



# Quarters 1 Superintendent's Residence, Garage, and Permanent Masonry Landscape Features Historic Structure Report





The historic structure report presented here exists in two formats. A traditional, printed version is available for study at Catoctin Mountain Park, the National Capital Regional Office of the NPS, Denver Service Center of the NPS, and at a variety of other repositories. For more widespread access, the historic structure report also exists in a web-based format through ParkNet, the website of the National Park Service. Please visit [www.nps.gov](http://www.nps.gov) for more information.

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# Catoctin Mountain Park

## Quarters 1

Superintendent's Residence, Garage, and  
Permanent Masonry Landscape Features

# Historic Structure Report

June 2013

for

Catoctin Mountain Park  
Thurmont, MD

by

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Recommended by: \_\_\_\_\_  
Superintendent, Catoctin Mountain Park

\_\_\_\_\_  
Date



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| Boggs Environmental Consultants, Inc.; June 21, 2010               |     |

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## Project Team

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National Capital Regional Office  
National Park Service

Scott Bell, Chief, Resource Management  
Catoctin Mountain Park



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## Executive Summary

### Introduction

This historic structure report was produced for Catoctin Mountain Park to determine the best treatment and use for Quarters 1. Reuse of the buildings is preferred as per National Park Service policies and guidelines for Cultural Resource Management and Executive Order No. 130006: *Locating Federal Facilities on Historic Properties*. This HSR will guide future rehabilitation and repair work on the buildings.

The project, “Prepare Historic Structure Report for Superintendents’ Residence & Garage,” PMIS # 174192, was conducted under a Project Agreement between the Historic Preservation Training Center (HPTC) and Catoctin Mountain Park (CATO) entitled “Catoctin Mountain Park Historic Structure Report for Quarters 1 – Lodge, Garage, and Permanent Landscape Features.” Funding was allocated through the National Capital Regional Office (NCR); project management was also done through NCR. HPTC, PETE, and NCR are units of the National Park Service (NPS), U.S. Department of the Interior. NPS policies and guidelines were adhered to in the production and distribution of this HSR.

A historic structure report is the primary guide to treatment and use of a historic structure. It is prepared to identify and minimize the loss of character-defining features and materials and provides a basis upon which to address anticipated management objectives. This historic structure report aims to provide a current understanding of these previously undocumented historic buildings and structures and meet the following goals: provide an historical background and context for Quarters 1; supply a current physical description and timeline for changes for the buildings; identify character-defining features for the buildings; document the condition of the buildings; and provide treatment recommendations for the proposed use for the buildings.

HPTC’s investigations result in a full developmental history for Quarters 1, the original Custodian’s or Superintendent’s lodge. This HSR records the first Quarters 1 complex and its subsequent demise by fire, the construction of the second Quarters 1 complex (extant), and alterations which have occurred to the buildings in their 65-year history. The technical evaluations provide an understanding of the historical integrity of the buildings. This information is valuable for guiding sustainable development of Quarters 1 by offering research and insight to park management. The contents are used by the park when scoping new projects. These new projects contain parameters for re-use functions and physical modifications that complement resource protection and preservation goals. This HSR informs management and directs planning and construction alternatives.

## Research Conducted to Produce HSR

The following activities were conducted to gain a thorough understanding of Quarters 1 at Catoctin Mountain Park:

- Primary and secondary historic research into the sequence of changes and evolution of construction by the NPS:
  - o Harpers Ferry Center Willow Springs, Charles Town, WV:
    - National Park Service Historic Photograph Collection,
    - National Park Service History Collection-Park Historic Reference Files;
  - o National Park Service, Denver Service Center, Technical Information Center, Denver, CO
  - o Catoctin Mountain Park archives, Thurmont, MD (researched by Angela Sirna),
- Architectural documentation, including measured drawings, by HPTC (CATO 841/116742);
- Condition assessments of all three buildings by HPTC.

## Condition Assessment Summary

Upon HPTC's first visit to Quarters 1, the complex was thought to be in good condition despite being closed to park use. After successive visits and assessments, further investigation by HPTC reveals modest maintenance deficiencies—which have been previously documented—resulting in an overall condition assessment rating of fair.

It should be noted that this is a high-quality building that cannot be replicated in today's economic environment. The maintenance deficiencies described herein, while needing to be addressed, are superficial and in no way signify justification for any treatment other than full rehabilitation of the building and a return to immediate use. Reversal of recent out-of-character modifications is easily incorporated into any design or planning work and represents a return to the sustainable management of these heritage structures.

Additionally, the use of modern and synthetic non-compatible materials occurred during this time period (mid-1970s through 1990s) because the building was not being managed as a historic structure. The building was not officially listed on either the internal NPS List of Classified Structures or the National Register of Historic Places. As of August 2011, Quarters 1 has been listed as a contributing structure in the Catoctin Mountain Park Historic District (the National Register nomination is currently in Final Draft Form.<sup>1</sup>

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<sup>1</sup> Horner, Susan G. "Catoctin Recreational Demonstration Area." Draft National Register of Historic Places Registration Form. August 8, 2011

The exterior retains a low level of historic integrity (although easily reversible) dating to the original date of construction and the date of significance for this HSR (1947). Major changes to the original exterior features include:

- Reconfiguration of the windows in the exterior stair enclosure (1958);
- Installation of a wood stove and chimney on the sun porch (1992);
- Replacement of the overhead garage doors (1994);
- Enclosure of the sun porch (1994);
- Replacement of exterior doors and storm doors (residence only; 1991 and 1995);
- Replacement of exterior basement door (1997);
- Replacement of the first- and second-floor windows (residence only; date unknown);
- Installation of vinyl siding over the brick and cedar-sided exterior walls (date unknown);
- Installation of modern gutters and downspouts (date unknown);
- Installation of metal on eaves and soffits (date unknown); and
- Replacement of original slate roof coverings with cedar shakes (date unknown).

The interior retains a moderate level of historic integrity dating to the original date of construction and the date of significance for this HSR. Major changes to the interior include:

- Installation of carpet over hard-wood floors (ca. 1991);
- Replacement of at least eight original interior doors (1995);
- Replacement of cast-iron radiators with baseboard heat on the second floor (1997);
- Installation of faux-wood paneling in the basement (date unknown); and
- Replacement of kitchen cabinets and countertops (date unknown).

Overall Quarters 1 is in “fair” condition, from the standpoint of NPS facility management programs (FMSS) and standards (with some features in “good” and “poor” condition). Further professional investigation and assessment of utility and building systems, including mechanical, plumbing, electrical, and fire and emergency systems, is required for a complete understanding of the condition of these engineered systems.

An accessibility study will be needed in conjunction with future programs to plan site and building modifications that are in compliance with the Architectural Barriers Act Accessibility Standards (ABAAS). Federal properties must meet ABAAS for the following accessible conditions: site arrival point to building entry; parking; entrance(s); site circulation; interior circulation; restrooms; and programmatic access. ABAAS and Section 504 of the Rehabilitation Act of 1973 pertains to both employee and visitor access. Most of the ABAAS recommendations are easily achievable and may be designed so as not to adversely affect the character-defining features of the structure or the landscape.

The results of these investigations at Quarters 1 provide a more fully-integrated narrative of developmental history of the extant buildings, including changes made over the years by the NPS. It also will educate users of the buildings about the integrity of the historic fabric and the character-defining features so that it may be exposed, interpreted, and preserved for future generations.

## **Recommendations for Treatment and Use Summary**

The recommended ultimate treatments and use for Quarters 1, as determined through research for this HSR, are as follows:

- Exterior rehabilitation of the character-defining features, preservation (typical), maintenance and minor rehabilitation, with the removal of non-sympathetic modern additions. These changes should assist with the goal to have the building reflect its appearance in 1948, its year of completion.
- Interior rehabilitation and preservation of character-defining features with removal of non-sympathetic modern accretions to reflect its residential function in 1948. This treatment will preserve character-defining features and allow for the reversal of non-sympathetic treatments, materials, and finishes. Alternate compatible uses by the National Park Service include administrative offices, support park visiting scholar or artist-in-residence function, park staff quarters, park record storage, or park partner group use.

The treatment and use recommendations provided are meant to guide the final scope and description of the funded project and do not provide a construction or architectural program.

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## Administrative Data

### Project Identification

PMIS Number: 174192  
Project Title: Prepare Historic Structure Report for Quarters 1 (HS128) and Garage (HS129)  
Project Location: Catoctin Mountain Park, Thurmont, MD

### Name and Location Data

Preferred Structure Name: Quarters 1  
Other Structure Name: Superintendent's Residence, Custodian's Residence Garage  
List of Classified Structures ID: To be determined (not currently listed)  
Park Asset Number: Residence: HS-128 (FMSS: 17018)  
Garage: HS-129 (FMSS: 17019)  
Square Feet: Residence: 2,316  
Garage: 380  
  
Park: Catoctin Mountain Park  
Park District: Not Applicable (Historically: Blue Blazes)  
Structures' County: Frederick  
Structures' State: Maryland  
NPS Region: National Capital  
Cluster: Not Applicable  
Administrative Unit: Not Applicable

### Related Studies

Boggs Environmental Consultants, Inc. "Asbestos-Containing Materials Survey (US EPA AHERA Level), Quarters #1 (HS128), Catoctin Mountain National Park, Thurmont, MD 21788." Prepared for Prizm, Inc. June 16, 2010.

Boggs Environmental Consultants, Inc. "Asbestos-Containing Materials Survey (US EPA AHERA Level), Quarters #1 Garage (HS129), Catoctin Mountain National Park, Thurmont, MD 21788." Prepared for Prizm, Inc. June 21, 2010.

Boggs Environmental Consultants, Inc. "Limited Indoor Air Quality (IAQ) Investigation, Catoctin Mountain Park, Thurmont, Maryland, BEC Project # MD09082." August 12, 2009.

Briscoe, Stanley. Memorandum from Chief, Design Services Division, National Capital Region to Superintendent, Catoctin Mountain Park, National Capital Region. Ranger Quarters #1 Leak Analysis Report. October 16, 2009.

“Emergency Conservation Work (ECW) Architecture at Catoctin Mountain Park.” National Register of Historic Places, Multiple Property Documentation Form. October 11, 1989.

Horner, Susan G. “Catoctin Recreational Demonstration Area.” Draft National Register of Historic Places Registration Form. August 8, 2011

## **Cultural Resource Data**

### **National Register of Historic Places**

|                             |                                                                    |
|-----------------------------|--------------------------------------------------------------------|
| Status:                     | Contributing structure in Catoctin Mountain Park Historic District |
| Date:                       | August 8, 2011                                                     |
| National Historic Landmark: | No                                                                 |
| Significance:               | Criterion C: Architecture                                          |
| NR Information System No.:  | Not Yet Assigned                                                   |

### **Period of Significance**

The Catoctin Mountain Park Historic District, of which Quarters 1 is considered a contributing structure, states the period of significance for the park to be 3000 BC to 1954 AD. Because Quarters 1 was constructed in 1947, the period of significance for this complex is 1947-1954.

### **Recommended Treatment & Use**

The recommended ultimate treatment for Quarters 1 is exterior restoration to 1947 and interior rehabilitation to comply with National Park Service policies and guidelines.

The recommended ultimate use for Quarters 1 is continued use as park housing or other administrative use.

### **Recommendations for Cataloguing & Storage of Materials Generated by HSR**

All project materials will be turned over from HPTC to Denver Service Center and filed at the Technology Information Center (TIC). Electronic files and media will be transferred via the NPS ftp network site and through archival CDs mailed to DSC. Copies of materials will also be submitted to CATO and the NCR Office.

### **Recommendations for Future Research**

Recommendations for future research of the Quarters 1 complex include the photographic archives of The Thurmont Historical Society, Inc. and the Frederick County Historical Society.

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## **Part 1 | Developmental History**

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## Historical Background and Context

### **Catoctin Mountain Park Development<sup>1</sup>**

“In the Catoctin Mountain area, the first three decades of the twentieth century witnessed a continuing shift away from an emphasis on industry and farming toward recreation and tourism.” Frequent visits by President Herbert Hoover to the Catoctin area for recreational retreats allowed the region to be noticed and boarding houses, catering to summer visitors, were quickly established in and around the area.

With the onset of the depression, New Deal relief efforts were initiated throughout the United States by President Franklin D. Roosevelt. Economic recovery and basic reform were included as part of the whole-scale change for the country. One of the many goals of the New Deal “sought to address the problem of agricultural overproduction and falling prices [and]...persistent poverty by]...removing poor farmers from submarginal land.” A Land Planning Committee was appointed to oversee the resettlement of the farmers; the committee members included the Secretary of the Interior, the Chief of the Federal Emergency Relief Administration, and representatives from the National Park Service. Through this committee, forty-six Recreational Demonstration Areas (RDAs) were developed in twenty-four states.

Site selection for the state of Maryland was coordinated through University of Maryland’s State Cooperative Extension Service (later building plans for Catoctin RDA would use their title blocks). Catoctin Mountain was the top choice for an RDA by the State Cooperative Extension Service. “At Catoctin, [the surveyor] found ‘good roads,’ proximity to the nearby Appalachian Trail, and Hunting Creek... , farmers in economic distress, many on relief, and farm land ‘not yielding enough for families.’” National Park Service officials heard of the favorable report of Catoctin and inspected the area themselves. An NPS district inspector “envisioned a Civilian Conservation Corps [CCC] camp remaking the area into a park with handsome camp sites.” The Catoctin Recreational Demonstration Area project gained approval on January 7, 1935.

The Resettlement Administration was placed in charge of the development of the RDA and the Works Progress Administration was tasked with supplying the workers and financing the projects. Work began on January 2, 1936 and gradually gained momentum through the development of the Camp Misty Mount, Camp Greentop, and Camp Hi-Catoctin; however none of this work was completed by CCC labor.

It was not until early 1939, when the CCC was merged into the Federal Security Agency and gained funding for 245 new camps, that a CCC camp was formed at Catoctin RDA. Initially constructing a company camp, their work ultimately had a very broad scope and included the construction of roads, residences (including the first Quarters 1), ranger stations, a water supply system, power

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<sup>1</sup> The Catoctin Mountain Park development section was gathered from information found in: Wehrle, Edmund F. *Catoctin Mountain Park: A Historic Resource Study*. 2000. Accessed <[http://www.nps.gov/history/history/online\\_books/cato/hrs.htm](http://www.nps.gov/history/history/online_books/cato/hrs.htm)> August 23, 2012.

lines, foot trails, and retaining walls, and also planting trees. CCC work continued at Catoctin until November 7, 1941. The CCC program was ultimately terminated by Congress on July 2, 1942.

## Quarters 1

### The First Complex

Plans for the first complex, originally called Custodian's Residence or Dwelling, began in early 1938. The earliest found drawings of the area show development of the water supply system (dated 02/02/38 and approved 04/29/39; fig. 1) and the sewer/septic system (dated 02/02/39; fig. 2).

By June 1939 the plans for the dwelling were preliminarily developed (fig. 3). These plans included a two-story log house with a stone walk-out basement. The first floor included a kitchen, dining room, living room, two bedrooms, a full bathroom, a stair hall with access to the basement and the second floor, front and rear porches, and a side terrace. The dormered second floor included a single bedroom and auxiliary room. The basement plan consisted of a two-car garage with stair access to the first floor, and also included a separate boiler and fuel storage rooms. A set of front-elevation retaining walls and stairs altered the landscape for access between the basement garage and the first-floor levels.

The plans for Quarters 1 were altered by August 1939 (fig. 4). A plot plan shows the garage removed from the basement and conjoined to the dwelling through a breezeway. The first-floor outline is very similar to the preliminary plans, but does not include the front-elevation retaining walls and stairs. Changes include a retaining wall at the rear elevation, an exterior basement stair at the breezeway, and an entrance court at the garage.

Two site planning drawings were completed in September 1939. The first depicts a crushed-stone driveway and entrance court to the dwelling site (fig. 5). The second depicts an updated water supply system (fig. 6).

In September 1940, an eight-sheet set of plans, elevations, and details was completed of the dwelling (figs. 7-15). The drawings show a two-story log house with a full basement. The first floor included a kitchen, dining room, living room, two bedrooms, various closets, a full bathroom, a stair hall with access to the basement and the second floor, a screened-in front porch, a breezeway connecting the garage, and a side flagstone terrace. The dormered second floor included two bedrooms, various closets, a stair hall with loft, and an attic store room. The basement plan consisted of one large room with small enclosures for a toilet and coal storage. The one-and-one-half-story stone garage included space for two cars on the ground floor and a stair to the attic. Additional details include doors, windows, trim, dormers, second-floor wallboard, structure, cornices, stairs, fireplaces, and cabinets.

The custodian's residence was constructed by CCC labor and was finished by the summer of 1941.<sup>2</sup> On October 21, 1945 the first Quarters 1 complex was destroyed in a fire.<sup>3</sup>

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<sup>2</sup> Wehrle, *Catoctin Mountain Park*.

<sup>3</sup> Catoctin Mountain Park. Form 10-768, Prepared on March 13, 1953. Catoctin Mountain Park building file, Building No. 129 Garage to Supt's Quarters.

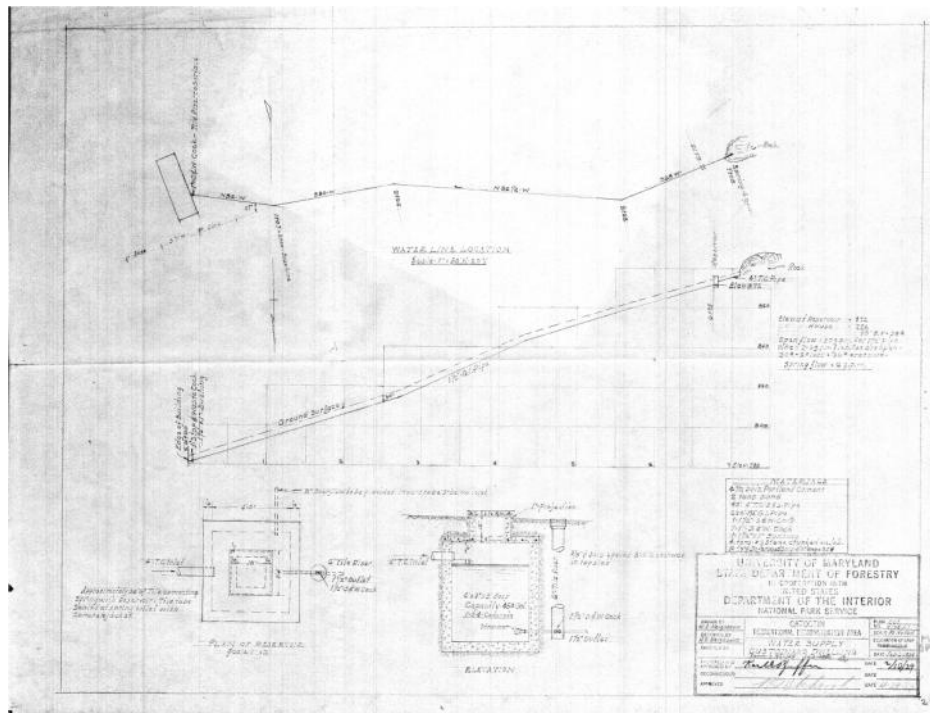


Figure 1. A February 1938 drawing details the water supply system for the new custodian's dwelling. The absence of the building on the drawing suggests that the dwelling had not yet been designed. Drawing: Water Supply, Custodian's Residence (Orig. Dwg. # 9104-1-1). February 2, 1938. Catoclin Mountain Park Resource Office flat files. See Appendix D for larger drawing.

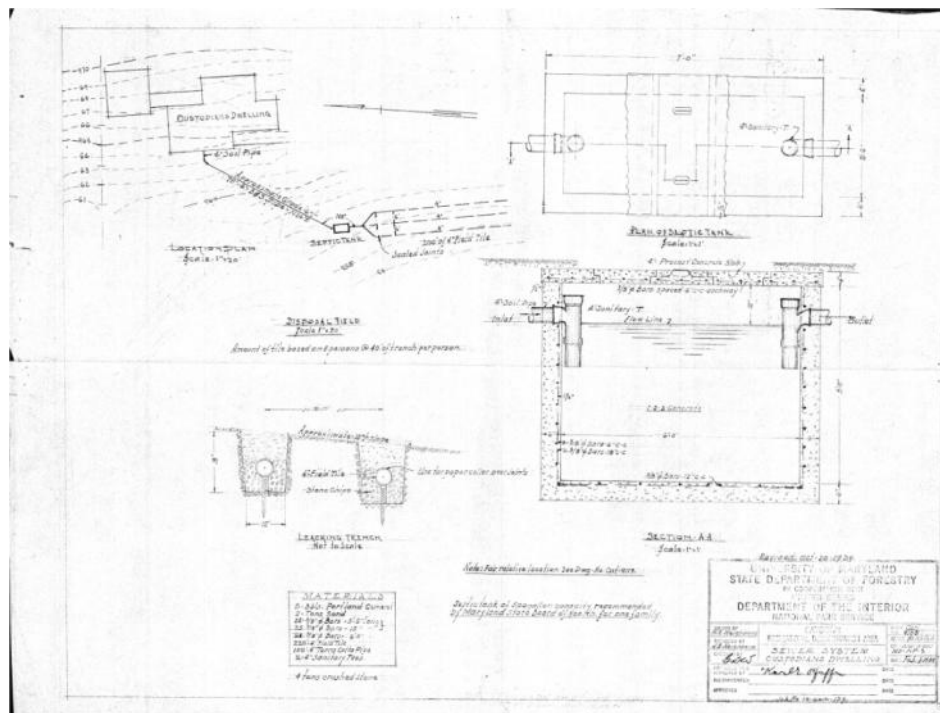


Figure 2. A February 1939 drawing details the sewer/septic system for the new custodian's dwelling. The presence of the building suggests that the dwelling had been designed. Drawing: Sewer System, Custodians Dwelling (Orig. Dwg. # 9103). February 2, 1939. Catoclin Mountain Park Resource Office flat files. See Appendix D for larger drawing.

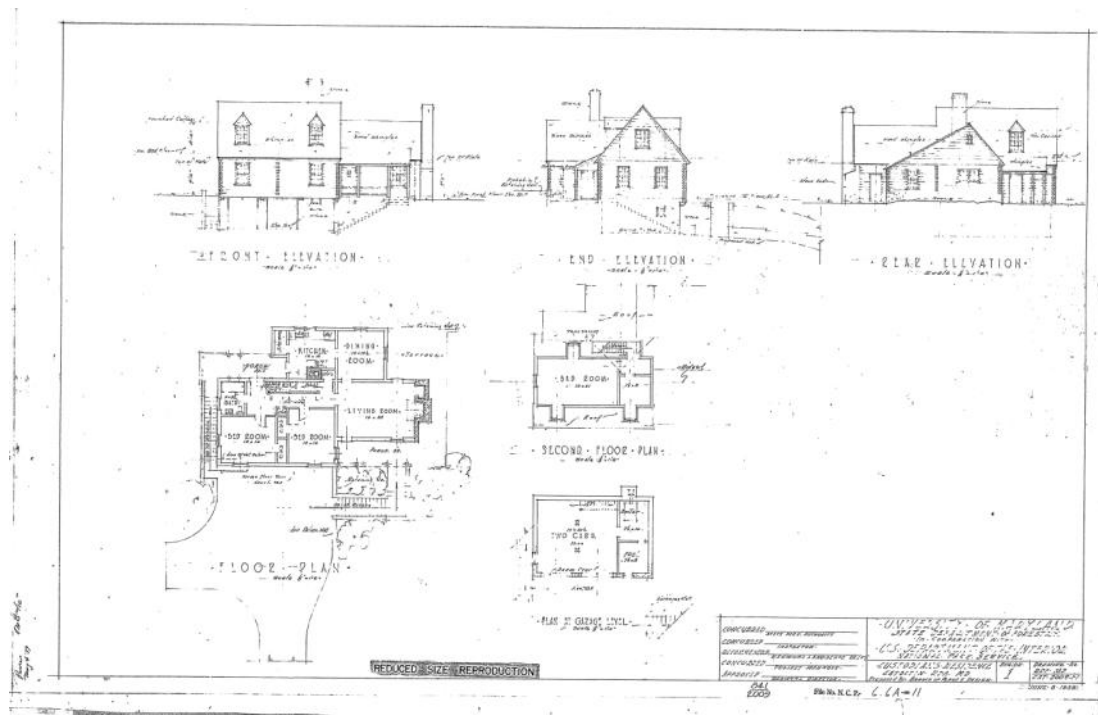


Figure 3. A June 1939 plan shows the preliminary design of Quarters 1; it was later changed. Drawing: Custodian's Residence (NPS Dwg. # 841/2009). June 8, 1939. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.

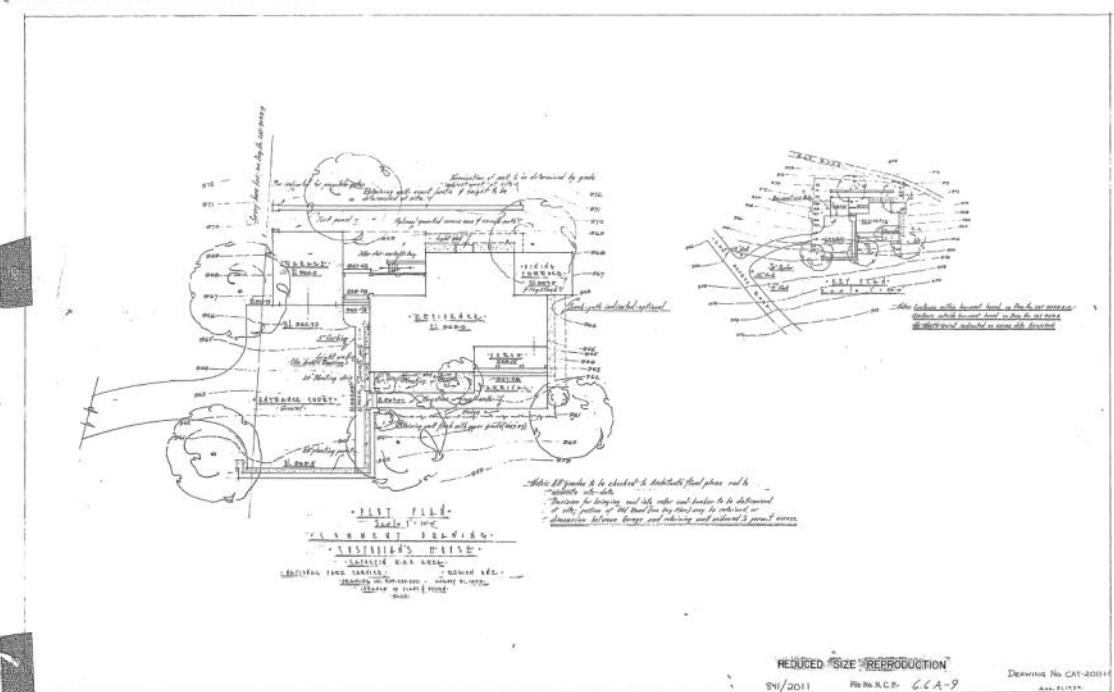


Figure 4. An August 1939 plot plan shows that the preliminary design for Quarters has been significantly changed. Drawing: Plot Plan, Comment Drawing (NPS Dwg. # 841/2011). August 31, 1939. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.

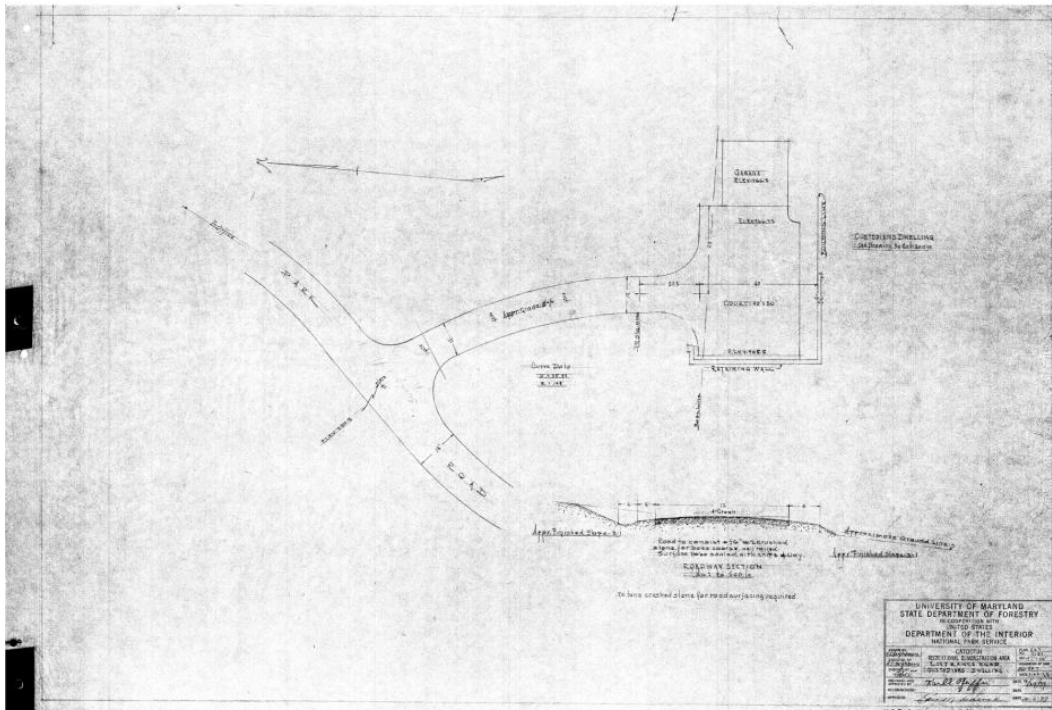


Figure 5. A September 1939 site plan shows the specifications for the new crushed-stone driveway and entrance court to the dwelling site. Drawing: Entrance Road, Custodians Dwelling (Orig. Dwg. # 9131). September 22, 1939. Catoclin Mountain Park Resource Office flat files. See Appendix D for larger drawing.

