989 From Gary Everhardt, Supt. to Robert L. Newton Vice President - Finance MHCMH	**August 28, 1989** Letter to MHCMH	Letter states that 8 years ago the entire exterior of the Manor House was given a major restoration, including a new coat of paint... Photos were included to give MHCMH an idea of how the exterior has deteriorated, "we are anticipating expenditures for several years of at least $100,000 annually..." They have yet to benefit from the friends and neighbors of the Parkway and the Cone Estate...
BLRI also NPS-Atl (File #1)	December 22, 1989 From Paul Hatchett Acting Chief, Hist. Arch. Div. Cult. Res. SE Region to Gary Everhardt, Supt.	**December 22, 1989**	**TASK DIRECTIVE FOR MILLWORK REPAIR AND PAINTING OF CONE MANOR** **1. Repair of balustrade units and columns:** " Approx. 135 feet of balustrade units and three columns will be removed from first floor, south el., and transported to Dunwoody shop... be repaired, treated with an approved wood preservative, primed and given one coat of finish paint. When all repairs are completed, the balustrades and columns will be reinstalled." **2. Reproduction of balusters** - 325 balusters will be reproduced at the Dunwoody shop. The balusters will be turned from wood treated with an approved preservatives... primed... one coat finish paint... returned to site and installed" **3. On-site repairs/PORCH** - "will be made to six of the first floor, south el. bases. Approx. 200 lineal feet of first floor, south el. porch decking will be replaced" **4. Exterior painting** - "south el. siding, trim and windows will be spot primed and given one coat of finish paint" **5. Masonry pier repairs** - "one pier (on accompanying dwg.) will be disassembled, a footing placed beneath it, and reassembled to correct a structural failure." (NOTE FROM SURBER & BARBER: THIS PIER IS SHOWN TO BE THE PIER UNDER COLUMN C105 ON SOUTH EL.) **Total estimate for project was $90,000**

Source	Date/From/To	Time Period	Work Performed/Subject
BLRI	January 22, 1990 From Gary Everhardt, Supt. to Robert L. Newton Vice President - Finance MHCMH	**Second Half 1989** Maintenance Report	**No completed work reported.** States outcome of Historic Arch. Division study, PROBLEMS: 1. Significant deteriorate of paint and fabric, esp. porches and balustrades 2. Evidence of major structural failure in three areas (1) ceiling in main room of second floor, (2) bulging walls over pocket doors in front room first floor, (3) sagging pier on front porch. 3. Some evidence that water may be undermining the structure **RECOMMENDATIONS** 1. In early March 1990, begin rehab of porch and balustrades and entire exterior will be repainted 2. & 3. An architect in Reg. Hist. Arch. Div. has been assigned to coordinate preparation of a report with a detailed inventory of all building features, assessments of feature conditions, deficiencies, cost estimates and recommended sequences of work.
NPS-Atl	December 10, 1990 Letter from Bethanie C. Grashof, R.A. Chief, Technical Assistance Georgia Tech Center for Architectural Preservation to David Ates, Hist. Arch. SE Regional Office - NPS-Atl	**RE: HSAR**	Beth Grashof wrote a 4 page letter elaborating on problems at Cone Manor which could not be summed up in the Historic Structure Assessment Report (HSAR). These problems include: **1. Rot of porch columns** - before porch roof was repaired, water probably was seeping through faulty boxed gutters and trapped inside column shafts. Also, water vapor which naturally occurs would pass through the columns and become trapped... **Rec** - install small round vents on the back two faces of the base of each pedestal and one or two at top of each col. Also recommended solid redwood cols. **2. Rot of roof balustrades** - if original, age coupled with water is probably cause; though the HSAR called for complete replacement, repair with epoxies and wood dutchmen, with limited baluster replacement, is viable option because it preserves existing material. **3. Peeling Paint** - Beth Grashof spoke with Bill Feist at the USDA Forest Service about the paint problem and got a copy of his letter to Jim Bently (NPS?). Especially interesting was their work using acrylic latex primers rather than oil-based primers on "fresh wood" (wood with no paint which has been freshly sanded). Beth recommends giving this a try -- also using 2 acrylic topcoats. Beth does not recommend complete removal as this removes all historical evidence of paint, however the HSAR recommends using a chemical stripper such as Diedrich Chemicals 404 RIP-STRIP on south el., second floor; sun porch panels; very west end of second floor of west el.; entire cornice/soffit; chimneys; all sash (inside and out but not ext. trim); porch floor; dormers; porch elements and roof balustrades which are preserved; entire east el. except public (NPS) washrooms. Remaining surfaces should be scraped to remove loose paint, washed to remove mildew, sanded, spot-primed with oil-based paint. **She also recommends a complete paint analysis to determine historic colors and those colors used when repainting building.** **4. Site Drainage** - behind house is one of the most important problems to address since it is contributing to the continued movement of the building. There has been discussion of installing a drain behind the retaining wall to divert the water before it gets to the building. To this might be added a foundation drainage system at back of house on east and north elevations. Also, make sure underground storm drain system is running clear. If not, a new system should be developed to carry rain water away from bldg. **5. Gutters & Downspouts** - Make sure they are working -- Water is dumping onto steps and ground causing bottom tread to rot and allowing water underneath porch foundation. West brick foundation wall is quite damp with large areas of deteriorating brick and mortar -- probably contributing to water in NW corner of basement. **INTERIOR** **1. Cracks** - Those around chimney breasts can generally be attributed to normal thermal expansion and a change in building materials (plaster on wood lath and framing vs. plaster on brick). Some damage can be traced to deteriorated flashing which appears to have been repaired or replaced when the new wood shingle roof was installed. **2. Dropped Wall between green and yellow bathrooms (second floor)** - has dropped from its original position. A beam or joist(s) may frame into the chimney at this point. Its end may have rotted due to water in the brick (from faulty flashing) causing the beam end to drop somewhat. This may have happened at both ends of wall since the tile has dropped about 1/4" in both corners of bathroom. Also several diagonal cracks which cross each other, through plaster and tile on both sides of this wall. The ceiling in the office should be watched for cracks which would indicate unacceptable bending of beam above.

Source	Date/From/To	Time Period	Work Performed/Subject
			3. Cracks in Kitchen - Vertical cracks above and in center of west exterior openings in kitchen and south window of dining room might indicate weakened lintel and should be monitored. Several cracks continue through the cornice and ceiling. **4. South Wall Blue Bathroom** - has dropped about 1/2" in SE corner of room. Several diagonal cracks point up to west end of wall. On the other side of this wall in the pink bathroom, a series of diagonal cracks at both ends of the wall point up and to the center of the wall. This may have been caused by one end settling more than the other. There is no dramatic break and drop in the tile in the NE corner of pink bathroom to correspond to the drop in the SE corner of the blue bathroom. There is no damage in the pantry below to correspond, indicating that everything has settled together. **6. Cracked Plaster** - should be monitored in two areas: south wall to each side of center bedroom on second floor (hall side) and section of the west wall to left (south) of fireplace in SE bedroom. In both cases, cracks correspond to a wide opening in both the wall below on the first floor and in the foundation wall. In addition, a crack on north face of capital of last column in main stair hall on first floor. Settlement of the foundation piers and/or bending of the lintels may be the cause of the cracking. **DAMAGE TO INTERIOR FINISHES** 1. **S-SW Bedroom Ceiling** - due to a apparent hole in the cornice at the SW corner of widow's walk. 2. **Ceiling in Main Hall of Second Floor** - also traced u to attic and roof above. Floor of hallway in center of attic is bowed up in the center, corresponding to the south wall of the second floor hall below (opposite the fireplace). Evidence of water in north wall of attic, both underneath stairs to roof and around doors to attic bathroom and small bedroom/storage room. Wall between bathroom and bedroom/storage room has also dropped leaving a 1/4" gap between floor and baseboard in bathroom. 3. **West Wall of Attic Bathroom** - at point where roof balustrade meets roof -- Beth heard animals in wall and/or ceiling, but could not see anything to indicate whether the noise was inside the wall or outside on roof.
BLRI	[November 26, 1991] Maintenance Summary Memo to File	**FY 1989** "Major Accomplishments at MHC Estate"	**Panel Fence** - "Replaced panel fence in front of Cone Manor House "10,000" **Rail Fence** - "Installed rail fence at upper parking area - $1,100" **HSAR from GA Tech** - "Finalized condition assessment dated 2/22/89 for Moses Cone Manor House received from SER" **Paint & Masonry** - "Job order request approved 5/2/89 to hire temporary crew to perform work including painting, fabric repair and masonry repair - $44,000"
BLRI	July 24, 1990 From Gary Everhardt, Supt. to Robert L. Newton Vice President - Finance MHCMH	**First Half 1990** Maintenance Report	Reports that work recommended in January 22, 1990 letter (above) began on July 2, 1990.
BLRI	January 14, 1991 From Gary Everhardt, Supt. to Robert L. Newton Vice President - Finance MHCMH	**Second Half 1990** Maintenance Report	Reports that corrective measures in January 22, 1990 letter continue with marked improvement of front elevation of Manor House
BLRI	[November 26, 1991] Maintenance Summary Memo to File	**FY 1990** "Major Accomplishments at MHC Estate"	**Porch** - "$100,000 provided in Cultural Cyclic Program for rehabing porch/balustrades at Cone Manor House"
BLRI	July 24, 1991 From Gary Everhardt, Supt. to Robert L. Newton, VP Fin. MHCMH	**First Half 1991** Maintenance Report	Mentions Historic Structure Assessment Report from Georgia Tech in draft form which will become an important planning document

Source	Date/From/To	Time Period	Work Performed/Subject
BLRI	[November 26, 1991] Memo to File	**FY 1991** "Major Accomplishments at MHC Estate"	"$82,000 provided for ongoing corrective measures recommended by Historical Architects including in 1991: Restoration/repainting front elevation of Cone Manor House" "Historic Structural Assessment (HSAR) on Moses H. Cone Manor received 3/91. Assessment prepared by the Center for Architectural Conservation at Georgia Tech through a co-op agreement with SER. Cost estimates included and this will be a useful document for future planning." "Section 106 Clearance approval received 8/91 for installing underground drain lines around perimeter of Moses Cone Manor House"
NPS-Atl	1991 Bethanie Grashof Historical Architect Georgia Tech Center for Architectural Conservation	**1991** **HISTORIC STRUCTURE ASSESSMENT REPORT**	This report begins with a project statement, definitions, photographs and simple CAD-generated plans. It is followed by a computer-generated assessment report with a print out date of 8/24/92. The date of inspection was 5/14/90. **Recommendations are summarized as follows:** **EXTERIOR** Replace 7 rotted pilaster bases (total of 10); replace/repair column pedestals, bases and shafts to match orig. incorporate vents in pedestal bases (total of 33 cols.); replace apron boards at east and west ends of south porch (replace 40 s.f.); on porch floor, remove floor boards to 3' back and install new with half-round end cap (replace 1000 s.f.); replace top piece of handrail incorporating sloped "wash" of orig. design (80 l.f.); replace 56 balusters; provide new screens, full-size at 1st floor, half size at 2nd floor, paint same color as sash (38 windows); remove paint as required, wash to remove mildew, apply WRP to wood elements, prime and 2 top coats; replace bottom tread of north stair to west porch (18 s.f.). **INTERIOR** Replace deteriorated floor in employee restroom under main stair with matching t&g (10 s.f.); repair cracks in 50 s.f. of wall by peeling back canvas, cleaning out debris, patching and replacing canvas; monitor cracks for 6-12 months - south window dining room, south wall blue bath, west wall yellow bath, billiard room, SE bedroom, east wall music room, back of east col. cap. main hall, south wall 2nd floor hall (total of 50 s.f.); repair damaged plaster under canvas in SSW bedroom, 2nd floor hall, music room, kitchen (total of 200 s.f.); run new plaster cornice to match above chimney in 1st floor office (10 s.f.); **CANVAS WALLS** - carefully scrape all loose paint, clean and prime, apply 1 top coat, conduct paint research and match orig. color scheme (total of 26,000 s.f.). **ROOF** Replace small section of cornice at SW corner of widow's walk allowing water into bldg. (2 l.f.); Provide new balustrade which matches existing in design (total of 537 l.f.); flashing on back side of widow's walk needs more study to determine water intrusion (25 l.f.); provide new copper gutters and downspouts to match profile of orig. gutters (660 l.f.). **FIRE/LIFE/HEALTH SAFETY** Install both fire and intrusion detection with annunciation both at site and ranger office; rehang basement door to shut more securely and keep rats out -- more study needed to determine if animals are living in the roof or wall where attic balustrade meets roof. **TOTAL COST OF RECOMMENDED WORK: $324,428.**
BLRI	January 24, 1992 From Gary Everhardt, Supt. to Robert L. Newton Vice President - Finance MHCMH	**Second Half 1991** Maintenance Report	**EXTERIOR** 1. Rebuilding of foundation, decking and front porch, and removal, rehab. and restoration of **columns and balustrades** 2. Rehab. of underground drainage system and lawn reshaped, reseeded and landscaped 3. A $25,000 order issued for replacement of balusters to be on hand for use in 1992 work
BLRI	November 18, 1991 Memo from Richard Foster Asst. Chief of Maint., NC to Chief, Maint. & Eng.	**FY 1992**	**FY 1992 Repair Program (Work Intended for 1992)** **Electrical** - "The existing electrical wiring and equipment has been added to the Manor House in a piecemeal fashion over the preceding 40-50 year period. Many of the electrical devices are outdated and do not meet current NEC standards. Wiring has been installed haphazardly without the use of proper fittings and connectors. Equipment grounding on many circuits is non-existent. Over-current is improperly sized on several circuits." "The entire electrical system... requires rehabilitation in order to meet NEC standards... work will be performed along with

Source	Date/From/To	Time Period	Work Performed/Subject
			other preservation efforts and would carry over to future years for completion... the 106 Clearance should be requested for complete rehab of electrical with the following work scheduled for FY 1992: (A) Replacement of existing disconnects, fuse and breaker panels with a main load center sized to accommodate all circuits and electrical needs... Existing branch circuit wiring will be routed to new panel and terminated at properly sized circuit breakers; (B) Provide code ground fault protection as required in bathrooms, kitchen, basement and outside; (C) Upgrade service to 400 amps to include new meter base, service disconnect and underground service entrance cable...; (D) Demolition and removal of unused circuit wiring and devices in basement area; (E) Repair circuit wiring... deemed to be hazardous." **Foundation and Exterior Woodwork** - "The scope of this work involves the replacement of deteriorated porch decking, repair to porch columns and bases, repair of balustrades on all elevations, repair of deteriorated skirt boards, minor drainage work at foundation on north elevation, repairs to stone masonry foundation on west and north elevations. Continue with repairs to gutters and downspouts including the removal of paint and repair of leaking joints and sections. Perform necessary painting of exterior siding and millwork to include prep of surfaces."
BLRI	July 23, 1992 From Gary Everhardt, Supt. to Robert L. Newton Vice President - Finance MHCMH	**First Half 1992** Maintenance Report	**EXTERIOR** 1. Rebuilding of widow's walk and repainting some exterior sections 2. Rebuilding sections of dry-laid rock walls
BLRI	February 18, 1993 From Gary Everhardt, Supt. to Robert L. Newton Vice President - Finance MHCMH	**Second Half 1992** Maintenance Report	**EXTERIOR** 1. Widow's walk completed - 1,000 hours of work
BLRI	July 30, 1993 From Gary Everhardt, Supt. to Robert L. Newton Vice President - Finance MHCMH	**First Half 1993** Maintenance Report	**EXTERIOR** **Porch** - repaired balustrades and handrails **Leaded Windows** - installed protective coverings on leaded windows **INTERIOR** **Sun Porch** - painted interior sun porch **Plaster** - repaired plaster at entrance (ASSUME ENTRANCE HALL ADJACENT TO POCKET DOORS) **Electric** - rewired basement
BLRI	February 3, 1994 From Gary Everhardt, Supt. to Robert L. Newton Vice President - Finance MHCMH	**Second Half 1993** Maintenance Report	**EXTERIOR** **Porch** - "Continued repairs to balustrades and handrails" **INTERIOR** **Paint** - "painting of interior" **Plaster** - "repairing plaster" "Electrical rewiring and plumbing" Also reports that in December 1993, $130,000 was authorized for on-going preservation/restoration projects within the estate. $35,000 is being programmed to partly fund a Historic Structures Report.
BLRI	July 13, 1994 From Gary Everhardt, Supt. to Robert L. Newton Vice President - Finance MHCMH	**First Half 1994** Maintenance Report	**EXTERIOR** **Porch** - "Purchased materials and continued repairs to balustrades and handrails... sanded and painted front porch and steps" **Leaks** - "The Cone Manor House was visually inspected during heavy rains to insure no leaks were occurring."

APPENDIX E

HISTORIC STRUCTURE ASSESSMENT REPORT
1991

Prepared for:
Park Historic Architecture Division
National Park Service
Washington, D.C. 20013-7127

Compiled by:
Center for Architectural Conservation
College of Architecture
Georgia Institute of Technology
Atlanta, Georgia 30332-0155

HISTORIC STRUCTURE ASSESSMENT REPORT

MOSES H. CONE MANOR HOUSE
BUILDING HS359
BLUE RIDGE PARKWAY

HISTORIC STRUCTURE ASSESSMENT REPORT

MOSES H. CONE MANOR HOUSE
BUILDING HS359
BLUE RIDGE PARKWAY

Dates of Inspection and
Condition Assessment Report: 1991

Inspected by:
Center for Architectural Conservation
College of Architecture
Georgia Institute of Technology
Atlanta, Georgia 30332-0155

Prepared for:
Park Historic Architecture Division
National Park Service
Washington, D.C. 20013-7127

and

Southeast Regional Office
National Park Service
Atlanta, Georgia 30303

Compiled by:
Center for Architectural Conservation
College of Architecture
Georgia Institute of Technology
Atlanta, Georgia 30332-0155

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PROJECT STATEMENT

The Inventory and Condition Assessment Program (ICAP) is a systematized methodology to inventory and to assess the condition of or inspect maintenance features and a computer program to manage the substantial volume of information developed under the program.

The inventory and condition assessment is based on a comprehensive field inspection conducted by park, regional office, or DSC staff and/or private architectural/engineering (A/E) contractors. The inspection team prepares a report assessing the findings of the inspection and recommending, where necessary, appropriate repair treatments. For prehistoric and historic buildings these recommendations are consistent with the "Standards for Managing Historic and Prehistoric Structures (Including Ruins)" in the "Cultural Resource Management Guideline, NPS-28". A comprehensive building report for non-historic buildings is titled "Inventory and Condition Assessment Report". For prehistoric and historic buildings, a comprehensive building report is titled "Historic Structure Assessment Report". A comprehensive building report consists of the following information.

1. **General Date** - Background, size and geographical location.

2. **Historical Data** - For historic and prehistoric buildings, the historic significance of each feature is identified. Important List of Classified Structures (LCS) and Cultural Resources Management Bibliography (CRBIB) information is also furnished.

3. **Inventory Data** - Descriptions of features.

4. **Condition Assessment Data** - Deficiencies identified through the inspection process, with corrective work recommendations.

5. **Cost Data** - Estimated costs for all recommended work broken down into material and labor.

6. **Graphic Data** - A site sketch, simple plan drawings, and photocopies of representative views indicating existing conditions are also provided.

DEFINITIONS

MAINTENANCE PRIORITY

Priority 1: Buildings assessed priority 1 are those that must be maintained.

Condition Criteria:

- the building has fire/life/health safety and other code deficiencies; and/or
- the building has other significant critical and serious deficiencies that may effect the useful life of the building.

Management Criteria:

- the building is a cultural resource; and
- the building is significant based on specific servicewide, Regional or park management initiatives or directives.

Priority 2: Buildings assessed priority 2 are those that should be maintained.

- the building meets any of the requirements of priority 1. However, due to limited funding/resources maintenance is deferred. Every effort should be taken to upgrade these buildings when possible, in order to ensure proper maintenance.

Priority 3: Buildings assessed priority 3 are those that may be maintained.

- the building is scheduled for future cyclical and/or repair/rehabilitation work which may require special coordination of maintenance activities in order not to conflict with the planned work;
- or the building does not meet any of the requirements of priority 1 and 2.

BUILDING CONDITION

Excellent - A building is in excellent condition if any of the following conditions are present. Both interior and exterior features of the building are in like-new (or better) condition and building utility systems are without obvious or known defects. (This level does not apply to historic or prehistoric buildings.)

Good - A building is in good condition if the following conditions are present. The significant features are intact, structurally sound and performing their intended purpose; there are few or no cosmetic imperfections; the significant features need no repair; and only routine and/or cyclic maintenance is required. Examples are touch up painting needed or other minor items needing maintenance.

Fair - A building is in fair condition if any of the following conditions are present. There are signs of wear, failure or deterioration, though the building is generally sound; or if failure of a significant feature of the building is evident. Examples are worn floor or wall coverings and building utility systems in need of minor repair.

Poor - A building is in poor condition if any of the following conditions are present. The significant features are no longer performing their intended purpose or are missing; significant features show signs of imminent failure or break-down; structural integrity is marginal; major repairs are needed; or fire, life, health and/or safety standards for occupancy are questionable. Examples include exterior envelope which allows the elements to attack the interior and/or utility systems which are inadequate.

Obsolete - A building is in obsolete condition if any of the following conditions are present. It is beyond economic rehabilitation; is not historic or prehistoric and is not architecturally significant; and major health and/or safety violations exist. (This level does not apply to historic or prehistoric buildings.)

FEATURE CONDITION

The conditions *Good, Fair,* and *Poor* are equivalent to the **MM** conditions "1" as good, "2" as fair, and "3" as poor. For historic and prehistoric structures, it is also used as part of the criteria in establishing the significance of a feature.

A feature is evaluated as Good when:

- the feature meets the established Maintenance Management program condition guidelines, and
- the feature is intact, structurally sound and performing its intended purpose, and
- the feature needs no repair or rehabilitation and only routine and preventive maintenance is required.

A feature is evaluated as Fair when:

- the feature generally meets the Maintenance Management program condition guidelines and provides an adequate level of service, or
- there are early signs of wear, failure, or deterioration, though the feature is generally structurally sound and performing its intended purpose, or
- there is failure of a sub-component of the feature, or
- replacement of up to 25% of the feature or replacement of a defective sub-component is required.

A feature is evaluated as Poor when:

- the feature does not meet the Maintenance Management program condition guidelines, or
- the feature is no longer performing its intended purpose, or
- the feature is missing, or
- deterioration or damage affects more than 25% of the feature and cannot be adjusted or repaired, or
- the feature shows signs of imminent failure or breakdown, or
- the feature requires major repair or replacement.