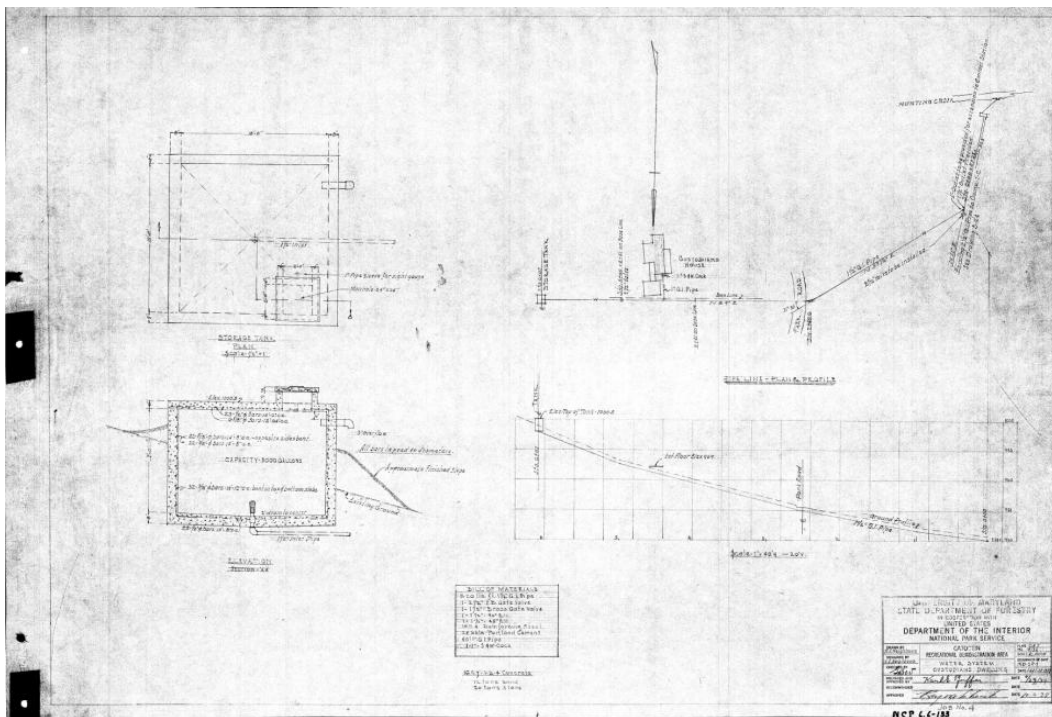


Figure 6. A September 1939 drawing details the water supply system for the new custodian's dwelling. Drawing: Water System, Custodians Dwelling (Orig. Dwg. # 9132). September 28, 1939. Catoclin Mountain Park Resource Office flat files. See Appendix D for larger drawing.

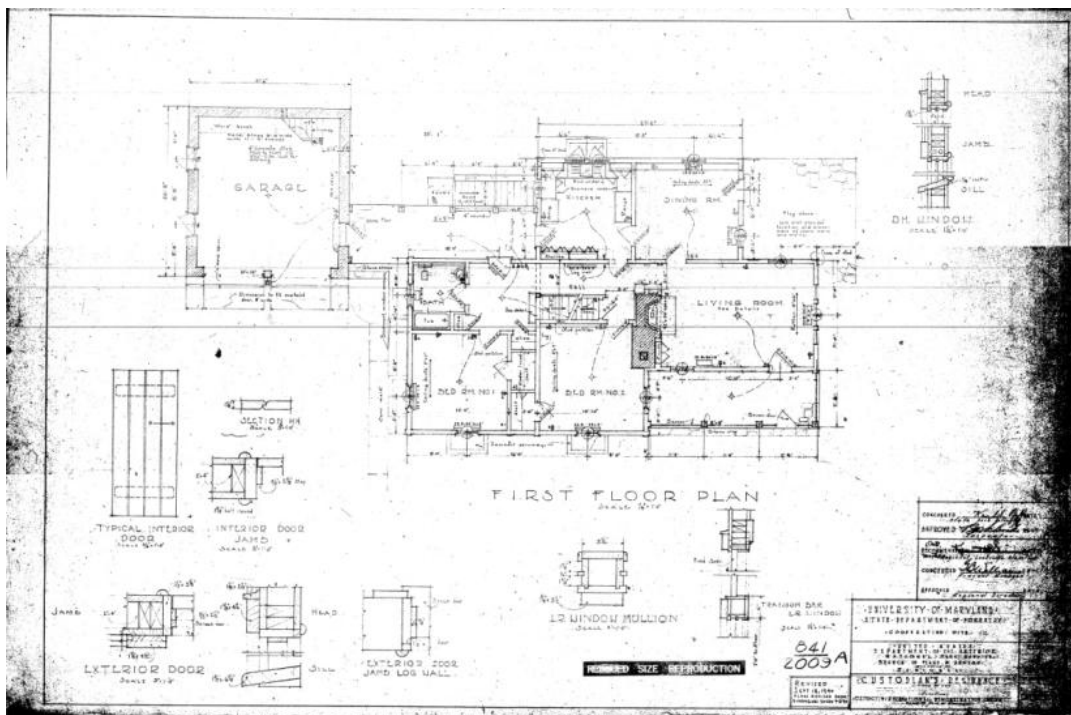


Figure 7. Sheet 1 of September 1940 drawing set detailing the first custodian's dwelling at Catoctin Mountain Park. Drawing: Custodian's Residence (NPS Dwg. Set # 841/2009A). September 18, 1940. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.

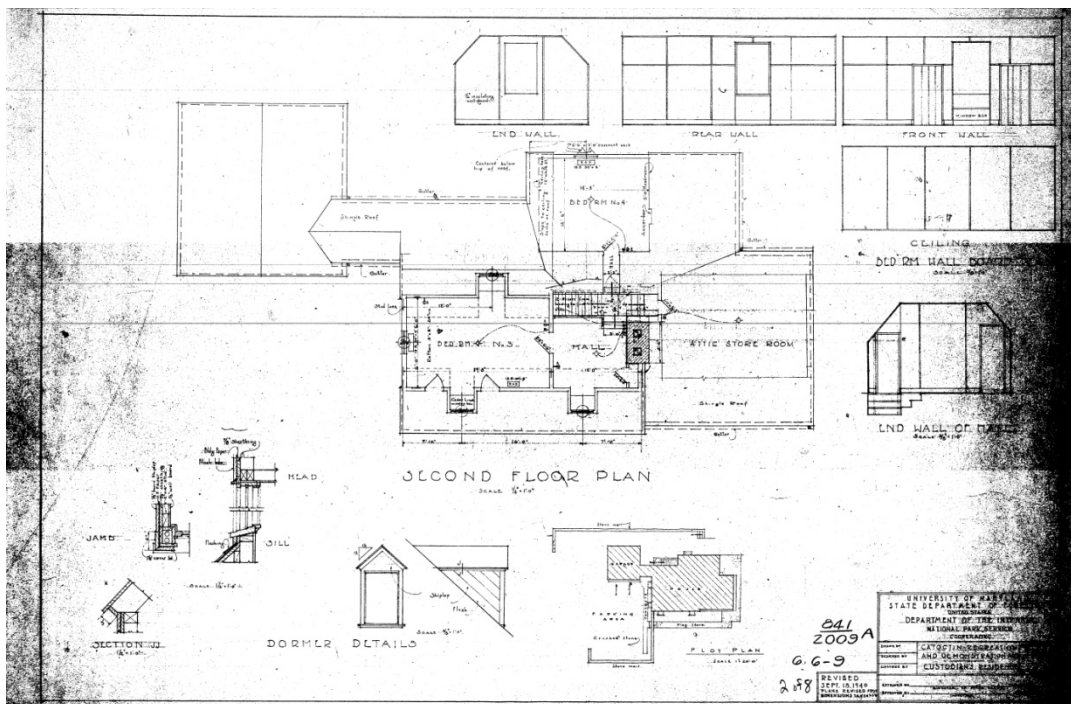


Figure 8. Sheet 2 of September 1940 drawing set detailing the first custodian's dwelling at Catoctin Mountain Park. Drawing: Custodian's Residence (NPS Dwg. Set # 841/2009A). September 18, 1940. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.

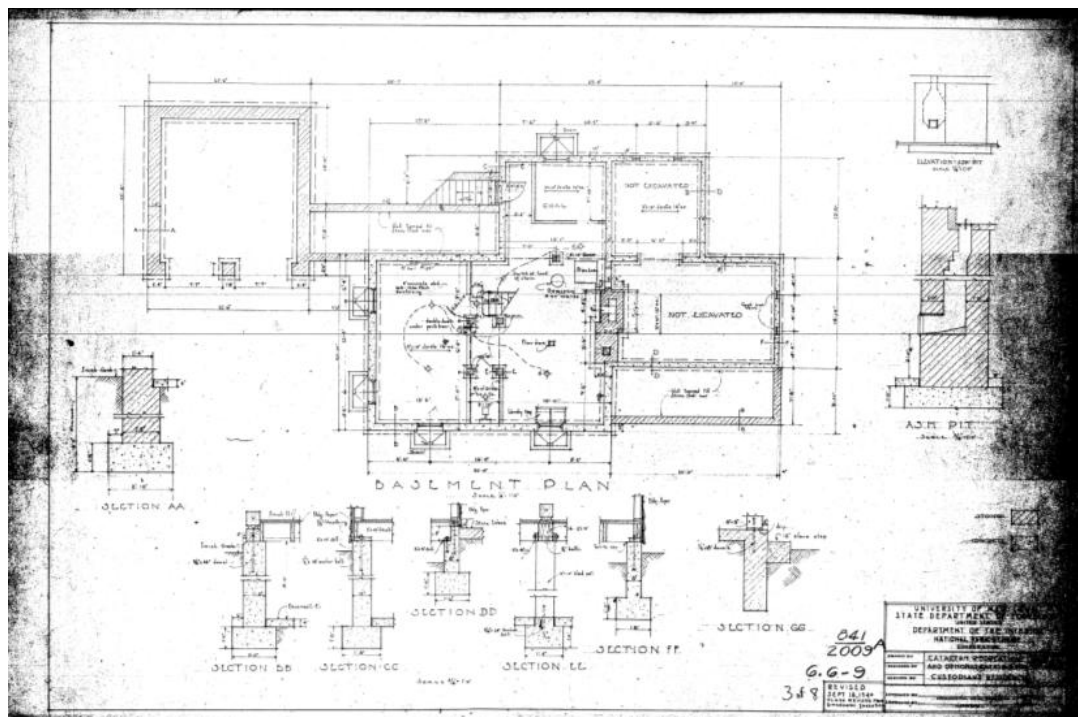


Figure 9. Sheet 3 of September 1940 drawing set detailing the first custodian's dwelling at Catoctin Mountain Park. Drawing: Custodian's Residence (NPS Dwg. Set # 841/2009A). September 18, 1940. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.

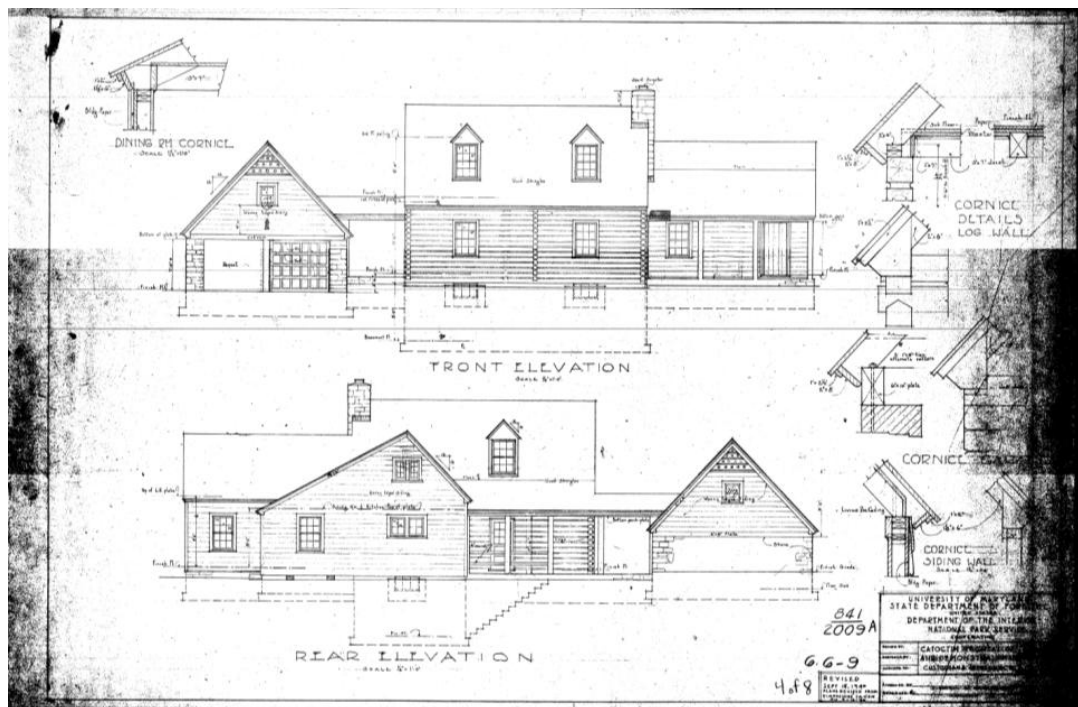


Figure 10. Sheet 4 of September 1940 drawing set detailing the first custodian's dwelling at Catoctin Mountain Park. Drawing: Custodian's Residence (NPS Dwg. Set # 841/2009A). September 18, 1940. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.

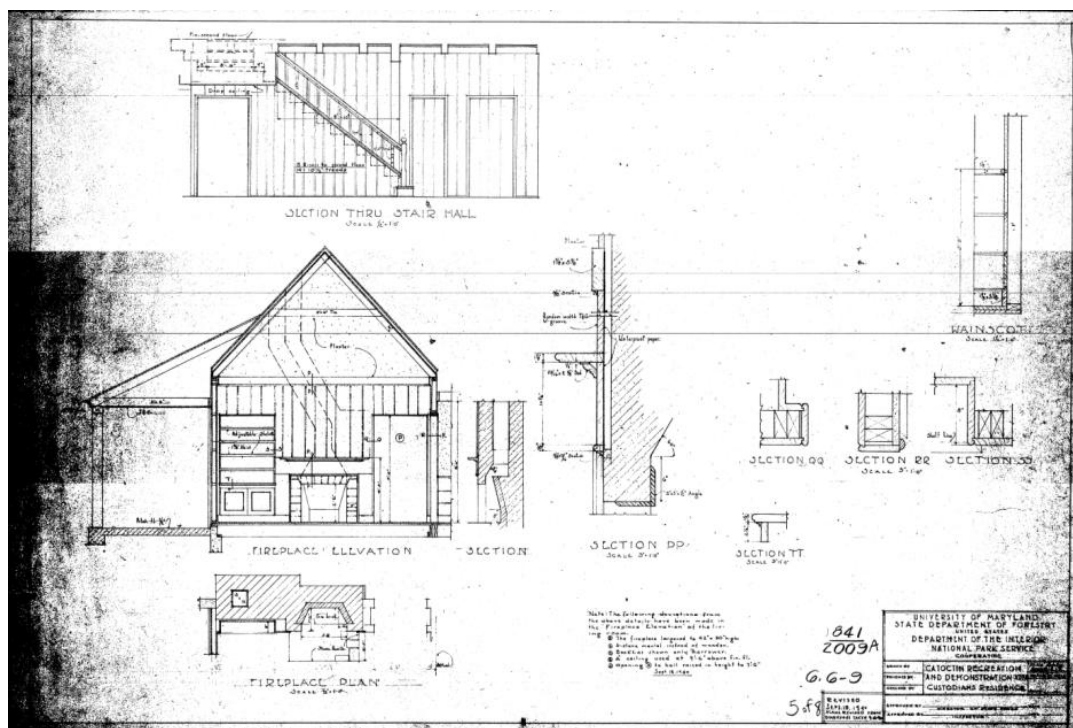


Figure 11. Sheet 5 of September 1940 drawing set detailing the first custodian's dwelling at Catoctin Mountain Park. Drawing: Custodian's Residence (NPS Dwg. Set # 841/2009A). September 18, 1940. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.

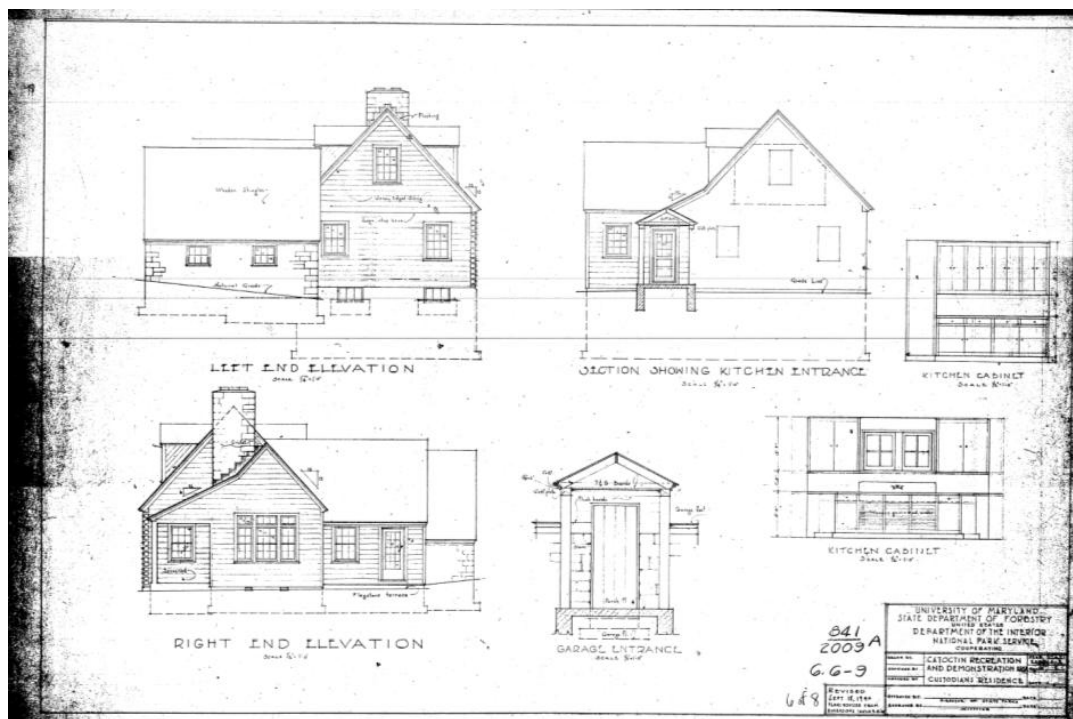


Figure 12. Sheet 6 of September 1940 drawing set detailing the first custodian's dwelling at Catoctin Mountain Park. Drawing: Custodian's Residence (NPS Dwg. Set # 841/2009A). September 18, 1940. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.

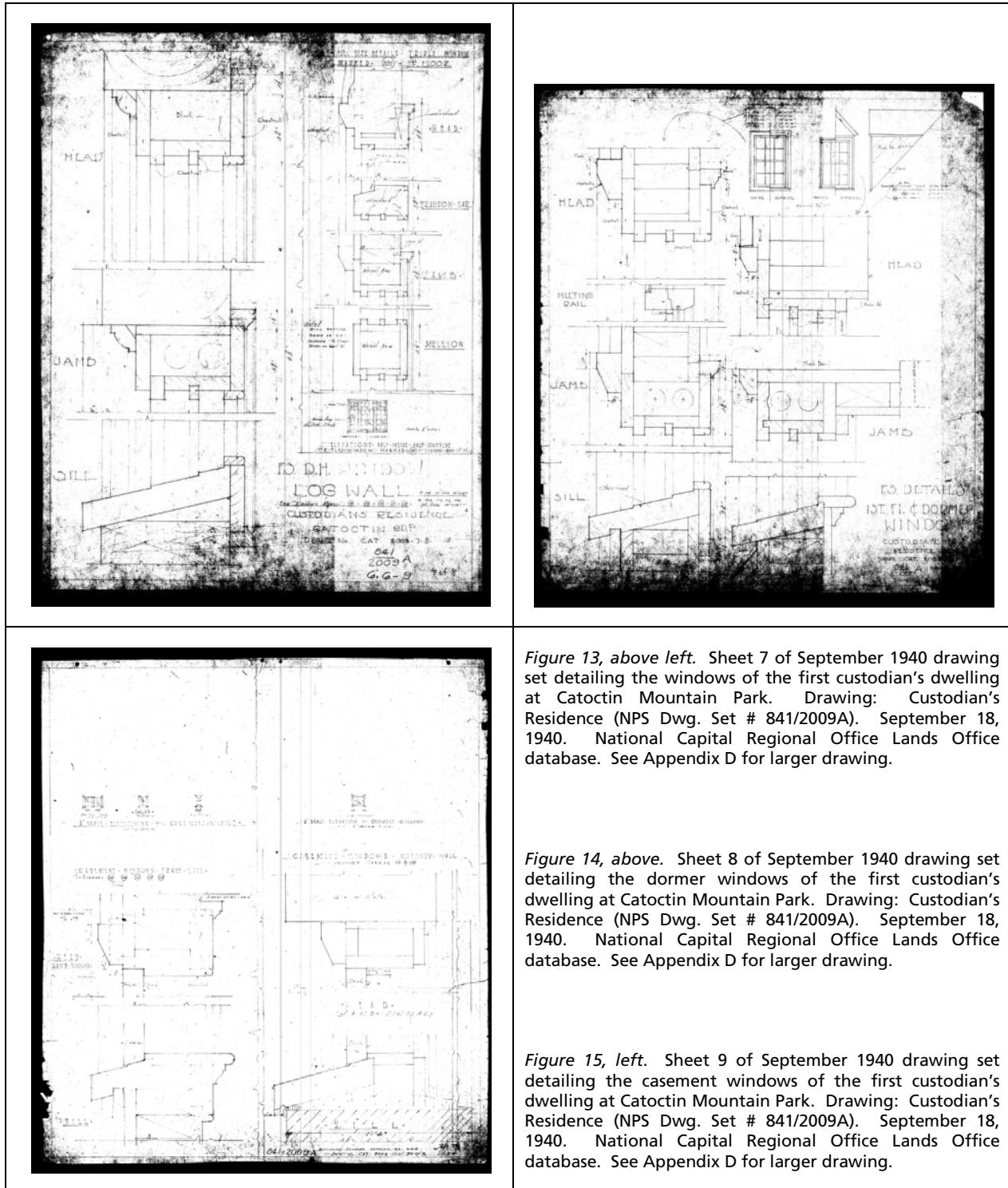


Figure 13, above left. Sheet 7 of September 1940 drawing set detailing the windows of the first custodian's dwelling at Catoctin Mountain Park. Drawing: Custodian's Residence (NPS Dwg. Set # 841/2009A). September 18, 1940. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.

Figure 14, above. Sheet 8 of September 1940 drawing set detailing the dormer windows of the first custodian's dwelling at Catoctin Mountain Park. Drawing: Custodian's Residence (NPS Dwg. Set # 841/2009A). September 18, 1940. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.

Figure 15, left. Sheet 9 of September 1940 drawing set detailing the casement windows of the first custodian's dwelling at Catoctin Mountain Park. Drawing: Custodian's Residence (NPS Dwg. Set # 841/2009A). September 18, 1940. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.



Figure 16. An undated (ca. 1941) photograph of the original Quarters 1. Photo: The Thurmont Historical Society, Inc. "Catoclin Mountain Park Supt Williams 002." The Robert S. Kinnard Collection of Historic Thurmont Photographs.

## The Second Complex

Approximately one year after the first Quarters 1 complex was destroyed, a preliminary plan for a second complex was completed (dated September 1946; fig. 17). It sought only to reuse the first basement/foundation and nothing else. This drawing includes a first-floor plan with a kitchen, dining room, a stair accessing the basement and a second floor, three bedrooms, and two full bathrooms circling a central living room. This plan was not executed.

Final drawings for the second, and current, Quarters 1 complex were completed in June 1947 and approved in October of the same year (figs. 18-23). These plans are nearly identical to what is extant today. The brick and stone two-story dwelling includes a full basement. The first floor contains a kitchen, a dining room, a living room with entry vestibule and stairs to the second floor and basement, a bedroom, a full bathroom, various closets, a side porch, and a rear breezeway with access to the garage. The second floor contains two bedrooms, various closets, a full bathroom, and attic storage. The basement contains a recreation room, a utility room, closets, and a half bathroom; it is accessed through both an interior stairway and an exterior stairway (dates to the first complex). Many of the foundation walls, but not all, were reused for the rebuilding of the dwelling (see physical description section, for more information).

Construction of the second complex (Contract No. I-28np-98) was started on March 22, 1948 and completed on December 27 of the same year.<sup>4</sup> Progress photographs were taken on April 3, April 24, and July 24, 1948 (figs. 24-41).

<sup>4</sup> Progress Pictures of Custodian's Residence and Garage (Reconstruction). 1948. Catoclin Mountain Park archives.

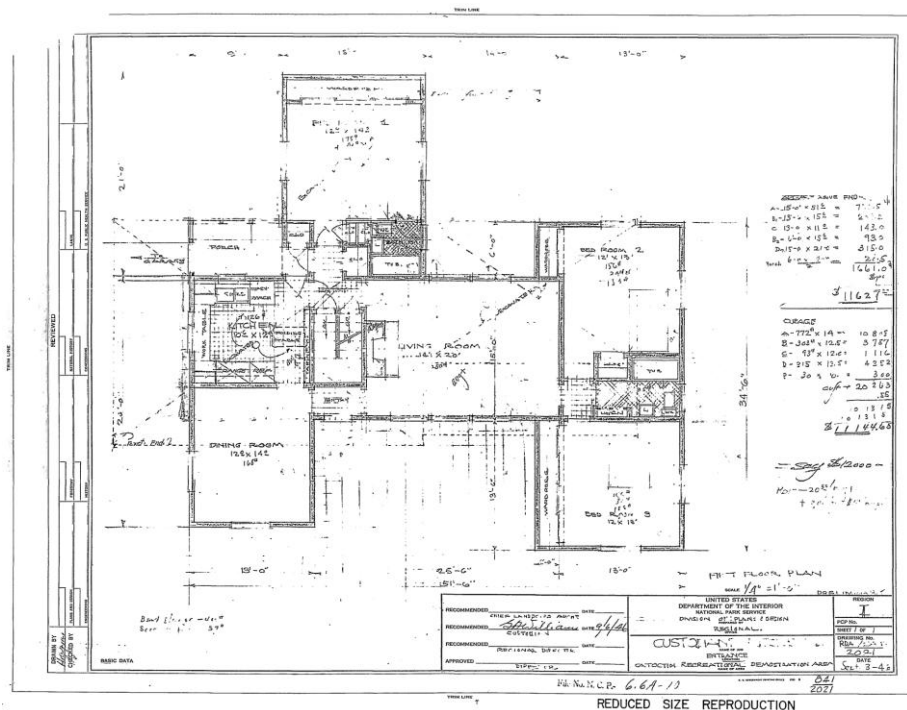


Figure 17. A September 1946 drawing shows a preliminary plan for the rebuilding of Quarters 1. This plan was not executed. Drawing: Custodian's Residence (NPS Dwg. # 841/2021). September 3, 1946. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.

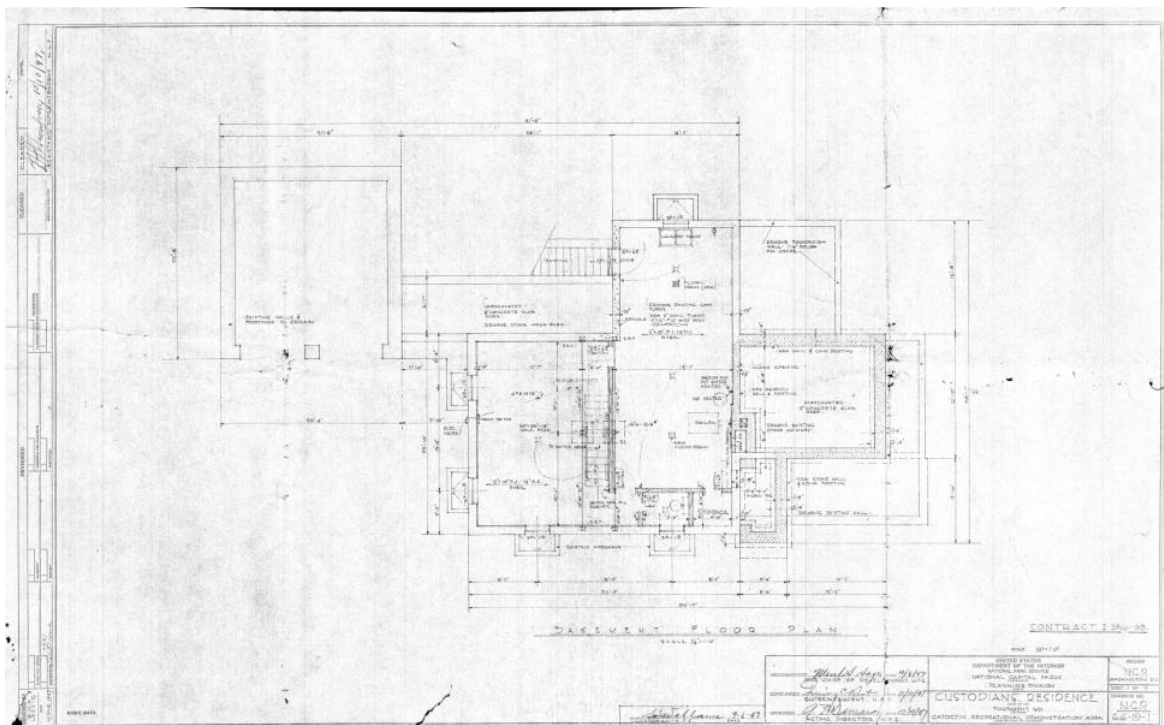


**Figure 18.** Sheet 1 of June 1947 drawing set detailing the second custodian's residence at Catoctin Mountain Park. Drawing: Custodian's Residence (Orig. Dwg. # 6.6-19-1). September 6, 1947. Catoctin Mountain Park Resource Office flat files. See Appendix D for larger drawing.