TREATMENT RATINGS (Historic and Prehistoric Buildings Only)

Preservation: Defined as the act or process of applying measures to sustain the existing form, integrity, and material of a building.

Feature: Defined as the basic component or issue on which the ICAP program collects information for inventory use. A feature may be an architectural element, structural component, engineering system or a functional requirement.

1. PRESERVE

Statement of Importance:

- the element is associated with those qualities for which the building is considered to have cultural value and dates from the period(s) of significance, and/or
- the feature is highly distinctive architecturally and dates to the buildings's period(s) of significance, and
- the level of damage or deterioration is such that it is still feasible to preserve.

Condition: Poor to Good- Preserve

2. PRESERVE WHEREVER POSSIBLE- REPLACE IN-KIND IF TOO DETERIORATED TO SAVE

Statement of Importance:

- the feature has acquired significance in its own right or makes an important contribution to other historic periods or levels of significance identified for the building, or

- the feature makes a significant contribution either to the building's historic appearance or as an integral part of its historic construction, or

- the feature meets "1" level criteria except that preservation is not feasible.

Condition: *Fair to Good- Preserve*
Poor- Replace

Note Exception: If the feature is antiquated and no longer serves a functioning role, retain it, in situ, as an historic artifact, wherever possible.

3. PRESERVE WHEREVER POSSIBLE- IF TOO DETERIORATED TO SAVE, FEATURE MUST BE REPLACED WITH COMPATIBLE MATERIAL AND DESIGN.

Statement of Importance:

- the feature contributes to the historic appearance of the building and dates either to the period(s) of historic significance or represents later, sensitive repair or replacement work, or

- the feature dates to the historic period(s) of significance of the building and represents a substantial amount of historic fabric.

Condition: *Fair to Good- Preserve*
Poor- Replace

4. PRESERVE WHERE THERE IS NO COMPELLING REASON FOR REMOVAL; UNDERTAKE ALL NECESSARY ALTERATION WORK AS SENSITIVELY AS POSSIBLE, INCLUDING ANY DEMOLITION WORK.

Statement of Importance:

- the feature dates to the historic period(s) of significance of the building or is a later, sensitive repair, but does not represent a substantial amount of historic fabric, is not distinctive, nor does it make any measurable contribution to the building's historic appearance or system of construction.

Condition: *Fair to Good- Preserve*
Poor- Alter/Replace

5. REMOVE/ALTER/REPLACE; UNDERTAKE ALL WORK AS SENSITIVELY AS POSSIBLE.

Statement of Importance:

- the feature is not significant and through design or condition detracts from the historic appearance of the building, or

- the feature is a poor design and/or construction detail which contributes to the deterioration of the building, or

- the feature creates a serious code violation which can not be mitigated. (In cases where mitigation is not possible, removal or alteration of the feature may, in some cases, take precedence over higher ratings normally assigned to the feature.)

Condition: Poor to Good- Remove/Replace

6. SPECIFIED TREATMENT IS NOT REQUIRED, HOWEVER, IF ANY WORK IS DONE ON THIS ELEMENT IT SHOULD BE SYMPATHETIC TO THE HISTORIC QUALITIES OF THE BUILDING.

Statement of Importance:

- the feature has no historic value.

0. DEFAULT RATING - FEATURE NOT EVALUATED

The ICAP computer program will default to this value. A rating of zero (0) should alert the reader that an evaluation of the significance of the feature has not been made.

PRIORITY

A *Critical* deficiency of a feature exists where:

- there is advanced deterioration which has resulted in the failure of the feature or will result in the failure of the feature if not corrected within one year or
- there is accelerated deterioration of adjacent or related building materials as a result of the feature's deficiency,
- there is a threat to the health and/or safety of the user, or
- there is a failure to meet a legislative requirement.

A *Serious* deficiency of a feature exists where:

- there is deterioration which, if not corrected within 2-5 years, will result in the failure of the feature or
- a threat to the health and/or safety of the user may occur within 2- 5 years if the deterioration is not corrected, or
- there is deterioration of adjacent or related materials and/or systems as a result of the feature's deficiency.

A *Minor* deficiency of a feature exists where:

- standard preventive maintenance practices and conservation methods have not been followed, or
- there is a reduced life expectancy of affected or related materials and/or systems, or
- there is a condition with long-term impact beyond 5 years.

WORK RECOMMENDATIONS

Within the inventory section of a comprehensive report, each time a fair or poor condition is indicated, a work recommendation will appear in the back of the report. Occasionally, several related deficient features can be grouped together under one work recommendation. When this happens, the description of each of the affected features refers the reader to the feature with the work recommendation and no condition quantities are cited for the affected features.

COST ESTIMATES

The cost figures included in the work recommendations are estimates to be used for the planning of future work. They can be based on the inspector's own records, cost data provided by the Park, or standard cost estimating guides such as R.S. Means, but they are only estimates. Costs for architect's or engineer's fees or other contingencies are not included.

LIST OF SYMBOLS AND ABBREVIATIONS

bedrm or BR- bedroom
bldg- building
bsmnt or bmt - basement
btwn- between
clg- ceiling
dbl- double
dine or DR- dining room
E- east
elev- elevation
exist- existing
fdn- foundation
ftg- footing
fl or flr- floor
galv- galvanized
gyp bd- gypsum board
kit- kitchen
LF- linear feet
LR- living room
mtl- metal
N- north
NFPA 101 - Life Safety Code, National Fire Protection Association
oc- on center
opg- opening
orig- original
reqd- required
rm- room
S- south
SF- square feet
SY- square yard
sgl- single
sht mtl- sheet metal
sm- small
stl- steel
T&G or T + G- tongue and groove

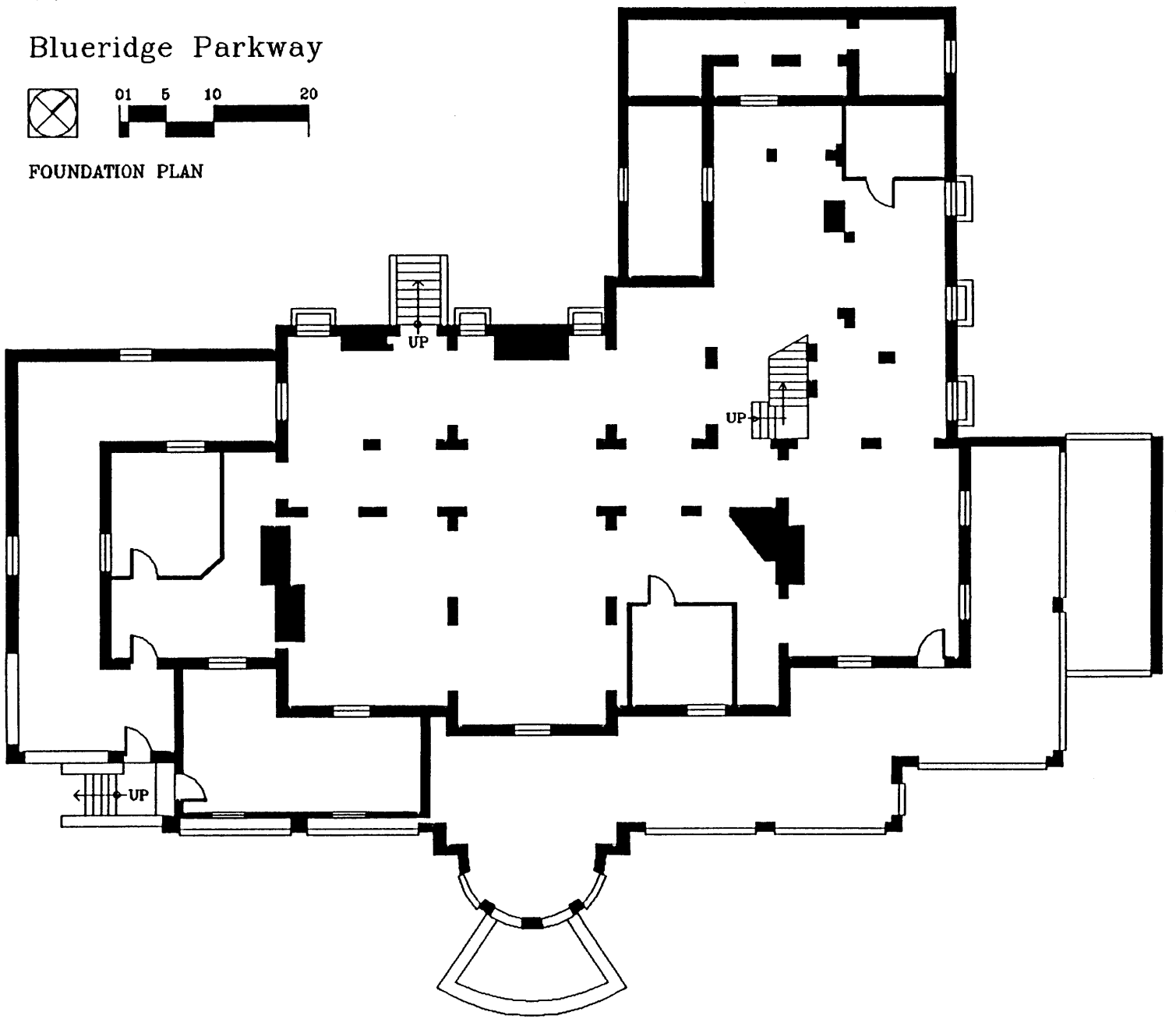
typ- typical
UBC- Uniform Building Code
W- west
wd- wood
wdo- window

Moses H. Cone Manor House

Blueridge Parkway

01 5 10 20

FOUNDATION PLAN

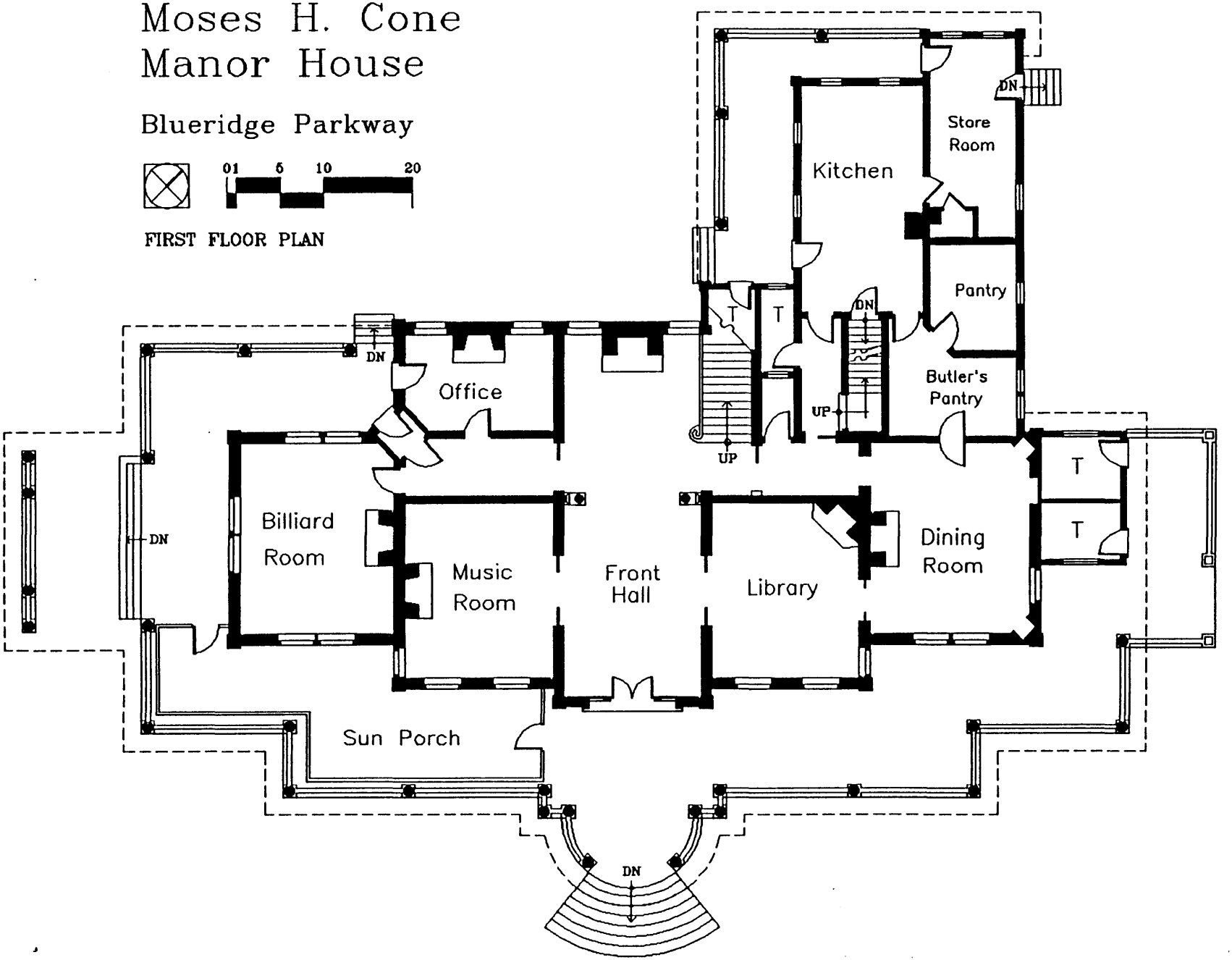


Moses H. Cone Manor House

Blueridge Parkway

0 1 5 10 20

FIRST FLOOR PLAN

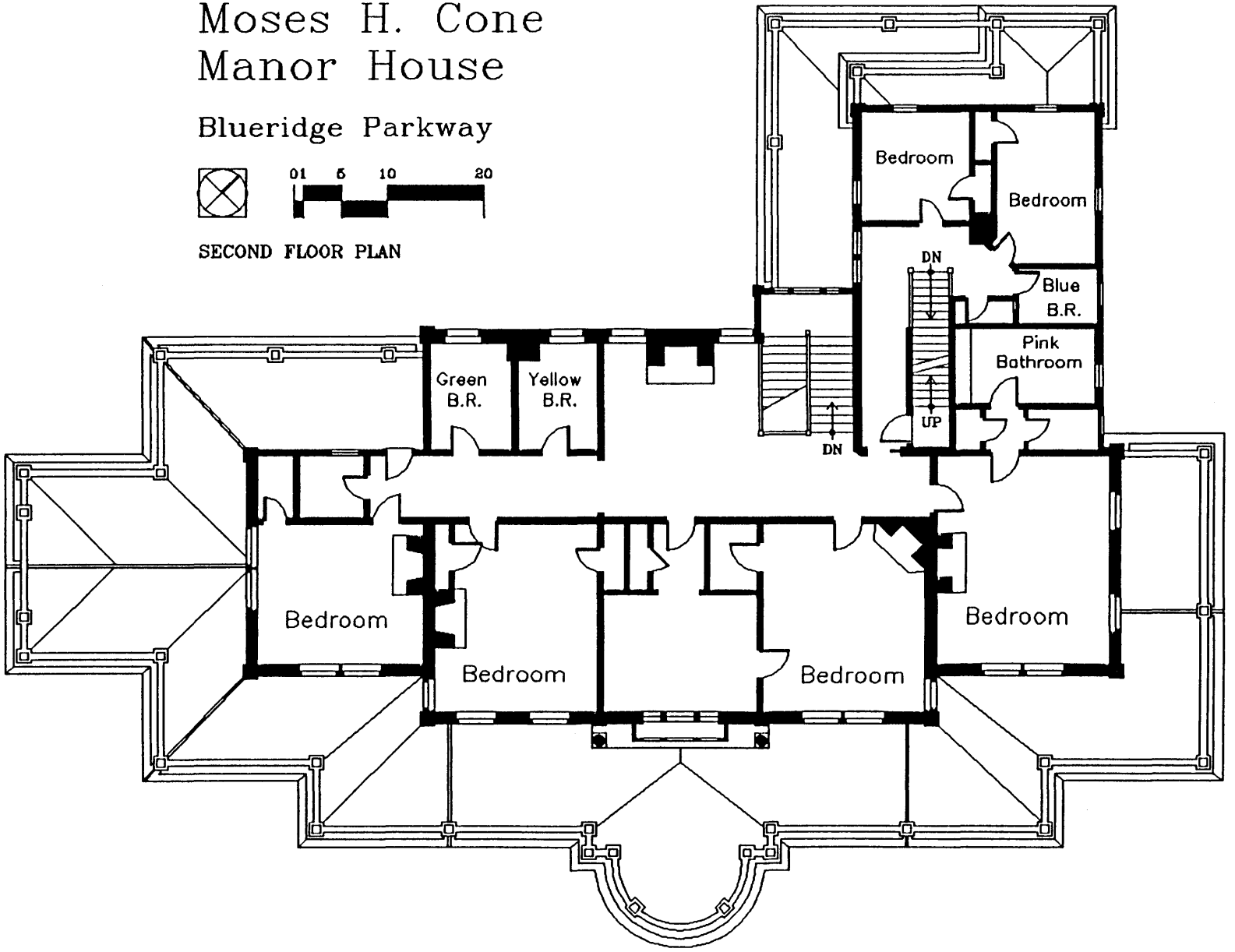


Moses H. Cone Manor House

Blueridge Parkway

01 5 10 20

SECOND FLOOR PLAN

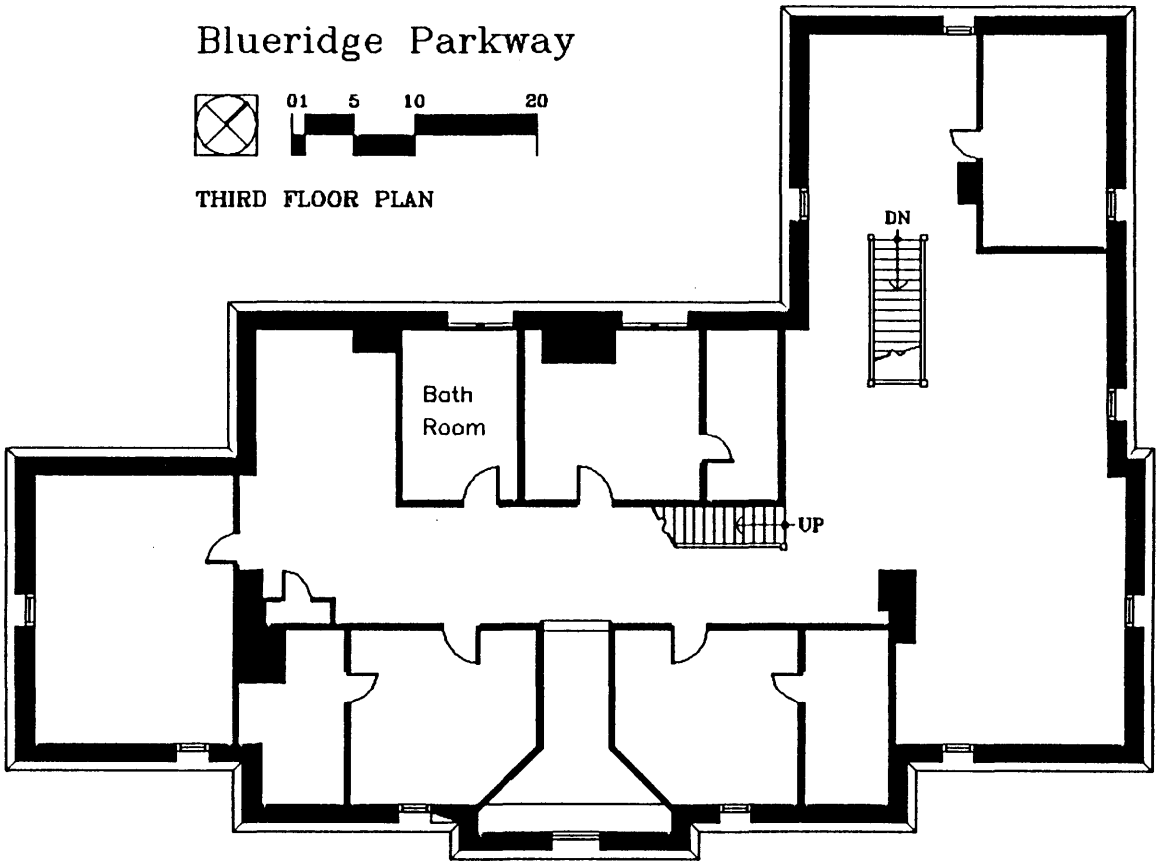


Moses H. Cone Manor House

Blueridge Parkway

01 5 10 20

THIRD FLOOR PLAN



****

--EXECUTIVE SUMMARY----------

SIGNIFICANCE: Built by Moses H. Cone in about 1900. Mr. Cone, known as the Denim King, cofounded Proximity Manufacturing Co, later known as Cone Mills. The house is the center of a large farming estate.

ARCHITECTURAL DESCRIPTION: Classical Revival;2-1/2 story wood frame with clapboards;Ionic & Doric columns & pilasters at porch & building corners; large porch on S & W elevs.

--IDENTIFICATION/MANAGEMENT INFORMATION----------

OTHER NAMES: Flat Top Manor

BUILDING ADDRESS
- PARK ORGCODE: 5140
- South
- DISTRICT ORGCODE: 5140
- P.O. Box 367
- Blowing Rock, NC 28605
- LOCATION: Mile post 294/89 miles north of park headquarters
- COUNTY: Watuga

BUILDING INFORMATION
- BUILDING ORGCODE: 5140
- MANAGEMENT UNIT: BLRI
- BUILDING CONDITION: Fair
- MAINTENANCE PRIORITY: 2 - Medium
- MANAGEMENT CATEGORY: B DATE: 00/00/00
- ELEVATION: 4000 FT
- UTM COORDINATES: / /

REAL PROPERTY INFORMATION
- ACQUISITION DOCUMENT: - - -
- ACQUISITION COST: $ 0
- ACQUISITION DATE:
- GENERAL LEDGER ACCT NO: 215
- SF 1166 NUMBER: 6013
- SF 1166 DESIGNATION: MERCHANDISING FACILITY
- TOTAL IMPROVEMENT/MODIFICATION COSTS: $ 0

OTHER PROPERTY INFORMATION
- NPS LEGAL INTEREST:
  - FEE - FEE SIMPLE
- MANAGEMENT AGREEMENT: NONE

NUMBERING INFORMATION
- NUMBER ON BUILDING: 359
- LCS ID NUMBER: 06502
- HOUSING NUMBER:
- ENERGY NUMBER:
- CONCESSIONER NUMBER:

APPRAISAL INFORMATION
- REPLACEMENT COST:
- APPRAISAL YEAR:
- APPRAISAL SOURCE:
- PERCENT OCCUPIED: 50%
- DATE OF CONSTRUCTION: 1900

SIZE INFORMATION
- TOTAL FLOOR AREA: 11600 SF
- FIRST FLOOR AREA: 4000 SF
- ADDITIONAL FLOOR AREA: 7600 SF
- TOTAL BASEMENT AREA: 5800 SF
- FINISHED BASEMENT AREA: 3800 SF
- UNFINISHED BASEMENT AREA: 2000 SF
- ROOF AREA: 8664 SF
- PERIMETER LENGTH: 0 LF
- NUMBER OF STORIES: 2.5
- NUMBER OF ROOMS: 24
- NUMBER OF BATHROOMS: 7.0

SUMMARY COST INFORMATION
- TOTAL: $ 324428
- CRITICAL: $ 24765
- SERIOUS: $ 260949
- MINOR: $ 38714

****

--I D E N T I F I C A T I O N / M A N A G E M E N T I N F O R M A T I O N (cont)----------

BUILDING CODE INFORMATION
APPLICABLE CODES:
NFPA 101 - Life Safety Code

OCCUPANCY CLASSIFICATION: Business
OCCUPANCY LOAD:
HAZARD OF CONTENTS: Ordinary
SEISMIC ZONE: 2
CONSTRUCTION TYPE: V (000)

OPERATIONS INFORMATION
Open to the public
SEASON: May-Oct
HOURS: 9:00-5:30
TREATMENT RESPONSIBILITY
INTERIM TREATMENT: NPS
APPROVED ULTIMATE TREATMENT: NPS
ROUTINE MAINTENANCE: NPS
CYCLIC MAINTENANCE: NPS
ULTIMATE TREATMENT: PROPOSED DATE: 00/00/00
DOCUMENT: B - GMP
TREATMENT TYPE: PRESERVATION

--S I G N I F I C A N C E----------

SIGNIFICANCE: Not Evaluated
NATIONAL REGISTER STATUS: 0 - Undetermined DATE: 00/00/00
NHL STATUS: No

--H I S T O R I C A L I N F O R M A T I O N----------

PERIOD OF CONSTRUCTION: Historic
HISTORIC FUNCTION:
SINGLE DWELLING(INCL ROWHOUSE)

CURRENT FUNCTION:
SPECIALTY STORE (SHOP)
NPS VISITOR CONTACT

--D O C U M E N T A T I O N----------

DSC PARKCODE: 601
DRAWINGS:

TITLE	DOC ID #	DATE	LOCATION
HABS Drawings		1987	Park Headquarters

REPORTS:

TITLE	DOC ID #	DATE	LOCATION

--H I S T O R I C A L D O C U M E N T A T I O N----------

HABS NUMBER: NONE HAER NUMBER: NONE NATIONAL REGISTER NUMBER: NONE
CULTURAL RESOURCES MANAGEMENT BIBLIOGRAPHY (CRBIB)

--M A J O R I M P R O V E M E N T S / M O D I F I C A T I O N S----------

CONSTRUCTION DATE: 1900 CONSTRUCTION: Built TEXT: Date of original construction
COST: $ 0 DESIGNER: DESIGNER'S OCCUPATION: Unknown

TOTAL IMPROVEMENT/MODIFICATION COSTS: $ 0

--I N S P E C T I O N T E A M I N F O R M A T I O N----------

EVALUATION PROCEDURE

It has been assumed that the building will continue as a gift shop, open from May to October, 8:00 to 5:30. Because the 2nd & attic flrs are not used the present exiting is adequate. The building is not accessible to the handicapped and consideration should be given to modifying the entrance at the W end of the main hall for this purpose. Three serious problems exist outside: site drainage behind the bldg; the paint film; & the condition of wood porch members. NPS is in the process of studying these problems. See separate letter to regional office concerning paint.

INSPECTION TEAM

DATE OF INSPECTION: 05/14/90

INSPECTION TEAM PERSONNEL:

Bethanie C. Grashof
Historical Architect
Ctr for Arch Conservation
Georgia Tech
Atlanta, GA 30332-0155
(404) 894-3390
AREAS: EAF/IAF/F/L/HS
TIMES:
INSPECTION: 16 HRS.
REPORT PREPARATION: HRS.

DATA ENTRY

DATE OF DATA ENTRY: 11/05/90

NAME:

ADDRESS:

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
EXTERIOR ENVELOPE					
4111	WALLS:WALL SURFACE	Main house:wood clapboards over diagonal			
	MM UNIT: BLRI	tongue & groove sheathing, 4240 SF/10"			
	HISTORIC RATING: 2	flat board apron at base of walls			
	REVISION DATE: 01/07/91				
	NOTES: North wall of attic & side walls of dormers:wood shingles, 210 SF.				
4112	WALLS:WALL STRUCTURE	Wood frame- size & spacing of members	8600	SF	TOTAL
	MM UNIT: BLRI	unknown	8600	SF	GOOD
	HISTORIC RATING: 2		0	SF	FAIR
	REVISION DATE: 11/29/90		0	SF	POOR
4113	WALLS:WALL INSULATION	Wall cavity inaccessible; probably none			
	MM UNIT: BLRI				
	HISTORIC RATING: 6				
	REVISION DATE: 11/08/90				
4116	WALLS:WALL TRIM	Doric pilasters at corners of bldg/Ionic	655	LF	TOTAL
	MM UNIT: BLRI	columns at corners of center projecting	645	LF	GOOD
	HISTORIC RATING: 2	bay-2nd flr, front elevation, 655 LF	0	LF	FAIR
	REVISION DATE: 12/10/90		10	LF	POOR
	NOTES: Flat corner boards at public restrooms, 40 LF.				
4117	WALLS:WALL ORNAMENT	Porches & porte-cochere:Ionic cols set	33	EA	TOTAL
	MM UNIT: BLRI	on paneled pedestals/orig wood/past work	3	EA	GOOD
	HISTORIC RATING: 2	has replaced some original material	0	EA	FAIR
	REVISION DATE: 08/20/92		30	EA	POOR
	NOTES: 30 columns & 3 pedestals without columns/several back porch capitals are fiberglass/porte-cochere capitals are reportedly aluminum/molds are stored in apple barn on site.				
4121	CEILINGS:CLG SURFACE	Beaded tongue & groove, 2140 SF/	2585	SF	TOTAL
	MM UNIT: BLRI	continues down backside of beams, 445 SF	2585	SF	GOOD
	HISTORIC RATING: 3		0	SF	FAIR
	REVISION DATE: 12/10/90		0	SF	POOR
4122	CEILINGS:CLG STRUCTURE	Wood framing/steel beam reportedly at	2775	SF	TOTAL
	MM UNIT: BLRI	back porch- installed in earlier	2775	SF	GOOD
	HISTORIC RATING: 2	restoration work	0	SF	FAIR
	REVISION DATE: 11/29/90		0	SF	POOR

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
EXTERIOR ENVELOPE					
4131	FLOORS:FLOOR SURFACE	Wood tongue & groove, 2730 SF/simple 10"	2770	SF	TOTAL
	MM UNIT: BLRI	flat board apron at foundation wall,	1730	SF	GOOD
	HISTORIC RATING: 3	40 SF	40	SF	FAIR
	REVISION DATE: 08/20/92		1000	SF	POOR
4133	FLOORS:FLOOR STRUCTURE	Wood beams, 2" x 10" joists/front & west	2730	SF	TOTAL
	MM UNIT: BLRI	porches have recently been reinforced	2730	SF	GOOD
	HISTORIC RATING: 2		0	SF	FAIR
	REVISION DATE: 11/29/90		0	SF	POOR
4134	FLOORS:RAILING	Porches & porte-cochere:turned balusters	230	LF	TOTAL
	MM UNIT: BLRI	between columns/good qty indicates front	150	LF	GOOD
	HISTORIC RATING: 2	porch rail presently being replaced	0	LF	FAIR
	REVISION DATE: 11/29/90		80	LF	POOR
	NOTES: At time of inspection balustrade of front porch had been removed to NPS workshop to be reproduced/many of the original balusters were replaced in earlier restoration work/poor qty indicates remaining porch rail.				
4141	WINDOWS:WDO FRAME	Wood/simple at frame walls/with brick	93	EA	TOTAL
	MM UNIT: BLRI	mold at basement walls	93	EA	GOOD
	HISTORIC RATING: 2		0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
	NOTES: Dormer window frames & sash counted under feature #4390.				
4142	WINDOWS:WDO SASH	Wood/most dbl-hung/1st fl:1-over-1/2nd	93	EA	TOTAL
	MM UNIT: BLRI	fl:9-over-9, 12-over-12/rear attic:2	93	EA	GOOD
	HISTORIC RATING: 1/2	sets dbl casement-5 lites ea leaf	0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
	NOTES: Stair landing:3 fixed sash in palladian motif/Half-round multi-paned sash at front pediment/Fanlight:2nd fl center, front elev/Round multi-paned sash:E elev/6 pane casement:basement/decorative sash rated 1/others 2.				
4143	WINDOWS:WDO TRIM	Wood/molded casing with heavy molded	1540	LF	TOTAL
	MM UNIT: BLRI	cornice/generally matches exterior door	1540	LF	GOOD
	HISTORIC RATING: 1	trim & interior door & window trim	0	LF	FAIR
	REVISION DATE: 11/29/90		0	LF	POOR
4144	WINDOWS:WDO GLAZING	All glass single thickness clear/much is	537	EA	TOTAL
	MM UNIT: BLRI	old rolled glass- rated 3	537	EA	GOOD
	HISTORIC RATING: 1/3		0	EA	FAIR
	REVISION DATE: 12/10/90		0	EA	POOR
	NOTES: 1st & 2nd flr hall windows which flank fireplaces & palladian windows on stair landing have elaborate leaded patterns within sash- rated 1.				

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
EXTERIOR ENVELOPE					
4147	WINDOWS:WDO SILL	Simple wood sills at 1st, 2nd & attic	82	EA	TOTAL
	MM UNIT: BLRI	windows, 61 each/brick at basement, 21	82	EA	GOOD
	HISTORIC RATING: 3	each	0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
4148	WINDOWS:WDO STORM/SCRN	Wood framed screens, mounted on outside	38	EA	TOTAL
	MM UNIT: BLRI	of sash/30 screens on lower half only/8	0	EA	GOOD
	HISTORIC RATING: 3	with full size screens	0	EA	FAIR
	REVISION DATE: 12/10/90		38	EA	POOR
	NOTES: Half screens generally at 2nd flr windows.				
4151	DOORS:DOOR FRAME	Wood/simple at frame walls/deep brick	18	EA	TOTAL
	MM UNIT: BLRI	mold at basement walls	18	EA	GOOD
	HISTORIC RATING: 3		0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
4152	DOORS:DOOR	Wood/most orig doors:3, 5 & 7 panels/SW	20	EA	TOTAL
	MM UNIT: BLRI	basement:2 lower tongue & groove panels	20	EA	GOOD
	HISTORIC RATING: 126	with wire in upper half/rated 2	0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
	NOTES: Main door:dbl 7-panel doors with eliptical fanlight & sidelight each site- rated 1. Modern louvered doors at public restrooms- rated 6. Sun porch:2 doors each with single lower panel with 4 lites above- rated 2.				
4153	DOORS:DOOR TRIM	Wood/molded casing with heavy molded	215	LF	TOTAL
	MM UNIT: BLRI	cornice/generally matches ext window	215	LF	GOOD
	HISTORIC RATING: 1	trim & interior door & window trim	0	LF	FAIR
	REVISION DATE: 11/29/90		0	LF	POOR
	NOTES: Main door:engaged Ionic cols to each side of door; flat pilasters frame sidelights; ornate entablature; simple trim at fanlight. No trim at basement doors.				
4154	DOORS:DOOR GLAZING	Fanlight & sidelights of main door:	3	EA	TOTAL
	MM UNIT: BLRI	elaborate leaded glass patterns- rated 1	3	EA	GOOD
	HISTORIC RATING: 1/4		0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
	NOTES: Rear restroom door- single pane of glass in upper half.				
4155	DOORS:DOOR HARDWARE	Brass knobs & hinges/most doors with	90	EA	TOTAL
	MM UNIT: BLRI	dead bolts/hasp & padlock at 3 basement	90	EA	GOOD
	HISTORIC RATING: 3	& 1 storeroom door	0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
EXTERIOR ENVELOPE					
4157	DOORS:DOOR SILL	Wood/approximately 6-3/4" step up into	12	EA	TOTAL
	MM UNIT: BLRI	each 1st flr door & 2nd flr porch door/	12	EA	GOOD
	HISTORIC RATING: 3	(approx 1" at public restrooms)	0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
4158	DOORS:DOOR STORM/SCRN	Wood frame screens at all 1st & 2nd flr	10	EA	TOTAL
	MM UNIT: BLRI	doors (including sun porch) except to	10	EA	GOOD
	HISTORIC RATING: 3	storeroom & public restrooms	0	EA	FAIR
	REVISION DATE: 12/10/90		0	EA	POOR
	NOTES: Screens behind louvers of doors to public restrooms.				
4161	FINISHES:COATINGS	All wood elements, exposed foundation	26600	SF	TOTAL
	MM UNIT: BLRI	walls & piers, gutters & downspouts are	0	SF	GOOD
	HISTORIC RATING: 4	painted	0	SF	FAIR
	REVISION DATE: 12/10/90		26600	SF	POOR
4170	STAIRS/RAMPS:EXT STAIR/RAMP	7 sets/1 at main stair/1 at storeroom/1	7	EA	TOTAL
	MM UNIT: BLRI	at rear porch/2 at west porch/2 to base-	7	EA	GOOD
	HISTORIC RATING: 3	ment	0	EA	FAIR
	REVISION DATE: 11/08/90		0	EA	POOR
4173	STAIRS/RAMPS:STAIR/RAMP STRUCTURE	Wood stringers, risers & treads at porch	550	SF	TOTAL
	MM UNIT: BLRI	& storeroom/concrete to basement	532	SF	GOOD
	HISTORIC RATING: 3		0	SF	FAIR
	REVISION DATE: 12/10/90		18	SF	POOR
4190	EXTERIOR:EXTERIOR OTHER	Glass enclosed sun porch at west half of	480	SF	TOTAL
	MM UNIT: BLRI	front porch/glass held in wood framed	480	SF	GOOD
	HISTORIC RATING: 2	panels, 70 LF	0	SF	FAIR
	REVISION DATE: 12/10/90		0	SF	POOR
	NOTES: Also encloses small area at triple window of 2nd flr, center bay, South elevation, approximately 14 LF of wall enclosing 20 SF.				
INTERIOR ENVELOPE					
4211	FLOORS:FLOOR SURFACE	Wood tongue & groove-possibly maple,	9100	SF	TOTAL
	MM UNIT: BLRI	8500 SF/hexagonal ceramic tile:baths &	9090	SF	GOOD
	HISTORIC RATING: 2	butler's pantry, 500 SF	0	SF	FAIR
	REVISION DATE: 11/29/90		10	SF	POOR
	NOTES: New sheet vinyl in public restrooms, 100 SF.				

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
INTERIOR ENVELOPE					
4212	FLOORS:FLOOR DECKING	Probably diagonal wood tongue & groove/	9700	SF	TOTAL
	MM UNIT: BLRI	quantity does not include unknown	9700	SF	GOOD
	HISTORIC RATING: 3	material at public restrooms	0	SF	FAIR
	REVISION DATE: 11/29/90		0	SF	POOR
4213	FLOORS:FLOOR STRUCTURE	1st, 2nd & attic:wood joists, 2" x 10",	13500	SF	TOTAL
	MM UNIT: BLRI	9700 SF/basement:concrete slab, 3800 SF	13500	SF	GOOD
	HISTORIC RATING: 2		0	SF	FAIR
	REVISION DATE: 11/29/90		0	SF	POOR
4214	FLOORS:FLOOR INSULATION	None			
	MM UNIT: BLRI				
	HISTORIC RATING: 6				
	REVISION DATE: 11/08/90				
4221	WALLS:WALL SURFACE	Plaster:basement, 1st & 2nd flrs &	16100	SF	TOTAL
	MM UNIT: BLRI	chmimney flues in attic, 11700 SF	16000	SF	GOOD
	HISTORIC RATING: 2		50	SF	FAIR
	REVISION DATE: 12/10/90		50	SF	POOR
	NOTES: Attic:horizontal beaded tongue & groove boards, 3800 SF. Public restrooms:smooth plywood wainscot with beaded tongue & groove above, 600 SF.				
4222	WALLS:WALL STRUCTURE	Standard wood framing-size & spacing of	10500	SF	TOTAL
	MM UNIT: BLRI	members unknown	10500	SF	GOOD
	HISTORIC RATING: 2		0	SF	FAIR
	REVISION DATE: 11/29/90		0	SF	POOR
4223	WALLS:WALL TRIM	Narrow molded picture molding in major	1400	LF	TOTAL
	MM UNIT: BLRI	1st & 2nd flr spaces including bath-	1400	LF	GOOD
	HISTORIC RATING: 2	rooms, 900 LF	0	LF	FAIR
	REVISION DATE: 11/29/90		0	LF	POOR
	NOTES: 10 1/2" high wood base in bedrooms & closets of 2nd flr- no wainscot in these spaces, 500 LF.				
4224	WALLS:WALL ORNAMENT	Wood paneled wainscot in all rooms on	4100	SF	TOTAL
	MM UNIT: BLRI	1st flr except as noted below, 2300 SF	4100	SF	GOOD
	HISTORIC RATING: 1		0	SF	FAIR
	REVISION DATE: 12/10/90		0	SF	POOR
	NOTES: V-groove tongue & groove:rear stair hall & stairs, kitchen, storeroom, pantry, restroom under main stairs & bathroom, 1200 SF/ceramic tile with decorative different colored borders:2nd flr bathrooms, 600 SF.				

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
INTERIOR ENVELOPE					
4231	CEILINGS:CLG SURFACE	Plaster on wood lath, 9900 SF/attic:	13400	SF	TOTAL
	MM UNIT: BLRI	beaded tongue & groove, 3500 SF	13200	SF	GOOD
	HISTORIC RATING: 2		0	SF	FAIR
	REVISION DATE: 12/10/90		200	SF	POOR
4232	CEILINGS:CLG STRUCTURE	All ceilings supported by floor joists			
	MM UNIT: BLRI	or rafters above			
	HISTORIC RATING: 2				
	REVISION DATE: 11/29/90				
4233	CEILINGS:CLG TRIM	Deep plaster cornice in all spaces	1410	SF	TOTAL
	MM UNIT: BLRI	except kitchen wing 1st flr, bathrooms,	1400	SF	GOOD
	HISTORIC RATING: 1	closets, basement & attic	0	SF	FAIR
	REVISION DATE: 12/10/90		10	SF	POOR
4243	WINDOWS:WINDOW TRIM	Wood/molded casing with heavy molded	1700	LF	TOTAL
	MM UNIT: BLRI	cornice/matches interior door trim &	1700	LF	GOOD
	HISTORIC RATING: 136	exterior door & window trim/rated 1	0	LF	FAIR
	REVISION DATE: 11/29/90		0	LF	POOR
	NOTES: Molded casing, 1200 LF. Flat board trim in attic & basement; 470 LF in basement, rated 3; 30 LF in basement, rated 6.				
4245	WINDOWS:WINDOW HARDWARE	1st - attic:brass catches & lifts/many	229	EA	TOTAL
	MM UNIT: BLRI	catches are original, several are	229	EA	GOOD
	HISTORIC RATING: 3	replacements	0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
4251	DOORS:DOOR FRAME	Simple wood/approx 12" deep at 1st & 2nd	56	EA	TOTAL
	MM UNIT: BLRI	flrs	56	EA	GOOD
	HISTORIC RATING: 3		0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
4252	DOORS:DOOR	Wood paneled/5,6 or 7 panels per leaf	56	EA	TOTAL
	MM UNIT: BLRI	with 7 panels in major 1st flr spaces &	56	EA	GOOD
	HISTORIC RATING: 2	bedrooms	0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
	NOTES: 3 sets of double pocket doors & 4 sets of single pocket doors; 1 hollow core wood in basement. Dining room to hall door removed and stored in attic.				
4253	DOORS:DOOR TRIM	Wood/molded casing with heavy molded	1830	LF	TOTAL
	MM UNIT: BLRI	cornice, 1450 LF/matches window trim/	1830	LF	GOOD
	HISTORIC RATING: 1/3	rated 1	0	LF	FAIR
	REVISION DATE: 11/29/90		0	LF	POOR
	NOTES: Interior closet trim generally without cornice. Flat board trim in attic, approx 6" wide, 380 LF, rated 3.				

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
INTERIOR ENVELOPE					
4255	DOORS:DOOR HARDWARE	Brass hinges, knobs & mortise locks	280	EA	TOTAL
	MM UNIT: BLRI		280	EA	GOOD
	HISTORIC RATING: 3		0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
4261	FINISHES:COATINGS	Paint:walls, clgs, doors, windows, trim,	40400	SF	TOTAL
	MM UNIT: BLRI	balustrades, wainscot, stair risers,	14400	SF	GOOD
	HISTORIC RATING: 4	some of attic flr/except as noted below	26000	SF	FAIR
	REVISION DATE: 12/10/90		0	SF	POOR
	NOTES: Varnish/shellac:1st & 2nd fls; attic walls, clgs, doors & window trim; kitchen, storerm & pantry wainscot, window & door trim & doors; stair handrails & treads. Paint, 31400 SF; varnish/shellac, 9000 SF.				
4262	FINISHES:COVERINGS	Canvas:walls & ceilings of major rooms	15900	SF	TOTAL
	MM UNIT: BLRI	including bathrooms, 15200 SF/rated 2	15900	SF	GOOD
	HISTORIC RATING: 2/3		0	SF	FAIR
	REVISION DATE: 12/10/90		0	SF	POOR
	NOTES: Sheet linoleum over wood floors in storeroom & pantry, 300 SF; linoleum tile in kitchen, 400 SF; all rated 3.				
4270	STAIRS/RAMPS:INT STAIR/RAMP	Main stairs:serve 1-2 flrs/stairs to	4	EA	TOTAL
	MM UNIT: BLRI	basement in kitchen/rear stair hall:	4	EA	GOOD
	HISTORIC RATING: 3	serves 1-attic/stairs to roof in attic	0	EA	FAIR
	REVISION DATE: 11/08/90		0	EA	POOR
4273	STAIRS/RAMPS:STAIR/RAMP STRUCTURE	All stairs are wood	420	SF	TOTAL
	MM UNIT: BLRI		420	SF	GOOD
	HISTORIC RATING: 2		0	SF	FAIR
	REVISION DATE: 11/29/90		0	SF	POOR
4274	STAIRS/RAMPS:STAIR/RAMP RAILING	Turned balusters, molded handrail &	200	SF	TOTAL
	MM UNIT: BLRI	paneled newels at main & rear stair/	200	SF	GOOD
	HISTORIC RATING: 136	attic to roof:turned newel & balusters	0	SF	FAIR
	REVISION DATE: 11/29/90		0	SF	POOR
	NOTES: Square balusters, rail & newel around attic floor opening of stairs to 2nd flr. Galvanized pipe rail on one side of stair wall of rear stairs to 2nd flr. Turned balusters & rail rated 1; square rated 3; galv rated 6				
4281	FIREPLACES:MANTEL	Elaborate wood mantel pieces with	11	EA	TOTAL
	MM UNIT: BLRI	columns, pilasters, gesso molding, heavy	11	EA	GOOD
	HISTORIC RATING: 1	brackets & heavy molding	0	EA	FAIR
	REVISION DATE: 11/08/90		0	EA	POOR
	NOTES: Red brick facing with red mortar & red brick hearths. Located in all major 1st flr room, most bedrooms & both 1st & 2nd flr main stair halls.				