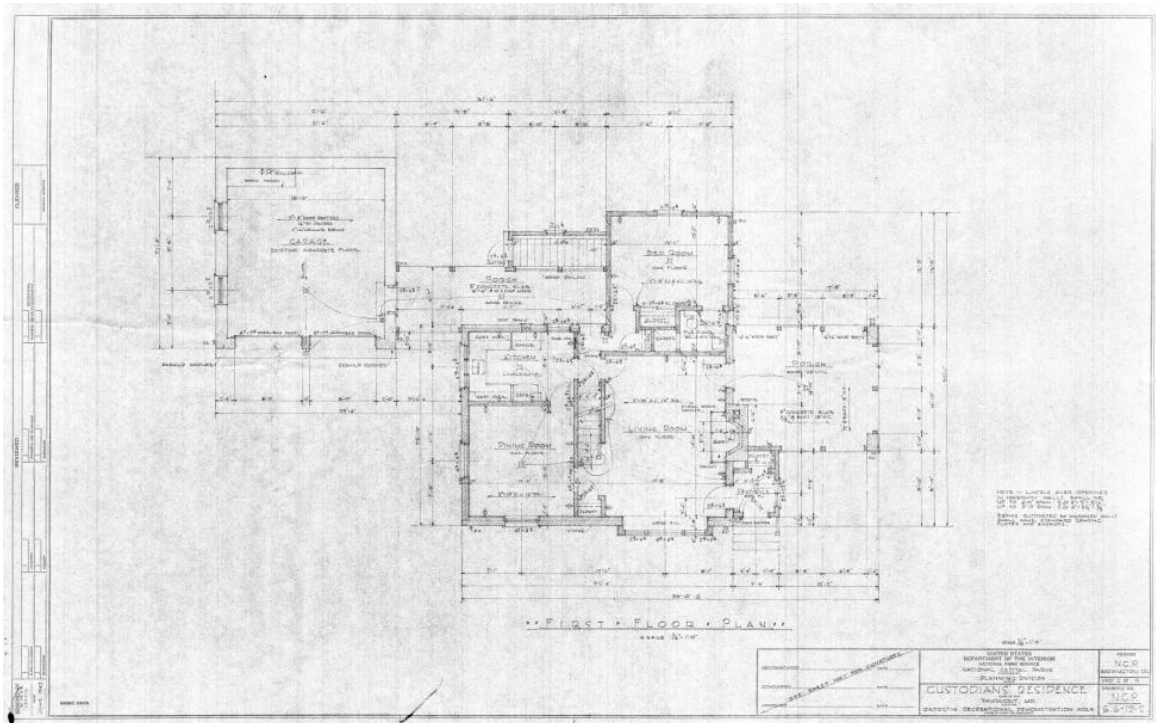


Figure 19. Sheet 2 of June 1947 drawing set detailing the second custodian's residence at Catoctin Mountain Park. Drawing: Custodian's Residence (Orig. Dwg. # 6.6-19-2). September 6, 1947. Catoctin Mountain Park Resource Office flat files. See Appendix D for larger drawing.

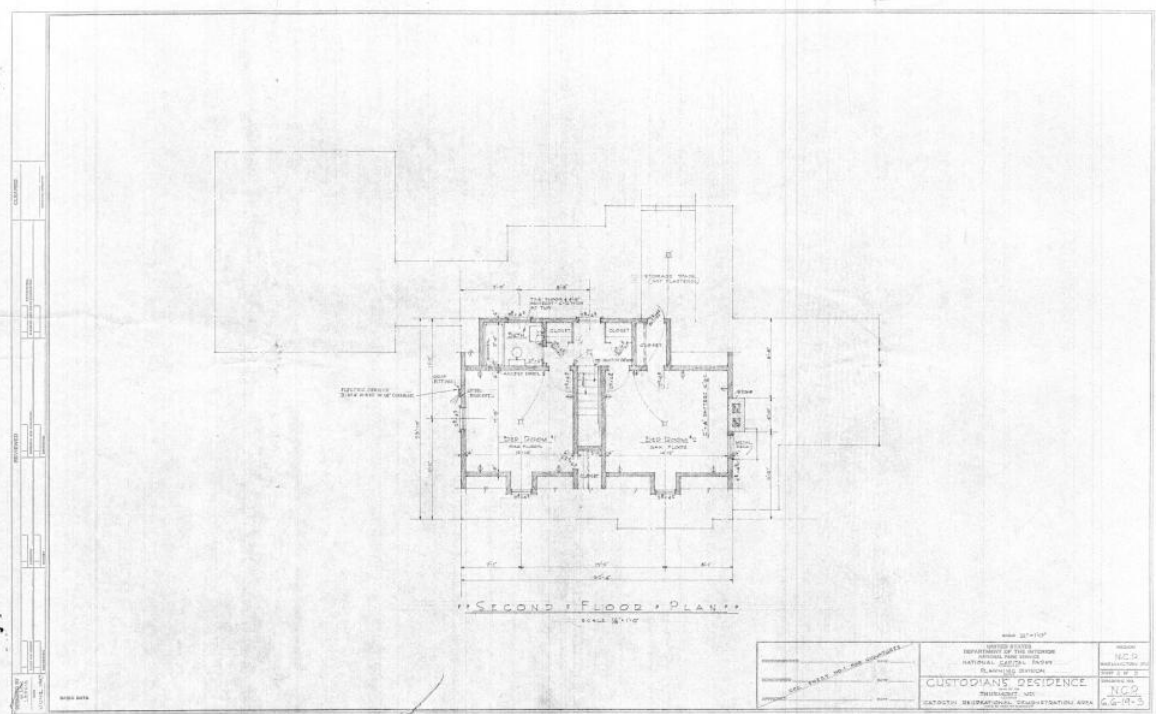


Figure 20. Sheet 3 of June 1947 drawing set detailing the second custodian's residence at Catoctin Mountain Park. Drawing: Custodian's Residence (Orig. Dwg. # 6.6-19-3). September 6, 1947. Catoctin Mountain Park Resource Office flat files. See Appendix D for larger drawing.

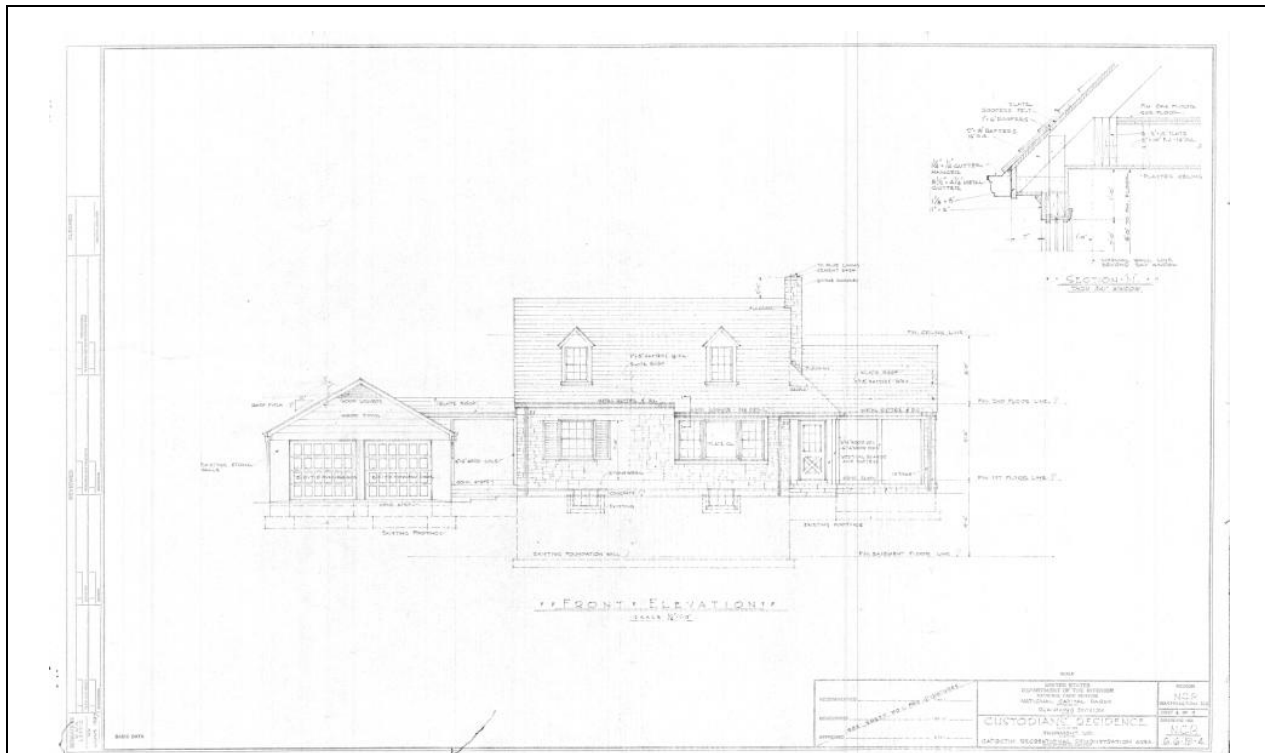


Figure 21. Sheet 4 of June 1947 drawing set detailing the second custodian's residence at Catoclin Mountain Park. Drawing: Custodian's Residence (Orig. Dwg. # 6.6-19-4). September 6, 1947. Catoclin Mountain Park Resource Office flat files. See Appendix D for larger drawing.

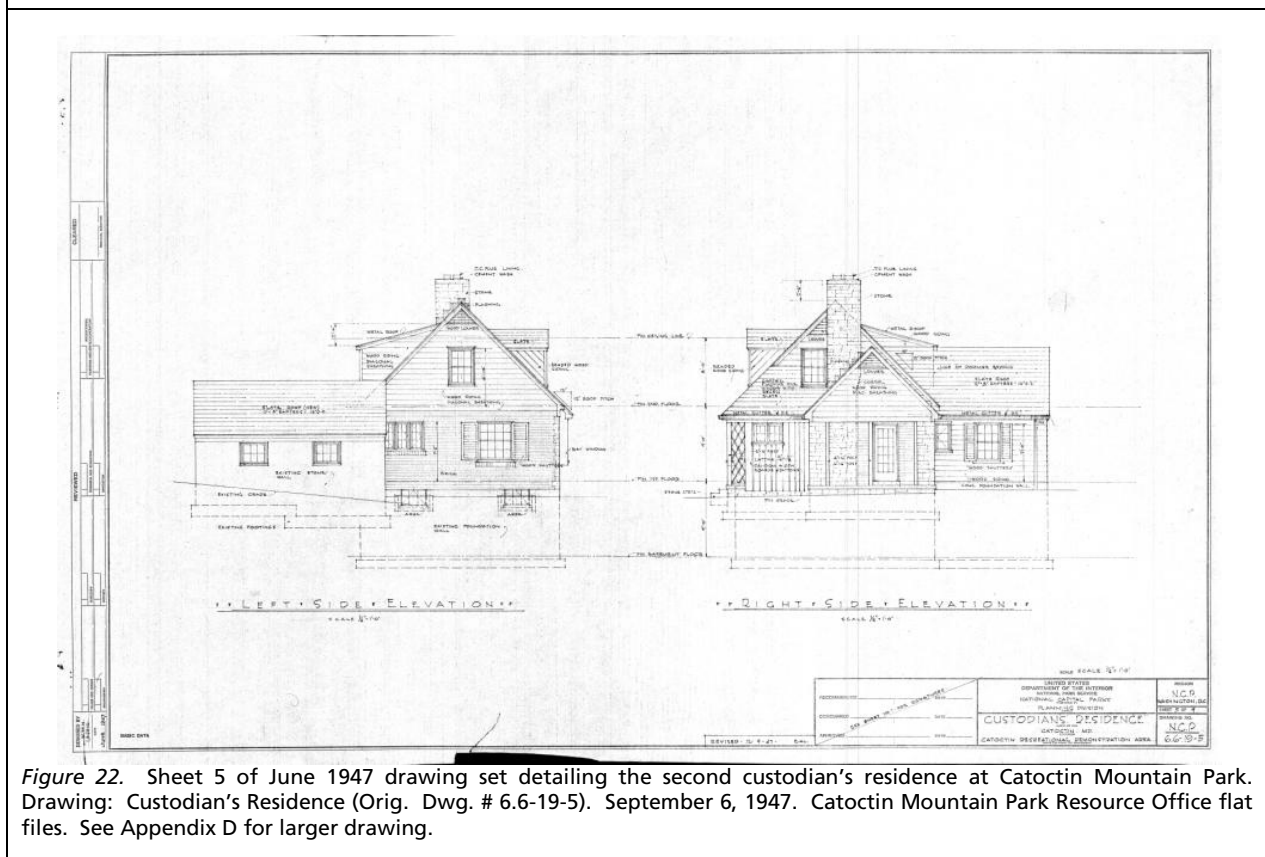


Figure 22. Sheet 5 of June 1947 drawing set detailing the second custodian's residence at Catoclin Mountain Park. Drawing: Custodian's Residence (Orig. Dwg. # 6.6-19-5). September 6, 1947. Catoclin Mountain Park Resource Office flat files. See Appendix D for larger drawing.



Figure 23. Sheet 6 of June 1947 drawing set detailing the second custodian's residence at Catoclin Mountain Park. Drawing: Custodian's Residence (Orig. Dwg. # 6.6-19-6). September 6, 1947. Catoclin Mountain Park Resource Office flat files. See Appendix D for larger drawing.



Figure 24. April 3, 1948 photograph of repairs being made to first residence's foundation for reuse on the second residence. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



Figure 25. April 3, 1948 photograph of the reconstruction of the stone chimney foundation. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



*Figure 26.* April 3, 1948 photograph of the first residence's foundation and garage exterior walls to be reused. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



*Figure 27.* April 3, 1948 photograph showing the reconstruction of the stone chimney foundation. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



*Figure 28.* April 3, 1948 photograph showing the reconstruction of portions of the foundation. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



*Figure 29.* April 3, 1948 photograph showing the reconstruction of the stone chimney foundation. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



*Figure 30.* April 3, 1948 photograph showing the reconstruction of portions of the foundation. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



*Figure 31.* April 3, 1948 photograph showing the first residence's foundation and garage exterior walls to be reused. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



*Figure 32.* April 24, 1948 photograph showing the construction of the brick exterior walls. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photographs.



*Figure 33.* April 24, 1948 photograph showing the construction of the stone exterior wall. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photographs.



*Figure 34.* April 24, 1948 photograph showing the reconstruction of the garage. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photographs.



*Figure 35.* April 24, 1948 photograph showing the construction of the eastern ell. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photographs.



*Figure 36.* July 24, 1948 photograph showing the sun porch and vestibule. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



*Figure 37.* July 24, 1948 photograph of the eastern ell, exterior basement entry, and rear kitchen entry door. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



*Figure 38.* July 24, 1948 photograph of the north elevation. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



*Figure 39.* July 24, 1948 photograph of the residence from the northeast corner. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



*Figure 40.* July 24, 1948 photograph of the front vestibule. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.

*Figure 41, right.* July 24, 1948 photograph of the interior of the sun porch. Photo: Progress Pictures of Custodian's Residence and Garage (Reconstruction). Catoclin Mountain Park archives. See Appendix C for larger copy of photograph.



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## Chronology of Development and Use

Early photographs and property records detail the newly-reconstructed Quarters 1. Three photographs from ca. 1950 show the stone buildings with slate roofs and divided-light wood windows with shutters, and wood exterior doors (figs. 42-44). The stone garage exterior walls and the rear elevation stone retaining wall date to the original Quarters 1 complex (1941) and were retained after the fire.



*Figure 42.* A ca. 1950 photograph of the Quarters 1 residence from the southwest corner. The pole on the chimney is a television antenna, not a lightning protection system. Photo: Catoclin Mountain Park building file, Building No. 128 Superintendent's Quarters. See Appendix C for larger copies of photographs.

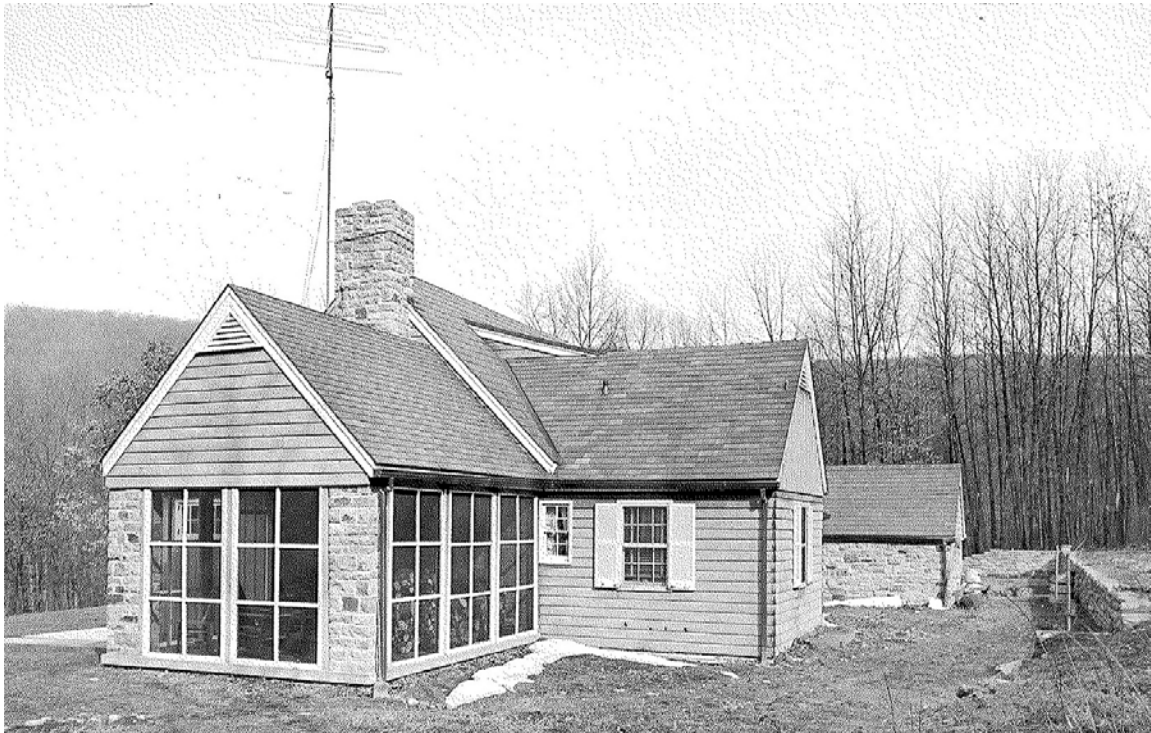


*Figure 43.* A ca. 1950 photograph of the Quarters 1 residence from the southeast corner. The stone retaining wall along the rear elevation dates to the original Quarters 1 complex (1941). Photo: Catocin Mountain Park building file, Building No. 128 Superintendent's Quarters. See Appendix C for larger copies of photographs.

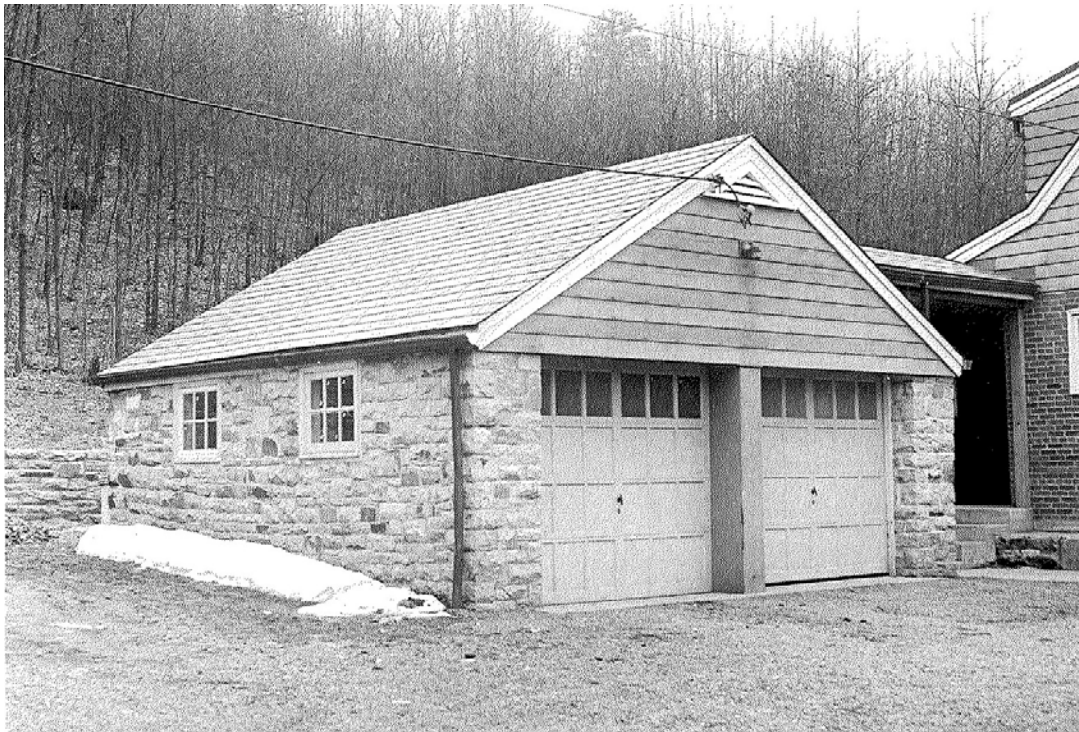


*Figure 44.* A ca. 1950 photograph of the Quarters 1 garage from the northwest corner. The stone walls date to the original Quarters 1 complex (1941). Photo: Catocin Mountain Park building file, Building No. 129 Garage to Supt's Quarters. See Appendix C for larger copies of photographs.

A questionnaire form for the “Manager’s Residence,” dated March 13, 1953, states that the two-story building has a total of 3,319 sq. ft. in the basement, first floor, second floor, and porches (fig. 45). The building is stone, brick, and frame construction. Exterior walls are composed of stone, brick, and shiplap siding; the roof is clad in slate. The interior walls are composed of painted plaster and the floors are shellacked oak. Water, sewer, electricity, and phone utilities service the building. The heating system is powered by a hot water oil furnace. The building also had an electric water heater and was within close proximity to two fire hydrants.

Figure 45. A questionnaire form for the Manager's Residence was completed on March 13, 1953. Note: the red-circled doors were removed and replaced in 1995. Document: Form 10-768, Prepared by J.J. Boley on March 13, 1953. Catcotin Mountain Park Maintenance Files, HS-128 Superintendent's House (#1).

A questionnaire form for the “Garage – (Mgr. Resid.),” also dated March 13, 1953, states that the one-story building has a total of 462 sq. ft. on the first floor (fig. 46). The building is stone construction. The exterior and interior faces of the walls are left exposed. The floor is concrete. The roof is clad in slate. Electricity serviced the building, which was within close proximity to two fire hydrants.

In July 1958, fixed glass windows were installed at the exterior rear basement stair, between new wood posts, above a vertical-board-and-batten knee wall and below the cornice line (fig. 47).

DATE MAR 13 1953 LOCATION IN PARK BLUE BLAZES BUILDING NAME GARAGE - (MGR. RESID) No. 129

1. USED AS GARAGE  
 Owned by NPS  
 Operated by NPS  
 Maintained by NPS  
 Constructed by NPS

2. YEAR BUILT 1948 REMODELED RECONSTRUCTED 1948

3. DRAWING NO. NCP 6-6-17 (1 1949) OCCUPANCY AREA MGR.

4. ORIGINAL COST, \$ 3,000  
 Present value, \$

5. NUMBER STORIES ONE NUMBER ROOMS ONE - TWO STALLS

6. CU. FT. 5082 Sq. Ft. Basement  
 1st floor 4082 2d floor  
 Other

7. CONSTRUCTION TYPE STONE  
 Walls, exterior STONE  
 Walls, interior STONE  
 Floors CONCRETE Roof SLATE SHINGLE

8. INTERIOR FINISH, Walls NATURAL  
 Floors NATURAL Ceilings OPEN

9. UTILITIES, Water NO Electric YES  
 Sewer NO Phone NO

10. MECHANICAL EQUIPMENT:  
 Sanitary  
 Heating Fuel  
 Electric H. W.

11. EXISTING CONDITION OF BUILDING:  
 Structural GOOD  
 Mechanical

12. FIRE PROTECTION:  
 Hydrant size 1-1/2" OUT Distance 50 FT. 0"  
 Sprinklers  
 Extinguishing apparatus 1 AT. GTS.

SKETCH PLAN  
 (Designate original and later additions, when constructed)  
 SCALE - 1/8" = 1'-0"

REMARKS:  
 Original building destroyed by fire 10/21/48. Reconstruction in October 1948 consisted of new roof, doors and windows. Original stone walls were undamaged to any great extent and were used in the reconstruction. Contract I-28np-88 (1948)

Figure 46. A questionnaire form for the Garage was completed on March 13, 1953. Document: Form 10-768, Prepared by J.J. Boley on March 13, 1953. Catoctin Mountain Park building file, Building No. 129, Garage to Supt's Quarters.



Figure 47. A July 1958 drawing depicting new window wall at the exterior rear basement stairs. It has since been altered. Drawing: Revision of Back Porch (NPS Dwg. # 841/80317). July 1958. National Capital Regional Office Lands Office database. See Appendix D for larger drawing.

Property records from 1966-1967 detail the buildings, which changed little since the 1953 questionnaires.

Bldg. #129, Garage constructed in 1940, remodeled in 1948, one story, one room with two stalls, stone type construction, concrete foundation, concrete floors, slate shingle roof, open ceiling, garage has one electrical heater, contains 462 sq. ft. Direct Cost: \$2,000<sup>1</sup>

Bldg. #128, Quarters (Mgr. Residence) constructed in 1940, remodeled in 1948. A frame and masonry construction, concrete foundation, slate roof, two stories with eleven rooms. First floor: one porch, one dining room, one living room, one kitchen, one bath with one toilet, one basin and one shower; second floor: three bedrooms, one bath with toilet, basin and shower; basement – one recreation room, one utility room, one bath with toilet and basin. Heated by one American Standard oil fired hot water furnace, A-3 B.T.U.'s with cast iron baseboard radiation throughout the quarters. Floors are naturally finished except kitchen and bath floors which are asphalt tile. One electric hot water heater – G.E. 50-gallon. Water, sewage, electricity and telephone are available. Contains 3,232 sq. ft. How asset acquired: Built by the YCC and later remodeled with Day Labor. Direct Cost: \$25,000<sup>2</sup>

Archival research yielded little information for the time period between 1967 and 1991. Thorough maintenance records and annual reports exist throughout the 1990s.

In 1991, a long list of renovations occurred at both buildings.

- o At the garage: <sup>3</sup>
  - The exterior was painted; the stonework was repointed (interior and exterior); and
  - The interior of the garage doors were painted; and the garage doors were serviced.
- o At the residence: <sup>4</sup>
  - The wall surfaces were patched and spackled;
  - The entire interior was painted (all 3 floors);
  - The kitchen cabinets were refinished; the hardwood floors were refinished;
  - New light fixtures, switches, outlets, and exhaust fans were installed;
  - Plumbing repairs in the kitchen and bathrooms were completed; the exterior was painted (figs. 48-49);
  - The stonework was repointed (interior and exterior);
  - The wood stove was painted;
  - New carpet was installed in the living room, front door entryway and closet, dining room, stairs and landing, and closets at top and bottom of stairs, over the original hardwood floors;
  - A chain link fence was installed;
  - The drop ceiling was installed in the basement;
  - Mini-blinds were installed on all windows;
  - The kitchen floor was replaced;
  - The second-floor storage closet was insulated;
  - The broken bathroom tile was replaced;
  - The stone wall along the exterior basement stair was sealed; and

<sup>1</sup> Catoctin Mountain Park. Form 10-559 (Nov. 1985). June 30, 1966. Fixed Property Record. Catoctin Mountain Park building file, Building No. 128 Superintendent's Quarters.

<sup>2</sup> Ibid.

<sup>3</sup> Catoctin Mountain Park maintenance files. HS-129, Garage.

<sup>4</sup> Catoctin Mountain Park maintenance files. HS-128, Superintendent's House (#1).

- Two storm doors were replaced.

In the fall of 1992, a brick chimney was constructed on the south elevation of the sun porch and a wood stove was installed (fig. 50).<sup>5</sup>



*Figure 48, left, and Figure 49, right.* These undated photographs may depict Quarters 1 after the exterior was painted in 1991. Photo: Catoclin Mountain Park building file, Building No. 128 Superintendent's Quarters.



*Figure 50.* A ca. 1992 photograph shows the chain-link fence installed in 1991 and the sun porch's brick chimney constructed in 1992; it does not show the enclosing windows installed in 1994. Photo: Catoclin Mountain Park building file, Building No. 128 Superintendent's Quarters.