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
INTERIOR ENVELOPE					
4282	FIREPLACES:FIREBOX	Blond fire brick	11	EA	TOTAL
	MM UNIT: BLRI		11	EA	GOOD
	HISTORIC RATING: 3		0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
4290	INTERIOR:INTERIOR OTHER	Wood Ionic columns & pilasters divide	6	EA	TOTAL
	MM UNIT: BLRI	stair hall from front hall & at landing	6	EA	GOOD
	HISTORIC RATING: 1	of staircase/see work for #4221	0	EA	FAIR
	REVISION DATE: 12/10/90		0	EA	POOR
ROOF					
4311	SYSTEM:ROOF SURFACE	Porches & flat parts of main:roofing	87	SQ	TOTAL
	MM UNIT: BLRI	fabric, rated 6/steeply sloped parts	87	SQ	GOOD
	HISTORIC RATING: 2/6	including dormers:wood shingles, rated 2	0	SQ	FAIR
	REVISION DATE: 08/19/92		0	SQ	POOR
	NOTES: Wood shingles have been replaced within last few years. Roofing fabric system installed recently over lead-coated copper. Wood - 5000 SF; roofing fabric - 3700 SF.				
4312	SYSTEM:ROOF SHEATHING	Inaccessible, probably wood boards	8665	SF	TOTAL
	MM UNIT: BLRI		8665	SF	GOOD
	HISTORIC RATING: 3		0	SF	FAIR
	REVISION DATE: 11/29/90		0	SF	POOR
4313	SYSTEM:ROOF STRUCTURE	Standard wood framing, size & spacing of	9025	SF	TOTAL
	MM UNIT: BLRI	members unknown	9025	SF	GOOD
	HISTORIC RATING: 2		0	SF	FAIR
	REVISION DATE: 11/29/90		0	SF	POOR
4314	SYSTEM:ROOF INSULATION	Fiberglass blankets between rafters/now			
	MM UNIT: BLRI	covered with attic ceiling			
	HISTORIC RATING: 6				
	REVISION DATE: 11/08/90				
4315	SYSTEM:ROOF CORNICE	Classical Revival entablature carried by	835	LF	TOTAL
	MM UNIT: BLRI	columns & pilasters at porch roof line &	833	LF	GOOD
	HISTORIC RATING: 1	main roof line, 761 LF	0	LF	FAIR
	REVISION DATE: 12/10/90		2	LF	POOR
	NOTES: Forms a triangular pediment above the 2nd flr windows of the center bay, front (south) elevation. Much simpler wood cornice at widow's walk, 74 LF.				

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
ROOF					
4317	SYSTEM:ROOF ORNAMENT	Turned roof balustrade at "widow's"	537	LF	TOTAL
	MM UNIT: BLRI	walk, porch roofs, projecting stair hall	0	LF	GOOD
	HISTORIC RATING: 2	bay (rear elev) & rear attic roof	0	LF	FAIR
	REVISION DATE: 12/10/90		537	LF	POOR
4321	OPENINGS:ROOF HATCH	To "widow's" walk: wood curb, heavy wood	1	EA	TOTAL
	MM UNIT: BLRI	door covered with sheet metal	1	EA	GOOD
	HISTORIC RATING: 4		0	EA	FAIR
	REVISION DATE: 12/10/90		0	EA	POOR
4322	OPENINGS:ROOF VENTILATION	None			
	MM UNIT: BLRI				
	HISTORIC RATING: 0				
	REVISION DATE: 11/29/90				
4340	FLASHING:ROOF FLASHING	Painted metal	400	LF	TOTAL
	MM UNIT: BLRI		375	LF	GOOD
	HISTORIC RATING: 6		0	LF	FAIR
	REVISION DATE: 12/10/90		25	LF	POOR
4351	DRAINAGE:GUTTER/DOWNSPOUT	Painted galvanized downspouts-335 LF/	1060	LF	TOTAL
	MM UNIT: BLRI	boxed gutters integral with lead-coated	400	LF	GOOD
	HISTORIC RATING: 3	copper roofs- 400 LF	0	LF	FAIR
	REVISION DATE: 12/10/90		660	LF	POOR
	NOTES: Painted hung galvanized gutter forms cornice of entablature at main roof- 325 LF. See #4311 for work to boxed gutter in LCC roofs.				
4390	ROOF:ROOF OTHER	Classical Revival dormers:fluted	10	EA	TOTAL
	MM UNIT: BLRI	pilasters, entablature, triangular ped-	10	EA	GOOD
	HISTORIC RATING: 1	iment & dbl-hung round topped sash	0	EA	FAIR
	REVISION DATE: 12/10/90		0	EA	POOR
	NOTES: See also work for #4161.				
FOUNDATION					
4411	WALLS:FDN WALL SURFACE	Stucco applied to walls on back side of	1200	SF	TOTAL
	MM UNIT: BLRI	house:N half of E & W walls & all of	1200	SF	GOOD
	HISTORIC RATING: 3	rear walls/painted	0	SF	FAIR
	REVISION DATE: 11/29/90		0	SF	POOR

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
FOUNDATION					
4412	WALLS:FDN WALL STRUCTURE	House proper:brick/porches:brick & stone	1200	SF	TOTAL
	MM UNIT: BLRI	with small section of concrete block at	1200	SF	GOOD
	HISTORIC RATING: 2	public restrooms	0	SF	FAIR
	REVISION DATE: 11/29/90		0	SF	POOR
	NOTES: Portions of the porch foundation around front steps were rebuilt in Spring 1990.				
4413	WALLS:FDN VENTILATION	Openings between piers of front porch	13	EA	TOTAL
	MM UNIT: BLRI	covered with wood framed wire panels	13	EA	GOOD
	HISTORIC RATING: 4		0	EA	FAIR
	REVISION DATE: 11/08/90		0	EA	POOR
4416	WALLS:FDN INSULATION	None			
	MM UNIT: BLRI				
	HISTORIC RATING: 6				
	REVISION DATE: 11/08/90				
4421	PIERS:PIER/PILE SURFACE	Interior piers in basement covered with	23	EA	TOTAL
	MM UNIT: BLRI	plaster/square footage of plaster	23	EA	GOOD
	HISTORIC RATING: 4	included under #4221	0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
4422	PIERS:PIER/PILE STRUCTURE	Brick	23	EA	TOTAL
	MM UNIT: BLRI		23	EA	GOOD
	HISTORIC RATING: 3		0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
4430	CHIMNEYS:CHIMNEY	1 each at East & West ends; 1 at kitchen	5	EA	TOTAL
	MM UNIT: BLRI	wing; 2 at back of main block	5	EA	GOOD
	HISTORIC RATING: 3		0	EA	FAIR
	REVISION DATE: 11/08/90		0	EA	POOR
4432	CHIMNEYS:CHIMNEY STRUCTURE	Red brick-painted/top courses corbeled	85	LF	TOTAL
	MM UNIT: BLRI	out up to cap	85	LF	GOOD
	HISTORIC RATING: 2		0	LF	FAIR
	REVISION DATE: 11/29/90		0	LF	POOR
4434	CHIMNEYS:CHIMNEY CAP	Top 2 courses & top covered with stucco/	5	EA	TOTAL
	MM UNIT: BLRI	screens over flue openings/also painted	5	EA	GOOD
	HISTORIC RATING: 3		0	EA	FAIR
	REVISION DATE: 12/10/90		0	EA	POOR

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
FURNISHINGS					
4515	APPLIANCE:REFRIGERATOR	1 refrigerator in kitchen- property of	1	EA	TOTAL
	MM UNIT: BLRI	concessioner	1	EA	GOOD
	HISTORIC RATING: 6		0	EA	FAIR
	REVISION DATE: 11/08/90		0	EA	POOR
4520	FURNISHINGS:BUILT-IN FURN	Cupboards & drawers, some glass front			
	MM UNIT: BLRI	cabinets:kitchen & butler's pantry/open			
	HISTORIC RATING: 3	shelving:pantry & storeroom			
	REVISION DATE: 11/29/90				

NOTES: 3 cabinets with drawers below in Pink bathroom. Drawers in West most closet in 2nd floor hall. Built-in open shelves in music room. 2 corner cabinets in dining room.

UTILITY SYSTEMS					
4611	PLUMBING:SUPPLY PIPE NET	Not inspected			
	MM UNIT:				
	HISTORIC RATING:				
4612	PLUMBING:WASTE PIPE NET	Not inspected			
	MM UNIT:				
	HISTORIC RATING:				
4613	PLUMBING:PLMB FIXTURES	All bathrooms & butler's pantry retain	20	EA	TOTAL
	MM UNIT: BLRI	original fixtures/many faucets replaced	20	EA	GOOD
	HISTORIC RATING: 2	but found in attic	0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR

NOTES: Marble sinks- 9; ball & claw foor tubs- 5; toilets- 6. Bathroom under stairs accessible only from rear porch was inaccessible at time of inspection.

4615	PLUMBING:SEPTIC SYSTEM	Not inspected			
	MM UNIT:				
	HISTORIC RATING:				
4618	PLUMBING:WATER TREAT SYS	Not inspected			
	MM UNIT:				
	HISTORIC RATING:				

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
UTILITY SYSTEMS					
4631	ELECTRICAL:INCOMING SERVICE	Not inspected			
	MM UNIT:				
	HISTORIC RATING:				
4636	ELECTRICAL:LIGHT FIXTURES	Many orig Carbide gas ceiling fixtures &	55	EA	TOTAL
	MM UNIT: BLRI	wall sconces remain throughout house	55	EA	GOOD
	HISTORIC RATING: 2	(gas plant torn down several years ago)	0	EA	FAIR
	REVISION DATE: 11/29/90		0	EA	POOR
	NOTES: Ceiling fixtures- 5; wall sconces- 50. Ceiling fixture missing in Billiard Room but piping still in place. Some fixtures stored in attic.				
4652	HVAC:HVAC EQUIPMENT	Not inspected			
	MM UNIT:				
	HISTORIC RATING:				
FIRE/LIFE/HEALTH SAFETY					
4711	FIRE EGRESS:MEANS OF EGRESS	Two exits from 2nd flr but not remotely	5	EA	TOTAL
	MM UNIT: BLRI	located/2nd flr & attic unoccupied	5	EA	GOOD
	HISTORIC RATING: 6		0	EA	FAIR
	REVISION DATE: 11/08/90		0	EA	POOR
	NOTES: Three exits from main floor.				
4712	FIRE EGRESS:STAIR/RAMP/RAILING	Rear, 2 sets:12" treads, 6" risers, no	3	EA	TOTAL
	MM UNIT: BLRI	rail/front, curved:14" treads, 6-1/2"	3	EA	GOOD
	HISTORIC RATING: 4	risers, rail 31" high	0	EA	FAIR
	REVISION DATE: 11/08/90		0	EA	POOR
4713	FIRE EGRESS:DOOR/HARDWARE	All doors minimum 36" wide/standard	3	EA	TOTAL
	MM UNIT: BLRI	residential hardware	3	EA	GOOD
	HISTORIC RATING: 126		0	EA	FAIR
	REVISION DATE: 11/08/90		0	EA	POOR
4714	FIRE EGRESS:EMERGENCY LIGHTING	Located in rear stair hall & main hall-	2	EA	TOTAL
	MM UNIT: BLRI	both on 2nd floor/building only occupied	2	EA	GOOD
	HISTORIC RATING: 2	during daylight hours	0	EA	FAIR
	REVISION DATE: 11/08/90		0	EA	POOR

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
FIRE/LIFE/HEALTH SAFETY					
4733	FIRE DETECTION:FD DETECTOR MM UNIT: BLRI HISTORIC RATING: 6 REVISION DATE: 11/08/90	See feature #4743			
4743	SMOKE CONTROL:DEVICE/EQPT MM UNIT: BLRI HISTORIC RATING: 6 REVISION DATE: 12/10/90	Ceiling mounted smoke detectors in most rooms, all hallways, throughout attic/ alarm bell in entry hall	29 0 0 29	EA EA EA EA	TOTAL GOOD FAIR POOR
4750	FIRE/LIFE SAFETY:FIRE SUPP SYS MM UNIT: BLRI HISTORIC RATING: 6 REVISION DATE: 11/08/90	Fire hose in rear stair hall at 1st & 2nd flr levels	1 1 0 0	EA EA EA EA	TOTAL GOOD FAIR POOR
4757	FIRE SUPPRESSION:EXTINGUISHERS MM UNIT: BLRI HISTORIC RATING: 6 REVISION DATE: 11/08/90	Class ABC & BC, January 1990 inspection date	6 6 0 0	EA EA EA EA	TOTAL GOOD FAIR POOR
4761	SEISMIC:STRUCTURAL MM UNIT: BLRI HISTORIC RATING: 6 REVISION DATE: 11/08/90	Zone 2- Moderate damage/2-1/2 story wood frame structure			
4772	HANDICAPPED ACCESS:ENTRY/ROUTE MM UNIT: BLRI HISTORIC RATING: 6 REVISION DATE: 12/10/90	Steps at all entry doors			
4781	HEALTH SAFETY:D WTR TREATMENT MM UNIT: BLRI HISTORIC RATING: 6 REVISION DATE: 11/08/90	NPS			
4782	HEALTH SAFETY:W WTR TREATMENT MM UNIT: BLRI HISTORIC RATING: 6 REVISION DATE: 11/08/90	NPS			
4783	HEALTH SAFETY:FOOD SERVICE MM UNIT: BLRI HISTORIC RATING: 6 REVISION DATE: 11/08/90	No public food service in building			

MM CODE	FEATURE	DESCRIPTION	INVENTORY QUANTITY	UNIT	CONDITION
FIRE/LIFE/HEALTH SAFETY					
4784	HEALTH SAFETY:REFUSE COLL/STOR MM UNIT: BLRI HISTORIC RATING: 6 REVISION DATE: 11/08/90	NPS			
4785	HEALTH SAFETY:PEST INFEST MM UNIT: BLRI HISTORIC RATING: 6 REVISION DATE: 12/10/90	Mice & rats in basement/possible birds or squirrels in west wall of attic bathroom	1 0 0 1	EA EA EA EA	TOTAL GOOD FAIR POOR
4786	HEALTH SAFETY:HAZARDOUS MATL MM UNIT: BLRI HISTORIC RATING: 0 REVISION DATE: 11/29/90	None apparent			
GENERAL BUILDING/SITE					
4911	SITE FEATURES:DRIVE/PARKING MM UNIT: BLRI HISTORIC RATING: 4	Asphalt & gravel road in front/public parking on hill above house to rear of site			
4912	SITE FEATURES:GRADE/DRAINAGE MM UNIT: BLRI HISTORIC RATING: 3	NPS conducting study of drainage from parking & hillside to rear of building			
4913	SITE FEATURES:VEGETATION MM UNIT: BLRI HISTORIC RATING: 6	Miscellaneous trees/grassy areas/no apparent problems			
4914	SITE FEATURES:WALKWAY/PATIO MM UNIT: BLRI HISTORIC RATING: 4	Asphalt & stone walk from parking to east entry/walk in front to main stairs & to rear porches			
4920	SITE:SITE DESIGN MM UNIT: BLRI HISTORIC RATING: 3	Split rail & wood fence which matches porch roof balustrade lines road in front of house			

MM CODE / UNIT	ELEMENT	DEFICIENCY CODE	RECOMMENDATION	QUANTITY	UNIT	MAT / LABOR / MARK-UP
EXTERIOR ENVELOPE						
4116	WALLS WALL TRIM PRIORITY: SERIOUS CONDITION: POOR SOURCE: Park RATING: 2	Deterioration at bases of several corner pilasters:rot & peeling paint/approx 7 bases affected- generally only base & astragal below shaft damaged	Replace bases as required to match original design/use either treated wood or dip in WRP/back prime/caulk joints before painting (see #4161)	10	LF	$ 100 150 75 ======= $ 325
4117	WALLS WALL ORNAMENT PRIORITY: CRITICAL CONDITION: POOR SOURCE: Park RATING: 2	Severe deterioration of column pedestals, bases, shafts & several capitals/lack of ventilation of interior of shaft & leaky gutters part of cause	Replace/repair pedistals & cols as required/match orig design/maintain as much orig material as possible/modify design to vent interior of pedestals & columns	33	EA	$ 3600 3700 2190 ======= $ 9490
4131	FLOORS FLOOR SURFACE PRIORITY: MINOR CONDITION: FAIR SOURCE: Park RATING: 3	Apron boards at both east & west ends of front porch are warping & deteriorating at end grain	Replace apron boards to match existing	40	SF	$ 100 30 39 ======= $ 169
4131	FLOORS FLOOR SURFACE PRIORITY: SERIOUS CONDITION: POOR SOURCE: Park RATING: 3	Deterioration of porch floor boards especially under pedestals/warping, checking, peeling paint	Remove floor boards to about 3' back/install new to match/ dip ends in WRP & provide 1/2 round end cap at exposed end-caulk joint before painting	1000	SF	$ 30000 2600 9780 ======= $ 42380
4134	FLOORS RAILING PRIORITY: SERIOUS CONDITION: POOR SOURCE: Park RATING: 2	Severe deterioration of handrail & many balusters of remaining porch handrail	Replace top piece of handrail-new design should incorporate sloped "wash" of orig design/ replace balusters as reqd-approx 50% or 56 balusters	80	LF	$ 16000 10800 8040 ======= $ 34840
4148	WINDOWS WDO STORM/SCRN PRIORITY: MINOR CONDITION: POOR SOURCE: Means RATING: 3	Most screens have deteriorated to point of falling apart/many windows without any screens at all	Provide new screens-full size at 1st flr, half size at 2nd flr/paint same color as sash/ apply WRP before painting	38	EA	$ 3800 3600 2220 ======= $ 9620
4161	FINISHES COATINGS PRIORITY: SERIOUS CONDITION: POOR SOURCE: Insp/Means RATING: 4	Varying degrees of paint deterioration:peeling to bare wood, cracking, mildew/ especially bad on wood elements, gutters & downspouts	Remove paint as required/wash surfaces to remove mildew/ apply WRP to wood elements/ prime & 2 top coats of appropriate paint system	26600	SF	$ 16500 73300 26940 ======= $ 116740

MM CODE / ELEMENT / UNIT	DEFICIENCY CODE	RECOMMENDATION	QUANTITY	UNIT	MAT / LABOR / MARK-UP
EXTERIOR ENVELOPE					
4173 STAIRS/RAMPS STAIR/RAMP STRUCTURE PRIORITY: CRITICAL CONDITION: POOR SOURCE: Park RATING: 3	Bottom tread of north stair to west porch damaged	Replace tread as required/use treated wood	18	SF	$ 100 400 150 ======= $ 650
INTERIOR ENVELOPE					
4211 FLOORS FLOOR SURFACE PRIORITY: SERIOUS CONDITION: POOR SOURCE: Park RATING: 2	Severe deterioration of wood floor under sink in employee restroom under main stair	Replace existing damaged floor with new tongue & groove to match original in appearance & color	10	SF	$ 150 150 90 ======= $ 390
4221 WALLS WALL SURFACE PRIORITY: MINOR CONDITION: FAIR SOURCE: Means RATING: 2	Numerous cracks throughout due to thermal expansion & uneven settling	Carefully peel back canvas/ clean out debris from cracks/ patch to match surrounding areas & reattach or replace canvas as required (see #4261 for painting)	50	SF	$ 150 550 210 ======= $ 910
4221 WALLS WALL SURFACE PRIORITY: SERIOUS CONDITION: POOR SOURCE: Other RATING: 2	Several of the cracks should be monitored for 6-12 months to determine if there is continued movement & determine likely causes	Monitor:S window-dining rm;S wall-blue bath;W wall-yellow bath, billiard rm & SE bedrm;E wall-music rm;back of E col capital-front hall;Ctr S wall-2nd flr hall	50	SF	$ 200 0 60 ======= $ 260
4231 CEILINGS CLG SURFACE PRIORITY: SERIOUS CONDITION: POOR SOURCE: Park RATING: 2	Damaged plaster in SSW bedrm, 2nd flr hall, music room, kitchen/minor cracking throughout	Carefully pull back canvas/ remove damaged plaster/patch to match surrounding area/ reattach or replaster canvas as required	200	SF	$ 1500 3300 1440 ======= $ 6240
4233 CEILINGS CLG TRIM PRIORITY: MINOR CONDITION: POOR SOURCE: Means RATING: 1	Small section of cornice above chimney breast missing in 1st flr office	Run new plaster cornice to match existing cornice/paint to match surrounding surfaces	10	SF	$ 50 200 75 ======= $ 325

MM CODE	ELEMENT UNIT	DEFICIENCY CODE	RECOMMENDATION	QUANTITY	UNIT	MAT LABOR MARK-UP
INTERIOR ENVELOPE						
4261	FINISHES COATINGS PRIORITY: MINOR CONDITION: FAIR SOURCE: Means RATING: 4	Paint crazing on canvas wall & clg surfaces/peeling paint on sash, some window trim & wainscot/patched areas will also need repainting	Carefully scrape all loose paint/clean & prime as reqd/ apply 1 top coat/conduct paint research first & work towards painting interior with orig color scheme	26000	SF	$ 3900 17400 6390 ======= $ 27690
ROOF						
4315	SYSTEM ROOF CORNICE PRIORITY: CRITICAL CONDITION: POOR SOURCE: Park RATING: 1	Small section of cornice at SW corner of widow's walk missing allowing water into bldg - probable cause of failed plaster in SSW bedroom	Replace cornice to match existing design	2	LF	$ 50 200 75 ======= $ 325
4317	SYSTEM ROOF ORNAMENT PRIORITY: SERIOUS CONDITION: POOR SOURCE: Park RATING: 2	Severe deterioration of all roof balustrades - extensive rot & some missing balusters	Provide new balustrade which matches existing in design/ painting covered under #4161	537	LF	$ 29900 16000 13770 ======= $ 59670
4340	FLASHING ROOF FLASHING PRIORITY: CRITICAL CONDITION: POOR SOURCE: Park RATING: 6	Failure of flashing or cornice on back side of widow's walk at roof allowing water to run down N attic wall & onto clg of 2nd floor hall	May also have been failure of roof or floor of widow's walk/ more study required	25	LF	$ 150 350 150 ======= $ 650
4351	DRAINAGE GUTTER/DOWNSPOUT PRIORITY: CRITICAL CONDITION: POOR SOURCE: Park RATING: 3	Deterioration of hung gutters & downspouts: rust, holes, bent out of shape	Provide new copper gutters & downspouts/match profile of original gutters	660	LF	$ 6300 1700 2400 ======= $ 10400
FIRE/LIFE/HEALTH SAFETY						
4743	SMOKE CONTROL DEVICE/EQPT PRIORITY: CRITICAL CONDITION: POOR SOURCE: Park RATING: 6	According to concessioner existing smoke detectors do not work	Install both fire & intrusion detection with annunciation both at site & ranger office (awaiting costs from other source)	1	EA	$ 1000 1500 750 ======= $ 3250

MM CODE	ELEMENT UNIT	DEFICIENCY CODE	RECOMMENDATION	QUANTITY	UNIT	MAT LABOR MARK-UP
FIRE/LIFE/HEALTH SAFETY						
4785	HEALTH SAFETY PEST INFEST PRIORITY: SERIOUS CONDITION: POOR SOURCE: Park RATING: 6	Open door in southeast corner of basement allows rats etc. to enter building/there may be birds or squarrels in wall from hole in roof	Rehang basement door to shut securely/more study needed of point where attic balustrade meets roof to see if indeed there are critters living in wall	1	EA	$ 30 50 24 ======= $ 104

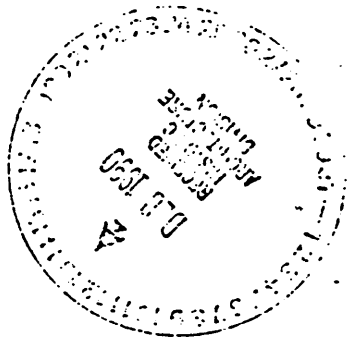
MOSES H. CONE MANOR HOUSE
HS359
BLUE RIDGE PARKWAY

DIVISION	CRITICAL FAIR	CRITICAL POOR	SERIOUS FAIR	SERIOUS POOR	MINOR FAIR	MINOR POOR	SUBTOTAL
EXTERIOR ENVELOPE	$ 0	$ 10140	$ 0	$ 194285	$ 169	$ 9620	$ 214214
INTERIOR ENVELOPE	$ 0	$ 0	$ 0	$ 6890	$ 28600	$ 325	$ 35815
ROOF	$ 0	$ 11375	$ 0	$ 59670	$ 0	$ 0	$ 71045
FOUNDATION	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
FURNISHINGS	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
UTILITY SYSTEMS	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Plumbing	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Electrical	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
HVAC	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Conveyance	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
FIRE/LIFE/HEALTH SAFETY	$ 0	$ 3250	$ 0	$ 104	$ 0	$ 0	$ 3354
Fire/Life Safety	$ 0	$ 3250	$ 0	$ 0	$ 0	$ 0	$ 3250
Handicapped Accessiblity	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Public Health	$ 0	$ 0	$ 0	$ 104	$ 0	$ 0	$ 104
GENERAL BUILDING/SITE	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
SUBTOTAL	$ 0	$ 24765	$ 0	$ 260949	$ 28769	$ 9945	
TOTALS	$ 24765		$ 260949		$ 38714		$ 324428

CONE - FLAT TOP

Georgia Institute of Technology
Atlanta, Georgia 30332-0155

(404) 894-3390



December 10, 1990

David Ates, Historical Architect
Southeast Regional Office
National Park Service
75 Spring Street, NW
Atlanta, Georgia 30303

Dear David,

There are a number of problems at the Moses H. Cone Manor House which cannot be adequately addressed in the HSAR and which I would like to discuss further here. These include the extensive rot of wooden porch elements, the massive paint failure especially on wood elements, site drainage around the building, particularly around the back, and sources of cracking in the walls and ceilings on the inside of the building.

- The rot of the porch columns can be traced to two sources. Before the porch roof was repaired water was probably seeping through the faulty boxed gutters and becoming trapped inside the shafts of the columns. In addition, water vapor which naturally occurs in the air would pass through the columns and also become trapped. It would condense and run down the inside of the columns. Because there is no ventilation of the interior of either the pedestal bases or the column shafts, the water could only saturate the wood fibers causing the extensive and potentially catastrophic rot that now exists. I recommend that the design of the pedestals and columns be modified to provide ventilation of the interior of these elements. This would include the installation of small round vents on the back two faces of the base of each pedestal and one or two similar vents at the top of each column. Of course a hole would also need to be made in the center of the pedestal cap so that air could get up through the column. Other design modifications could also be made just as long as the interior is vented. In talking with wood column manufacturers (Blue Ox Mills, whose literature I am including), it was suggested that solid redwood columns might be a better solution considering the past problems.

- The cause of the rot of the roof balustrades is not quite as easy to determine. If these are the original balusters than age coupled with water is probably the cause. Wood that has swelled, dried, twisted, warped, etc. is also almost certainly putting added stresses on the paint film causing its failure exacerbating the problems. Though the work recommendation in the HSAR calls for the complete replacement of this balustrade (assuming it was also replaced in earlier restoration work and thus is not original fabric), its repair using epoxies and wood dutchmen, with limited baluster replacement is certainly a viable option and now, thinking back on it, probably the better recommendation because it preserves existing material. If you agree, I will change this on the final report. (I counted approximately 13 balusters which needed to be replaced and 43 which were severely deteriorated on the west and south porch alone. Similar deterioration can be seen on the balustrade over the attic bathroom. The

Someone else has thought of using Redwood.

profile of the individual balusters at the widow's walk is different from any of the others. Could it be that these are the only remaining original balusters and thus must be preserved?)

- Much of the above deterioration is made worse by the fact that much of the paint film has severely deteriorated. I have talked with Bill Feist at the USDA Forest Service about his findings at the building and he has sent me a copy of his letter to Jim Bently in addition to other interesting information on paint and wood. Especially interesting was their work using acrylic latex primers rather than oil-based primers on "fresh" wood (wood with no paint on it and that has been freshly sanded). I would certainly give this system a try. I also wholeheartedly agree with using two acrylic latex top coats. The work recommendation in the HSAR does not, however, call for removing all of the existing paint so that whole scale use of an acrylic latex primer is not recommended. Complete removal of all paint layers removes all of the physical evidence of the paint history of the building and is frowned upon by many in the preservation community. Complete removal is also an expensive undertaking unnecessary on those surfaces where the paint is still sound. The cost estimate presented in this report reflects complete removal on the following surfaces using a chemical stripper such as Diedrich Chemicals 404 RIP-STRIP: south elevation, second floor; sun porch panels; very west end of the second floor of the west elevation; entire cornice/soffit; the chimneys; all sash (inside and out, but not the exterior trim); porch floor; dormers; porch elements and roof balustrades which are preserved; and the entire east elevation except the public restroom addition. The remaining surfaces will need to be scraped to remove localized loose paint, washed to remove the extensive mildew, sanded, spot primed using an oil-based primer, and painted. It is also recommended that a complete paint analysis be conducted to determine the original colors and those colors used when repainting the building.

- The site drainage behind the house is probably one of the most important problems to be addressed since many people believe the lack of proper drainage is contributing to the continued movement of the building. There has been discussion of installing a drain behind the retaining wall to divert the water before it gets to the building. To this might be added a foundation drainage system at the base of the house on the east and north elevations. In addition, it is important to make sure that the underground storm drain system into which the downspouts empty is running clear. If it is not a new system will have to be developed to carry rain water away from the back and east sides of the building.

- Making sure the gutters and downspouts are working properly is also important. The downspout to the right of the rear stairs to the west porch has come loose from the gutter. Water is dumping onto the steps and ground causing the bottom tread to rot and allowing water underneath the porch foundation. The west brick foundation wall of the house is quite damp with large areas of deteriorating brick and mortar. It is also probably contributing to the water in the northwest corner of the basement.

Inside, there are a number of areas which need further study probably by a structural engineer. Cracks have developed on many of the walls. Those around the chimney breasts can generally be attributed to normal thermal expansion and a change in building materials (plaster on wood lath and framing vs. plaster on brick) and are usually not a problem. Some damage in these areas can also be traced to deteriorated flashing which appears to have been repaired or replaced when the new wood shingle roof was installed. There are several areas, however, which are still a concern.

- The wall between the green and yellow bathrooms has dropped from its original position. A beam or joist(s) may frame into the chimney at this point. Its end may have rotted due to water in the brick (introduced by the faulty flashing) causing the beam end to drop somewhat. This may have happened at both ends of this wall since the tile has clearly dropped about 1/4"

in both corners (as seen in the yellow bathroom). There are also several diagonal cracks, some of which cross each other, through both the plaster and tile on both sides of this wall. There is, however, no damage in the office below other than the missing section of cornice, probably caused by leaking flashing rather than the beam dropping. Still, the ceiling in the office should be closely watched for cracks which might indicate unacceptable bending of the beam or joists above.

- Vertical cracks above and in the center of the west exterior openings in the kitchen and the south window of the dining room might be an indication of a weakened lintel and should be monitored. Several of these cracks continue through the cornice and ceiling.

- The south wall of the blue bathroom has dropped about 1/2" in the southeast corner of the room. There are also several diagonal cracks which point up to the west end of this wall. On the other side of this wall, in the pink bathroom, a series of diagonal cracks at both ends of the wall point up and to the center of the wall. These may have been caused by one end of the wall settling more than the other end. There is, however, no dramatic break and drop in the tile in the northeast corner to correspond to the drop in the southeast corner of the blue bathroom. There is also no damage in the pantry below to correspond to this apparent drop perhaps suggesting that everything has settled together.

- Two final areas where cracked plaster needs to be monitored are the south wall to each side of the center bedroom on the second floor (hall side of the wall), and the section of the west wall to the left (south) of the fireplace in the southeast bedroom. Diagonal cracks point up and to the center of the respective sections of wall. In both cases these cracks correspond to a wide opening in both the wall below on the first floor and in the foundation wall. In addition, a crack has appeared on the north face of the capital of the east column in the main stair hall on the first floor. Settlement of the foundation piers and/or bending of the lintels may be the cause of the cracking.

There are numerous areas where water has damaged the interior finishes. Many of them can be attributed to faulty flashing usually around a chimney or in a valley of the roof, but also under several of the dormer windows, and at at least one plumbing vent to the left of the south most dormer on the east elevation. These areas need to be monitored to insure that recent roof repairs have indeed corrected the flashing problems.

- The failure of the ceiling in the south-southwest bedroom can be attributed to an apparent hole in the cornice at the southwest corner of the widow's walk. Both the attic wall and ceiling above this spot in the bedroom show clear evidence of water infiltration.

- The damage to the ceiling in the main hall of the second floor can also be traced up to the attic and the roof above. A hallway runs down the center of the attic with a series of rooms opening off on both the north and south sides. The floor in this section of hall is bowed up in the center, the bow corresponding to the south wall of the second floor hall below, the wall opposite the fireplace. There is evidence of water in the north wall of the attic both underneath the stairs to the roof and around the doors to the attic bathroom and small bedroom/storage room. The wall between the bathroom and this bedroom/storage room has also dropped leaving a 1/4" gap between the floor and the baseboard in the bathroom. A more thorough study of the north roof where it meets the cornice of the widow's walk, and the north side of the roof hatch is needed to determine the source of the water.

One final area that needs further investigation is the west wall of the attic bathroom at about the point where the roof balustrade meets the roof of this space. When I was inspecting this room it sounded

like there were either birds or squirrels in the wall and/or ceiling. By the time I would get outside, however, I never could see anything to indicate whether whatever I heard was inside the wall or simply on the roof outside. Since this is also an area with extensive water infiltration it should be checked as soon as possible.

Four pages later, I think this pretty much covers the problems encountered at the building but which I could not elaborate on in the HSAR. If you have any questions please do not hesitate to ask. I apologize for the tardiness of this report.

Sincerely,

Bethanie C. Grashof, R.A.
Chief, Technical Assistance

Enclosure

ATES12.10

APPENDIX F

PAINT ANALYSIS - MOSES H. CONE MANOR HOUSE
1995

Prepared by:
Sara B. Chase
Preservation Consultant

Paint Analysis
Moses Cone Manor House
Blowing Rock, NC

The purpose of this study is to present the history of paint and finishes of the Moses Cone Manor House. Munsell color designations are assigned to the original finishes. Photographs of most of the areas sampled are attached at the end of the report.

Summary

The most interesting fact to emerge from the 157 paint samples mounted and studied is this: Moses and Bertha Cone originally painted their house with a recognized colonial revival palette of colors. They were billed in 1899 for 1000 pounds of French ochre, a bright ochre yellow, and indeed the original exterior clapboard color was bright ochre yellow. They were billed in 1900 for other pigments--Venetian Red, Richmond Brown, French Zinc Green, Chrome Green, Chrome Yellow, Venetian Green, and for vast amounts of arsenate of lead, linseed oil, and turpentine. The paints they used were all hand made. Not until 1915 is there a bill for a commercial paint, from Devoe, and even then it may well be for white lead and oil paste. Finally, in 1916, there is a bill for a small amount of factory made paint from Samuel Cabot of Boston.

The bills indicate that there was very little painting occurring between 1901 and 1911. (Moses Cone died in 1908.) After that time, however, there are bills for some amount of painting, and of paint materials, at least every other year. None of these bills is more than a few hundred dollars, until 1947 when there are three bills in close sequence for painting, totalling close to $1000. That paint was handmade at the Cone Estate for a long time is shown in bills for arsenate of lead which continue up through 1933.

The information presented in this report tells briefly which elements in each room and space studied are interesting and what paints were on them. The original paint is color matched, as is the second paint. The original color is one Bertha and Moses lived with; the second color is the first chosen solely by Bertha. It is difficult to pinpoint which later colors she chose at which dates, as the bills indicate a little painting going on here or there over four decades.

After a gap of 26 years, records of work on the house begin again with the National Park Service files. However, like the painting done from 1911 through 1947, it appears that some part of the house, inside or out, was being painted nearly every year. The records do not specify which parts. On the interior, however, it seems clear that the most recent three layers on the wall canvas date from the NPS tenure, while the original and second paint layer on the canvas can be attributed to Bertha. Exterior paints were especially challenging as a number of the trim elements, and clapboards, have either been stripped repeatedly or replaced. Finding original exterior material with all paint layers intact was virtually impossible.

Sara B. Chase
Preservation Consultant

Methodology

Documentary Materials
Available documentary materials on the construction and later work on the House were studied before visiting the site, and throughout the sampling and microscopic analysis of the paints.

Because dated bills exist for specific pigments, the presence of those pigments in certain paint layers (and no others) was assumed to indicate the probable dates of those paint layers. In addition, more recent paints could be dated from the existing paint color chips in National Park Service records. Three Glidden colors, a white, a gray, and a green, are not only called out in an 1985 completion report for exterior painting, but are also included in the form of paint company chips. [It is always preferable to include labeled and dated draw-down cards, as the small paper chips often do not have quite the same color or gloss as the paint itself.]

The first finish paint on each architectural feature, although the documents suggest that painting, decorating, and finishing were going on for several years after 1899, is considered the original or "First Period" paint.
The "Second Period" paints are the second finish layers, assumed to have been applied shortly after Moses Cone's death in 1908. Except for 3 kegs of lead billed in 1907, the bills for painting ingredients do not resume until 1911 and later. From that point on, the records indicate that painting was happening frequently, but in small portions of the house.

In 1924, the boarding of paper hangers is mentioned, but no bills for wallpaper are part of this collection of documents. Reasoning deductively from the bills, where the first mention of electricity in the House is also in 1924, and 25 pounds of finishing nails are billed, one might conclude that electrical conduit necessitated carpentry and millwork, and therefore, painting of the trim at least. It is tempting to speculate that the paper hangers installed the wall canvas (or "linen") at this time. The wall canvas exists on the walls above wainscot in all of the first floor rooms except the kitchen area (Rooms 114 - 117), the halls, stairways, all of the second floor rooms including bathrooms but excepting closets and Room 214, a linen or utility room.
The first finish paint layer on all of that canvas is identical throughout the house, and has distinctly visible particles of the following pigments:

-raw sienna
-burnt umber
-bright ochre (French?)

There is one significant pigment used in the early paints which must be mentioned. Arsenate of lead is billed to Bertha Cone repeatedly, and in conjunction with colored pigments, from 1913 to 1933. The common white lead pigment compounds are basic lead carbonate, lead sulfate, or lead acetate. Lead arsenate is not mentioned in any available paint reference works searched at this time. One may guess that the compound of lead and arsenic effectively prevented mildew while providing opacity. If this is as unusual as it seems to be, it may indicate that someone was quite creative at paint formulation. Copper arsenate was well-known as a mildew preventer, but caused paint to be green. Perhaps someone involved with the painting of the Cone Manor House

simply decided to try a formulation combining white lead with arsenic to produce a chemical compound which would improve their paint. Further investigation of lead arsenate as a paint pigment would be quite interesting.

Bills and similar documents exist for the years from 1899 to 1947, during the Cone's occupancy of the house. Documentation for work done at the house from 1973 to the present also exist. At this point, no documents have been found which suggest the paint activity between 1948 and 1972.

Finally, it must be noted that painting seems to have occurred in one part of the house or another almost continuously since 1911. Thus, the first finish layer no doubt dates from ca. 1900, and the second probably dates from 1911 or slightly later. Beyond that, one can only state that subsequent paint layers date from years after the nineteen-teens. The next clearly distinguishing evidence of paint dates is the absence of visible pigment particles (no more hand made paint) and the absence of white lead (probably post-1950 but maybe not until the 1960's or 1970's).

Physical Research
The first step in the paint research on site was examining all painted wood, plaster, metal, masonry in each room and on the exterior with a 10x jeweler's loupe, using a flashlight where daylight was insufficient. Once the common paint layers (number and color sequence) were established for each painted element, closer scrutiny with a 24x Zeiss binocular microscope was done in order to get the best samples. Several samples were taken for each element. Samples included substrate and all layers of paint. Each was placed in a labeled coin envelope.

In the laboratory, each sample was examined under a Nikon SMZ-10 stereo zoom microscope, at up to 200x. The best cross-sectional samples were mounted in paraffin for further study. Original oil paint layers were exposed wherever possible and exposed to 48 hours of UV light in order to reverse the darkening and yellowing of the linseed oil medium.

Layers were recorded from the cross-sectional samples, with the presence of dirt and/or pigment particles noted. The sodium sulfide test for lead was done.

Colors were matched on the exposed chips. The original (1899-1900) and the next colors only were matched to the Munsell system.

Report of Findings
This report presents the findings for each room or area. The room numbers correspond to the numbering system on the HABS drawings used by the architect (Surber & Barber) to document building conditions.

A narrative of the information in the paint layers is followed by the color listing for each painted architectural feature in the space being discussed.

Room 101,103-106, 109 Front Hall and Corridors

Design
This area is distinguished by pilasters and columns which divide the front portion of the Hall from the rear portion. The corridor linking the eastern and western ends of the house crosses the Hall at these columns, and a large floor-to-ceiling fireplace with window seats is at the rear of the Hall. The main stair goes up to the second floor.

Special Features
Of particular interest is the paint on the brick fireplace. A 1900 bill for a barrel of Venetian Red and a barrel of Metallic (probably Van Dyke) Brown along with the presence of these two pigments ground very fine very nicely confirms that the brickwork was originally painted. Since the brick is a formal pressed brick, the only technical reason for painting it might be the desire to make the mortar joints less prominent. The brick foundation facing was also painted originally. Only a single thin paint treatment is present.

Wood Trim
All of the wood trim in the Hall areas except for the window seats has 7-8 paint layers. The first four layers are consistent with the wood trim paint layers throughout the house. The last three layers are clearly recent paints (no white lead, chalkier, a neutral grey and then chalk white color). It may be that the wood was painted more times, but that later layers were scraped or sanded off before the last three paint jobs. Doors and windows are included with the wainscot and baseboard and any other trim.

Window Seats
The window seats had a thick deep red/brown coating. Venetian red pigment was suspended in a clear resin (possibly Damar varnish) and brush-applied. There is no stain deep in the grain of the wood, nor is the resin tinted in any other way. This is not a common way to give wood window seats the look of mahogony, but it probably was visually effective. After the red varnish, the window seats take on the paint layers of the rest of the wood trim.

Wall
The wall is covered with a fine even canvas at present. It has 4-5 paint layers on it, ranging from light cream through light tan to the present white. Beneath the canvas there are a few flecks of a water soluble paint of a reddish color. Since a few water soluble paint flecks were also found beneath the wall canvas in other rooms, we may suspect that the walls had flat water-based paint as their first treatment. That was scrubbed off before the glue to adhere the canvas was applied. It appears that the house had more colors in its first ten years than it did later.

Floor
There is no indication of any finish other than a clear finish, except for black paint at each doorway. That black paint, as well as the present carpet, represent floor treatments during the period of public use.

Ceiling
There must have been water-based paints on the ceilings throughout the house, which were properly scrubbed off before new paint was put on. Nowhere in the house was there more than a two-layer paint system on the ceilings.

Front Doors
The front doors have the same series of paint layers as the rest of the wood trim, with this difference: a thinned ochre primer was painted first on the wood. It has sunk into the grain, and very clearly was not intended as a first finish coat. It matches the bright French ochre color on the north clapboards.

MUNSELL COLOR MATCHES

Wood Trim:	ivory	5Y 9.25/1.5 NN	thick, clear thick glaze
	[3-4 layers the same]		
	cream	10YR 9.25/1.5 NN	thick, some dirt collected
	[2-3 layers]		
	lt mauve gray	5P 8/0.5 NN	thin, flat
	3-6 chalky modern whites		
Wall:	deep rose	7/5R 7/6	few flecks at edge of trim
	cream	2.5Y 9/4	thick, oily, pigments clear
	lt tan	10YR 8/4	
Window Seats:	red/brown	7.5R 4/8	see notes above
	same as Wood Trim, minus first ivory layer		
Interior of Front Doors:			
	thin ochre primer	10YR 7/10	
	same as Wood Trim		
Stairs:	Risers have full Wood Trim chromochronology		
Balusters:	reddish cherry stain in grain of wood		
	thin varnish, possibly with burnt umber pigment		
	same as Wood Trim		
Newell Post:	same as Wood Trim		

Room 102 Music Room

Design
This room is rather simple, distinguished only by its fine Colonial Revival (Federal period style) fireplace.