<sup>5</sup> Ibid.

In 1993, two ceiling fans were installed (master (south) bedroom and dining room) in June and a new window air conditioning unit was installed at the top of the stairs on the second floor in September.<sup>6</sup>

The original wood garage doors were replaced with Raynor American Classic steel, raised-panel overhead doors in March 1994. In August of the same year, a ceiling fan was installed in the second-floor north bedroom. In September, changes to the sun porch were executed, and were as follows: the storm and screen sash were removed; the old framework was removed; framework was installed for new windows; new exterior siding and four new Anderson casement window units were installed; exterior trim was installed, caulked, and painted; new interior wall covering was installed; wall and window trim was installed; and the interior walls and trim were painted.<sup>7</sup>

In February of 1995, a contract proposal was announced which consisted “of interior painting and some minor plaster and drywall crack repair work at Housing number 128...” The work was executed in September of the same year.<sup>8</sup>

In November of 1995, thirteen doors from the residence that tested positive for lead paint were removed. Ten doors, and their original styles, were listed (the other three door locations are unknown):

- Front door – 9-lite above, cross-buck below
- Kitchen entry (back) door – 6-lite above, 2-panel below
- Foyer closet door – 3-panel
- Living room closet door – 3-panel
- 1<sup>st</sup> floor bathroom door – 3-panel
- 2<sup>nd</sup> floor hallway closet door, right – batten
- 2<sup>nd</sup> floor hallway closet door, left – batten
- 2<sup>nd</sup> floor bedroom door, right – 3-panel
- 2<sup>nd</sup> floor bedroom door, left – 3-panel
- 2<sup>nd</sup> floor bedroom left, closet door – batten

Records state that eleven new Luan flush interior doors with new locks were installed at interior door openings (finished with Sanding Sealer), although only eight interior doors were listed. Two new nine-lite, panel exterior doors with new locks were installed at exterior door openings; they were painted green and white.<sup>9</sup> This is an example of the loss of significant character-defining features (the original doors were replaced with inferior modern replacements) because the building was managed as non-historic and attention was not placed on the retention of character-defining features.

In early January 1997, Quarters 1 was vacated by its tenant. Later that month, the water lines throughout the residence froze and exploded (the main breaker had been shut off at the house). Extensive cleanup and repairs were performed throughout the buildings.<sup>10</sup> This work may have included outstanding maintenance work as well.

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<sup>6</sup> Catoctin Mountain Park maintenance files. HS-128, Superintendent's House (#1).

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

- o In the basement:
  - The refrigerator was relocated to kitchen;
  - The exterior door was replaced with a solid-core door;
  - 24' of cove baseboard was replaced;
  - The water lines for the second floor were capped;
  - A pump was removed;
  - The ceiling tiles and light fixtures were replaced; and
  - Numerous broken water lines in the ceiling were replaced.
- o In the sun porch:
  - Baseboard heat was installed;
  - The carpet was cleaned; and
  - The woodstove was cleaned.
- o In the living room:
  - The wallpaper was repaired;
  - The woodstove was cleaned;
  - All of the walls were washed; and
  - The carpets were steam cleaned.
- o In the dining room:
  - The carpets were steam cleaned;
  - The broken water lines in the heaters were replaced; and
  - All the walls were washed.
- o In the kitchen:
  - The carpet was removed and replaced with linoleum;
  - The water-damaged ceiling and walls were repaired and repainted; and
  - The cabinets were cleaned.
- o In the first-floor bedroom:
  - The walls were washed;
  - The bathroom was deep cleaned; and
  - The broken water lines in the heaters were repaired.
- o On the second floor:
  - All of the cast iron registers had exploded and were replaced with baseboard heat;
  - All of the walls were touched up with paint;
  - The holes in the floors were patched;
  - The walls and floors were washed;
  - The water pipes around the tub were insulated;
  - The black porcelain soap dish was replaced;
  - The bathroom ceiling fan was cleaned and serviced;
  - The bathroom floor was patched;
  - The bath tiles were regROUTED;
  - The bathroom was cleaned; and
  - Door stops were installed.
- o In the garage, the 5000W heater was removed.

Shortly after the work was completed, in March, a new tenant occupied the residence.<sup>11</sup>

In 2001, rehabilitation of the electrical distribution unit occurred at Quarters 1.<sup>12</sup> Details for this work are unknown.

In 2005, the exterior of Quarters 1 was pressure-washed and a damaged stone wall was repaired.<sup>13</sup>

Large-scale projects which have occurred to Quarters 1, but have no exact date include:

- o The addition of the vinyl siding,
- o The addition of vinyl windows (residence only),
- o The addition of metal to the soffits;
- o The modern replacement of the sun porch windows;
- o The installation of carpet on the interior;
- o The addition of the modern gutters and downspouts; and
- o The replacement of slate roof coverings with cedar shakes.

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<sup>11</sup> Catocin Mountain Park maintenance files. HS-128, Superintendent's House (#1).

<sup>12</sup> 2001 Annual Report. 1.C.2.1 National Park Service History Collection, Park Reference Files, Catocin Mountain Park, CATO, Box Number: Annual Reports, Folder: Annual Reports. Harpers Ferry, WV.

<sup>13</sup> 2005 Annual Report. 1.C.2.1 National Park Service History Collection, Park Reference Files, Catocin Mountain Park, CATO, Box Number: Annual Reports, Folder: Annual Reports. Harpers Ferry, WV.

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## Architectural Description

The Historic Preservation Training Center visited the site multiple times over the course of research for this HSR; this included a preliminary trip (February 2012) prior to receiving the scope of work for the project. The other site visits occurred in April, June, July, and August 2012. A large collection of field photographs, notes, and drawings were compiled during these visits. Through these site visits, detailed physical descriptions of features, condition assessments, and a compilation of character-defining and non-character-defining features have been made. Park logistical assistance was provided by the Resource Management Division.

### Building Feature Master List

The Building Feature Master List (BFML) is an overall outline-format checklist used for creating a physical description of the residence, garage, and permanent landscape features. The BFML describes features using a hierarchal structure based on industry standards adopted by the federal government—the UNIFORMAT II (ASTM E1557 Standard, 2008) used by many facility management industry leaders, including the National Park Service’s Park Facility Management Division (PFMD). The BFML uses headings and sub-headings to divide architectural components, structural systems, mechanical systems, etc. into a simple organizational tool (Table 1).

### Physical Description Summary

Quarters 1 has benefitted from almost continual maintenance attention and occupation since its construction in 1948 except for a brief period in the 1990s when it was abandoned and subsequently damaged by burst water pipes. It is the addition of inferior modern surface materials that have degraded the physical characteristics and historic features of the building. Materials such as synthetic wall coverings, non-historic roof coverings, door and window replacements, interior wall-to-wall carpeting, and wood paneling do not contribute to the overall sustainable longevity of this historic building. These types of synthetic or replacement finish materials have no place in the maintenance or adaptive use of sustainably constructed structures.

The original design and construction methodology of this building is very strong and has resisted attempts at modernization by retaining most of its character-defining features despite repeated attempts to cover up or strip them from the building. Lack of knowledge about traditional

|     |                          |
|-----|--------------------------|
| A   | Substructure             |
| A10 | Foundations              |
| B   | Shell                    |
| B10 | Superstructure           |
| B20 | Exterior Enclosure       |
| B30 | Roof Closure             |
| C   | Interiors                |
| C10 | Interior Construction    |
| C20 | Stairs                   |
| C30 | Interior Finishes        |
| D   | Services                 |
| D20 | Plumbing                 |
| D30 | HVAC                     |
| D40 | Fire Protection Services |
| D50 | Electrical               |
| G   | Building Sitework        |
| G20 | Site Improvements        |
| G90 | Other Site Work          |

*Table 1.* The basic UNIFORMAT II Building Feature Master List includes the above headings and subheadings.

construction and sympathetic methods of improved energy efficiency and repairs have led to the wholesale destruction of many of the primary character-defining features of this building (original traditional wood windows and doors, roof materials, etc.). Despite this removal, the basic character-defining materials and shape of the building remain intact and can instruct the nature of its care. Future care of this building should be based on the sustainable preservation maintenance of the traditional construction materials and methodologies, not on covering them up or replacing them with inferior imitations. Significant heritage systems that have been removed should be installed as part of any future treatment of this structure.

## Quarters 1 Physical Description

### Location within the Park

Quarters 1 is located on a terraced and heavily-wooded lot approximately 250 feet north and uphill from the Catoclin Mountain Park Visitors' Center and northwest of Park Headquarters (figs. 51-53). A paved driveway connects Quarters 1 to Park Central Road, the main park road which runs from MD-77 throughout the park (fig. 54).

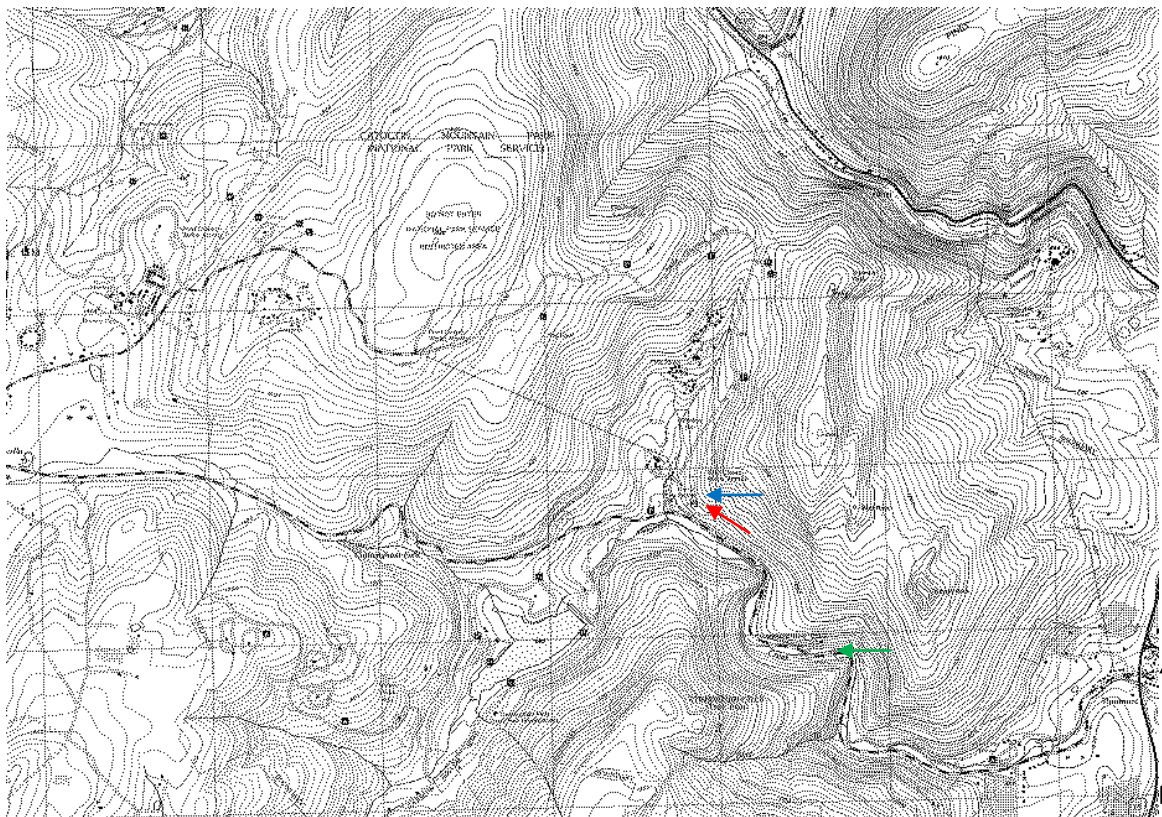


*Figure 51.* Quarters 1 (blue arrow) is located just north of the park visitors center (red arrow); park headquarters (green arrow) is located southeast on MD-77 (map dashed line). North arrow added by HPTC. Map: Catoclin Mountain Park, Thurmont, MD. Prepared by Air Survey Corporation of Virginia. Located in Catoclin Mountain Park Cultural Resource Office flat files. See Appendix D for larger copy of map.



Figure 52. The front (west) elevation of Quarters 1 as seen from Park Central Road. Photo: HPTC (03/21/12).



Figure 53. Quarters 1 sits north of the park visitors' center (seen behind the trees). Photo: HPTC (08/29/12).

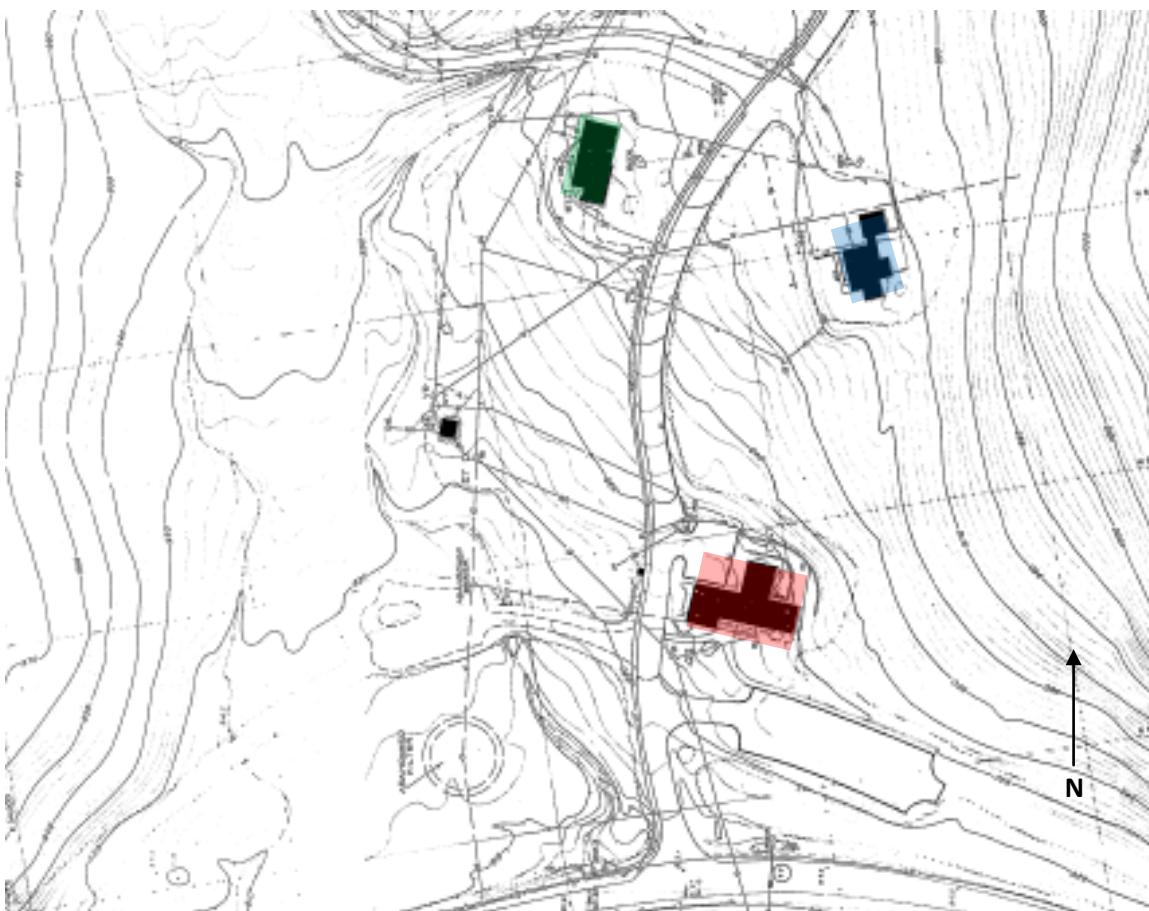


Figure 54. Quarters 1 (blue overlay), accessed via Park Central Road, is located just north of the park visitors center (red overlay); Mission 66 park housing (green overlay) is located across the road from Quarters 1. North arrow added by HPTC. Map: Catoclin Mountain Park resource and topography map set (13 sheets; NPS Dwg. # 841 41022). Sheet 4. 12/07/82. Located in National Capital Regional Office Lands database. See Appendix D for larger copy of map.

## Exterior Overall

The prominent overall visual aspects of the residence are its one-and-a-half story rectangular mass with concrete foundation walls, stone and vinyl-sided first-floor walls, and cedar-shake-clad gable roofs with dormers (two on the front elevation, one on the rear elevation). A one-story sun porch extends from the south elevation with siding below the window walls and a cedar-shake-clad gable roof. A one-story wing extends from the east elevation with vinyl-sided walls and a cedar-shake-clad gable roof. An open breezeway covered with a cedar-shake and copper, standing-seam metal roof connects the residence to the garage. The garage is a one-and-a-half story square mass with stone and vinyl-sided walls and a cedar-shake-clad gable roof. Refer to figs. 55-58.

A paved parking area is located to the north of the residence in front of the garage and extends around the northern elevation of the garage (see fig. 55); the paved driveway joins at its northern edge. The western boundary of the parking area is demarcated by a low stone wall which is original to the first Quarters 1 complex (1941).

A stone retaining wall is located on the east and north elevations of Quarters 1 within close proximity to the buildings (fig. 59). It is also an original feature to the first Quarters 1 complex.

A stone grill is located to the south of the sun porch (fig. 60). It does not appear on any early drawings, and therefore likely post-dates the second Quarters 1 complex; its exact date of construction is unknown.



Figure 55. Quarters 1 from the northwest. Photo: HPTC (02/14/12).



Figure 56. Quarters 1 from the southwest. Photo: HPTC (02/14/12).



*Figure 57.* Quarters 1 from the southeast. Photo: HPTC (02/14/12).



*Figure 58.* Quarters 1 from the northeast. Photo: HPTC (02/14/12).



*Figure 59.* The stone retaining wall dates to 1941 (first complex). Photo: HPTC (04/21/12).



*Figure 60.* The date of construction of the south elevation stone grill is unknown. Photo: HPTC (08/29/12).

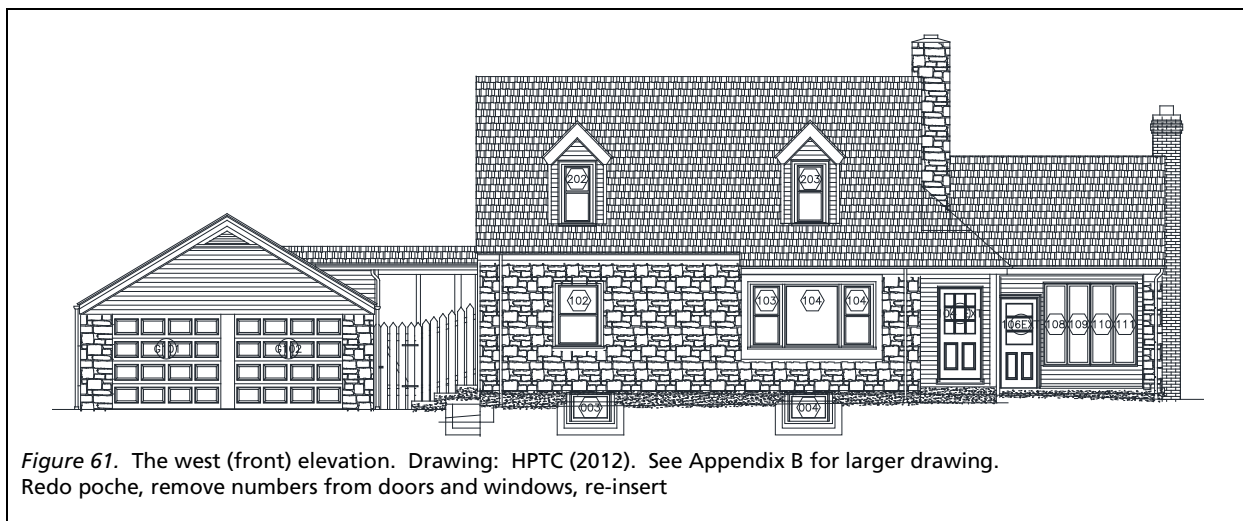
### West Elevation (fig. 61)

The west (front) elevation of the residence is three bays wide, one-and-a-half stories tall, and sits on a slightly raised foundation under a steep gable roof. The north and central bays are each anchored by window openings on the first floor and dormer on the second floor. The south bay is only one story tall and is marked by an exterior door.

A two-bay, one-story sun porch (12'-0" wide) is recessed from the front façade (38'-6" wide) of the residence by 9'-0". The vinyl-sided addition sits on a slab foundation under a moderately-sloped gable roof. The northern bay is anchored by an exterior door; the southern bay is anchored by a unit of four casement windows.

The two-bay, one-and-a-half story garage (21'-7" wide) is recessed from the main façade by 21'-9" and north of the building by 7'-8". The stone building sits on a slab foundation under a moderately-sloped gable roof. Both bays are marked by overhead garage doors.

The residence and garage are attached via a two-bay breezeway (one bay deep). The breezeway sits on slab foundation under a shallow gable roof. The two open bays are divided by a column.



### South Elevation (fig. 62)

The south elevation of the residence is three bays wide, one to one-and-a-half stories tall, and sits on a slightly raised foundation under a steep gable roof. The central bay (sun porch; 14'-11" wide) sits forward of the west and east bay and is anchored by a unit of four casement windows. The one-story main block west bay (7'-8" wide) is recessed from the south façade of the sun porch by 12'-2" and is anchored by a pair of small windows. The one-and-a-half story main block east bay (13'-5" wide) is recessed from the south façade of the sun porch by 17'-6" and is anchored by a large central window and small western window.

The south elevation of the one-bay, one-and-a-half-story garage (22'-9" wide) is hidden behind the south elevation of the residence. The single bay is marked by an exterior door (located under the one-bay-wide (7'-8") breezeway).



Figure 62. The south elevation. Drawing: HPTC (2012). See Appendix B for larger drawing.

### East Elevation (fig. 63)

The east elevation of the residence is three bays wide (32'-7" wide). The southern bay (eastern ell; 15'-7" wide) sits forward of the east façade of the main block by 13'-4". The central and north bays are hidden behind the three-bay exterior stair enclosure on the first floor, but exposed on the second floor and punctuated by windows in the dormer wall.

A two-bay sun porch (17'-6" wide) is recessed from the east façade of the main block by 13'-7". Both bays are anchored by a unit of four casement windows each.

The two-bay garage (21'-7" wide) sits forward of the east façade of the main block by 19'-9". No markings denote the bays on the east elevation of the garage.

The residence and garage are attached via a two-bay breezeway; two more bays run along the main block, but are hidden behind the three-bay exterior stair enclosure. The bays are divided by columns.



Figure 63. The east (rear) elevation. Drawing: HPTC (2012). See Appendix B for larger drawing.

### North Elevation (fig. 64)

The north elevation of the residence is two bays wide on the first floor (23'-11" wide) and a single bay wide on the second floor. All bays are anchored by windows.

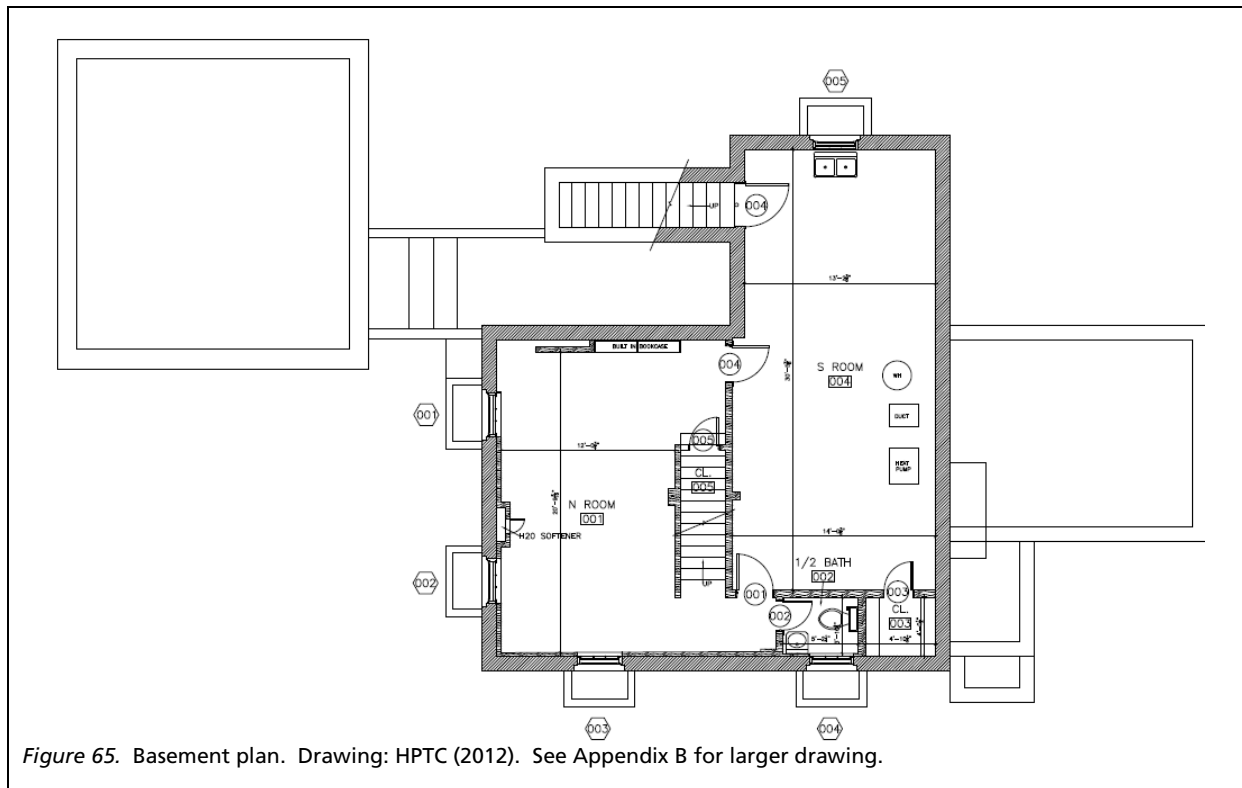
The two-bay north elevation of the garage (22'-9" wide) sits forward from the residence by 29'-3" and overlaps from the east by 3'-0". Both bays are marked by window openings.

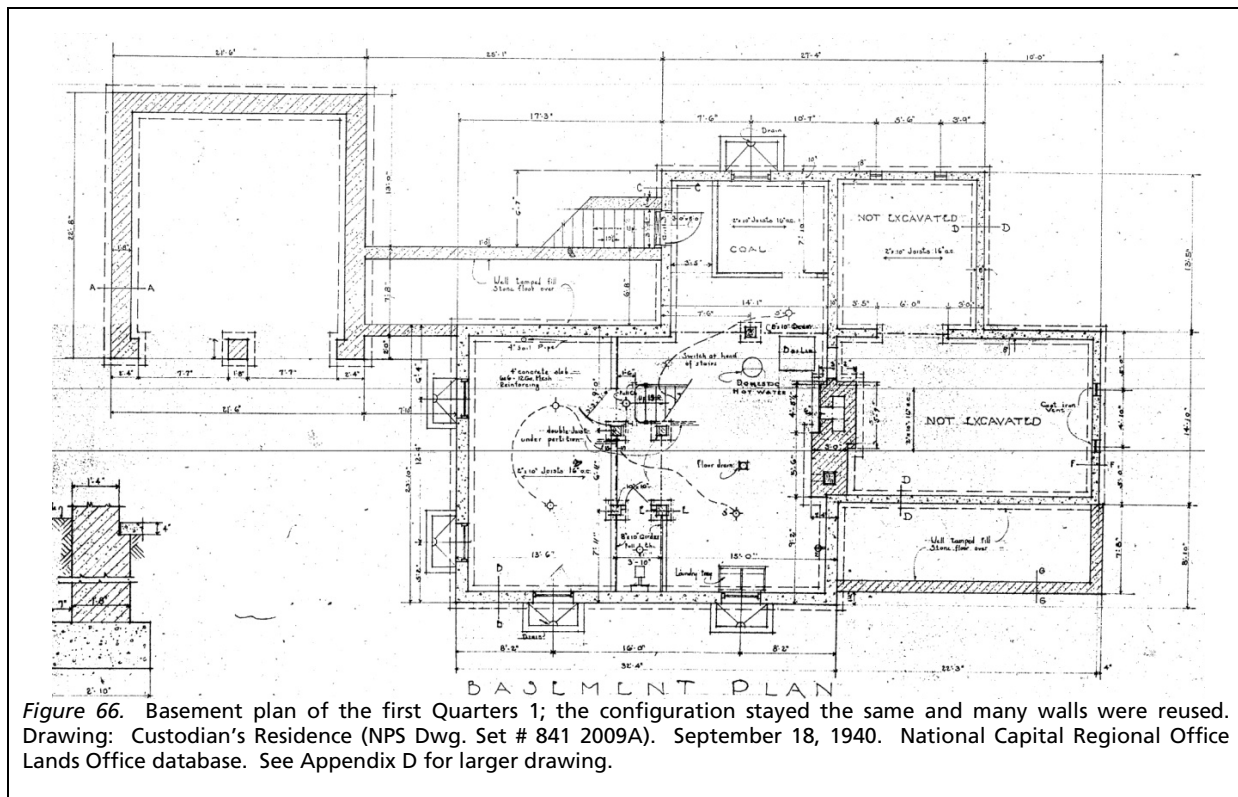


Figure 64. The north elevation(front) elevation. Drawing: HPTC (2012). See Appendix B for larger drawing.

## Interior Organization

A basement level is only found under the residence building of Quarters 1 (fig. 65). It retains its original layout with two large rooms and a few ancillary rooms (half bathroom and closets). The layout is nearly identical to the original Quarters 1 basement plan (fig. 66); many of the extant walls were reused from the first building. The basement is accessible through an interior stair, which divides the two larger rooms from one another, and an exterior stair, located on the east elevation. There are no basement rooms under the garage, breezeway, or sun porch.





The first floor of the residence also retains its original layout with five major rooms and several smaller ancillary rooms (entry vestibule, bathroom, closets, and hallways). The room uses for all of the major rooms has been consistent since originally built: living room, dining room, kitchen, bedroom, and sun porch. The first floor of the garage is a single room and has always been used for vehicular storage. A covered, but open breezeway connects the east elevation of the residence to the south elevation of the garage; this is its original use. Refer to fig. 67 for identification of first-floor spaces.

The second floor of the residence also retains its original layout with two major rooms (bedrooms) and several smaller ancillary rooms (closets, bathroom, and hallway; fig. 68). The room uses have been consistent. The usable attic level of the garage has not always been present in the building; it is unknown when this level was installed.

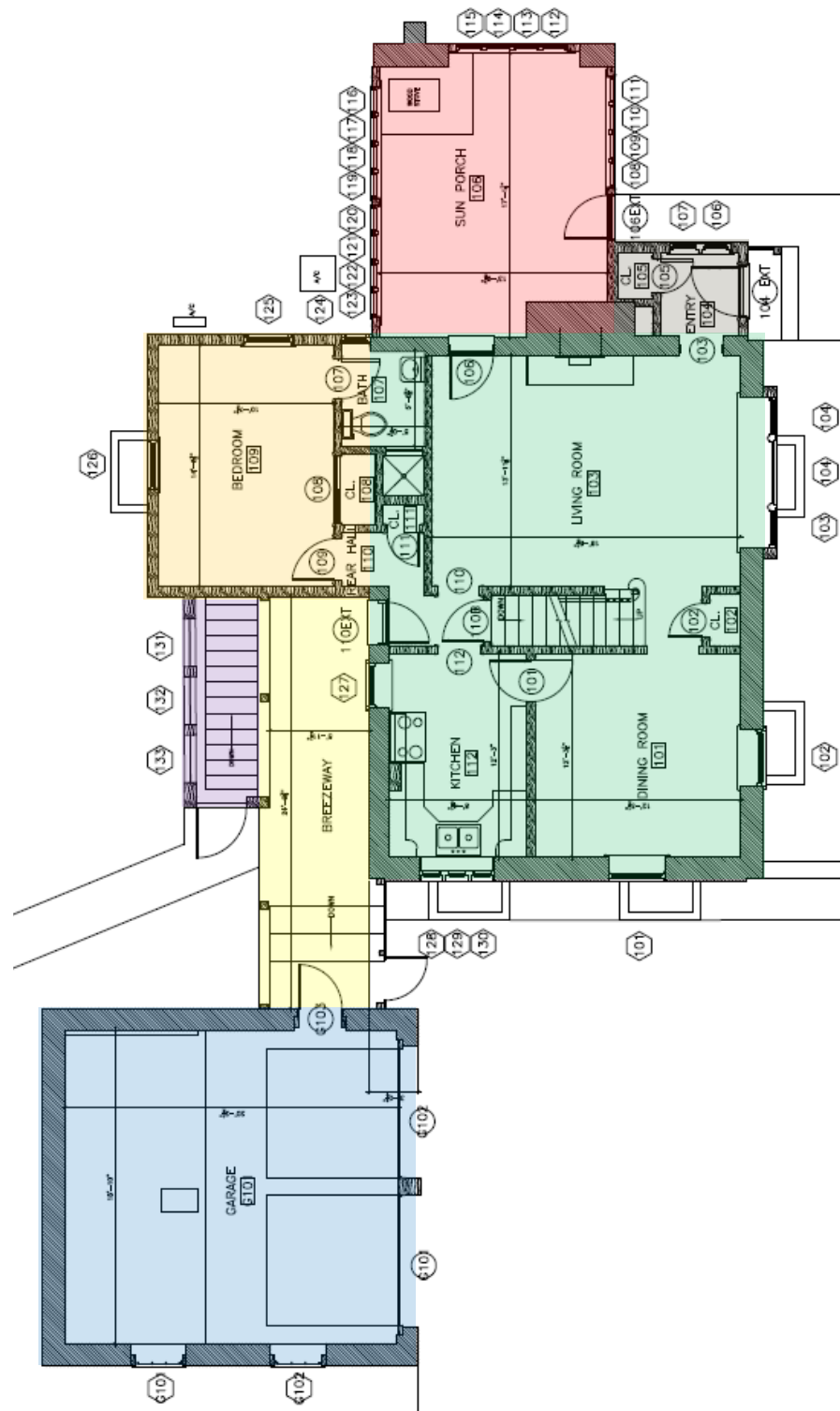


*Figure 67.* The first-floor plan with identification of spaces. The green overlay denotes the main block. The brown overlay denotes the vestibule. The red overlay denotes the sun porch. The orange overlay denotes the eastern ell. The purple overlay denotes the exterior stair. The yellow overlay denotes the breezeway. The blue overlay denotes the garage. Drawing: HPTC (2012).

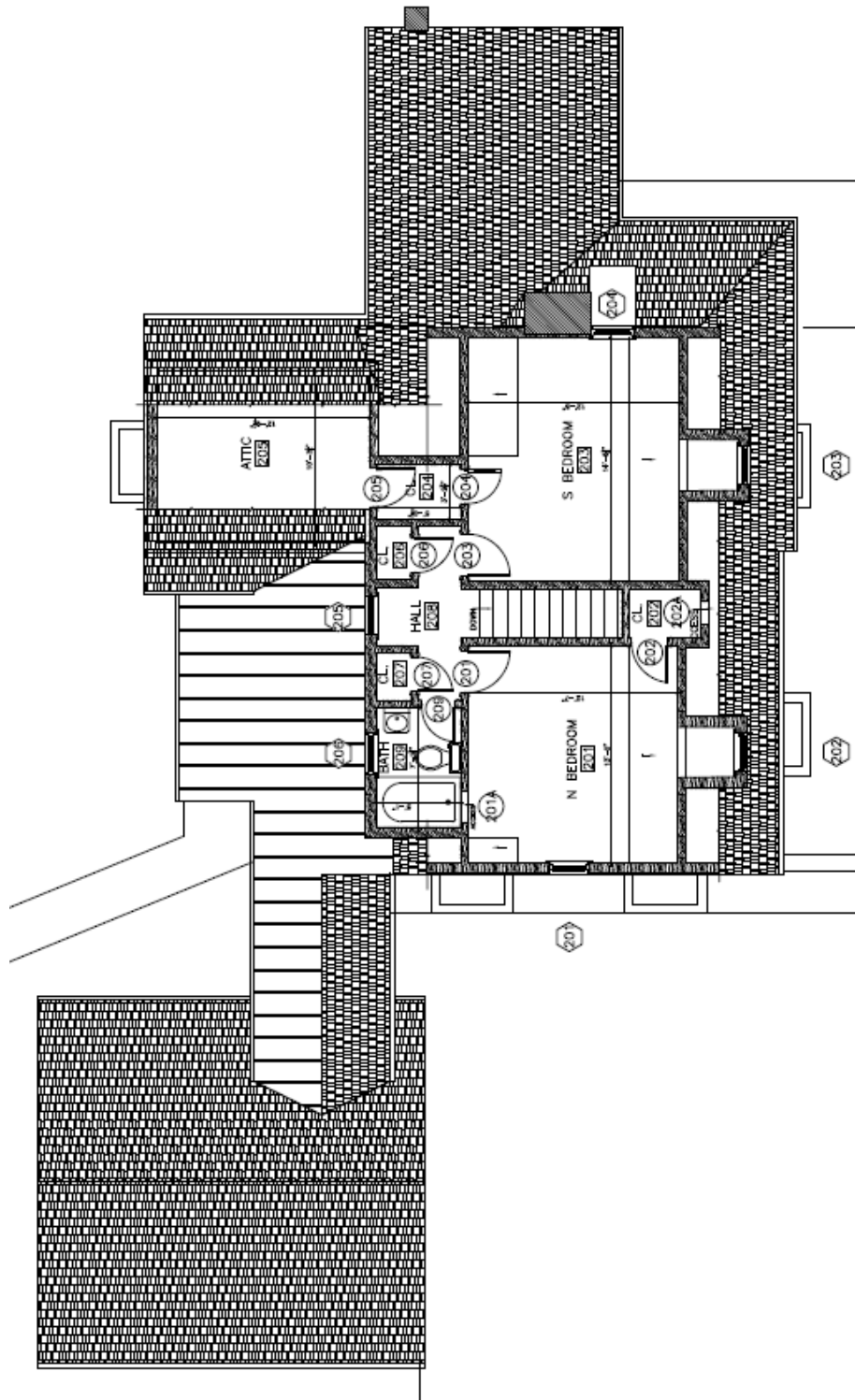


Figure 68. The second-floor plan. Drawing: HPTC (2012).

## Building Feature Master List Descriptions

### A1010 Standard Foundations

A majority of the foundation supporting the main block and eastern ell was part of the 1941 foundation and is composed of cast-in-place (CIP) concrete which is 0'-10" thick (figs. 69-74); the thickness of footers is unknown. Rebuilt portions include the 0'-10"-thick, CIP-concrete north wall and corner (fig. 75) and the stone central portion of the south wall for the chimney (broken ashlar pattern, depth unknown; fig. 76) of Room 004. These CIP concrete foundation walls are visible on the exterior (fig. 77); they are painted. Five window openings, dating to 1941, are located in the main block foundation walls. They are located below grade and include concrete-parged brick window wells (fig. 78).

The sun porch and main block vestibule foundations (southern portion of the building) were constructed in 1948 of CIP concrete. The design drawings specify the foundations to be located approximately 3'-0" below grade with walls 1'-4" thick and footers 2'-4" thick. The drawings also specify the spaces formed by these walls to be infilled; it is unknown if this detail is extant.

The main block exterior stair foundation walls were part of the 1941 foundation and are composed of stone in a squared rubble pattern approximately 0'-10" thick (fig. 79). The breezeway foundations were constructed in 1941 of CIP concrete approximately 0'-10" thick and 3'-0" deep. The garage foundations were also constructed in 1941 of CIP concrete approximately 1'-8" thick and 3'-0" deep.

Subsurface and interior faces of all of the foundation walls were not assessed due to their inaccessibility and the limited scope of this HSR.

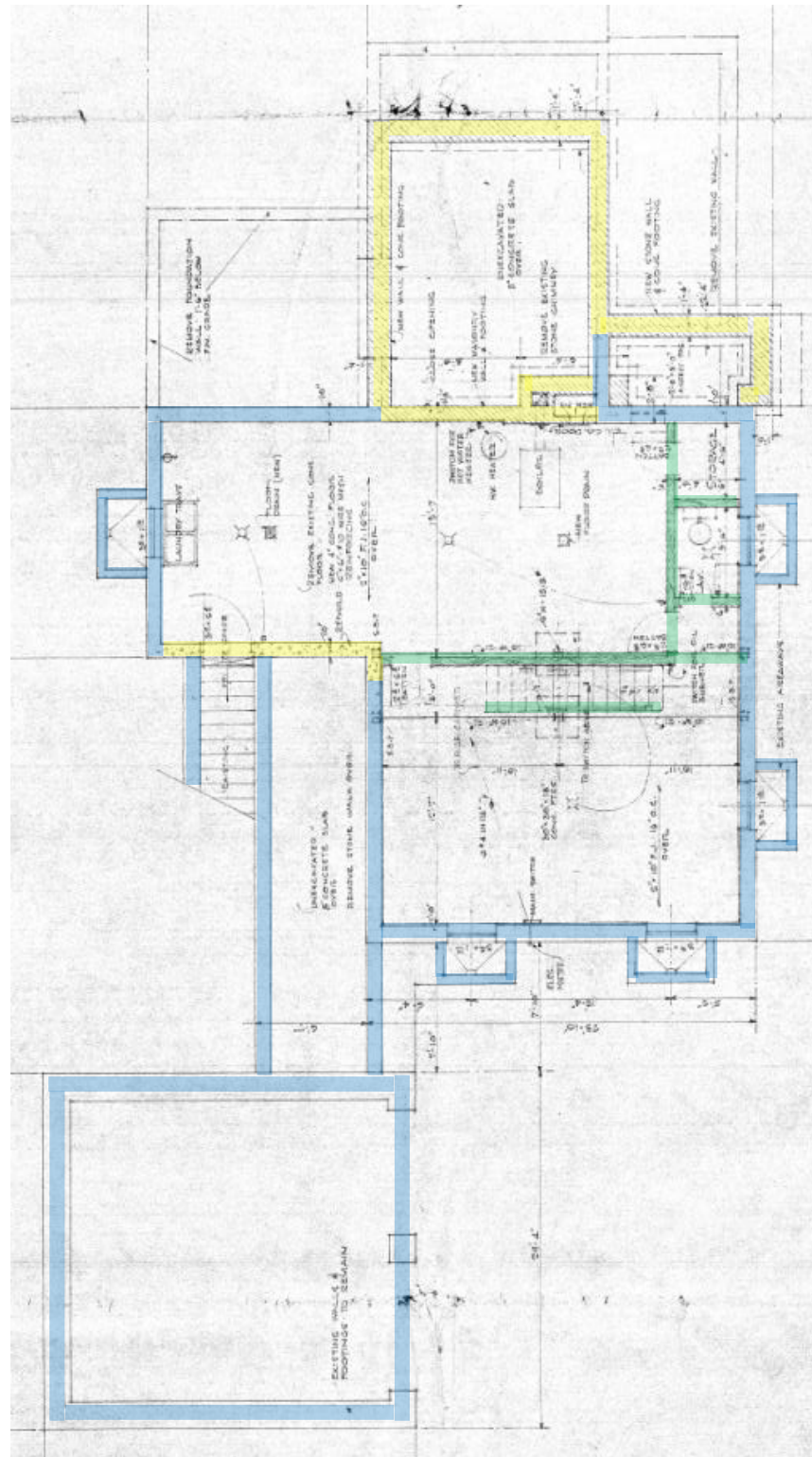


Figure 69. Basement plan. Blue lines: reused foundation walls from 1941. Yellow lines: new foundation walls. Green lines: partition walls. Drawing: Custodians Residence (Sheet 1 of 9), NCR lands database.



Figure 70. The west foundation wall of Rooms 001, 002, and 003 were reused from the 1941 building. Photo: CATO archives (04/03/48).



Figure 71. The central stone chimney foundation (south wall in Room 004) was rebuilt after the fire. Photo: CATO archives (04/03/48).



Figure 72. The north wall and corner of Room 004 were re-cast; note the framework and bracing. Photo: CATO archives (04/03/48).



Figure 73. Framework and bracing at the north wall and corner of Room 004. Photo: CATO archives (04/03/48).



Figure 74. The north wall of Room 001 was reused from the 1941 building. Note the garage shell with 1941 stone walls. Photo: CATO archives (04/03/48).



Figure 75. In Room 004, the north wall (left) was rebuilt after the fire and the east wall was reused. Photo: HPTC (04/21/12).



*Figure 76.* The stone chimney foundation, located on the south wall of Room 004, was rebuilt in 1968. Photo: HPTC (04/21/12).

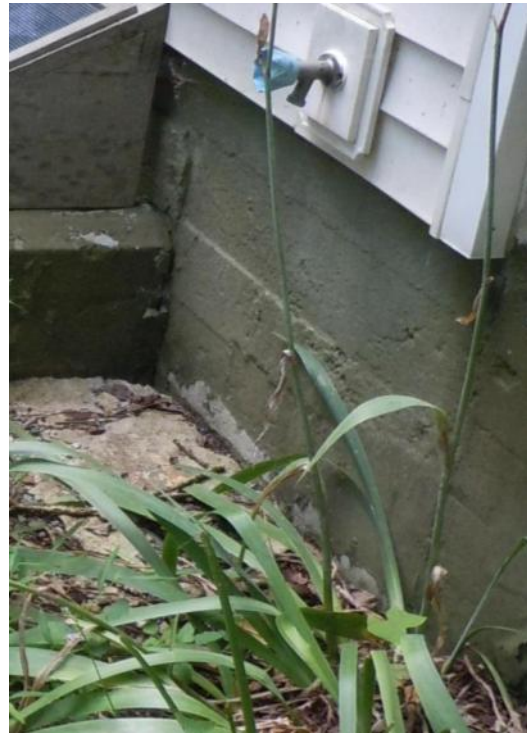


*Figure 77, right.* The cast-in-place concrete foundation walls of the main block are painted on the exterior. Photo: HPTC (08/29/12).



*Figure 78.* The below-grade basement window openings include concrete-parged brick window wells. Photo: HPTC (08/29/12).



*Figure 79, right.* The stone foundation walls of the exterior basement stair date to 1941. Photo: HPTC (08/29/12).

A1030 Slab On Grade

The main block basement floor slabs were replaced in 1948 (fig. 80). The drawings specify a 0'-4" concrete floor with 6"x6"-#10 wire mesh. Two floor drains were also installed in Room 004 (fig. 81).

The sun porch floor slab was constructed in 1948. The drawings specify a 0'-5" concrete slab over the unexcavated space with 3/8"-diameter bars at 18" on center (OC) running north-south and 1/2"-diameter bars at 8" OC running east-west (fig. 82).

The breezeway floor slab was constructed in 1948. The drawings specify a 0'-5" concrete slab over the unexcavated space with 6"x6"-#10 reinforcing mesh.

The garage floor slab dates to the 1941 quarters and was retained after the fire (fig. 83). Its depth is unknown.



Figure 80. The basement concrete floor slab is entirely covered with tile in Room 003. Photo: HPTC (06/20/12).



Figure 81. One of the two floor drains in Room 004. Photo: HPTC (04/21/12).



Figure 82. The 0'-5"-thick sun porch concrete slab is exposed on the exterior. Photo: HPTC (08/29/12).



Figure 83. The garage concrete floor slab dates to 1941. Photo: HPTC (07/17/12).

#### **B1010** Floor Construction (Floor Frame and Load-Bearing Walls)

The main block first-floor structural floor frame is composed of 2"x10" wood joists, running north-south, at 16"OC with diagonal bracing and 1"x6" and 1"x8" subfloor, laid diagonally, above (fig. 84). The joists are supported by the exterior masonry foundation walls and a steel column and beam system in the center of the basement (fig. 85). The drawings specify the columns to be 6"H-15.5# with 30"x30"x18" concrete footings and the beams to be 10"WF-21# and pocketed at the ends into the east and west concrete foundation walls.

The first-floor structural floor frame of the vestibule (main block) was inaccessible; additionally the drawings do not specify the framing. It is assumed to match the wood framing members for the rest of the main block.

The main block second-floor structural floor frame is inaccessible. The drawings specify 2"x10" wood joists, running north-south, at 16"OC. It is assumed there is also diagonal bracing and 1"x6" and 1"x8" subfloor, laid diagonally, above. The joists are supported by the exterior masonry foundation walls and the interior load-bearing frame walls (fig. 86).

The sun porch and garage attic floor structural frames are inaccessible. The drawings do not specify framing sizes.



*Figure 84.* The exposed first-floor structural floor frame as seen from Room 004. Photo: HPTC (06/20/12).



*Figure 85, right.* A steel column and beam system supports the floor frame at the center of the basement. Photo: HPTC (06/20/12).

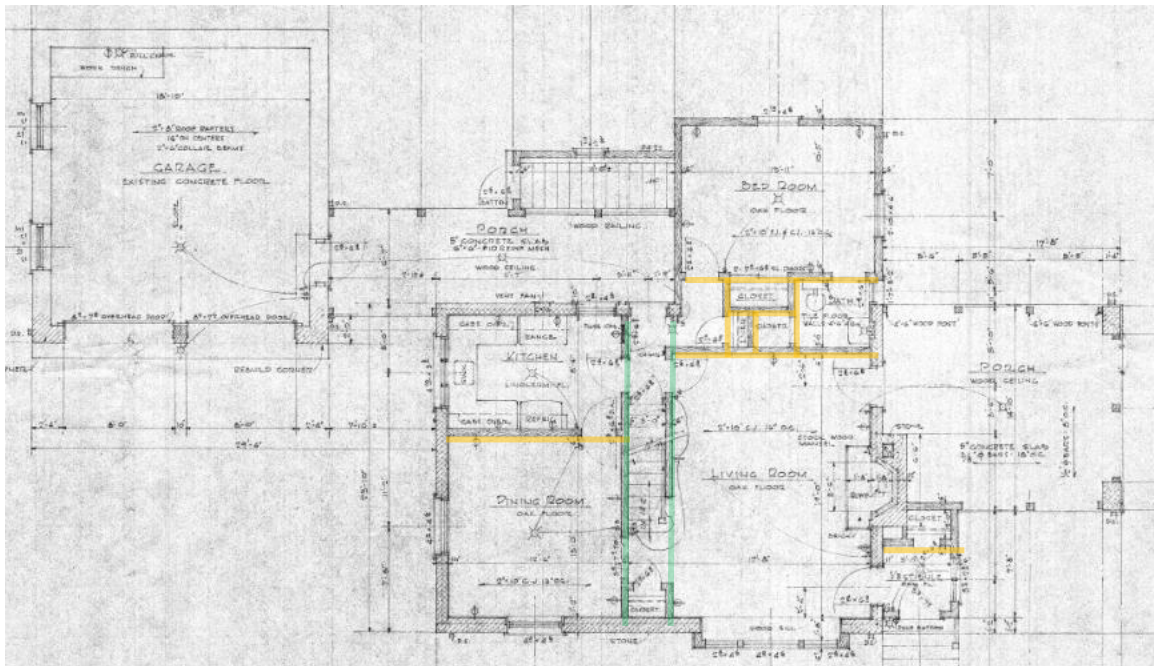


Figure 86. First-floor plan. Green lines: load-bearing walls. Orange lines: partition walls. Drawing: Custodians Residence (Sheet 2 of 9), NCR lands database.

#### **B1020** Roof Construction (Structural Frame, Chimneys above roof level, and Roof Penetrations)

The main block gable and hipped roof structural frame is inaccessible. The drawings specify 2"x8" wood rafters, running east-west, at 16" OC. It is assumed there are also rafter ties and sheathing above.

The main block front dormer gable roofs and rear dormer shed roof structural frames are inaccessible. The drawings do not specify framing sizes.

The main block rear ell gable roof structural frame is inaccessible. The drawings specify 2"x8" wood rafters, running north-south, at 16" OC. It is assumed there are also rafter ties and sheathing above.

The sun porch gable roof structural frame is inaccessible. The drawings specify 2"x8" wood rafters, running east-west, at 16" OC. It is assumed there are also rafter ties and sheathing above.

The breezeway gable roof structural frame is inaccessible. The drawings do not specify framing sizes.

The garage gable roof structural frame is inaccessible to measure, but is visible through a scuttle in the second-floor framing (fig. 87). The drawings specify 2"x8" wood rafters, running north-south, at 16" OC. The ridge board, queen posts, and perpendicular can also be seen.



Figure 87. The garage roof structural frame can be seen through a scuttle from the first floor. Photo: HPTC (07/17/12).

## **B2010 Exterior Walls (also includes louvers & screens and soffits)**

### *Exterior Walls*

The main block front (west) façade exterior wall is structurally composed of stone and brick (fig. 88). Both the drawings and historic photographs show a single-wythe brick backing with stone facing (fig. 89). The rough-faced stone, likely locally-found Catocin greenstone, is laid in a broken ashlar pattern. Additionally, the stone turns the corners to create quoins on the north and south elevations (fig. 90). Including the firred-out plaster layer on the interior, these walls are approximately 1'-4" thick (fig. 91).

The main block chimney is also composed of stone in a broken ashlar pattern (fig. 92). According to the drawings, there is no brick backing. The flues are lined with terra cotta.

The north, south, and east façade exterior walls are structurally composed of cement block and brick. Historic photographs show a single-wythe, cement-block backing with a single-wythe hard, red brick facing set in a 6:1 common bond with partial-Portland cement mortar (see fig. 89; fig. 93). The north façade brick has been covered with modern vinyl siding (not a character-defining feature); the date of installation is unknown (figs. 94-95). The south and east façade brick is still exposed (see fig. 92; fig. 96). Including the plaster layer on the interior, the north wall is approximately 1'-5" thick, the east wall is approximately 1'-3" thick, and the south wall is approximately 1'-1" thick.

The main block eastern ell, vestibule, exterior stair walls (above grade), second-floor gable end walls, and dormer walls are wood-frame construction (fig. 97). Originally, all of the frame walls, except the vestibule, front dormer walls, exterior stair walls, and second-floor gable-end wall of the eastern ell were clad with wood lap siding over diagonal sheathing (figs. 98-99). The front dormers were clad in beaded wood siding (see fig. 99); the vestibule, exterior stair walls, and second-floor gable-end wall of the eastern ell were clad in board and batten siding (fig. 100). All of the frame walls are now clad with modern vinyl siding (not a character-defining feature); the date of installation is unknown (fig. 101). It is unknown if the original wood siding was retained under the modern vinyl siding.

Originally the sun porch was only enclosed by screens (see fig. 99). The stone corner piers support the roof and gable-end wall frames (the brick and stone sun porch chimney was constructed in 1992 to the inside of the east pier; see fig. 100). Intermediary supports came from wood columns assumed to be encapsulated within the extant exterior walls (figs. 102-103). The gable-end walls were originally clad in wood lap siding. In 1994, the sun porch was permanently enclosed. The exterior is now clad in vinyl siding (not a character-defining feature; fig. 104).

The stone exterior walls of the garage date to the 1941 Quarters 1 complex and were reused after the fire (see fig. 74). The stone is laid in a squared rubble pattern; the walls are approximately 1'-4" thick. The gable end walls of the second floor are wood-frame construction (fig. 105). Originally clad in wood lap siding, the walls are now clad with modern vinyl siding (not a character-defining feature; see fig. 101).

The drawings state that "lintels over openings [doors and windows] in masonry walls shall be: Up to 4'-0" span – 2 Ls 4"x3"x5/16". Up to 5'-0" span – 2 Ls 4"x3½"x3/8". Sills were not specified; however brick sills can be seen on the drawings for openings located in brick exterior walls. It is assumed that openings in the frame walls were constructed according to standard framing practices.

#### *Louvers & Screens*

Attic louvers can be seen at both ends (north and south) of the main block gable roof (see figs. 90, 95), the end (south) of the sun porch gable roof (see figs. 99, 104), and both ends (east and west) of the garage gable roof (see figs. 101, 105). Originally constructed of wood, the extant louvers are now clad with metal (fig. 106). It is assumed that these vents were installed when the vinyl siding was installed, however this date is unknown. An interior screen is located on the eastern louver of the garage (fig. 107). It is unknown if all of the louvers have screens.

The drawings denote a louver at the end of the eastern ell gable roof. It is unknown if this louver was installed. A modern metal vent is presently located at this location (see fig. 101).

#### *Soffits*

Simple metal-clad soffits are located at the lower edge of all of the roofs at Quarters 1 (figs. 108-109). It is assumed that the extant metal covers the original wood soffits. The soffit overhangs vary in depth from 0'-1" to 0'-8".

Metal-clad rakes are located along all other roof edges. It is assumed that the extant metal covers the original wood rakes.



*Figure 89.* A brick backing can be seen behind the stone facing of the west façade. Note the cement-block backing on the north wall. Photo: CATO archives (04/28/48).

*Figure 88, left.* The stone masonry west façade during construction. Photo: CATO archives (04/28/48).



*Figure 90.* The rough-faced, broken ashlar stone turns the corner to create quoins on the brick north façade. Photo: CATO archives (07/28/48).



*Figure 91.* The stone masonry west façade as seen in 2012. Photo: HPTC (04/21/12).



*Figure 92.* The main block broken-ashlar stone chimney walls can be seen in the sun porch. Note the exposed brick wall. Photo: HPTC (06/12/12).



*Figure 93.* The north and east façade brick walls during construction; cement-block backing is located behind the brick. Photo: CATO archives (04/28/48).



*Figure 94.* The brick north façade wall was exposed until at least ca. 1991. Photo: CATO Bldg 128 building file.



*Figure 95.* The brick on the north wall has been covered with vinyl siding. Photo: HPTC (04/21/12).



*Figure 96.* The brick is still exposed on the east façade (6:1 common bond with partial-Portland cement mortar. Photo: HPTC (08/29/12).



*Figure 97.* The eastern ell of the main block is frame construction. Photo: CATO archives (04/28/48).



*Figure 98.* The eastern ell was originally clad in wood lap siding. Photo: CATO archives (07/28/48).



*Figure 99.* In this ca. 1950 photograph, the front dormer walls were clad in beaded wood siding. The main block gable end walls were clad in wood lap siding. Photo: CATO Bldg. 128 building file.



*Figure 100.* The vestibule was originally clad in board and batten siding, as seen in this ca. 1992 photograph. Photo: CATO Bldg. 128 building file.



*Figure 101.* All of the wood-frame exterior walls have been clad with modern vinyl siding. Photo: HPTC (08/29/12).



*Figure 102.* Stone piers support the roof and gable-end wall frames of the sun porch. Photo: CATO archives (07/28/48).



*Figure 103, right.* Intermediate supports are wood columns. Photo: CATO archives (07/28/48).



*Figure 104.* The wood-frame exterior walls of the sun porch, including the lower portion of the infill window walls, are clad with modern vinyl siding. Photo: HPTC (08/29/12).



*Figure 105.* The second-floor gable-end walls of the garage were originally clad in wood lap siding. Photo: CATO archives (07/28/48).



*Figure 106.* The gable-end louvers have been replaced with metal-clad louvers. Photo: HPTC (08/29/12).