Special Features
No features warranted particular or different paint treatments.

Wood Trim
The wood trim in this room had the same sequence of paint layers and colors as the wood trim in the Front Hall.

Window Seats
The window seats, also, had the translucent red/brown finish that appeared on the Front Hall window seats, followed by the rest of the wood trim colors.

Wall
The wall is covered with a fine even canvas like the canvas on the rest of the main room walls. It has the same paint layers on it as the Front Hall wall canvas does. There are a few flecks of a water soluble paint adhering to the canvas at the edge of the trim. They are a light blue grey, and suggest that the walls were originally painted with a flat water-base paint of a typical Colonial Revival hue.

Floor
There is no indication that this floor ever had any finish other than a clear finish on the wood.

Ceiling
The ceiling has a recent chalky white paint.

MUNSELL COLOR MATCHES

Wood Trim:	ivory [3-4 layers]	5Y 9.25/1.5 NN	
	cream [2-3 layers]	10 YR 9.25/1.5 NN	
	lt mauve gray	5 P 8/0.5 NN	
	3-6 chalky modern whites		
Wall:	lt blue-gray	10 B 7/2.0 NN	(few flecks)
	cream	2.5 Y 9/4	thick, oily, pigments clear
	lt tan	10 YR 8/4	
Window Seats:	red/brown	7.5R 4/8	see notes above

Room 105 Billiard Room

Design
This room is distinguished by its shelving over the fireplace and other racks for holding pool cues and other accessories of the game. The room has double windows on three walls--north, south, and west--thus providing it with extra light.

Special Features
There are no special features, other than those for pool playing.

Wood Trim
The wood trim in this room has the same paint layers and color sequences (chromochronology) as does the wood trim in the Front Hall (described above).

Window Seats
The window seats in this room have the same red/brown translucent finish as the Front Hall window seats as their original treatment. On top of that is the same thinned French ochre paint which was used as a primer on the inside of the main front doors. Was this perhaps a simple matter of thrift, using up some already mixed paint as a primer? It does not seem thick enough to have been intended as a second finish coat, but then if this room was always a Billiard Room, it had a different use and may have originally looked different from the rest of the house.

Wall
The wall canvas in this room has the same chromochronology as the Front Hall wall canvas. No flecks of a previous water-based paint were found on these samples. More investigation might turn up an earlier wall treatment.

Floor
The floor was originally a clear finished maple.

Ceiling
The ceiling has only one or two whites on it at present.

MUNSELL COLOR MATCHES

Room 107 Office

Design
This room is on the north side of the house, and is much smaller than the primary first floor rooms. It does have a fireplace, but with a somewhat more modest mantelpiece.

Special Features
This room has a small cupboard in its southeast corner which paint research shows to have been added. The cupboard's first finish paint layer is the same as the fourth or fifth paint on the rest of the wood trim. It is the cream
The picture rail, too, has the fourth or fifth wood trim color as its original paint, and thus was added when the cupboard was installed.

Wood Trim
The wood trim in the Office has the same chromochronology as the trim in the Front Hall.

Window Seats
The window seats in this room have the red/brown translucent coating as their original color, but do not have the first ivory paint layer that appears on the rest of the wood trim. The red/brown look of the window seats evidently continued for a while in this room.

Wall
There are flecks of a light yellow paint on the wall, under the canvas and at trim edges. Again, like the other few and far between remaining flecks of water-based wall paint, these are sparse. Still, they provide evidence of a color and a paint which existed prior to the canvas.

MUNSELL COLOR MATCHES

Wood Trim:	ivory [3-4 layers]	5Y 9.25/1.5 NN	
	cream [2-3 layers]	10YR 9.25/1.5 NN	
	lt mauve gray	5P 8/0.5 NN	
	3-6 chalky modern whites		
Wall:	lt yellow	2.5Y 8/1	
	cream	2.5Y 9/4	thick, oily, pigments clear
	lt tan	10 YR 8/4	
	modern layers, incl. white		

Window Seats:	red/brown 7.5R 4/8
	same as wood trim, but without the first ivory paint layer
Floor:	clear finish
Ceiling:	present white

Room 119 Library

Design
This room is distinguished by its corner angled fireplace and its built-in bookshelves. Like the Music Room (102) it has large sliding pocket doors leading into the Front Hall.

Special Features
The book shelves originally had decorative wooden doors with glass panes in a Colonial Revival sash pattern. The doors have been removed, but were found in a storage area in the Attic. The paint layers on the doors indicate that they were removed before the light mauve gray paint; they have only the ivories and creams.

Wood Trim
The wood trim of the Library has the same paint layers as the wood trim in the Front Hall, and the other main first floor rooms.

Window Seats
The Library window seats, like those in the Billiard Room, have the French ochre yellow used as a primer over the red/brown translucent coating. This is followed by the ivories and creams, light mauve grey and later whites which are typical.

Wall
As in other areas on the first floor, there are flecks of a water-based paint at edges of the wall canvas. Here the color of the flecks is a light terra cotta.

Floor
The floor appears to have been originally clear finished maple.

Ceiling
The ceiling at present has only one white paint.

MUNSELL COLOR MATCHES

Wood Trim:	ivory	5Y 9.25/1.5 NN
	[3-4 layers the same]	
	cream	10YR 9.25/1.5 NN
	[2-3 layers]	
	lt mauve gray	5P 8/0.5 NN
	3-6 chalky modern whites	
Wall:	lt terra cotta	2.5 YR 6/8 few flecks at edge of trim
	cream	2.5Y 9/4
	lt tan	10YR 8/4

Window Seats:	red/brown 7.5R 4/8
	thin ochre
	same colors as typical wood trim

Room 118 Dining Room

Design
This room is distinguished by having two corner angled china closets with leaded glass doors, as well as a handsome Colonial Revival fireplace in the style of the Federal period. The doors have been removed, but are stored in the Attic. A doorway which led originally to the side porch on the east has been blocked in. There is a pocket sliding door to the Library, and a swinging door to the Butler's Pantry.

Special Features
The special features are discussed as part of the room's design.

Wood Trim
The wood trim in this room has the same paint layers and colors as the trim in the Front Hall. The mantel shelf is different, in that it appears to be mahogony, and to have had a clear finish which was stripped. It has only the three most recent chalky whites directly on its somewhat darkened and fibrous wood surface.

Window Seats
The window seats in this room have the same paint colors and layers as the rest of the wood trim.

Wall
No flecks of earlier water-based paint were found on the walls at the edges of the canvas. Further investigation might yield more information.

Floor
The floor appears to have been originally clear finished maple.

Ceiling
The ceiling at present has only one coat of flat white paint.

MUNSELL COLOR MATCHES

Rooms 114, 115, 116, 117

These service rooms have wood trim which is stained and shellacked. Most of it has received at least one coat of later darker varnish. The surfaces have collected dirt. The wainscot is made of v'd tongue-and-groove boards.

The walls, where original paint could be found, seems to have originally been a light yellow. This color appears to be an original oil paint, as it has run in behind some of the original wood trim. However, there is a chance that an earlier water-based paint might have existed, and might have been scrubbed off prior to the yellow. Water-based paints were often considered more sanitary, as they could be removed before fresh paint was put on. On the other hand, oil paints could be washed.

The floors have various coverings--small hexagonal white tiles, one early linoleum with blue in the pattern, and one ca. 1920-1940 linoleum with red, black, and an off-white in the pattern. The off-white is close to the early trim paint colors.

MUNSELL COLOR MATCH

Wall:	lt yellow	5Y 9.25/2.5 NN

Later paints are confusing to read, as they have run in under each other through cracks. There is a great deal of new plaster in the Kitchen, and it may be that the entire Kitchen and Storage Room were replastered/repainted when the small extension was built on the northeast corner.

COLOR CHIPS: FIRST FLOOR

WOOD TRIM (TYPICAL)
5Y 9.25/1.5 NN 10YR 9.25/1.5 NN 5P 8/0.5 NN

WINDOW SEATS
7.5R 4/8 (thin ochre: 10YR 7/10)

WALL (TYPICAL)
2.5Y 9/4 10YR 8/4

WALL FRONT HALL (101, 103-106, 109)
7/5R 7/6

WALL MUSIC ROOM (102)
10 B 7/2.0 NN

WALL OFFICE (107)
2.5Y 8/1

WALL LIBRARY (119)
2.5YR 6/8

WALL DINING ROOM (118)
(same as Front Hall)

WALLS KITCHEN & SERVICE AREAS (114-117)
5Y 9.25/2.5 NN

Room 201, 217 Main Hall, Second Floor

Design
At the head of the main stairway on the second floor is a large room which corresponds to the back portion of the Main Hall on the first floor. Like that area, it too has Colonial Revival elements: a large fireplace, window seats on either side of the fireplace, wainscot, canvassed wall, and cornice.

Special Features
The fireplace in the Main Hall of the second floor is painted with a thin red wash, just like the fireplace in the similar location on the first floor. The decorative carved wood trim on the fireplace, such as the deep modillions, is painted to match the rest of the wood trim.

Wood Trim
The wood continues the Colonial Revival theme of raised field panel wainscot, cyma recta and cyma reversa cornice moulding, and deep window seats.

Window Seats
The window seats, like those on the first floor, were originally painted with a translucent red/brown coating. On the rest of the second floor, however, the window seats are painted with the trim colors only.

Wall
The wall continues to have the same fine canvas covering. No samples of the canvas were taken from the second floor hall.

Floor
The fine maple flooring is not covered by carpeting on the second floor. At present it has a light natural color, a clear coating. There is no readily apparent evidence of any earlier darker finish, but it does appear that the floor has been refinished at some point--maybe more than once.

Ceiling
No ceiling samples were taken here.

MUNSELL COLOR MATCHES

The Main Hall and corridor (217)on the second floor repeat the colors of the Main Hall on the first floor.

Room 202, 203 Service Area Stair and Hall

Design
This area runs at a right angle to the Main Hall and is separated from it by a sliding pocket door. It has much plainer finishes. The wainscot is simple v'd tongue and groove boards laid vertically. The stair is enclosed and has no balusters except for few at the head of the stairs where the back hall opens. The newell posts are squared and simple. Interestingly, the doors and windows all have the full architraves which grace the doors and windows of the rest of the house.

Special Features
There are no particular special features in this space.

Wood Trim
The first two layers of paint on the wood trim here are exactly the same as those on the trim in the Main Hall. However, the trim here lacks the third layer, and the fourth layer seems thinner.

Wall
The wall is covered with a fine canvas, just like the canvas on most of the rest of the walls in the house. It has the same original paint layer, and a second layer with a color very close to that of the second layer on the rest of the canvas walls. It does not have the mauve grey or the later 20th century grey.

Floor
The floor has a clear finish.

Ceiling
The ceiling was not sampled.

MUNSELL COLOR MATCHES

Rooms 204, 205 Two Back Bedrooms

Design
These rooms do not have wainscot, but they do have the standard second floor cornice with a deep frieze band (plaster). They do not have fireplaces.

Special Features
There are no special features in these rooms.

Wood Trim
The wood trim has the same paint chromochronology as the rest of the second floor wood trim, but without the two paint layers just under the most recent layer.

Window Seats
Like the rest of the bedrooms, these rooms have window sills which are not deep enough to be window seats and which are painted with the wood trim colors.

Wall
The walls are covered with the same canvas found on wall throughout the main rooms of the house, with the same first four paint layers.

Floor
The floor is maple with a clear finish.

Ceiling
The ceiling is also covered with canvas. The fibers seem slightly whiter than those of the wall canvas, and there are two fewer paint layers on the ceiling canvas. There is no discernible evidence of calcimine paint under the canvas on the ceiling, but it could easily have been scrubbed off with no traces if it was white.

MUNSELL COLOR MATCHES

Wall: 5Y 9.25/2.0 NN

Ceiling: 5Y 9.25/1.5 NN

Trim: 10YR 9/2.) NN

N.B. **These colors apply to all of the second floor canvas ceilings, canvas walls, and wood and plaster trim.**

Room 206 Back Bathroom

Design
This bathroom is quite similar to the other three bathrooms upstairs. It has small tiles on the floor; the wall has a high wainscot of glazed white tiles with a very decorative tile band near the top of the wainscot. Here the band is turquoise blue. In the other bathrooms, the band is pink, green, and yellow. In spite of such an obvious color cue, however, there were no traces of paint colors on the wall above the tiles which would relate to the tile band colors.

Special Features
The marble washbasin and other items appear to be original.

Wood Trim
The wood trim here is limited to doors, door casings, windows, and window casings. The colors on the wood trim are the same as those on the wood trim throughout the main rooms of the house. Two-three of the more recent 20th century paint layers are not here.

Wall
The wall is covered with canvas, which has the same chromochronology as the canvas on the other walls.

Floor
The floor is tile.

Ceiling
The ceiling was not sampled.

MUNSELL COLOR MATCHES

CF. Rooms 204 & 205.

Room 207A & B Bertha's Closet and Bertha's Bathroom

Design/Special Features
This small closet or dressing room has a decorative oval window with wood tracery to admit daylight. Its paints are the same as the predominant wood trim paints, without the more recent 20th century paint layers.

The bathroom has a band of pink decorative tile near the top of the tile wainscot.

Room 207 Bertha's Room

Design
This bedroom adjoins a large closet and a bathroom, and thus is part of a suite of rooms. Like the other bedrooms, it has no paneled wainscot, but it does have a deep cornice with wide frieze band, and full architrave over the windows and doors.

Special Features
The fireplace in this bedroom is very similar to those in the other bedrooms. It has the slender attenuated columns and composition moulding decoration which give it a high style Federal period look.

Wood Trim
The wood trim in this room is identical to that in the other main bedrooms, and has the same paint colors.

Window Seats
There are wide window sills, but they have always had the same paint colors as the rest of the trim

Wall
The wall is covered with canvas which is identical to that on the other bedroom and bathroom walls.

Floor
The floor has a clear finish.

Ceiling
The ceiling is also covered with canvas, and has an original paint color slightly lighter than the original light yellow creamy color on the wall.

MUNSELL COLOR MATCHES

CF. Rooms 204 and 205

Room 210 Front Bedroom

Design
This bedroom is slightly different from the other rooms in that its fireplace is at an angle in the horth east corner of the room. It has only the paired front windows for daylight. It has not only a large closet but also a door into the small central room, 211.

Special Features
The Federal style fireplace has already been mentioned. Each fireplace has slightly different moulded ornament or columns or other decoration.

Wood Trim
The wood trim in this room is identical to that in the other bedrooms.

Window Seats
The wide window sills in this room have the same paints as the rest of the wood trim.

Wall
The wall is covered with canvas, like the other bedroom walls, with the same paints.

Floor
The floor has a clear finish and no traces of earlier paint.

Ceiling
The ceiling is covered with canvas. It there was an original white or off-white calcimine paint on the ceiling, it has been completely removed and no traces of it exist now.

MUNSELL COLOR MATCHES

CF. Rooms 204 and 205.

Room 211 Center Room with projecting enclosed bay

Design
This room has no fireplace, and is entered through a narrow "hall" created by large closets from adjoining bedrooms. It has the window which is the central focal point of the second floor from the exterior, and in front of that window, a glass-enclosed narrow "porch." The enclosure is contained within the wider "porch" which has two columns at its front corners. The glass panes give access to the roof. The question posed here is,"Is this enclosure original?"

Special Features
The spectacular view out to the south is framed by a large three-part window with a shallow elliptical fanlight. The fanlight has wooden muntin bars, arranged in the standard pattern of spokes coming into a central half-moon.

Wood Trim
The wood trim in this room was obscured by large stored objects. Only the window trim was sampled.

Window Seats
There is no window seat.

Wall
The wall was not sampled.

Floor
The floor was not sampled.

Ceiling
The ceiling was not sampled.

MUNSELL COLOR MATCHES

CF. Rooms 204 and 205.

Room 212 Front Bedroom

This bedroom is very simple in its design, with two closets and a fireplace.

Special Features
The fireplace in this bedroom resembles the other bedroom fireplaces in scale and Federal period styling.

Wood Trim
The wood trim in this bedroom is identical to the wood trim in the other main bedrooms.

Window Seats
The wide window seats have the same paint layers as the rest of the wood trim.

Wall
The walls are covered with canvas, having the same paint layers as the other bedroom canvas walls.

Floor
The floor has a clear finish with no evidence of earlier paint or varnish.

Ceiling
The ceiling is also covered with canvas, as are the other bedroom ceilings.

MUNSELL COLOR MATCHES

Cf. Rooms 204 and 205.

Room 213 West Corner Bedroom

Design
This bedroom has a closet in its northwest corner (behind the Linen Room in the Main Hall). It has an awkwardly placed projecting fireplace on the east wall, which leaves a very narrow space between it and the wall to the north. The hearth projects into the area in front of the door.

Special Features
The fireplace in this room resembles the other high Federal style fireplaces in the other bedrooms.

Wood Trim
The wood trim in this room is the same design and has the same paints as the wood trim in the other main bedrooms.

Window Seats
The wide window sills have the same paint layers as the rest of the wood trim.

Wall
The wall is covered with canvas and has the same chromochronology as the other painted canvas bedroom walls.

Floor
The floor has a clear finish and no evidence of earlier or darker finishes.

Ceiling
The ceiling is also covered with canvas. The ceiling canvas has slightly lighter creamy off-white colors than the wall colors.

MUNSELL COLOR MATCHES

Cf. Rooms 204 and 205.

Room 214 Linen Closet

Design
This is a purely utilitarian room. The present shelving seems to be of 20th century construction.

Special Features
None.

The trim and wall colors of this room are the same. There is no canvas on the wall. The ceiling was not sampled.

MUNSELL COLOR MATCH

Wall and Trim: 2.5Y 9/4

Rooms 215 and 216 Bathrooms

Design
These rooms are mirror images of each other, and differ only in the color of their decorative tiles. Room 215 is green, and Room 216 is yellow.

Special Features
The plumbing and fixtures seem quite early.

The trim and wall colors of these rooms are the same as those in the other upstairs bathrooms.

MUNSELL COLOR MATCH

Cf. Rooms 204 and 205.

Room 301 Attic Stair

Design
The design of this stairway is even more unadorned than that of the back stair from the service area of the first floor to the second floor. Balusters are square; the newell post at the top of the stair is square and champfered on the corners with a turned round knob at the top.

MUNSELL COLOR MATCH

10YR 9/2.0 NN

EXTERIOR

The original color scheme on the exterior was very bright. The intense French ochre yellow clapboards, the warm ivory trim, the deep bright green doors, and the rich brown porch floor, all in a high gloss paint, present a traditional Colonial Revival (high style Federal) period look.

Subsequent exterior paintings have rendered the body of the house and the trim with the same or very nearly the same whites and off-whites. There is a more recent very light grey on the house--probably a mid-to-late 20th century color. The greatest number of paint layers found on any sampled area was 12. Many of the whites and off-whites on top of the persistent bright ochre may have weathered off or been scraped off before later paints were applied. On the salvage balusters and column capitals there were at least 30 paint layers. First there was a thin ochre primer. The first 2-4 finish layers were ivories. The 5-6 layers were thick and oily creams, and one even had an oil glaze coat on it. Then came 203 very thin very pale pearl gray layers, which must have coexisted with the same color on the clapboards, as painting the trim with a color darker than the body of the house would be highly unlikely. The later layers were all fairly thin.

All exterior doors and storm doors originally had the same deep bright green, and while later greens have been more of the black-green, still the doors and screen doors remain the same.

The porch floor has changed from warm brown to dark brown to off-white to the present gunmetal gray.

Many of the dentils and plain modillion brackets of the roof and dormer trim are new and crudely made. It was interesting to see that on some of the dentils an aluminum paint was used as a primer. The white finish paint is not adhering well to the metal paint.

Many of the carved wood and moulded plaster or Keene's cement column and pilaster capitals have been removed, but fortunately have been saved and stored in the Apple Barn. From these, the original trim colors could be determined. In addition, there are fluted pilasters, entire balustrade runs (with base board, balusters, and hand rails) and other trim elements save and stored there. It would be helpful if these were labelled to indicate their exact original location on the house.

It would be useful to strip all paints from one of each of these elements and make full scale drawings which could then be used as shop drawings for any restoration work.

Considering the initial purchase of 1000 pounds of French ochre, it is interesting to review a standard set of paint formulations, published by Dutch Boy in 1916. (*The Handy Book on Painting,* National Lead & Oil Co. of Pennsylvania, Pittsburgh, PA. 1916) Exterior paint on new wood usually required three coats: a priming coat, a second coat, and a finish coat. A gallon of primer covered 575 square feet, a gallon of second and finish paint covered 600 square feet.

Averaging the amounts of lead needed for a gallon of each, the amount per gallon is just over 10 pounds of white lead for white paint. In a larger quantity, the book calls for 100 pounds of white lead to 6 1/2 gallons of linseed oil, turpentine and drier to make 9 gallons of paint.

To tint the paint a "yellow brown" color, the formula published here calls for "15 lbs. 11 oz French ochre" and a few ounces of Venetian red and lampblack--a quantity by weight based on the use of 100 pounds of white lead, which as noted in the formula above, makes 9 gallons of paint. However, the additional weight of the tinting pigments requires half that weight in oil added. (The writer of this book uses the rule of thumb that "a pint's a pound the world around," and calls for adding nearly 8 more pints of oil for the "yellow brown" color, which would then make 4 more quarts or one more gallon. (pp. 16 - 20)

The earliest book of paint formulas published in America, Hezekiah Reynolds' "Directions for House and Ship Painting," 1812, calls for one pound of English Ochre to 30 pounds of white lead for a cream color and then says "The yellow tinge may be varied at pleasure, by increasing or diminishing the proportion of the Ochre." (p. 10)

The Practical House Painter, "by An Expert," published in Chicago in 1902, opens with a test for the purity of white lead and continues on pages 2 and 3 with an analysis of ochre. He observes that French ochre "is about the average for that pigment" in its tinting strength--that is, in the ratio of hydrated oxide of iron to alumina, silica, or barytes (cheap fillers with no tinting strength). What is most interesting in this book is the discussion of the use of cheap ochre as a primer. Since the older balusters and column capitals in storage, and window trim of all windows sampled on the first and second floors, as well as front and kitchen door casings and many of the clapboards showed that ochre was used as a primer, Cone's painters must have felt that ochre did make a good primer. Cheap ochre might be poor, but good French ochre would not only serve as a primer and second coat on the clapboards but also would serve to prime much of the rest of the exterior wood. There are three more pages discussing various ochre formulations and castigating dealers who sell inferior materials as real French ochre. Apparently, at the time Moses Cone was building his estate, French ochre was a topic of discussion among painters.
This does raise the question of the ochre as the original finish coat. At 200x examination, it does appear that the thickness of the ochre on the clapboards is fully sufficient to prove that it was both primer and finish coat originally. On all trim where ochre appears, it is clearly a primer, soaked deeply into the grain of the wood, with ivory paint layers over it. However, as nearly every layer of paint on both clapboards and trim has a telltale thin layer of black dirt particles on it, and as there is no dirt or very little dirt visible on the ochre, it is just possible that the first ivory paint layer covered it within a year. [Is there an historic photograph which is firmly dated to 1900 that shows the trim and house with the same light color value? I seem to remember that Maurie had one.]