*Figure 107.* The interior of the north garage louver has a screen. Photo: HPTC (07/17/12).



*Figure 108.* The metal-clad soffit of the rear dormer shed roof. Photo: HPTC (07/17/12).



*Figure 109.* The metal-clad soffit of the sun porch gable roof. Photo: HPTC (08/29/12).

## **B2020 Exterior Windows**

The original three-lite wood main block basement hopper windows are extant (W001-005; fig. 110). The units include exterior wood-frame screens and interior wood-frame storms. Additionally, a modern screen and wood-resin frame covers each window well to deter accumulation of debris in the area (fig. 111).

All of the window units on the first and second floors of the main block have been replaced. The original window types are best explained room by room.

In the dining room, the windows (W101-102) were 8/8 wood double-hung units (fig. 112); they have been replaced with 1/1 vinyl-clad double-hung units (fig. 113). In the living room, the bay windows (W103-105) were 6/6 wood double-hung units flanking a central fixed-glass unit (fig. 114); they have been replaced with 1/1 vinyl-clad double-hung units flanking a center vinyl-clad fixed glass unit (fig. 115). In the vestibule, the windows (W106-107) were four-lite wood casements (fig. 116); they were replaced with 1/1 vinyl-clad double-hung units (fig. 117). In the first-floor bathroom, the window (W124) was a 4/4 wood double-hung unit (fig. 118); it was replaced with 1/1 vinyl-clad double-hung unit (fig. 119). In two windows of the first-floor bedroom (W125-126) and the east elevation window of the kitchen (W127) were 6/6 wood double-hung units (see fig. 118); they were replaced with 1/1 vinyl-clad double-hung units (see fig. 119). The north elevation kitchen windows (W128-130) were six-lite wood casement windows; they have been replaced with 1/1 vinyl-clad double-hung units (fig. 120). All of the windows on the second floor (W201-206) were 6/6 wood double-hung windows; they were replaced with 1/1 vinyl-clad double-hung units (fig. 121).

All of the replacement windows are out of character with building design. When replacement occurred, no attempt was made to replicate the historic window light patterns in the synthetic replacement windows. The new windows exhibit a loss of lite patterns from the original windows and an increase of sash frames (i.e. W106-107, et al). These changes are not compatible with the historic building.

Originally, windows W101, 102, 125, 126, and 201 had exterior wood louvered shutters (see figs. 111, 117). These shutters were likely removed when the windows were replaced (date unknown).

The sun porch originally was screened in and did not include windows (see fig. 99). In 1994 Anderson® casement windows were installed in order to enclose the porch. The windows were replaced with Pella® casement windows (four units with four windows each: W108-111, W112-115, W116-119, W120-123); the date of these replacements is unknown (fig. 122).

According the design drawings, the exterior stair enclosure wall originally had a single four-lite casement window centered in the wall. A 1958 drawing details the installation of a series of three fixed-glass window units (W131-133). This layout is still extant; however it is not known whether the window units date to the original installation (see fig. 121).

The original (to 1948) wood garage windows are extant (WG101-G102). They are six-light hopper windows (fig. 123).



*Figure 110.* All of the basement windows are original. Photo: HPTC (08/29/12).



*Figure 111.* The basement window openings include screened frames above the window well. Photo: HPTC (08/29/12).

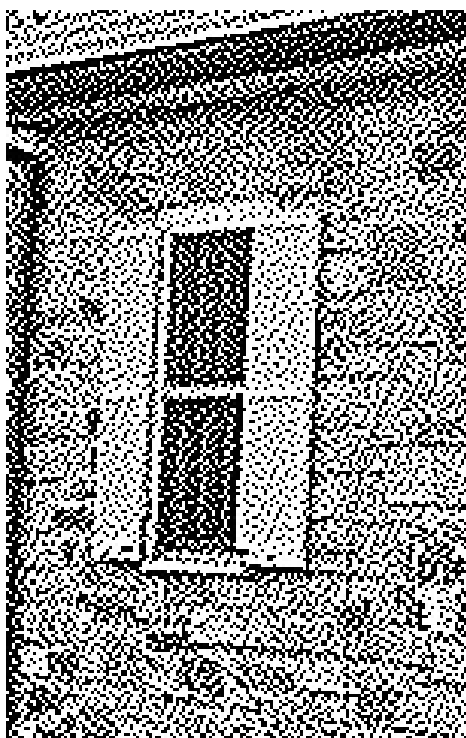


*Figure 112.* This ca. 1950 photograph shows the dining room windows were originally 8/8 wood double-hung units. Photo: CATO Bldg. 128 building file.



*Figure 113.* The dining room windows have been replaced with vinyl-clad units. Note lite patterns do not match. Photo: HPTC (04/21/12).

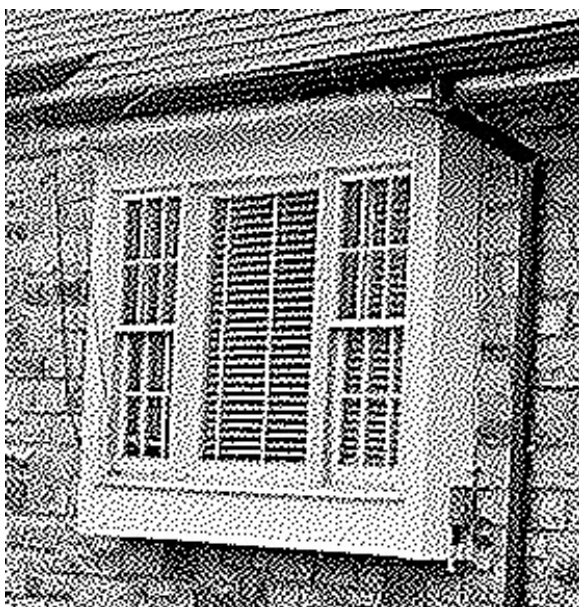


*Figure 114.* This ca. 1950 photograph shows the living room bay window was originally composed of a central fixed-glass unit flanked by 6/6 double-hung wood unit. Photo: CATO Bldg. 128 building file.

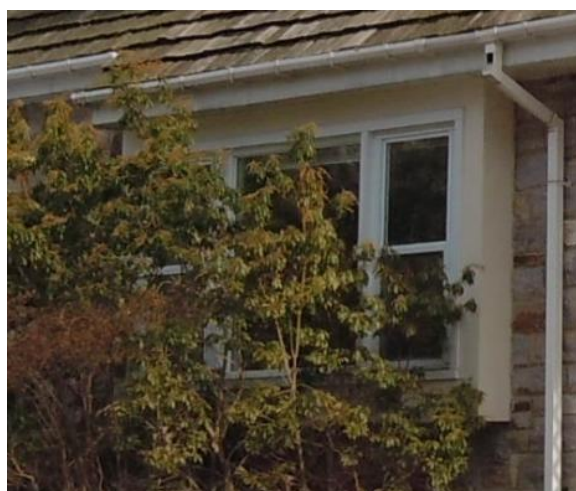


*Figure 115.* The living room bay window units have been replaced with modern vinyl units. No attempt was made to replicate historic window lite patterns in synthetic modern replacement windows. Photo: HPTC (02/14/12).



*Figure 116.* This ca. 1950 photograph shows the vestibule windows were originally four-lite wood casement units. Photo: CATO Bldg. 128 building file.



*Figure 117.* The vestibule windows have been replaced with vinyl-clad, double-hung units. Photo: HPTC (04/21/12).



*Figure 118.* This ca. 1950 photograph shows the bathroom window (left) was originally a 4/4 double-hung wood unit; the bedroom windows were 6/6 double-hung wood units. Photo: CATO Bldg. 128 building file.



*Figure 119.* The bathroom and bedrooms windows have been replaced with vinyl-clad, double-hung units. Note the absence of divided lites. Photo: HPTC (08/29/12).



*Figure 120.* The north elevation kitchen windows have been replaced with vinyl-clad, double-hung units. Photo: HPTC (08/29/12).

*Figure 121.* The second-floor windows have been replaced with vinyl-clad, double-hung units. The three windows over the exterior stair were reconfigured in 1958. Photo: HPTC (08/29/12).



*Figure 122.* The sun porch was infilled with windows in 1994; these windows have since been replaced. Photo: HPTC (08/29/12).



*Figure 123.* The 6-lite garage hopper windows are originally to the 1948 rebuild of Quarters 1. Photo: HPTC (08/29/12).

### **B2030 Exterior Doors**

The single basement exterior door (D004E) was replaced in 1997 with a solid-core wood door (fig. 124). The original style is unknown.

The main block originally had three exterior doors. With the enclosure of the sun porch, D106 is now considered an interior door. The other two main block exterior doors, D104E and D110E were replaced in 1995 due to the presence of lead paint. D104E was originally a wood door with nine lites above and a cross-buck below; D110E was originally a wood door with six lites above and two panels below. Both replacement wood doors have nine lites above and two vertical panels below (figs. 125-126). Additionally, both openings have an exterior aluminum storm door; the installation dates of these storms are unknown.

An exterior wood door (D106E) was installed on the sun porch prior to the enclosing of the porch in 1994 (fig. 127); its exact date and style are unknown. The current wood door has three horizontal lites above and two vertical lites below (fig. 128). Additionally, the opening has an exterior aluminum storm door; its installation dates is unknown.

The garage exterior entry door (DG103) is original to 1948; the wood door has six lites above and two vertical panels below (fig. 129). The garage overhead doors (DG101 and 102) have been replaced. Originally the wood doors each included six lites across the top and eighteen panels below (fig. 130). The extant steel doors, installed in 1994, include sixteen panels each (fig. 131).



*Figure 124.* D004E is a replacement solid-core wood door. Photo: HPTC (06/20/12).



*Figure 125.* D104E was replaced in 1995. Photo: HPTC (06/12/12).



Figure 126. D110E was replaced in 1995. Photo: HPTC (06/12/12).



Figure 127. A sun porch exterior door (D106E) was installed prior to the 1994 enclosure, as seen in this ca. 1992 photograph. Photo: CATO Bldg. 128 building file.



Figure 128. The extant D106E with exterior aluminum storm door. Photo: HPTC (06/12/12).



Figure 129. Exterior door DG103 is original to 1948. Photo: HPTC (08/29/12).

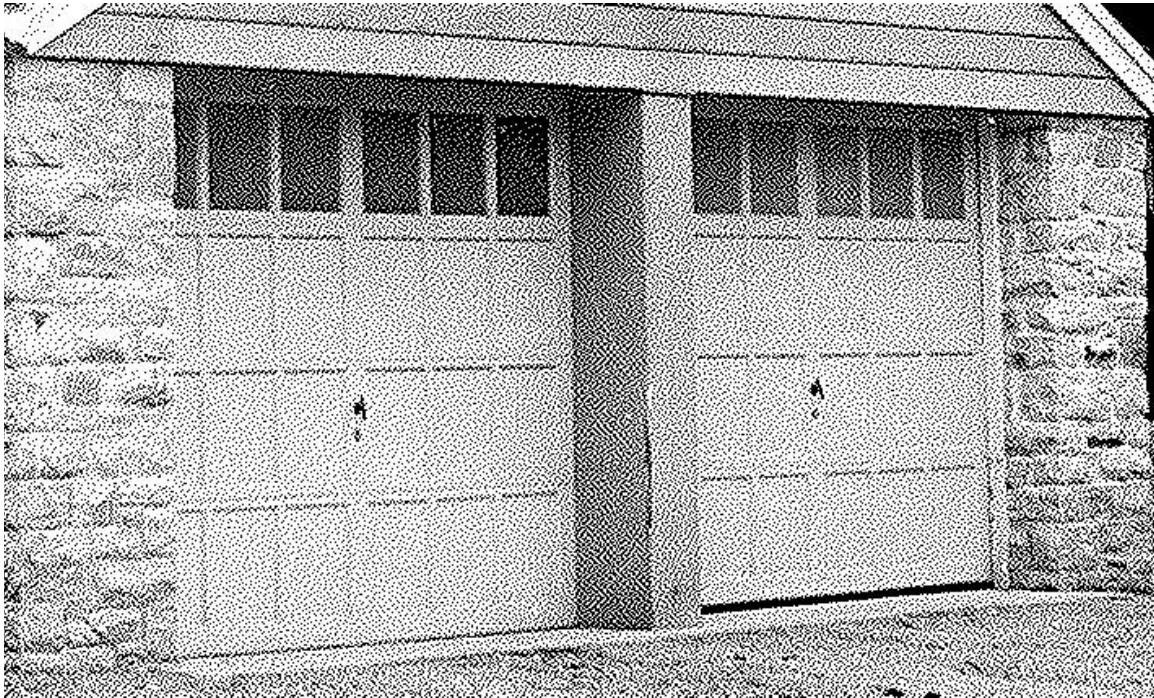


*Figure 130.* As seen in this ca. 1950 photograph, the original garage overhead wood doors each included six lites and eighteen panels (DG101 and DG102). Photo: CATO Bldg. 129 building file.



*Figure 131.* The overhead garage doors were replaced with sixteen-panel steel doors which are not character-defining features (DG101 and DG102). Photo: HPTC (08/29/12).

## **B3010** Roof Coverings (Finishes, Flashings, and Drainage)

### *Roof Finishes*

The roof can be divided into the following areas (fig. 132): the main block gable and hipped roof; the front dormer gable roofs; the rear dormer shed roof; the eastern ell gable roof; the sun porch gable roof; the breezeway shed and gable roof; and the garage gable roof.

The main block gable and hipped roof was originally specified as a slate roof on the design drawings. This condition can be seen in historic photographs (fig. 133). Cedar shakes currently cover this roof (fig. 134).

The front dormer gable roofs were originally specified as slate roofs on the design drawings. This condition can be seen in historic photographs (see fig. 133). Cedar shakes currently cover this roof (see fig. 134).

The rear dormer shed roof was originally specified as a metal roof on the design drawings. No historic photographs have been found showing this condition. The roof is currently clad in standing-seam copper (fig. 135). Metal snow guards are located at the lower end of every seam (fig. 136).

The eastern ell, sun porch, and garage gable roofs were originally specified as slate roofs on the design drawings. These conditions can be seen in historic photographs (figs. 137-138). Cedar shakes currently cover these roofs (figs. 139-140).

The breezeway shed and gable roof was originally specified as a slate roof on the design drawings. No historic photographs have been found showing this condition. Currently, each slope is clad in a different material (see fig. 140). The eastern slope of the gable roof and shed portions are clad in standing-seam copper; metal snow guards are located at the lower end of every other seam. The western slope of the gable roof portion is clad in cedar shakes.

The installation date of the cedar shakes and metal roofs is unknown. Through the study of archival photographs, the roof finishes were likely installed prior to ca. 1991.

### *Flashing*

The front dormer walls are assumed to be flashed, though no flashing can be seen at these locations (fig. 141). The rear dormer walls are flashed on all sides with copper (fig. 142). The areaway on the exterior of W204 is heavily flashed with copper (fig. 143). The chimneys are flashed with copper. All roof valleys are also flashed with copper.

### *Roof Drainage System*

Metal gutters and downspouts were specified on the drawings for the main block gable and hipped roof; the rear dormer shed roof; the eastern ell gable roof; the sun porch gable roof; the breezeway shed and gable roof; and the garage gable roof. The specified metal K-style gutter was to be 5½" x 4½" with a 1¼" x ¼" gutter hanger (fig. 144). Archival photographs depict metal, square downspouts. There was no roof drainage system specified for the front gable dormer roofs, nor is one extant (see fig. 141).

There are two types of extant roof drainage systems located at Quarters 1 (see fig. 132). The first system utilizes U-shaped vinyl gutters and square vinyl downspouts with cleanouts at the upper elbow. This system can be seen along the west and south eaves of the main block gable and hipped roofs (fig. 145), the west and east eaves of the sun porch, the south eave of the eastern ell (fig. 146), the north and south (western portion) eave of the garage, and the west eave of the breezeway.

The second system utilizes aluminum K-style gutters and rectangular, corrugated downspouts. This system can be seen along the north eave of the eastern ell, the east eave of the main block rear dormer, the east eaves of the breezeway (fig. 147), and the south (eastern portion) eave of the garage (fig. 148).

All of the downspouts drain below grade; it is unknown where this system daylights.

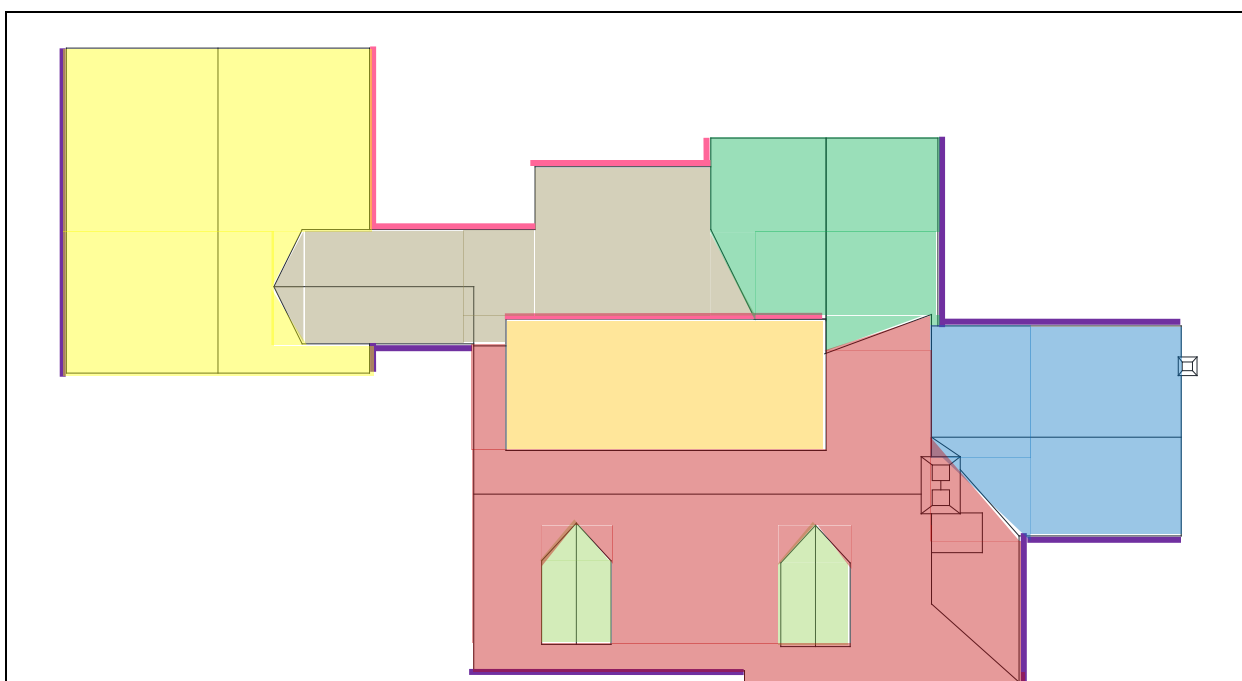


*Figure 132.* The Quarters 1 roofscape can be divided into distinct areas. Red overlay: main block gable and hipped roof. Light green overlay: front dormer gable roofs. Orange overlay: rear dormer shed roof. Dark green overlay: eastern ell gable roof. Blue overlay: sun porch gable roof. Brown overlay: breezeway shed and gable roof. Yellow overlay: garage gable roof. Purple lines: vinyl drainage system; pink lines: aluminum drainage system. Drawing: HPTC (2012).



*Figure 133.* As seen in this ca. 1950 photograph, the main block gable/hipped roof and the front dormer gable roofs were originally slate. Photo: CATO Bldg. 128 building file.



*Figure 134.* The main block gable and hipped roof and the front dormer gable roofs are now clad in cedar shakes. Photo: HPTC (02/14/12).



*Figure 135.* The rear dormer shed roof is clad in standing-seam copper. Photo: HPTC (08/29/12).



*Figure 136, right.* Metal snow guards are located at every seam on the metal roofs. Photo: HPTC (08/29/12).



*Figure 137.* As seen in this ca. 1950 photograph, the eastern ell and sun porch gable roofs were originally clad in slate. Photo: CATO Bldg. 128 building file.



*Figure 138.* As seen in this ca. 1950 photograph, the garage gable roof was originally clad in slate. Photo: CATO Bldg. 129 building file.



*Figure 139.* The eastern ell and sun porch gable roofs are now clad in cedar shakes. Photo: HPTC (08/29/12).



*Figure 140, right.* The garage gable roof (background) is now clad in cedar shakes. The breezeway gable and shed roof is clad in cedar shakes and standing-seam copper. Photo: HPTC (07/17/12).



Figure 141. No flashing can be seen at the front dormers. Photo: HPTC (08/29/12).



Figure 142. The rear dormer walls are flashed with copper. Photo: HPTC (07/17/12).



Figure 143. The areaway outside of W204 is flashed with copper. Photo: HPTC (06/12/12).

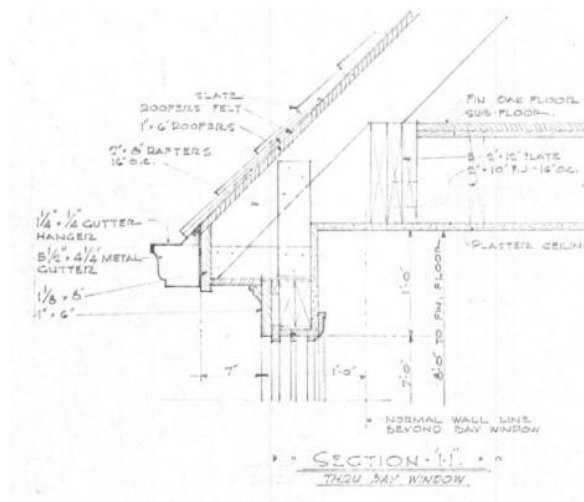


Figure 144, right. The design drawings specify the size and shape of the metal gutters. Drawing: Sheet 4, Custodian's Residence, CATO resources office flat files.



Figure 145. The vinyl drainage system on the west elevation of the main block. Photo: HPTC (04/21/12).



Figure 146. The vinyl drainage system on the south elevation of the eastern ell. The downspouts exhibit ice-dam prevention spouts. Photo: HPTC (04/21/12).



*Figure 147.* The aluminum drainage system on the east elevation of the breezeway. Photo: HPTC (04/21/12).



*Figure 148.* The aluminum drainage system on the south elevation (eastern portion) of the garage. Photo: HPTC (08/29/12).

### **B3020 Roof Openings**

The only through-the-roof penetrations are two copper pipes located on the southern slope of the eastern ell gable roof (fig. 149). They are likely associated with the first-floor bathroom ventilation.

There are two chimneys located at Quarters. The main block stone chimney dates to the 1948 rebuild. Only one of the terra cotta flues has a screened metal cap (fig. 150). The sun porch brick chimney was constructed in 1992. Its single flue has a screened metal cap (see fig. 150).



*Figure 149.* Two copper pipe vents penetrate the southern slope of the main block's eastern ell. Photo: HPTC (08/29/12).



*Figure 150.* The main block stone chimney is original; the sun porch brick chimney was built in 1992. Photo: HPTC (08/29/12).

### C1010 Partitions

Basement partition walls are framed and include the walls separating Room 004 from the main stair, the closet walls under the stair, and the walls enclosing the half bath (Room 002), and storage closet (Room 003). See fig. 69.

First-floor partition walls are framed and include the walls separating the dining room (Room 101) from the kitchen (Room 102), the wall between the front entry (Room 104) from its closet (Room 105), and the walls between the living room (Room 103) and the bedroom (Room 109) which enclose the closets (Rooms 108 and 111) and bathroom (Room 107). See fig. 86.

Second-floor partition walls are framed and include all interior walls (fig. 151).

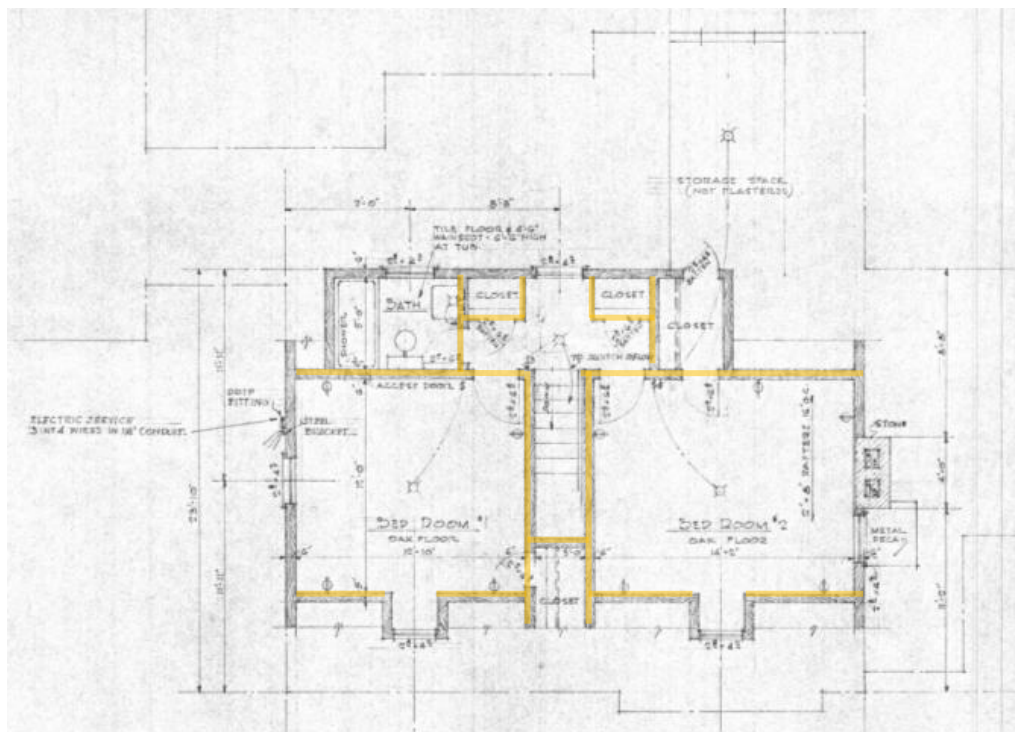


Figure 151. Second-floor plan. Orange lines: partition walls. Drawing: Sheet 3, Custodian's Residence, CATO resources office flat files.

## C1020 Interior Doors

The design drawings specify the interior basement doors (D001-004) to be “batten” doors. An extant painted batten door is located at D004 (fig. 152). The other three doors have been replaced with unpainted hollow-core wood doors (fig. 153). With the enclosure of the space under the stairs, an additional door (D005) accesses this closet.

Originally, all of the first-floor interior doors were three-panel doors. Examples can be seen at D101, D108, and D110b (fig. 154). In 1995, many of these doors were removed, due to the presence of lead-based paint, and replaced with unpainted hollow-core wood doors (fig. 155); those removed included D102, D105, D107, D109, and D111.<sup>1</sup> Interior doors were originally found at openings D103, D110, and D112; however they were removed (dated unknown). D106 was originally an exterior door, but when the sun porch was enclosed became an interior door. It is painted and has 15 lites (fig. 156).

There were two types of second-floor interior doors originally: “batten” style and 3-panel. An original batten-style door can be seen at D205 (fig. 157); an original 3-panel door can be seen at D204 (fig. 158). D202, D206, and D207 were originally batten-style doors, but were replaced with unpainted hollow-core doors in 1995. D201, D103, and D209 were originally 3-panel doors, but were also replaced with unpainted hollow-core doors in 1995 (fig. 159).



Figure 152. An original “batten” basement door (D003). Note the dimensional casing. Photo: HPTC (07/17/12).



Figure 153. A replacement hollow-core basement door (D004). Photo: HPTC (07/17/12).

<sup>1</sup> Removal of interior doors due to the presence of lead-based paint was done as a reactionary management decision common at the time and was not based on a true understanding of the requirements of the then-recently-enacted legislation. Because of this action however, these character-defining features were irretrievably lost. See Preservation Brief #37: “Reducing Lead-Pain Hazards” for more information.



*Figure 154.* D101 is an original 3-panel painted wood swinging door between the dining room and kitchen. Photo: HPTC (06/12/12).



*Figure 155.* D109 is a replacement hollow-core wood door; conversely the adjacent D108 is an original sliding closet door. Photo: HPTC (06/12/12).



*Figure 156.* D106 became an interior door after the sun porch was enclosed in 1994. Photo: HPTC (06/12/12).



*Figure 157.* D205 is an original batten-style door on the second floor. Photo: HPTC (06/12/12).



Figure 158. D204 is an original 3-panel door on the second floor. Photo: HPTC (06/12/12).



Figure 159. D203 is a replacement hollow-core door on the second floor. Photo: HPTC (06/12/12).

### C1030 Fittings (Cabinets, Architectural Trim, Fireplaces)

#### *Cabinets*

Unpainted, simple built-in cabinets are located in the kitchen (Room 112). Base and wall cabinets are located on the west, north, and east walls of the room (fig. 160). A scalloped valance and two sets radial shelves flanking the sink are the most notable decorative elements of the kitchen. The counters and backsplashes are composed of Formica. The cabinets likely date to the 1970s, but their exact date is unknown.

Built-in bookshelves are located on the east wall of basement room 001 (fig. 161). Simply constructed, they were installed when the paneling was installed, likely in 1991.

#### *Architectural Trim*

Limited replacement has occurred to the architectural trim in the basement. Original door casing consists of stock, dimensional wood (see fig. 152). The vinyl baseboard was likely installed when the floor tiles were installed (date unknown).

The wood trim of the first and second floors is all original. This includes baseboard with *cyma reversa* molding, stock window and door casing, and simple window sills and stools (figs. 162-165).

### Fireplaces

The fireplace located in Room 103 is original (fig. 166). It consists of a stone face with jack arch over the firebox opening and a brick hearth. A simple wood mantel with molding along the edge sits at the top of the stone face. A modern metal insert is located in the firebox.

A modern fireplace was added to the sun porch (Room 106) in 1992 (fig. 167). A stone chimney was built adjacent to the eastern stone pier. A heater sits on the flagstone hearth.



Figure 160. Wood base and wall cabinets with Formica countertops are located on the west, north, and east walls of the kitchen. Photo: HPTC (06/12/12).



Figure 161. Simple wood bookshelves are located on the east wall of Room 001. Photo: HPTC (06/20/12).



Figure 162. Painted wood baseboard with cyma reversa molding on the first floor. Photo: HPTC (06/12/12).



Figure 163. Painted wood window sill and stool at a first-floor window. Photo: HPTC (06/12/12).



*Figure 164.* Painted wood door casing on a first-floor door is original. Photo: HPTC (06/12/12).



*Figure 165.* Painted wood baseboard with unpainted quarterround and painted wood door casing on the second floor. Photo: HPTC (06/12/12).



*Figure 166.* The living room fireplace is original; the metal insert is modern. Photo: HPTC (06/12/12).



*Figure 167, right.* The fireplace on the sun porch was added in 1992. The seam between the original stone pier and modern stone chimney is obvious. Photo: HPTC (06/12/12).

## C2010 Stair Construction

### *Interior Stairs*

The interior staircase between the basement and the first floor of the main block is composed of a straight run of fourteen risers (fig. 168). The wood-frame stairs have painted risers and carpeted treads (fig. 169). An unpainted wood banister is located on the south wall of the stairwell. The design drawings show the north wall of the stairwell as open with a balustrade running the whole

length. It is not known if this stair structure was originally constructed in this way, or if it was when it was altered to its current layout.

The original interior staircase between the first floor and second floor is composed of a straight run of fourteen risers (fig. 170). The wood-frame stairs have carpeted risers and treads. The first three treads are open on the southern side; the lowest is a curtail step (fig. 171). The unpainted wood newel post supports an unpainted, curtailed wood railing. Painted wood balusters support the railing until the side wall encloses the staircase. The railing continues up the entire run of stairs, but is supported by the wall.

#### *Exterior Stairs*

The original, concrete exterior staircase located at the front entrance (D104ext) is composed of a straight run of two risers (originally three). There is no railing located at this stair. Over the years, the lowest tread has become level with the sidewalk/grade surrounding the stair (figs. 172-173).

The exterior staircase between the basement and grade is composed of a straight run of twelve risers (fig. 174). The stone structure has Astroturf on the top four treads. There is no railing located at this stair.

The exterior staircase located on the breezeway is composed of a straight run of three risers (fig. 175). The concrete structure is covered with Astroturf. There is no railing located at this stair.



*Figure 168.* The basement stairs have painted risers, carpeted treads, and an unpainted banister. Photo: HPTC (06/20/12).



*Figure 169.* The basement stairs are composed of wood frame. Photo: HPTC (06/20/12).



*Figure 170.* The main staircase is carpeted. Photo: HPTC (06/12/12).

*Figure 171, right.* The lowest three treads are open on the southern end with a curtail tread and railing and painted balusters. Photo: HPTC (06/12/12).



*Figure 172.* As seen in this ca. 1950 photograph, the concrete front entrance stair was originally composed three risers. Photo: CATO Bldg. 128 building file.



*Figure 173.* The lowest tread of the exterior stair is now level with the grade. Photo: HPTC (04/21/12).



Figure 174. The stone exterior basement staircase; the four upper treads are covered with AstroTurf. Photo: HPTC (04/21/12).



Figure 175. The breezeway stair is composed of concrete covered with AstroTurf. Photo: HPTC (08/20/12).

### C3010 Wall Finishes

Basement walls finishes include faux-wood paneling, paint applied to the concrete foundation walls, painted particle board, painted plaster, and exposed wood framing. First-floor wall finishes include painted plaster/drywall, exposed brick and stone, painted wood board and batten<sup>2</sup>, and ceramic tile. Second-floor wall finishes include painted plaster/drywall, unpainted plywood with battens, painted V-groove wood paneling, and ceramic tile.

More details on each wall finish, including photographs, are included in the *Room Descriptions* and the *Condition Assessment* sections.

<sup>2</sup> According to the 2010 "Asbestos-Containing Materials Survey," the "masonry seam sealant" between the stone chimney and painted wood batten and board interior wall finish in the sun porch contains asbestos. The percentage of asbestos content is not known, nor is it known whether the sealant is friable or non-friable. [Boggs Environmental Consultants, Inc. "Asbestos-Containing Materials Survey (US EPA AHERA Level)." *Quarters #1 (HS128), Catocin Mountain National Park, Thurmont, Maryland 21788*. Prepared for Prizim, Inc., June 16, 2010, p. 5.]

### C3020 Floor Finishes

Basement floor finishes include rigid tile (less than 500 s.f. contains asbestos).<sup>3</sup> First-floor floor finishes include carpet, ceramic tile, wood strip flooring, and vinyl sheet flooring. Second-floor floor finishes include wood strip flooring, unpainted press board, carpet, and ceramic tile.

More details on each floor finish, including photographs, are included in the *Room Descriptions* and the *Condition Assessment* sections.

### C3030 Ceiling Finishes

Basement ceiling finishes include suspended acoustical ceiling tiles, flush acoustical ceiling tiles, and exposed framing. First-floor ceiling finishes include painted plaster/drywall, and stained wood beadboard. Second-floor ceiling finishes include painted plaster/drywall, and unpainted plywood with battens.

More details on each ceiling finish, including photographs, are included in the *Room Descriptions* and the *Condition Assessment* sections.

### D20 Plumbing

A plumbing system has always serviced Quarters 1; this includes water supply and a sewage system.

Extant plumbing fixtures include a shower, toilet, lavatory, electric water heater, and laundry basin in the basement; a toilet, lavatory, enclosed shower stall, and kitchen sink on the first floor; and a bathtub/shower, toilet, and lavatory on the second floor.

More details on each plumbing fixture, including photographs, are included in the *Room Descriptions* and the *Condition Assessment* sections.

### D30 HVAC

A modern forced-air electric heat pump is located in Room 004 of the basement (York Affinity®; fig. 176). Modern metal ductwork leads from the heat pump to the first floor rooms of the main block and eastern ell. One condenser unit is located on the exterior of the building between the sun porch and the eastern ell (fig. 177). A digital thermostat for this system is located on the south wall of the dining room.

The second floor rooms and the sun porch are conditioned via a Mitsubishi Electric® mini-split system. A unit above D201 in Room 201, above D203 in Room 203, and at D106 in Room 106 (figs. 178-179). The three units are tied to a single condenser unit located on the exterior building between the sun porch and eastern ell (see fig. 177).

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<sup>3</sup> According to the 2010 "Asbestos-Containing Materials Survey," some of the vinyl-floor tiles in the basement contains asbestos. The percentage of asbestos content is not known, nor is it known whether the tile is friable or non-friable. [Boggs Environmental Consultants, Inc. "Asbestos-Containing Materials Survey (US EPA AHERA Level)." *Quarters #1 (HS128), Catoclin Mountain National Park, Thurmont, Maryland 21788*. Prepared for Prizim, Inc. June 16, 2010, p. 5.]

The extant sun porch wood stove (Atlanta Stove Works Homesteader Supreme®) was installed in 1992 (see fig. 167). An auxiliary wall heater is found in basement Room 001 along the south wall (fig. 180). Auxiliary electric baseboard heaters are also found in Rooms 201, 203, 208, and 209 (fig. 181).



*Figure 177.* The condenser units for the first-floor forced-air system (left) and the sun porch and second-floor mini-split system (right) is located between the sun porch and eastern ell. Photo: HPTC (04/21/12).

*Figure 176, left.* The electric heat pump for the first-floor forced-air system is located in Room 004. Photo: HPTC (06/20/12).



*Figure 178.* The mini-split unit in Room 201. Photo: HPTC (06/12/12).



*Figure 179.* The mini-split unit in Room 106. Photo: HPTC (06/12/12).



*Figure 181. An electric baseboard heater in a second-floor room. Photo: HPTC (06/12/12).*

*Figure 180, left. An auxiliary heater in Room 001. Photo: HPTC (06/20/12).*

#### **D40** Fire Protection Systems

There are three fire extinguishers located in Quarters 1. Currently they are all located on the floor of Room 110 (fig. 182). They were all serviced in June 2012 and were likely not redistributed after service. Permanent locations include the kitchen, the basement, and the garage.

A battery-operated smoke and carbon monoxide detector is located on the ceiling of Room 110; it is inoperable (fig. 183). A battery-operated smoke detector is located on the ceiling of Room 208; it is operable, but its batteries need to be replaced (fig. 184). There are no smoke detectors in the basement or in the garage.



Figure 182. The three fire extinguishers for Quarters 1 need to be redistributed throughout the building. Photo: HPTC (06/12/12).



Figure 183. The battery-operated smoke and carbon monoxide detector in Room 110. Photo: HPTC (06/12/12).



Figure 184. The battery-operated smoke detector in Room 208. Photo: HPTC (06/12/12).

## D50 Electrical

The main electrical panel for Quarters 1 is located in the garage (fig. 185); it is modern (date of installation unknown). There are two subpanels. One is located on the south wall of the kitchen (Room 112); it dates to 1948 (fig. 186). The other is located on the south wall of Room 004 (fig. 187); it is modern.

According to both of the 2010 “Asbestos-Containing Materials Survey[s],” the fabric-insulated wires, found in the interior of the garage and residence, are presumed to contain asbestos.<sup>4</sup>

All of the lighting equipment is contemporary or modern in design. No historic lighting exists in Quarters 1.

There is no hardwired fire alarm system, security system, emergency lighting and power system, or lightning protection system located at Quarters 1.

<sup>4</sup> Boggs Environmental Consultants, Inc. “Asbestos-Containing Materials Survey (US EPA AHERA Level).” *Quarters #1 Garage (HS129), Catoctin Mountain National Park, Thurmont, Maryland 21788*. Prepared for Prizim, Inc. June 21, 2010.  
Boggs Environmental Consultants, Inc. “Asbestos-Containing Materials Survey (US EPA AHERA Level).” *Quarters #1 (HS128), Catoctin Mountain National Park, Thurmont, Maryland 21788*. Prepared for Prizim, Inc. June 16, 2010.



*Figure 185.* The main electrical panel is located in the garage. Photo: HPTC (07/17/12).



*Figure 186.* An original subpanel is located in the kitchen. Photo: HPTC (06/12/12).



*Figure 187.* A modern subpanel is located in the basement. Photo: HPTC (03/21/12).

## G2020 Parking Areas

A large parking area is located in front (west) and to the side (north) of the garage (fig. 188). Historic photographs show this space as gravel; the extant parking area is composed of macadam (fig. 189).

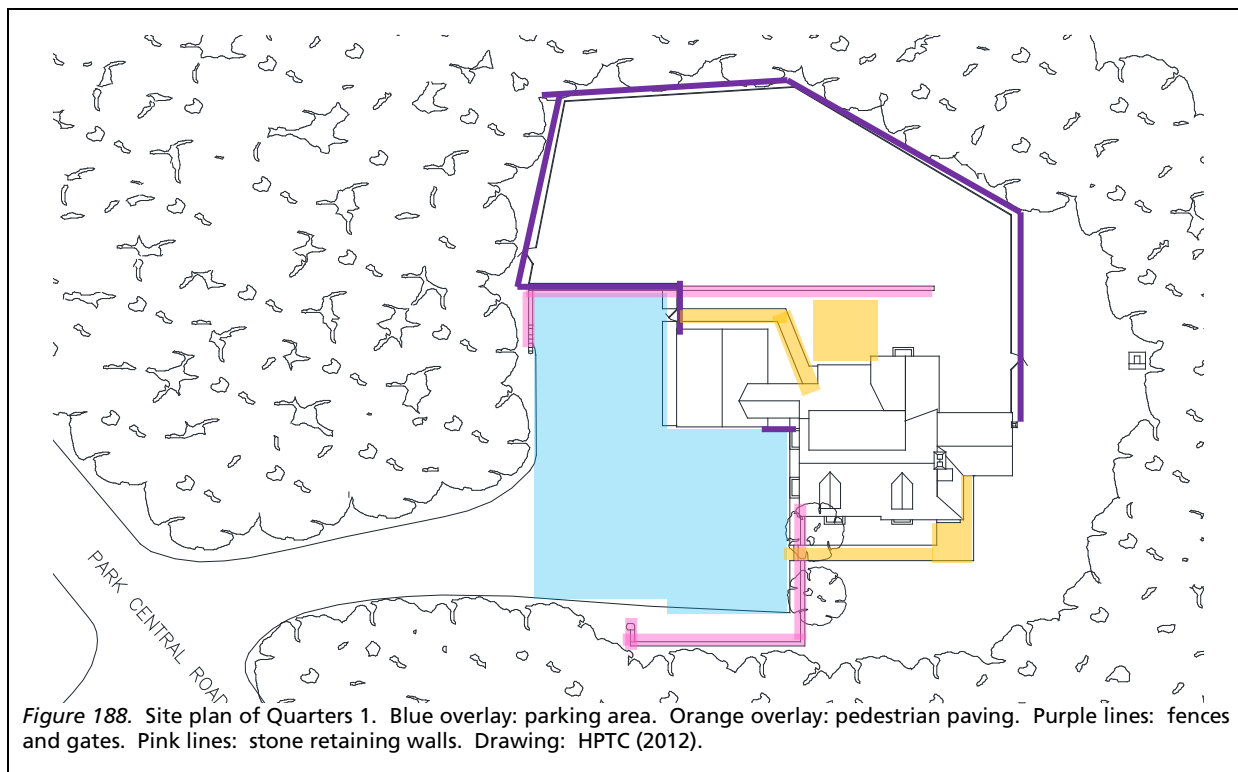


*Figure 188.* Site plan of Quarters 1. Blue overlay: parking area. Orange overlay: pedestrian paving. Purple lines: fences and gates. Pink lines: stone retaining walls. Drawing: HPTC (2012).



*Figure 189. The parking areas to the west and south of the garage are paved. Photo: HPTC (08/29/12).*

#### G2030 Pedestrian Paving

Front-elevation pedestrian paving consists of a straight, concrete sidewalk from the parking area to exterior doors D104ext to D106ext (figs. 190-191).

Rear-elevation pedestrian paving consists of a straight, concrete sidewalk from the rear portion of the parking area, behind (east of) the garage, to the rear (east) private yard and the breezeway (fig. 192). A flagstone patio, mostly covered with vegetative growth is also located in the rear yard (fig. 193).

Refer to fig. 188.



*Figure 191.* The front elevation concrete sidewalk leads to both doors on the west façade. Photo: HPTC (08/29/12).

*Figure 190, left.* A concrete sidewalk leads from the paved parking area to along the front elevation. Photo: HPTC (08/29/12).



*Figure 193.* The rear yard includes a grown-over flagstone patio (yellow overlay). Photo: HPTC (08/29/12).

*Figure 192, left.* A concrete sidewalk leads from the paved parking area, behind the garage, to the rear yard. Photo: HPTC (08/29/12).

## G2040 Site Development (Fences & Gates, Retaining Walls, Exterior Furnishings)

### *Fences and Gates*

A chain-link fence, encompassing the rear yard, was constructed in 1991 (see fig. 188). Gates are located at the back of the garage at the parking area (see fig. 192) and along the south elevation near the sun porch (fig. 194).

A modern wide-picket wood fence is located at the breezeway, between the main block and the garage, limiting access to the rear yard (fig. 195).

### *Retaining Walls*

An approximately 3'-0"-high stone retaining wall, dating to the 1941 complex, is located along the rear elevation of Quarters 1. It turns west ninety degrees at the north end of the parking area and terraces down with the grade (figs. 196-197).

An approximately 1'-0"-high stone wall, also dating to the 1941, is located along the northern and western ends of the parking area on the front elevation of Quarters 1 (fig. 198).

### *Exterior Furnishings*

A permanent, rectangular stone, likely Catoctin greenstone, grill is located to the south of Quarters 1 (fig. 199); it measures 4'-0" wide x 4'-0" deep x 2'-9" high. Stone walls surround the hearth with is covered above by a metal grill and on the side by a metal door. Its date of construction is unknown.



*Figure 194.* A gate in the chain-link fence is located near the sun porch. Photo: HPTC (08/29/12).

*Figure 195, right.* A painted wide-picket wood fence closes off the breezeway from the parking area. Photo: HPTC (08/29/12).





Figures 196, left, and 197, right. A three-foot tall stone retaining wall runs nearly the entire length of the building site in the rear yard (approximately 97'-0") and divides the upper and lower terraces. Photos: HPTC (03/21/12).



Figure 198. The paved area is framed with a border of perennials on the west while a stone knee wall separates the planting beds from a lawn. Photo: HPTC (04/21/12).



Figure 199. A permanent stone grill is located south of Quarters 1. Photo: HPTC (08/29/12).

## G2050 Maintained Landscapes

Quarters 1 sits on terraced lot of sloping mountain terrain with two level areas separated by a retaining wall the runs almost the entire length of the site (fig. 200). Above the retaining wall is a maintained lawn with mature shrubbery planted randomly throughout. Both the house and the garage sit on the lower terrace. The concrete sidewalk along the rear elevation is flanked by two planting beds

The paved lot is framed on the east side by a perennial border bed that continues along the south side until it abuts the concrete steps and front sidewalk (see fig. 198). Separating the planted beds and the front lawn is the lower stone wall.

The front concrete sidewalk frames a six-foot planting bed for evergreen woody perennials at the front façade (fig. 201). The maintained lawn of the front yard is scattered with small understory

trees which stop as the ground banks sharply on the lawn's western edge down to the natural grade (fig. 202). Natural forest surrounds the terraced lot on all sides (fig. 203).



*Figure 200.* The rear lawn is separated from Quarters 1 by a stone retaining wall. Photo: HPTC (02/14/12).



*Figure 201, right.* The front planting bed includes plantings which are very close to the foundation. Photo: HPTC (08/29/12).



*Figure 202.* A sodded yard is located on the front elevation. Photo: HPTC (08/29/12).



*Figure 203.* The area surrounding Quarters 1 is composed of woods. Photo: HPTC (08/29/12).

### G9087 Overall Building Site Drainage

Generally, site drainage around the building is fair to poor. The house is located on a level terrace that tends to trap water from the surrounding hillside. Rainwater drains from east to west following the natural grade of the mountainside. Moisture problems in the basement indicate that the site drainage should be improved especially in the east and north sides of the buildings (figs. 204-206).

Both the residence and the garage have gutters and downspouts to collect and discharge the roof drainage, but these are subject to clogging due to the excessive debris from the surrounding mature forest.



Figure 204, left, and Figure 205, right. Two areas most affected by poor site drainage are the north (left) and east (right) elevations mainly due to their orientation to the grade of the site causing the entrapment of moisture. Photos: HPTC: (03/21/12).

## Description by Room

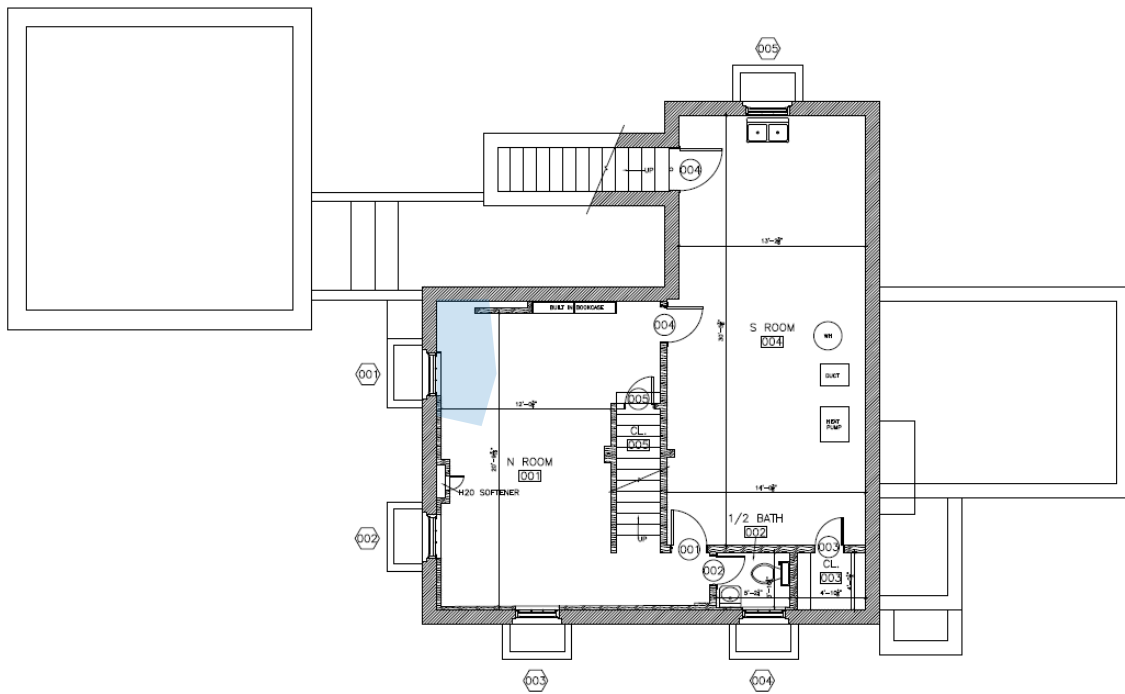


Figure 206. Basement floor plan. Blue overlay depicts area of moisture infiltration from exterior grade above. Drawing: HPTC (2012).

### Room 001 – Recreational Room

The northern room of the basement is used as recreational room (figs. 207-208). Rectangular in plan, the room measures 12'-1" x 20'-9".

#### *Floor*

The concrete slab floor is covered with rigid asbestos-containing tile (installation date unknown; fig. 209).<sup>5</sup> Some of the tiles have been replaced through the years.

#### *Walls*

The concrete foundation walls and the interior partition frame walls are covered with faux-wood paneling which is firred out from the foundation walls with 2x4 framing (date unknown; fig. 210). The paneling has been removed in the northeast corner of the room (fig. 211); the exposed concrete is painted.

#### *Ceiling*

A suspended acoustical ceiling is hung from a 2x4 frame approximately 1'-2" below the joists above (fig. 212). The suspension system was added in 1991; the panels were replaced in 1997.

#### *Trim*

Only modern trim, associated with the wood paneling, can be seen in Room 001 (see fig. 192); this includes corner trim and baseboard with quarter round. A built-in bookcase is located on the east wall (see fig. 161). Where the concrete foundation walls are exposed, vinyl baseboard can also be seen (see fig. 211).

#### *Doors*

D001 is modern hollow-core wood door installed in 1995. It has modern metal hinges and knob.

#### *Windows*

W001, W002, and W003 are identical. They are original painted wood hopper units with exterior wood storms and original metal hinges and locking hardware; W003 also includes a screen between the window and the storm (fig. 213).

#### *Plumbing System*

A modern water filter/softener is located on the north wall of room (installation date unknown; fig. 214).

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<sup>5</sup> According to the 2010 "Asbestos-Containing Materials Survey," some of the vinyl-floor tiles in the basement contains asbestos (chrysotile). The percentage of asbestos content is not known, nor is it known whether the tile is friable or non-friable. The floor tiles are not dangerous unless found to be friable. [Boggs Environmental Consultants, Inc. "Asbestos-Containing Materials Survey (US EPA AHERA Level)." *Quarters #1 (HS128), Catoctin Mountain National Park, Thurmont, Maryland 21788*. Prepared for Prizim, Inc. June 16, 2010, p. 5.]

### *Mechanical System*

A wall heater is located in the south wall (installation date unknown; see fig. 180).

### *Electrical System*

All of the electrical components are modern with flush-mount switches and outlets. The two recessed overhead fluorescent lights located in the suspended ceiling were replaced in 1997 (see fig. 194).

### *Closet (Room 005)*

A closet, or Room 005, occupies the space under the stair (see fig. 150). The floors are covered with asbestos-containing tile which matches that seen in Room 001. The north wall and ceiling are exposed framing. The south wall is composed of painted plaster.



Figure 207. Room 001 looking west. Photo: HPTC (06/20/12).



Figure 208. Room 001 looking east. Photo: HPTC (06/20/12).



Figure 209. The concrete floor slab is covered with rigid tile. Photo: HPTC (06/20/12).



Figure 210. The walls are covered with faux-wood paneling. Photo: HPTC (06/20/12).



*Figure 212.* The ceilings are covered with a suspended acoustical tile system. Photo: HPTC (06/20/12).

*Figure 211, left.* The exposed concrete foundation walls are painted. Note the vinyl baseboard. Photo: HPTC (06/20/12).



*Figure 213.* W003 is located on the west wall of Room 001; it is original. Photo: HPTC (06/20/12).



*Figure 214.* A water filter/softener is located on the north wall of Room 001. Photo: HPTC (06/20/12).

## Room 002 – Half Bathroom

The small basement half bathroom measures 5'-2" x 3'-10" (fig. 215).

### *Floor*

The concrete slab floor is covered with rigid asbestos-containing tile (installation date unknown; fig. 216).<sup>6</sup>

### *Walls*

The concrete foundation walls and interior partition frame walls are covered with faux-wood paneling which is furred out from the foundation walls with 2X4 framing (date unknown; see fig. 215).

### *Ceiling*

Acoustical ceiling tiles are adhered to the ceiling (fig. 217). The substrate is unknown, as is the date of installation.

### *Trim*

Only modern trim, associated with the wood paneling, can be seen in Room 002; this includes corner trim and baseboard with quarter round, dimensional door casing, and cove crown at the ceiling.

### *Doors*

D001 is modern hollow-core wood door installed in 1995 (fig. 218). It has modern metal hinges and knob.

### *Windows*

W004 is an original painted wood hopper unit with exterior wood storm and original metal hinges and locking hardware (fig. 219).

### *Plumbing System*

Room 002 includes a contemporary toilet (date unknown) and original sink (see fig. 215; fig. 220).

### *Electrical System*

All of the electrical components are modern with flush-mount switches and outlets and wall light fixtures.

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<sup>6</sup> According to the 2010 "Asbestos-Containing Materials Survey," some of the vinyl-floor tiles in the basement contains asbestos (chrysotile). The percentage of asbestos content is not known, nor is it known whether the tile is friable or non-friable. The floor tiles are not dangerous unless found to be friable. [Boggs Environmental Consultants, Inc. "Asbestos-Containing Materials Survey (US EPA AHERA Level)." *Quarters #1 (HS128), Catoctin Mountain National Park, Thurmont, Maryland 21788*. Prepared for Prizim, Inc. June 16, 2010, p. 5.]



*Figure 215.* Room 002 looking south. Photo: HPTC (06/20/12).



*Figure 216.* The concrete floor slab is covered with rigid tiles. Photo: HPTC (06/20/12).



*Figure 217.* The ceiling is covered with acoustical tiles (not suspended). Photo: HPTC (06/20/12).



*Figure 218, right.* D002 was replaced with a hollow-core wood door. Photo: HPTC (06/20/12).



Figure 219. W004 is an original wood hopper window. Note the original locking hardware on the bottom rail. Photo: HPTC (06/20/12).



Figure 220. The sink is original. Photo: HPTC (06/20/12).

### Room 003 – Storage Room

The small storage room measures 4'-10" x 4'-0" (fig. 221).

#### *Floor*

The concrete slab floor is covered with rigid asbestos-containing tile (installation date is unknown (fig. 222)).<sup>7</sup>

#### *Walls*

The concrete foundation walls are exposed in this room; they are painted.

#### *Ceiling*

The floor framing for the first floor is exposed at the ceiling in this room (fig. 223).

#### *Trim*

Vinyl baseboard is located at the base of the concrete foundation walls. Flanking painted wood shelves are located on the north and south walls of the room (see fig. 221).

#### *Doors*

D003 is an original painted wood batten door with original metal rim lock (fig. 224).

#### *Electrical System*

A single pull-cord ceiling light fixture is located in this utilitarian space (see fig. 224).

<sup>7</sup> According to the 2010 "Asbestos-Containing Materials Survey," some of the vinyl-floor tiles in the basement contains asbestos (chrysotile). The percentage of asbestos content is not known, nor is it known whether the tile is friable or non-friable. The floor tiles are not dangerous unless found to be friable. [Boggs Environmental Consultants, Inc. "Asbestos-Containing Materials Survey (US EPA AHERA Level)." *Quarters #1 (HS128), Catoctin Mountain National Park, Thurmont, Maryland 21788*. Prepared for Prizim, Inc. June 16, 2010, p. 5.]



*Figure 222.* The concrete floor slab is covered with rigid tile. Photo: HPTC (06/20/12).

*Figure 221, left.* Room 003 looking south. Photo: HPTC (06/20/12).



*Figure 223.* Exposed first-floor structural floor frame at the ceiling. Photo: HPTC (06/20/12).



*Figure 224.* The entry to Room 003 includes an original rim lock. Photo: HPTC (06/20/12).

## Room 004 – Utility Room

The southern room of the basement is used as a utility room. Rectangular in plan, the room measures 14'-0" x 30'-5" (figs. 225-226).

### *Floor*

The concrete slab floor is covered with rigid asbestos-containing tile (installation date unknown).<sup>8</sup> Some of the tiles have been replaced through the years. Two floor drains can be seen at the third points of the room (fig. 227).

### *Walls*

The concrete foundation walls are exposed, but painted in this room (fig. 228). Interior framed partition walls are covered with painted particle board (fig. 229).

### *Ceiling*

The ceiling is composed of the exposed first-floor structural floor frame (see fig. 84).

### *Trim*

The trim in Room 004 consists of vinyl baseboard and dimensional wood door casing (see fig. 229).