Clapboards:	7.5 YR 7/12--10YR 7/8*		10YR 9/2
	This is not a good match. No Munsell chip matched well. SW's Rookwood Amber, if brighter, is close		
Trim:	10YR 7/8 (primer)	5Y 9.25/1.5 NN	10YR 9/2
Front Door:	mahogony grained	7.5 GY 2/4	
Kitchen Door:	7.5 GY 2/4	7.5 GY 3/6	
Screen Door: (all screen doors)	7.5 GY 2/4	7.5 GY 3/6	
Porch Floor:	7.5 YR 3/6	7.5 YR 3/6	

COLOR CHIPS: FIRST FLOOR

WOOD TRIM (TYPICAL)
5Y 9.25/1.5 NN

10YR 9.25/1.5 NN

5P 8/0.5 NN

WINDOW SEATS
7.5R 4/8



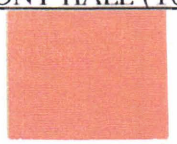
(thin ochre: 10YR 7/10)



WALL (TYPICAL)
2.5Y 9/4

10YR 8/4

WALL FRONT HALL (101, 103-106, 109)
7/5R 7/6



WALL MUSIC ROOM (102)
10 B 7/2.0 NN



WALL OFFICE (107)
2.5Y 8/6



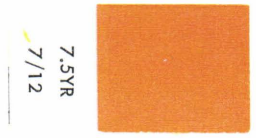
WALL LIBRARY (119)
2.5YR 6/8



WALL DINING ROOM (118)
(same as Front Hall)

WALLS KITCHEN & SERVICE AREAS (114-117)
5Y 9.25/2.5 NN

EXTERIOR





Clapboards: 7.5 YR 7/12--10YR 7/8* 10YR 9/2

This is not a good match.
No Munsell chip matched well.
SW's Rookwood Amber, if brighter, is close



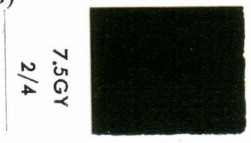
Trim: 10YR 7/8 (primer) 5Y 9.25/1.5 NN 10YR 9/2



Front Door: mahogony grained 7.5 GY 2/4

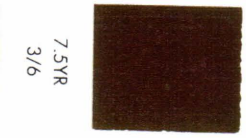
Kitchen Door: 7.5 GY 2/4 7.5 GY 3/6

Screen Door: 7.5 GY 2/4 7.5 GY 3/6
(all screen doors)





Porch Floor: 7.5 YR 3/6 7.5 YR 3/6



Interior Paint Recommendations
Moses Cone Manor House
Blowing Rock, NC

Purpose
The purpose of the following recommendations is to provide general guidelines for interior painting at the Moses Cone Manor House. The aim is to achieve paint work which both respects the existing historic materials and paints in the House and also is durable. Thus, the following comments address surface preparation of existing painted architectural features in some detail. Recommendations for application of new paint are briefer.

Problems and Causes
The paints in the Moses Cone Manor House are on wood, plaster, canvas, metal, and composition. Floors and floor finishes are not part of this discussion, as it appears that the floors were not painted originally.

The primary painted wood is the trim: baseboards, wainscot, doors and door trim, windows and window trim, and some fireplaces. In addition, built-in features, such as bookshelves and china closets are painted wood. Finally, decorative elements such as fluted columns (in the entry hall) are made of wood and painted.

The primary painted plaster areas are, of course, walls and ceilings. There are some decorative painted plaster elements, such as cornices. Molded plaster has been used for column and pilaster capitals in the entry hall; this material may have some hide glue and chalk or white lead filler and be more like composition.

On most of the walls of the larger first floor room rooms as well as on many ceilings (first and second floors) and some walls of second floor rooms, a fine canvas covers the original plaster. The canvas serves as substrate for paint layers.

Painted metal elements include most of the original gas light fixtures which are of a ferrous metal painted with a bronzing powder paint so as to resemble brass or patinated bronze. Some of the door hardware has been painted, perhaps inadvertently. Heating duct grilles which are located in walls have been painted to match the walls.

The low-relief composition ornament on the fireplaces is of course painted the same as the rest of the wood to which it is glued.

In planning interior paint work, it is important to specify or call out clearly every item to be prepared and painted in each room or area. That is especially important when different items require different methods of surface preparation or different paint products for greatest durability and good appearance.

The following are general guidelines for preservation/surface preparation.

Weak or Flawed Substrates

Wood:
All loose flaking paint should be scraped from wood by hand, using scrapers which do not roughen or gouge the wood surface. Cut scrapers to fit moldings where loose paint must be removed from molded areas.

The edges where firmly attached paint meets the scraped wood should be hand sanded to feather them down gradually to the areas which are bare or have less paint build-up. It is critical to do this so that the new paint will not have disturbing shadowed "crater" outlines.

Removing loose paint by hand scraping and sanding preserves the maximum amount of well-adhered historic older paints.

Nowhere in the interior of the Cone Manor House is there a thick enough build-up of older paints to warrant full paint stripping as a means to expose the original fine molding profiles or carving relief.

If the wood exposed by hand scraping is weak on its surface, i.e., soft and splintery and open-grained(as some window sills are), consolidate the wood surface before painting. This can be done by applying top grade spar varnish, thinned at 1:1 with a compatible thinner, and letting it soak into the wood. If it leaves a shiny surface on the wood, the surface must be lightly sanded till the gloss is gone. The surface should be thoroughly dry before primer and paint are applied.

No caulk or sealant should be applied to places where joined wood has opened joints. Raised field paneling often shows signs of its aging by openings between the panel and its framing stiles and rails. Painters often want to fill the openings with caulking compound or the like to produce a smooth and homogenous surface to paint. Invariably, the wood parts again as it goes through dimensional changes due to thermal and moisture content variation. Then, too, the caulk or filler material always dries out and fails in a few years. It then becomes a nuisance and an expense to remove.

Plaster:
Plaster has two types of problems. 1.) It has lost its keys and is loose on its lath. 2.) It has cracks, due to structural settlement or due to less serious conditions.

All plaster should be checked carefully over its entire surface prior to painting, to make sure that it is secure on its lath. Where it is loose, it can be reattached to the lath by means of small perforated metal discs and screws. It can also be reattached by means of more sophisticated injection methods. The means of reattachment should be determined by an architectural conservator at the time of the anticipated paint work.

All cracked plaster must be evaluated by an architect, a skilled and experienced paint contractor, and/or an architectural conservator. The definition of cracks to be raked and filled, versus cracks which are "hairline"

and to be left without remedial treatment, must be made. In order to get good bids from contractors, the cracks which are to be raked, undercut on the sides, and filled need to be mapped on sketch elevations which become part of the bid documents. In general, all cracks wider than 3/8 inch should be appropriately filled. (The cause of the cracking should first be remedied.)

Canvas:
The primary problem to solve with canvas is to get it securely and completely glued to the surface beneath it. Where it is attached to plaster, and the plaster has cracked or settled, it may have developed diagonal wrinkles. These should be relieved by careful cutting and re-gluing before paint work is done. Where it has simply lost adhesion, it should be readhered.

Where the canvas has cuts, holes, ragged edges or problems of that sort, it may be necessary to cut out the defective material and glue in a "dutchman" or patch of a perfectly matching canvas. Size and prime the canvas patch before installing it.

Metals:
The surface of any metal item to be repainted should first be cleaned with trisodium phosphate (TSP) and hot water. IF greasy dirt should remain, use ordinary liquid detergent and a NON-metallic wool scrubber to clean the metal thoroughly. Do NOT use any ammonia, alkaline, or acidic cleaner; they will react with the existing historic bronzing powder (metal flake) paint and probably discolor it.

Do NOT scrub down to bare metal. If possible, remove only surface dirt. Do not try to remove or strip any darkened varnish coating. If the original bronze or brass look is to be restored, it can be done on top of a sound coating of varnish or dark paint.

Composition:
All molded composition ornament should be considered fragile. Often it has become brittle over time. Therefore, do NOT try to remove paint from it. If paint on its surface is loose, brush the loose paint flakes off with a stiff natural bristle brush. Sanding is not advised. Do NOT use any chemical strippers on composition ornament.

If it is deemed necessary to replace missing portions of composition ornament, get an architectural artisan to cast the entire element, and cut off from the new casting whatever portion is necessary for replacement purposes.

Prime the surface of sound composition ornament for repainting just as the wood base around the composition is primed.

The following are general guidelines for repainting.

Follow best professional practice in every way. Maintain a wet edge while painting so that there will not be "seams" on painted surfaces. Paint all trim including return edges.; do not lap paint from flat areas onto return sides of trim areas. Use brushes best suited to area being painted--bristle type, length and width, angle of bristle edges, and so on. Use only top grade paints. Clean up all drips, smears, and the like each day. Leave no "holidays" or missed areas.

Wood:
-On a clean sound surface, hand sand very lightly with 400-600 grit sandpaper to provide some "tooth" for better adhesion.

-Apply all primers, paints, and glazes by hand with appropriate brushes. Do not use spray.

-Make sure that the brushes used are the appropriate size, shape, bristle type, and edge profile for the area being painted.

-Paint wall surfaces first. Paint trim second. Cut trim in to wall. Paint all surfaces of trim, including returns to wall or ceiling, in trim color.

-Use only top grade paint.

Plaster:
-Make sure that all repairs are fully cured and set up before applying any primer or paint.

-Apply paint by hand with appropriate brushes. Rollers may be used for ceilings and large plain wall surfaces only. All edges and corners must be painted by hand with brushes.

-If underlying paint is not an oil or an oil/alkyd, top grade acrylic latex paint may be used.

-Do not lap wall and ceiling paint over onto edges of moldings.

Canvas:
-Make sure that canvas is securely adhered and that its surface is clean and very lightly sanded to provide "tooth." (See guideline for light sanding of wood trim surfaces.)

-Apply all paint by hand with appropriate brushes. Make sure finished surface is even and free from drips, sags, runs, and the like.

Metals:
-Make sure that all paint is very well mixed, especially paint media containing metallic flakes or bronzing powder.

-Acrylic metallic paint is acceptable if it is of the right gloss and darkness.

-Apply paint so as to cover all surfaces.

Composition:
-Paint as for wood base on which composition elements are glued. See "Wood" above.

Exterior Paint Recommendations
Moses Cone Manor House
Blowing Rock, NC

Purpose

The purpose of the following recommendations is to provide guidelines for both the materials used and the methods by which they are applied. The aim is to achieve the most durable and long-lasting surface treatments. Although the house is oriented at a diagonal to true north, descriptions herein designate the elevations as follows for the sake of simplicity:

front = EAST
back = WEST
porte cochere end = SOUTH
visitors' toilet end = NORTH

Problems and Causes

The Moses Cone Manor House is at present plagued with major paint problems, especially on the north elevation and on the many highly articulated trim features (e.g., balusters, composite/Corinthian column and pilaster capitals, and the like). The recommendations here are preceded by a brief discussion of the causes of paint failure at the Cone House.

Microclimates

The peeling is most noticeable on the north exposure of the Kitchen ell. On the north wall and on parts of the west elevation planes, the paint is peeling due partly to a microclimate which retards the evaporation of moisture. The western side of the House, especially the Kitchen ell, is very close to an earth embankment which is almost one story high. Air cannot circulate well, and the sun does not shine fully on those walls. The north-facing wall of the service ell does not have the earth embankmant, but it does have the projecting new visitors' toilet which helps keep it in some shadow and which impedes air circulation.

Weak Wood Substrate

On many of the ornate trim elements, such as columns and pilasters, capitals and bases, and balustrades, the new wood is not of No. 1 Clear grade. Thus, the grain is wide, the summer growth rings porous, and the wood has significant dimensional changes as it goes through cycles of wet and dry, hot and cold (thermal and humidity cycling). It is hard for paint to flex enough to remain adhered tightly when wood swells and shrinks, as wood with so much surface area and exposed end grain does. [Note that some column bases stored in the Linen Closet at the south end of the second floor hall have warped even though they have never yet been installed outside!]

A number of the most recently installed new clapboards installed at various places (including the lower north wall) are of inferior quality. Some have knots; all have wide grain; some are warping. Many replacement dentils and

modillion brackets are rough cut with end grain and corners not even sanded or finished.

Installation Practices
Some of the installation of replacement trim has been casual. Pieces do not fit tightly to one another. There is no evidence of good backpriming prior to installation. Nails are too close to outer edges. All of this permits ambient moisture (fog, high humidity) as well as rain to soak into the wood. Moisture evaporates out of wood at a far slower rate than it is absorbed. [The contribution of microclimate problems to the slowing of evaporation is discussed above.]

There is also the problem of inter-layer peeling. It appears that incompatible paints have been used (latex paint over oil paint, e.g.). It may be that no primers or inappropriate primers have been used. There is also a fair amount of black particulate dirt visible at low magnification (10x to 24x) between layers, which seems to indicate that paint has been applied over surfaces not cleaned.

Not all nails of installation have been countersunk and puttied over. This also leads to paint problems.

Recommendations
As the points above suggest, the recommendations for getting a more durable exterior paint on the Cone House include remedying the causes of failure as well as selecting the best grade of primers and paints.

However, even the best design, installation, materials, and circumstances cannot make for a successful paint job without experienced, skilled, and dedicated craftspeople. It is critically important to hire paint contractors who handle the materials as they should be handled and who have a stake in producing the best possible job. Naming the contractor/company in all brochures about the house will help to motivate the painters to perform at their best.

Preparation
All wood should be sound (free from rot), clean (free from dirt, mold, mildew), and dry before even a primer is applied.
All new wood should be backprimed before installation. Knots should be sealed with BINS or KILZ.
Nails should be hot dip galvanized, countersunk, and puttied.

Cleaning should be by hand, with a garden hose and a natural bristle scrub brush, and not by "power washing." "Power washing" is like sandblasting in the way that wood surfaces are eroded. Wood that looks like terrycloth will not keep paint. Removal of mold and mildew should be done by scrubbing with a mixture of one cup ordinary household bleach and 1/2 cup trisodium phosphate (TSP--brand name, Spic'n'Span) to 1 gallon of warm water. All areas to be painted should be scrubbed, rinsed well, and let dry for at least 48 hours before priming and painting.

Where patches of bare wood meet a build-up of firmly adhering paint layers, the area should be hand sanded so that there is not a pronounced rim, Feather all edges of existing paint layers down to areas where no paint is left.

Where older paint remains firmly adhered, lightly sand all surfaces to provide a slight "tooth" for the primer to adhere to.

Paints and Primers
So long as it is not unlawful, and/or an abatement can be obtained if necessary to make it legal, use top grade oil/alkyd exterior paint. The paint should have a semi-gloss or higher gloss level.

Determination of a paint's quality can only be made with knowledge of the ingredients and their percentages in the paint formulation:

-ratio of oil/alkyd to thinner should be at least 40%/60%

Check to see if local paint manufacturers (Chattanooga, Tennessee?) make a paint which has around 60% oil/alkyd to 40% volatile spirits (thinners). Such a paint can be thinned further for first coat, with full body for second or finish coat.

-white pigment should be NON-CHALKING titanium dioxide

There are now TiO2 pigments of five different types. Get paint manufacturer to inform you as to which of his exterior gloss paints have the non-chalking type.

-ratio of cheap fillers (solids) should be as low as possible

Watch out for anything more than 10% total of calcium carbonate, silicates, barium compounds, or other solids which are not tinting or hiding compounds. Check with the manufacturer to find out which compounds are driers.

-look for mildewcide/fungicide compounds

If you cannot find any mentioned on the label, call the manufacturer and find out which ones, if any, the paint includes. Do this for each different type of paint or color of paint you are considering using.

-get manufacturer's information, preferably warranty, on color-fastness of any colored paints

-USE ONLY THE PRIMER RECOMMENDED BY THE MANUFACTURER OF THE FINISH PAINT, AND USE AS DIRECTED.

Brushes
Make sure that the painters are using the best quality brushes, that the brushes are properly cleaned and stored when not in use, and that the proper brush for each special task is used (e.g., narrow sharply angled brushes for painting the areas to be cut in around sash).

Spraying hardly ever is fully successful on exterior work. Masking is expensive, the constant varying of planes--clapboard bottoms, columns, balusters, and the like--makes it hard to keep the sprayer constantly at a right angle to the surface being painted. Spraying is NOT recommended.

APPENDIX G

COLUMNS & BALUSTRADES
CONDITION DOCUMENTATION & ASSESSMENT
1995

Prepared by:
Surber & Barber Architects, Inc.

Column #	Abacus		Cushion		Capital			Shaft		Base	
	Size	Condition	Style	Condition	Material	Date	Condition	No. of Flutes	Condition	Style	Condition
C101	n/a	missing	n/a	missing	n/a	n/a	missing, replaced with three 12"x12"x1 1/2" blocks	16	some minor cracks, two large cracks	attic	good
C102	1 1/2"	good	beveled block	poor, does not match typical egg-and-dart cushion	wood	original	cracked at mold seam	16	poor, severely cracked and splitting. 1 major 1/2" crack on north side	attic	bad proportions, top tori does not protrude out from shaft
C103	1"	good	egg-and-dart	good	wood	original	good	16	many small cracks	attic	good
C104	1 1/2"	not centered on ceiling beam, 1 1/2" overhang on the south side	egg-and-dart	good	wood	original	mold seam evident	16	many small cracks in paint, large cracks at base	attic	bad proportions, top tori is same diameter as bottom tori. concave scotia is overlapped by top tori
C105	1 1/2"	good	egg-and-dart	good	wood	original	overhang on north	16	some small cracks	attic	see C104
C106	1 1/2"	crack on west side	egg-and-dart	good	wood	original	mold seam evident	16	1 medium crack, some chipped paint	attic	good
C107	1 1/2"	good, not centered on corner joint of ceiling beams	egg-and-dart	crack on west side.	wood	original	good	16	some small cracks	attic	see C104
C108	1 1/2'	cracked and stained paint	egg-and-dart	good	wood	original	good	16	2 medium cracks, some small cracks that are painted over	attic	see C104
C109	1 1/2"	not centered on beam, overhang on north side	egg-and-dart	good	wood	original	mold seam evident	16	many small cracks	attic	good

C110	1 1/2"	good	egg-and-dart	good	wood	original	mold seam evident	16	many small cracks, paint is chipped. metal flag pole holder near base	attic	good
C111	1"	paint is stained and peeling. not centered on ceiling beam	egg-and-dart	good	wood	original	mold seam evident	16	some small cracks	attic	top tori is shifted
C112	3/4"	not centered on ceiling beam	egg-and-dart	good	wood	original	mold seam evident	16	few small cracks, paint is good	attic	good
C113	1 1/2"	good	egg-and-dart	good	wood	original	good	16	1 flute is severely damaged	attic	good
C114	1 1/2'	good	egg-and-dart	good	wood	original	good	16	shifted to the west. cracked. paint is peeling at base.	attic	good
C115	1 1/2"	good	egg-and-dart	good	wood	original	paint is cracking	16	good	attic	bottom tori is too thick
C116	1"	good	egg-and-dart	good	wood	original	paint is cracking	16	good	attic	good
C117	1 1/2" + additional 1" block	good	egg-and-dart	good	wood	original	bottom half of volute is missing on south side	16	good	attic	top tori too large
C118	1 1/2"	paint is chipped	egg-and-dart	good	either wood or aluminum	?	no visible mold seam	16	rotting at base. paint is peeling	attic	paint is cracked and peeling
C119	1 1/2" + 1" + 1/2"splint	poor	egg-and-dart	cracked and paint is peeling	wood	original	paint is peeling and cracking	16	paint is peeling severely	attic	paint is peeling severely
C120	n/a	n/a	n/a	n/a	n/a	n/a	replaced with 1"-2" x 1'-2" x1 1/2" board	5 1/2" x51/2" post	paint is cracking	1'-2" x 1'-2" x1 1/2" board	warped
C121	1 1/2" + 1" block	poor, pulled away from ceiling beam	egg-and-dart	good	wood	original	paint is cracked and peeling	16	leans away from porch. cracked. paint is peeling	attic	cracked, rotting, and paint is severely peeling
C122	1 1/2" + 1" block	paint is peeling	egg-and-dart	paint is peeling	wood	original	paint is peeling, mold seam is evident	16	some medium cracks	attic	paint is peeling

C123	1"	cracked	egg-and-dart	thinner member than typical. paint is cracking	composite	Bertha era (1899 -1947)	much more detailed than the wooden capitols, balusters on volutes are more ornate	24	good entasis	attic	good
C124	n/a	n/a	n/a	n/a	n/a	n/a	n/a	four 2" x10"s	n/a	n/a	n/a
C125	same as C124										
C126	same as C124										
C127	1 1/2" + 1" block	top block is shifted	egg-and-dart	good	aluminum	NPS era (1947 - present)	good	14	good	attic	top tori is too large
C128	3"	same asC127									
C129	3"	same as C127									
C130	3"	same as C127									

Balustrade #	Top Rail		Balusters			Bottom Rail	
	Bevel	Condition	No. per balustrade	Material	Condition	Bevel	Condition
B101	slight: 1/4"-1/2"	good	11(s-n)	poplar	1-7: good, beveled base and capital 8-11: poor, no bevel, rotting at base.	slight: 1/2"	rotting at south end, supported at mid span
B102	slight: 1/4"	good	21(w-e)	poplar	1-4,10-16,18,19 are cracked. 19 is wider. 5,6 have a narrow caps.	slight:1/2"	supported at mid span
B103	slight: 1/4"	top of rail separated from molding paint is cracking	8(s-n)	poplar	1,7,8 cracked. bases are not beveled	slight: 1/2"	good
B104	slight: 1/4"	good	16(w-e)	poplar	only 1 has beveled base and capitol	slight: 1/2"	supported at mid span
B105	slight: 1/4"	paint is peeling	18(w-e)	poplar	2,4,5,6,8,9,11,13,16,17 are cracked. 2,11,14 do not have beveled bases or capitals	slight: 1/2"	supported twice at 1/3 points
B106	slight: 1/4"	paint is cracked	2(s-n)	poplar	both are cracked, bases and capitals are not beveled	slight: 1/2"	paint is cracked
B107	slight: 1/4"	good	2(w-e)	poplar	bases and capital are not beveled, paint is cracked	slight: 1/2"	paint is cracked
B108	slight: 1/4"	paint is peeling	8(w-e)	poplar	2,5-7: rotted and cracked. 2,5: wider. 1,4,8: slight bevel at base	slight:1/2"	no molding. paint is cracked
B109	slight: 1/4"	paint is peeling	8(n-s)	poplar	1,8: slight bevel at capital and base. 2-8: rotted.	slight: 1/2"	no molding. south end has 2 1/2" clear off porch, north only 1 1/22".
B110	slight: 1/4"	good	2(w-e)	poplar	no bevels. 1 is severely rotted.	slight: 1/2"	paint is peeling
B111	slight: 1/2"	paint is cracked. slopes to south	2(n-s)	poplar	no bevels. both are cracked and rotting	slight: 1/2"	paint is peeling
B112	slight: 1/4"	paint is cracked and peeling	19(w-e)	poplar	3,6,7: are wider.4,6-9,11,13-18: cracked.	slight: 1/2"	only 3/4" clear off porch. supported under balusters 1,9, and between 18 and 19.

B113	slight:1/4"	rail is separating from molding. paint is peeling	18(w-e)	poplar	4,7,10 are severely cracked. bases are beveled. paint is peeling on all bases.	slight:1/2"	only 1/2"-3/4" clearing off porch
B114	flat	rail is separating from molding paint is cracking	9(w-e)	poplar	5,9 are severely cracked. bases and capitals are not beveled and vary in depth	slight: 1/2"	paint is peeling
B115	flat	paint is peeling	22(w-e)	poplar	bases are not beveled and paint is peeling. 4,9 are rotted. 12,13 are cracked	slight: 1/2"	paint is peeling
B116	slight: 1/4"	paint is peeling	15(n-s)	poplar	bases are beveled 1 is thinner than typical. 11,12,14 are cracked. paint is peeling.	slight: 1/2"	sagging
B117	slight: 1/4"	paint is peeling	15(n-s)	poplar	bases are not beveled paint is peeling and cracking on all members. 2, 4,5,12,14 are rotting at base. 6, 13 are thinner than typical	slight: 1/2"	paint is cracking and peeling
B118	slight:1/4"	rotting	15(e-w)	poplar	paint is peeling on all members. bases and capital are not beveled. 2,5,6,9,14 are rotting. 11 is missing.	slight:1/2"	rotting
B119	slight: 1/4"	paint is severely cracked and peeling	15(e-w)	poplar	all bases and capitals are not beveled. 1 is severely cracked. 14 is rotting. 14 is thinner than typical. others are slightly wider than typical. paint is peeling on all members	slight:1/2"	paint is severely cracked
B120	flat	poor, paint is peeling. rotting. rail is separating from molding.	14(n-s)	poplar	all bases are not beveled and are rotting. baluster are shaped differently, bellies flatten out near center bead. they are wider than typical. paint is peeling on all members.	flat	rotting
B121	see B120		11(n-s)	see B120		see B120	
B122	see B120		14(n-s)	see B120		see B120	
B123	see B120		14(n-s)	see B120		see B120	

B124	flat	paint is peeling	12(w-e)	poplar	all bases are not beveled and are rotting. paint is peeling on all members.	flat	supported at mid span. paint is peeling
B125	flat	paint is peeling	19(s-n)	poplar	see B125	flat	rotting
B126	slight: 1/4"	good	11(w-e)	poplar	see B125	slight: 1/2"	supported at mid span. paint is peeling.
B127	flat	good	5(n-s)	poplar	bases are not beveled. paint is peeling on all members.	flat	rotting
B128	see B127		16(n-s)	see B127		see B127	
B129	see B127		5(n-s)	see B127		see B127	
B201	slight:1/8"	rail is separating from molding	21(e-w)	redwood	good, bases and capitols are beveled	flat	good, blocking at mid span
B202	slight: 1/8"	rail is separating from molding	20(e-w)	redwood	good	flat	good, blocking at mid span
B203	slight: 1/8"	good	9(s-n)	redwood	good	flat	paint is peeling
B204	slight: 1/8"	rail is separating from molding	24(e-w)	redwood	11: paint is peeling	flat	paint is peeling. blocking at mid span
B205	slight: 1/8"	paint is cracking. rail is separating from molding	16(s-n)	redwood	good	flat	thin paint layer
B206	slight: 1/8"	rail is separating from molding	20(e-w)	redwood	good	flat	thin paint layer. blocking at mid span
B207	slight: 1/8"	good	4(s-n)	redwood	good	flat	thin paint layer
B208	slight: 1/8"	good	15(s-n)	redwood	good	flat	thin paint layer
B209	slight: 1/8"	thin paint layer	4(s-n)	redwood	2: paint is cracking at base	flat	thin paint layer
B210	slight: 1/8"	good	21((w-e)	redwood	good. 2: paint is peeling at base	flat	good, blocking at mid span
B211	slight: 1/8"	rail is separating from molding	17(s-n)	redwood	good	flat	good, blocking at mid span
B212	slight: 1/8"	good	17(w-e)	redwood	good, 10: paint is cracking at base,4: paint is peeling at capitol.	flat	good, blocking at mid span
B213	slight: 1/8"	thin paint layer	17(w-e)	redwood	good, 2: paint is peeling. 17: paint is peeling at base.	flat	good, blocking at mid span
B214	slight: 1/8"	good	4(w-e)	redwood	good	flat	good

B215	n/a	poor, rotting	23(s-n)	poplar	poor, all members are rotting at bases and paint is peeling. many capitols are thinner than others	slight: 1/4"	poor: rotting, paint is peeling.
B216	see B215		19(s-n)	see B215		see B215	
B217	see B215		17(w-e)	poplar	poor, all members are rotting at bases, many are cracked. paint is severely cracked. fungus is growing on 14.	see B215	
B218	slight: 1/8"	poor, paint is severely peeling. rail is separated from molding.	15(w-e)	poplar	1-3,5-7,11,12,14,15: cracked. 8-10,12,13: rotten. 14 and 15 are shortened to clear parapet.	slight: 1/4"	poor: paint is severely peeling.
B219	slight: 1/8"	see B215	15(w-e)	poplar	see B215	see B215	
B220	slight: 1/8"	rotten	12(n-s)	poplar	1,3-6,8: rotten. 2,7,10-12: cracked. 5,6,8: fungus.	slight: 1/4'	poor: paint is peeling
B221	see B215		4(s-n)	see B215		see B215	
B222	see B215		21(w-e)	see B215		see B215	
B223	see B215		6(s-n)	see B215		see B215	
B301	slight: 1/4"	good	14(w-e)	?	the bellies are much less rounded than those on the first and second stories and center bead has a larger diameter. 6,7,10,11: paint is peeling at base.	slight: 1/4"	paint is peeling. 9" clear under rail.
B302	slight: 1/4"	good	12(n-s)	?	same shape as B301. 3 is cracked.	slight: 1/4"	good
B303	slight:1/4"	good	14(e-w)	?	same shape as B301. good.	slight: 1/4"	rot under baluster 13.
B304	slight:1/4"	good	14(e-w)	?	same shape as B301.4 is cracked.	slight: 1/4"	good
B305	slight: 1/4"	good	12(s-n)	?	same shape as B301. 10 is cracked.	slight: 1/4"	good
B306	slight: 1/4"	good	14(w-e)	?	same shape as B301. good.	slight: 1/4"	good
B307	slight: 1/4"	paint is peeling	22(s-n)	?	balusters are thinner than those on the first and second stories, bases and capitols are not beveled. paint is peeling on most bases. 1-5 are cut at a diagonal to match roof slope.	flat	good

B308	slight: 1/4"	good	42(w-e)	?	cut in 21-31 to match roof slope. paint is peeling at most bases.	flat	good
B309	slight: 1/4"	good	22(n-s)	?	9-22 cut to match roof slope.	flat	good

APPENDIX H

BIBLIOGRAPHY

Compiled by:
Preservation Consultants
(Maurie Van Buren)

Bibliography

BOOKS

Aslet, Clive, *The American Country House*, (Yale University Press, New Haven and London 1990)

Bancroft, Hubert Howe, *The Book of the Fair*, Volume 1 (New York: Bounty Books, a division of Crown Publishers, Inc., 1894).

Bishir, Catherine W., *North Carolina Architecture* (Chapel Hill and London: The University of North Carolina Press, 1990. Published for The Historic Preservation Foundation of North Carolina, Inc.).

Buxton, Barry M., *A Village Tapestry, The History of Blowing Rock* (Boone, NC: Appalachian Consortium Press, 1989).

Crannell, William P., *Practical Estimating for Painters and Decorators.* (Frederick J. Drake Co., Chicago 1948)

Foley, Mary Mix , *The American House, (New York, Harper& Row, 1980).*

Gettens, Rutherford J. and George I. Stout, *Painting Materials: A Short Encyclopedia.* (D. Van Nostrand Company, Inc. New York 1942)

Gardner, F.B., *Everybody's Paint Book...*, (M.T. Richardson, New York 1885)

Harn, O. C., *Handy Book on Painting,* (National Lead & Oil Co. Of Penna., Pittsburgh, Pa., 1916)

Hewitt, Mark Alan, *The Architect and the American Country House, 1890-1940, (*New Haven: Yale University Press, 1990).

Hitchcock, Henry-Russell and William Seale, *Temples of Democracy: the State Capitols of the U.S.A.* (Harcourt Brace Jovanovich, New York and London, 1976)

Holley, Clifford Dyer, *Analysis of Paint and Varnish Products* (New York, John Wiley & Sons, 1912)

Kidder, Frank D. and Harry Parker. *Kidder-Parker Architect's and Builders Handbook : Data for Architects, Structural Engineers, Contractors and Draughtsmen.* (John Wiley & Sons, Inc. New York. Third Edition, 1897)

Lewis, Arnold, *American Country Houses of the Gilded Age (Sheldon's Artistic Country Seats) (*New York, Dover Publications, 1982)

McAlester, Virginia and Lee, *A Field Guide to American Houses* (New York: Alfred A. Knopf, 1984).

Mc Cash, William Barton and June Hall, The Jekyll Island Club, University of Georgia Press, Athens and London, 1989

A Monograph of the Works of McKim Mead & White 1879-1915 (New York: Benjamin Blom, 1973).

Moore, Edwin R., *In Old Oneonta* Vol. 4 (Oneonta, NY: Published by Upper Susquehanna Historical Society, 1965; Printed by the Star Job Shop, Oneonta, NY).

Morton, Chas. S, *Practical House Painter, Including Carriage, Sign and House Painting, and Valuable Hints and Recipes for the Same By an Expert.* (Shewsbury Company, Chicago, 1902)

Moss, Roger W., *The American Country House* (New York: Henry Holt and Company, 1990).

Nathans, Sydney, ed., *The Quest for Progress The Way We Lived in North Carolina, 1870-1920* (Chapel Hill, The University of North Carolina Press, 1983. Published for the North Carolina Department of Cultural Resources).

Reynolds, Hezekiah, *Directions for House and Ship Painting. A Facsimile Reprint of the 1812 Edition with a New Introduction by Richard M. Candee*, (American Antiquarian Society, Worcester, MA., 1978)

Scully, Vincent J. , Jr., *The Shingle Style and the Stick Style* , (New Haven: Yale University Press, 1955)

Swaim, Douglas, ed., *Cabins & Castles, The History & Architecture of Buncombe County, North Carolina* (Historic Resources Commission of Asheville and Buncombe County, 1981).

The Painter's Manual... by a Practical Painter. No author (Excelsior Publishing House, New York, 1897)

Vanderwalker, F. N., *The Mixing of Colors and Paints*, (Frederick J. Drake & C o. Wilmette, Illinois. 1950)

Vanderwalker, F. N, Ed., *Elementary Studies in House Painting, Decorating and Paper Hanging: Painting and Decorating Working Methods*, (International Association of Master House Painters and Decorators of the United States and Canada, Press of Byron S. Adams, Washington , D.C. 1922)

JOURNALS AND MAGAZINES

Eberlein, Harold D. "Five Phases of the American Country House", *Architectural Record,* (October, 1914, Volume XXXVI, Number IV).

Century Magazine, "In the Crowd at the Paris Exposition" November 1900: 155.

THESES AND DISSERTATIONS

Luxemburger, Elaine, "The Transition from the Beaux Arts Tradition to the Bauhaus Influence in American Architectural Education" (master's thesis, Georgia Institute of Technology, 1986).

Noblitt, Philip T., "A Search for Belonging: Moses and Bertha Cone and the Flat Top Manor Estate" (master's thesis Appalachian State University, 1994).

REPORTS

Buxton, Barry M., "Historic Resource Study and Historic Structure Report, Moses H. Cone Estate, Blowing Rock, North Carolina, April 1987". (Blue Ridge Parkway Headquarters, Asheville, N.C.)

Holt, Morgan, Russell Architects, "The Log House at Craftsman Farms", Historic Structures Report, , 350 Alexander St., Princeton, N.J., September 1993.

Firth, Ian J.W., School of Environmental Design, University of Georgia, "Moses H. Cone Memorial Park, A Cultural Landscape Report, Blue Ridge Parkway, August, 1993", Karen G. Rehm, ed., prepared for the Cultural Resources Planning Division, Southeast Regional Office, National Park Service, Department of the Interior, Washington D.C.

Conceptual Alternatives for the Relocation of the Craft Center from

the Moses Cone Manor House, by Maike Lehmann, January, 1993.

Development Concept Plans: 1) Great Smoky Mountains Deep Creek and Laurel Branch, 2) Great Smoky Mountains Foothills Parkway.
Historic Structure Assessment Report, 1991, Prepared for Park Historic Architecture Division, National Park Service, Washington, DC. (Compiled by the Center for Architectural Conservation, College of Architecture, Georgia Institute of Technology, Atlanta, GA)

PAVILION II, University of Virginia, Historic Structure Report, Mesick, Cohen Waite, Architects 1992.

"Projects Which Should Be Deleted from the Development Program", Blue Ridge Parkway Report, Blue Ridge Parkway Archives, Record Group 5, Series 7, Box 6, Folder 33, Asheville, N.C.

Proposal for Reestablishing an Apple Orchard at the Moses H. Cone Estate, by Martina Hape, January, 1991.

DOCUMENTS

City Directories in Greensboro, N.C. and Oneonta, N.Y

Epps & Hackett buildings (list of) from "The Manufacturer's Record" (North Carolina Dept. of Cultural Resources, Division of Archives and History, Raleigh, N.C.)

Ledger Book of Cone Estate, 1899-1901. Handwritten invoices for building materials. Located at the Blue Ridge Parkway Archives, Asheville, N.C.

Ledger Books of Cone Estate, 1900-1947. Handwritten entries for the Estate's expenses, including payroll and building materials. Located at the Blue Ridge Parkway Archives, Asheville, N.C.

National Park Service Maintenance Records of the Moses H. Cone Memorial Park, 1973-1994. Collected from the National Park Service Files, Southeast Regional Office, Atlanta, GA and the Blue Ridge Parkway Headquarters Files, Asheville, N.C.

National Register of Historic Places - Nomination Form, "Cumberland Island National Seashore Multiple Resource," National Park Service, Atlanta

Notes and Receipts from Blue Ridge Parkway Files, Asheville, NC, Moses H. Cone Historic Site, November 1-2, 1994. (Spiral-bound book) by Kathleen O'Malley and Gene Surber, Surber & Barber, Architects, Atlanta, GA

Paint Analysis--Moses H. Cone Manor House, 1995, prepared by Sara B. Chase, Preservation Consultant, Lexington, Mass.

The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines for Rehabilitating Historic Buildings, U.S. Department of the Interior, National Park Service, Washington, D.C., 1992.

Will of Bertha Cone, prepared in 1945, amended in 1946, and Cone Effects Summary, Compiled by Surber & Barber Architects, Inc. Atlanta, GA (Copies of the will are available at the information desk in the Manor House.)

NEWSPAPERS

Obituary of Orlo Epps, The Oneonta Herald, Oneonta, N.Y, June 3, 1926. (Rare and Manuscript Collections, Carl A. Kroch Library, Cornell University, Ithaca, N.Y.).

The Watauga Democrat, Boone, N.C., January 12, February 9, June 15, October 26, 1899; November 23, 1905.

Greensboro Patriot, Greensboro, N.C., September, 13, 1899, August 15, 1900.

Charlotte Daily Observer, Charlotte, N.C., January 31, 1900.

HISTORIC POST CARDS AND PHOTOGRAPHS

Post cards:
Proximity Mills, Greensboro, N.C.,
Flat Top Manor, 1914-1915.
Cone Estate, 1907-1915
Nighttime, The Cone Estate, 1915-1930.
Cone's Mansion, near Blowing Rock, N.C.
America's Switzerland. The Unrivaled Blowing Rock Country, One of the Lakes on the Cone Estate, Blowing Rock, N.C.
Nighttime, The Cone Estate from Across the Lake, Blowing Rock, N.C.
Lake on the Cone Estate, Blowing Rock, N.C.
A Scene on Blue Ridge Parkway.
Front View Biltmore House, Asheville, N.C.

Photographs:
Cone Export and Commission Company, date unknown. (Greensboro Historical Museum, Greensboro, N.C.)

Flat Top Manor and Environs before 1913. "Moses H. Cone Memorial Park", copied from the Park Service Publication GPO: 1979-281353/20.

Flat Top Manor before 1913. (Appalachian Consortium, Boone, N.C.)

List of Photos of State Normal & Industrial School, Epps & Hackett, Archts. Greensboro, N.C. Greensboro, N.C," (University Archives, UNC-G):

Main Building, now called Foust Building, 1892-1895.

Brick Dormitory before the porches were added.

Foust and Brick Dormitory--prior to 1895

Foust and Brick Dormitory after 1895.

Close-up of Foust Building, with student body.

Brick Dormitory--after the porches--c. 1895.

Collection of Photographs of the Cone Estate from the National Park Service Headquarters, Asheville, N.C.:

Classification No. 625.7, Negative Numbers. 224, 398, 488, 487, 491, 492,, 937, 938,939, 493, 490, 489.

Classification No. 728, Negative Numbers 4272, 421,5072, 3335,9488 (894e),5178, 5053, 4667, 4671, 4672, 4663, 7572, 7568, 5181, 5057, 5055, 5056, 5054, 2366, 2594, 7561, 5182, 2568, 2835, 2835A, 4670, 4673, 5862, 4669, 4668, 4664, 4660, 3035, 2595, 2564, 3036, 320, 7571, 284, 8315, 7570, 285, 5184, 7609, 7610, 2567, 472, 5859, 5861, 3036, 3334, 4666, 4665, 5073, 8999, 8998, 5074, 2562, 5170, 5176, 7569, 6344, 6345, 6346, 8314, 8313, 9532, 9533,

Other photographs:
Box of b/w photos from Blue Ridge dated August 1989,

Envelope with color photos, date unknown,
#10 envelope with Dave Ates photos, dated 3/15/90 in NPS Atlanta Photos Gene took

FLOOR PLANS AND ILLUSTRATIONS:

Epps, Orlo, Moses Cone Manor House Floor Plans and Elevations, first and second floors, east and west elevations, 1899. Stored on microfilm at the Blue Ridge Parkway Museum Documents Collection, Asheville, N.C.

Plans and Illustrations entitled "Preservation of the Moses H. Cone House", ID# 601/80,003, dated 4/25/86 and 1987.
Four sheets: 1) Title Sheet, 2) Foundation Plan, 3) Views 1980 Section A-A, 4) Existing Conditions. National Park Service, Washington D.C.

Plans and Illustrations entitled "Preservation of the Moses H. Cone House", ID #601/80,000 dated 6/30/78. Nine sheets: 1) Title Sheet, 2) Foundation Plan, 3) Typical Wall Sections, Existing Conditions, 4) Porch Framing Plan, 5) Porch Floor Plan, 6) Stair Details, 7) Elevations, 8) Roof Plans, 9) Roof Plans. National Park Service, Washington D.C.

Plans and Illustration entitled "Moses Cone Memorial Park, ID# 601/60108 dated 9/5/75. Three sheets: 1) Flooring Plan, Reflected Ceiling Plan, Six Stair Sections, 2) Porch Layout Plan, 3) Porch Framing Plan. National Park Service, Washington D.C.

Drawing ID #601/25001 dated 5/3/73. Three sheets: Roof Repairs designed and drawn by Askins.

Drawing entitled "The Moberg Group Inc., Carriage and Servant House"

Floor Plans, Elevations and Illustrations , Historic American Buildings Survey, Moses H. Cone Manor House, Swanson, Eric Cook, 1987.

SITE VISITS

November 1,2 1994 Gene Surber, Kathleen O'Malley,

Feb. 19, 20, 21, 1995. Gene Surber, Kathleen O'Malley, Sara Chase and Maurie Van Buren

June 14, 15 1995. Amanda Talbott, Stacie Monroe, and Gene Surber.

INTERVIEWS

Ostroy, Stephen Dr., Library of Congress, Washington DC, HABS Files. Telephone interview by Maurie Van Buren on March 17, 1995.

Epps, Rosemary, Oneonta NY, Telephone interview by Maurie Van Buren , March 20, March 22, March 30, 1995.

Research Librarian, American Institute of Architects, Washington, DC. Telephone interview by Maurie Van Buren.

Noblitt, Phil, Blue Ridge Parkway Interpretative Specialist, by Gene Surber and Kathleen O'Malley on January 17, 1995. Recorded interview and typed summary in National Park Service Files.

Bishir, Catherine North Carolina State Historic Preservation Office, Raleigh NC. Telephone interview by Kathleen O' Malley. Feb. 8, 1995

Fripp, Gail, Greensboro Historical Museum, Telephone interview by Kathleen O' Malley on March 1, 1995.

Hines, Caroline Cone Mills, Greensboro, NC. Telephone interview by Kathleen O' Malley on March 1, 1995.

Everhart, Gary (BLRI Superintendent), and Ali Miri (Historic Architect, Southeast Regional Office NPS), Richard Ramsden (Chief, Historic Architecture Division, Southeast Regional Office NPS), Al Hess (BLRI Cultural Resource Specialist), Jackie Holt(BLRI Archives Curator), Gary Johnson (Chief of Resource Planning and Professional Services for BLRI) of the NPS, interview by Gene Surber and Kathleen O' Malley in Asheville on November 2, 1994.

Boston Public Fine Arts Library, Peabody and Sterns Architects Collection, Telephone interview by Kathleen O' Malley on November 7, 1994.

Surber & Barber Architects, Inc.
1389 Peachtree Street, NE
Suite 350
Atlanta, Georgia 30309