### *Doors*

D004 is modern hollow-core wood door with modern hinges and knob; it was installed in 1995 (see fig. 153).

### *Windows*

W005 is an original painted wood hopper unit with exterior wood storm and original metal hinges and locking hardware (fig. 230).

### *Plumbing System*

A modern plastic two-basin laundry sink is located on the east wall of the room (fig. 231). Adjacent to it are water hookups for a washing machine (non-extant). A modern electric water heater is located on the south wall of the room (fig. 232).

### *Mechanical System*

The electric heat pump for the forced-air HVAC system is located along the south wall (see fig. 175).

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<sup>8</sup> According to the 2010 "Asbestos-Containing Materials Survey," some of the vinyl-floor tiles in the basement contains asbestos (chrysotile). The percentage of asbestos content is not known, nor is it known whether the tile is friable or non-friable. The floor tiles are not dangerous unless found to be friable. [Boggs Environmental Consultants, Inc. "Asbestos-Containing Materials Survey (US EPA AHERA Level)." *Quarters #1 (HS128), Catoctin Mountain National Park, Thurmont, Maryland 21788*. Prepared for Prizim, Inc. June 16, 2010, p. 5.]

### Electrical System

All of the electrical components are modern with surface-mounted switches, outlets, and light fixtures. A modern sub-panel is located adjacent to the heat pump on the south wall (see fig. 187).



Figure 225 Room 004 looking west. Photo: HPTC (06/20/12).



Figure 226. Room 004 looking east. Photo: HPTC (06/20/12).



Figure 227. The concrete floor slab is covered with rigid tiles. Photo: HPTC (06/20/12).



Figure 228, right. The concrete foundation walls are exposed, but painted. Photo: HPTC (06/20/12).



*Figure 229.* The frame partition walls are covered with painted particle board. Photo: HPTC (06/20/12).



*Figure 230.* W005 is an original wood hopper window with original hinges and locking hardware. Photo: HPTC (03/21/12).



*Figure 231.* A modern laundry sink sits adjacent to washing machine hook-ups on the east wall. Photo: HPTC (06/20/12).



*Figure 232.* A modern electric hot water heater is located on the south wall of the room. Photo: HPTC (06/20/12).

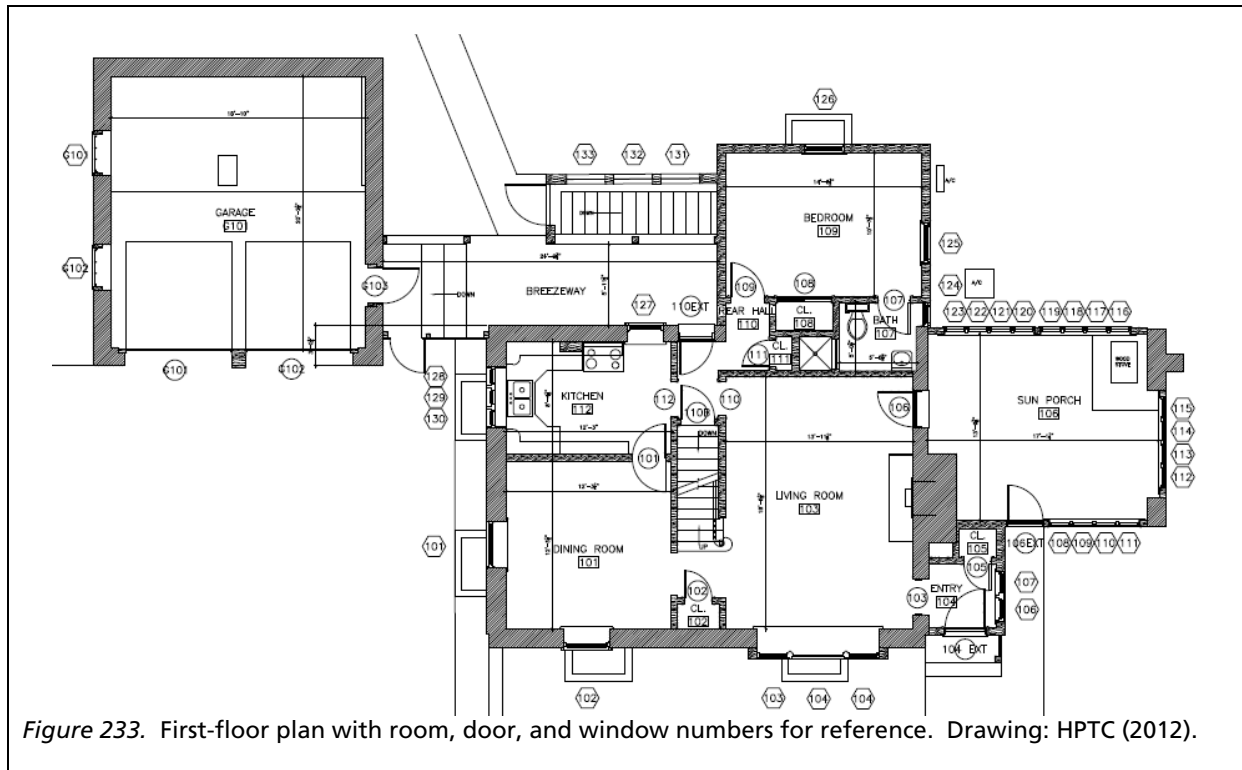


Figure 233. First-floor plan with room, door, and window numbers for reference. Drawing: HPTC (2012).

### Room 101 – Dining Room

The northwest corner room of the first floor of the main block is a dining room. Fairly square in plan, the room measures 12'-3" x 12'-5" with a ceiling height of 7'-10" (figs. 234-235).

#### *Floor*

The floor of Room 101 is covered with modern carpet (installation date unknown; fig. 236). The carpet is assumed to cover the original oak strip flooring.

#### *Walls*

All of the walls are composed of painted plaster. Exterior-wall plaster is firmed out from the masonry shell.

#### *Ceiling*

The ceiling is composed of painted plaster (fig. 237).

#### *Trim*

All of the painted wood trim is original. This includes baseboard, door casing, and window sills and stools (see figs. 163-165).

### *Doors*

D101 is an original 3-panel painted wood swinging door with original swing hinges (see fig. 154).

### *Windows*

W101 and W102 have been replaced with modern 1/1 vinyl double-hung units (installation date unknown; figs. 238-239).

### *Mechanical System*

Two supply forced-air vents are located in the floor at the windows (see fig. 236). A return air vent is located on the east wall. A digital thermostat is located on the south wall (see fig. 234).

### *Electrical System*

All of the electrical components are modern with flush-mounted switches, outlets, and ceiling fan light fixture (see fig. 237).



*Figure 234.* Room 101 looking southeast. Note the inconspicuous swinging door hinges on D101. Photo: HPTC (06/12/12).



*Figure 235.* Room 101 looking northwest. Photo: HPTC (06/12/12).



*Figure 236.* Carpet covers the floor of Room 101. Photo: HPTC (06/12/12).



*Figure 237.* The ceiling is composed of painted plaster. Note the modern ceiling fan-light fixture. Photo: HPTC (06/12/12).



Figure 238. W101 is a vinyl replacement window. Photo: HPTC (06/12/12).



Figure 239. W102 is a vinyl replacement window. Photo; HPTC (06/12/12).

### Room 103 – Living Room

The southern room of the main block is a living room. Rectangular in plan, the room measures 13'-11" x 18'-8" with a ceiling height of 7'-10" (figs. 240-241).

#### *Floor*

The floor of Room 102 is covered with modern carpet (installation date unknown; fig. 224). The carpet is assumed to cover the original oak strip flooring.

#### *Walls*

All of the walls are composed of painted plaster. The plaster on the exterior walls is firmed out from the masonry shell.

#### *Ceiling*

The ceiling is composed of painted plaster (fig. 225).

#### *Trim*

All of the painted wood trim is original. This includes baseboard, door casing, and window sills and stools.

### *Doors*

D103 is no longer extant. It is assumed that originally a painted wood three-panel door occupied this opening. Only the original keeper is retained in the casing.

### *Windows*

W103, W104, and W105 encompass the front bay windows. All three are vinyl replacement units (installation date unknown). W103 and W106, double-hung units, flank the central fixed-glass W104 (fig. 226).

### *Fireplace*

The living room fireplace is original and includes its original stone facing and painted wood mantel on the south wall. The brick hearth and metal firebox insert are more modern.

### *Mechanical System*

Two supply forced-air vents are located in the floor at the windows.

### *Electrical System*

All of the electrical components are modern with flush-mounted switches and outlets. There are no light fixtures (ceiling or otherwise) in this room.

### *Room 102 (Closet)*

A closet, or Room 102, occupies the northwest corner of the living (across from the main stair). The floor is covered with carpet and the walls and ceiling are painted plaster. D102 is a modern hollow-core wood door with modern hinges and knob. A simple shelf and clothes rod occupy the interior (fig. 227).

### *Stair (to second floor)*

The original interior staircase between the first floor and second floor is located behind the north wall of the living room; however the first three treads are open on the southern side. The carpeted wood-frame stair is composed of a straight run of fourteen risers (see fig. 241). The lowest tread is a curtail step (see fig. 171). The unpainted wood newel post supports an unpainted, curtailed wood railing. Painted wood balusters support the railing until the side wall encloses the staircase. The railing continues up the entire run of stairs, but is supported by the wall.



*Figure 240.* Room 103 looking south. The door opening, with historic door, to the left (D106) of the fireplace leads to Room 106; the door to the right (D103; historic door has been removed) leads to Room 104. Photo: HPTC (06/12/12).



*Figure 241.* Room 103 looking north. The door opening to the right (D110; historic door has been removed) leads to Room 110; the opening at left leads to the stair to the second floor and to Room 101. Photo: HPTC (06/12/12).



*Figure 242.* Carpet covers the floor of Room 103. Photo: HPTC (06/12/12).



*Figure 243.* The plaster ceiling in Room 103. There are no ceiling light fixtures in this room. Photo: HPTC (06/12/12).



*Figure 244.* W103-W105 are located in the front elevation bay window. Photo: HPTC (06/12/12).

*Figure 245, right.* Closet Room 102 is located in the northwest corner of the living room. Photo: HPTC (06/12/12).



### Room 104 – Vestibule (Front Entry)

The southwest corner of the first floor of the main block is occupied by the front entry or vestibule. Fairly square in plan, the room measures 5'-0" x 4'-8" with a 7'-10" ceiling height (fig. 246).

#### *Floor*

The floor of Room 104 is covered with modern carpet (installation date is unknown). The carpet is assumed to cover the original oak strip flooring.

#### *Walls*

All of the walls are composed of painted plaster.

#### *Ceiling*

The ceiling is composed of painted plaster.

#### *Trim*

All of the painted wood trim is original. This includes baseboard, door casing, and window sills and stools (fig. 247).

#### *Doors*

D104ext is a painted wood door dates to 1995 and has nine lites above and two panels below. The door has modern knobs and locking hardware and historic hinges. A modern aluminum screen door is located on the exterior (see fig. 125).

#### *Windows*

W106 and W107 are located side-by-side in the south wall. They have been replaced with modern 1/1 vinyl double-hung units (installation date unknown; fig. 248).

#### *Electrical System*

All of the electrical components are modern with flush-mounted switches and outlets. An historic, if not original, light fixture can be seen at the ceiling (see fig. 246).

### *Room 105 (Closet)*

A closet, or Room 105, occupies the southeast corner of the vestibule. The floor is covered with carpet and the walls and ceiling are painted plaster. D105 is a modern hollow-core wood door with historic hinges and modern knobs (see fig. 247). A simple shelf and clothes rod occupy the interior (fig. 249).



*Figure 246, left.* Room 104 looking south. Photo: HPTC (06/12/12).

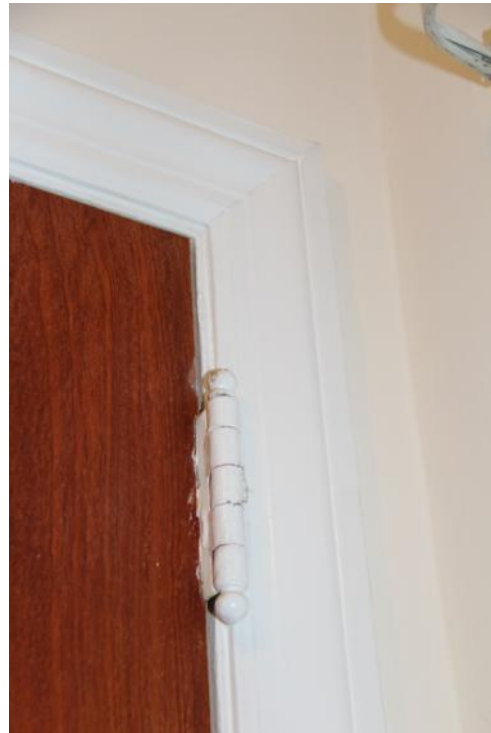


*Figure 247, right.* The door casing of D105 is original; the hinges for the door are also original. The door is a modern replacement. Photo: HPTC (06/12/12).



*Figure 248.* W106 and W107 are vinyl replacement units. Photo: HPTC (06/12/12).

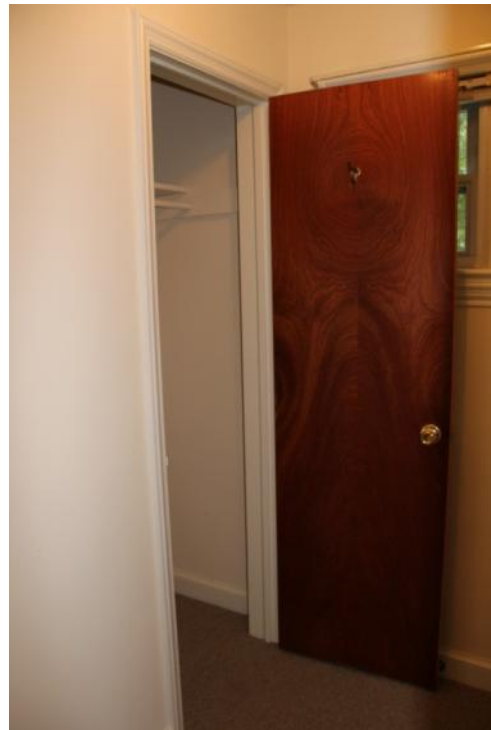


*Figure 249, right.* Closet Room 105 opens into Room 104. Photo: HPTC (06/12/12).

## Room 106 – Sun Porch

The sun porch is located at the south end of the main block. Rectangular in plan, the room measures 17'-1" x 13'-10" with an 8'-5" ceiling height (fig. 250).

### *Floor*

The floor of Room 106 is covered with modern carpet (installation date is unknown; fig. 153). The carpet is assumed to cover the concrete slab. A flagstone hearth is located in the southeast corner of the room.

### *Walls*

The north wall is composed of exposed stone (living room chimney) and brick (exterior walls). Stone piers anchor the southwest and southeast corners of the room. The infill walls are composed of wood framing and clad with painted board and batten on the interior (fig. 251).

### *Ceiling*

The ceiling is composed of stained wood beadboard (fig. 252).

### *Trim*

All of the painted wood trim is modern. This includes baseboard, door and window casing, and window sills.

### *Doors*

D106ext was installed in 1995. It is a painted wood door with three lites above and two panels below. The knobs, locking hardware, and hinges are modern. An aluminum screen door is located on the exterior (see fig. 128).

D106 was originally an exterior door. It is painted wood with fifteen lites and original hardware (knobs, locking hardware, hinges, brass weatherstripping, and screen door keeper (there is no screen door in this opening; see fig. 156).

### *Windows*

W108-123 are divided into four sections of four windows each. W108-111 are located in the west wall (fig. 253), W112-115 are located in the south wall (fig. 254), and W116-119 and W120-123 are located in the east wall (fig. 255). All of the windows are modern vinyl replacement casement units.

### *Mechanical System*

A woodstove, which exhausts through the modern flue, sits on the hearth in the southeast corner of the room (see fig. 250). A mini-split unit is located on the north wall of the room (see fig. 179).

### *Electrical System*

All of the electrical components are modern with flush-mounted switches, outlets, and light fixtures. An electric baseboard heater is located on the east wall (see fig. 255).



Figure 250. Room 106 looking south. Photo: HPTC (06/12/12).



Figure 251. The floor in Room 106 is covered with carpet. Note the brick, stone, and wood board and batten walls. Photo: HPTC (06/12/12).



Figure 252. The stained wood beadboard ceiling in Room 106. Photo: HPTC (06/12/12).

Figure 253, right. W108-W111 on the west wall. Photo: HPTC (06/12/12).



Figure 255. W116-W123 on the north wall. Note the electric baseboard heater. Photo: HPTC (06/12/12).

Figure 254, left. W112-W115 on the south wall. Photo: HPTC (06/12/12).

### Room 107 – Bathroom (First-Floor)

The southwest corner room of the eastern ell of the first floor is a bathroom. Fairly square in plan, the room measures 5'-9" x 5'-1" with a ceiling height of 7'-11" (fig. 256).

#### *Floor*

The floor of Room 101 is covered with ceramic black-and-white hex-tile; it may be original (fig. 257).

#### *Walls*

The lower half of the walls are covered with ceramic tile (date unknown). The upper half of the walls are composed of painted plaster (fig. 258).

#### *Ceiling*

The ceiling is composed of painted plaster.

#### *Trim*

All of the painted wood trim is original. This includes door casing and window sills and stools.

#### *Doors*

D107 is a replacement hollow-core wood door with modern knobs and historic hinges (fig. 259). The original marble threshold is extant (see fig. 257).

#### *Windows*

W101 has been replaced with a modern 1/1 vinyl double-hung unit (installation date unknown; fig. 260).

#### *Plumbing System*

A modern toilet is located in the northeast corner, a modern sink is located in the southwest corner, and an original shower stall (tile may not be original) is located in the northwest corner (figs. 261-262).

#### *Mechanical System*

A floor forced-air supply vent is located in the floor at the west wall (see fig. 256).

#### *Electrical System*

All of the electrical components are modern with flush-mounted switches, outlets, and light fixtures.



*Figure 256.* Room 107 looking northwest. Photo: HPTC (06/12/12).



*Figure 257.* The floor of Room 107 includes historic ceramic hex-tile. Note the original marble door threshold. Photo: HPTC (06/12/12).



*Figure 258.* The upper half of the walls in Room 107 are painted plaster; the lower half of the walls are covered with ceramic tile. Photo: HPTC (06/12/12).



*Figure 259.* D107 is a replacement hollow-core wood door. Note the modern doorknob and historic hinges. Photo: HPTC (06/12/12).



*Figure 261.* The modern sink in Room 107. Photo: HPTC (06/12/12).

*Figure 260, left.* W124 is a replacement vinyl unit. Photo: HPTC (06/12/12).



*Figure 262.* The modern toilet in Room 107. Photo: HPTC (06/12/12).



*Figure 263, right.* The original shower stall in Room 107. Photo: HPTC (06/12/12).

### Room 109 – Bedroom (First-Floor)

The eastern ell is composed of the first-floor bedroom. Rectangular in plan, the room measures 14'-6" x 10'-7" with a ceiling height of 7'-11" (figs. 264-265).

#### *Floor*

The floor of Room 101 is consists of the original oak strip flooring (fig. 266).

#### *Walls*

All of the walls are composed of painted plaster.

#### *Ceiling*

The ceiling is composed of painted plaster.

#### *Trim*

All of the painted wood trim is original. This includes baseboard, door casing, and window sills and stools.

#### *Doors*

D109 is a replacement hollow-core wood door with a modern knob and historic hinges (see fig. 265).

#### *Windows*

W125 and W126 have been replaced with modern 1/1 vinyl double-hung units (installation date unknown; figs. 267-268).

#### *Mechanical System*

Two supply forced-air vents are located in the floor at the windows.

#### *Electrical System*

All of the electrical components are modern with flush-mounted switches, outlets, and ceiling light.

#### *Room 108 (Closet)*

A closet, or Room 108, is located on the west wall of Room 109 (fig. 269). The floor consists of original oak strip flooring and the walls and ceiling are painted plaster. D108 is a pair of original three-panel painted sliding wood doors. The doors run in their original floor and casing tracks and have historic recessed door pulls. A simple shelf and clothes rod occupy the interior.



*Figure 264.* Room 109 looking south. Photo: HPTC (06/12/12).



*Figure 265.* Room 109 looking north. Photo: HPTC (06/12/12).



*Figure 266.* The original oak-strip flooring is exposed in Room 109. Photo: HPTC (06/12/12).



*Figure 267, right.* W125 is a vinyl replacement window. Photo: HPTC (06/12/12).



*Figure 268.* W126 is a vinyl replacement window. Photo: HPTC (06/12/12).



*Figure 269.* The interior of the closet (Room 108). The two original closet doors each have three panels with original recessed door pulls. Photo: HPTC (06/12/12).

## Room 110 – Hallway (First-Floor)

### *Floor*

The floor of Room 110 is covered with modern carpet (installation date is unknown). The carpet is assumed to cover the original oak strip flooring (fig. 270).

### *Walls*

All of the walls are composed of painted plaster (see fig. 270).

### *Ceiling*

The ceiling is composed of painted plaster (fig. 271).

### *Trim*

All of the painted wood trim is original. This includes baseboard, door casing, and window sills and stools.

### *Doors*

D110 is no longer extant. It is assumed that originally a painted wood three-panel door occupied this opening. Only the keeper is retained in the casing. D110B is an original 3-panel painted wood swinging door with original mortise knob set and hinges (fig. 272).

D110ext was installed in 1995. It is a painted wood door with nine lites above and two panels below. It has modern hardware, including knobs, locking hardware, and hinges. An aluminum screen door is located on the exterior (see fig. 126).

### *Mechanical System*

A return vent is located in the wall between D109 and D111.

### *Electrical System*

All of the electrical components are modern with flush-mounted switches, outlets, and light fixtures.

### *Fire & Emergency Systems*

Three recently-serviced fire extinguishers are located on the floor of this room (see fig. 270).

An inoperable battery-operated smoke and carbon monoxide detector is located at the ceiling in this room (see fig. 271).

### *Room 111 (Closet)*

A closet, or Room 111, is located on the south wall of Room 110. The floor consists of carpet over the original oak-strip floor; the walls and ceiling are painted plaster. D111 is a modern hollow-core wood door with a modern knob and historic hinges (fig. 273). Simple shelves occupy the interior.



*Figure 271.* The ceiling is painted plaster. The battery-operated smoke and carbon monoxide detector is inoperable. Photo: HPTC (06/12/12).

*Figure 270, left.* Room 110 has carpeted floors and painted plaster walls. The fire extinguishers on the floor belong distributed throughout Quarters 1. Photo: HPTC (06/12/12).



*Figure 272.* D110B is an original wood door which leads to the basement stair. Note the original mortise knob set and the original hinges. Photo: HPTC (06/12/12).



*Figure 273.* D111 is a replacement hollow-core closet door. It has a modern knob set and historic hinges. Photo: HPTC (06/12/12).

## Room 112 – Kitchen

The northeast corner room of the first floor of the main block is the kitchen. Rectangular in plan, the room measures 12'-3" x 8'-4" with a ceiling height of 7'-7" (fig. 274).

### *Floor*

The floor of Room 101 is covered with modern sheet linoleum (installation date unknown; fig. 275).

### *Walls*

All of the walls are composed of painted plaster. The backsplash is composed of modern Formica.

### *Ceiling*

The ceiling is composed of painted plaster.

### *Trim*

All of the painted wood trim is original. This includes baseboard, door casing, and window sills and stools.

### *Doors*

D112 is no longer extant. It is assumed that originally a painted wood three-panel door occupied this opening. Only the keeper is retained in the casing.

### *Windows*

W127 and W128-W130 have been replaced with modern 1/1 vinyl double-hung units (installation date unknown; figs. 276-277).

### *Cabinets*

Contemporary unpainted wood base and wall cabinets are located on the north wall and northern halves of the west and east walls (see fig. 274). Formica countertops top the case cabinets.

### *Plumbing*

A contemporary two-basin stainless steel sink with built-in garbage disposal is centered in the north wall base cabinets beneath the windows (fig. 278).

### *Mechanical System*

A single floor forced-air supply vent is located on the floor in front of W127.

### *Electrical System*

All of the electrical components are modern with flush-mounted switches, outlets, and light fixtures. A contemporary, but dated electric range and exhaust fan is located on the east wall (fig. 279). A sub-panel is located on the south wall.



Figure 274. Room 112 looking north. Photo: HPTC (06/12/12).



Figure 275. The modern vinyl floor covering in Room 112. Photo: HPTC (06/12/12).



Figure 277. W128-W130 are modern vinyl replacement units. Photo: HPTC (06/12/12).

Figure 276, left. W127 is a modern vinyl replacement unit. Photo: HPTC (06/12/12).



*Figure 278.* The stainless steel two-basin kitchen sink.  
Photo: HPTC (06/12/12).



*Figure 279, right.* The contemporary electric range and exhaust fan hood in Room 112.

### Room G101 – Garage

The garage measures 18'-10" x 20'-2" with a ceiling height of 8'-3" (figs. 280-281).

#### *Floor*

The floor of the garage is the unpainted floor slab (fig. 282).

#### *Walls*

All of the walls are exposed stone of the exterior walls.

#### *Ceiling*

The ceiling is composed of painted wood board and batten (fig. 283).

#### *Doors*

DG101 and 102 are modern metal overhead garage doors with modern tracks and hardware (see fig. 131).

DG103 is an original 3-panel painted wood swinging door with original hardware, including knob set, locking hardware, and hinges (see fig. 129).

*Windows*

WG101 and WG102 are original six-lite painted wood hopper windows (figs 284-285).

*Electrical System*

All of the electrical components are modern with surface-mounted switches, outlets, and light fixtures. A modern electrical panel is located on the south wall.



Figure 280. Room G101 looking towards the northeast corner. Photo: HPTC (07/17/12).



Figure 281. Room G101 looking towards the southwest corner. Photo: HPTC (07/17/12).



Figure 282. The exposed concrete slab floor of Room G101. Photo: HPTC (07/17/12).



Figure 283. The painted board and batten wood ceiling of Room G101. Photo: HPTC (07/17/12).



Figure 284. WG101 is an original wood hopper window. Photo: HPTC (07/17/12).



Figure 285. WG102 is an original wood hopper window. Photo: HPTC (07/17/12).

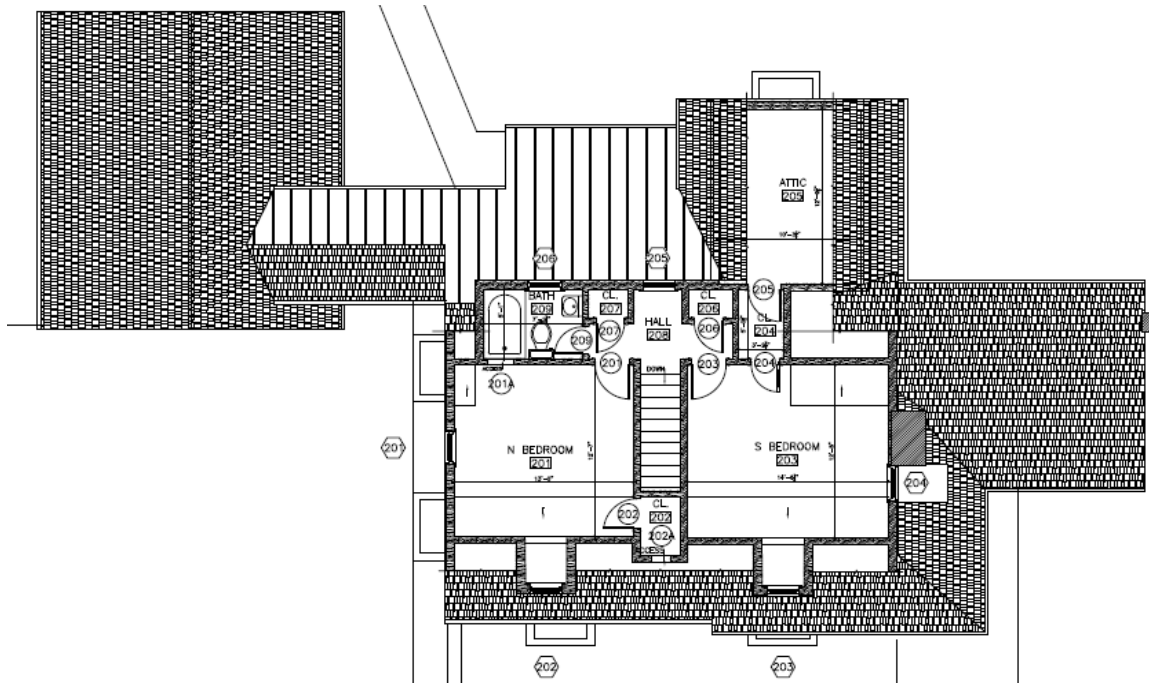


Figure 286. Second-floor plan with room, door, and window numbers for reference. Drawing: HPTC (2012).

### Room 201 – North Bedroom (Second-Floor)

The second-floor north bedroom measures 13'-0" x 12'-7" with an 8'-0" ceiling height (figs. 287-288).

#### *Floor*

The floor in Room 201 is composed of oak-strip flooring (fig. 289).

#### *Walls*

All of the walls are composed of painted plaster.

#### *Ceiling*

The ceiling is composed of painted plaster.

#### *Trim*

All of the painted wood trim is original. This includes baseboard, door casing, and window sills and stools.

#### *Doors*

D201 is a replacement hollow-core wood door with modern knobs and historic hinges (fig. 290).

D201a is a painted wood batten access door for access to the bathtub plumbing in the adjacent room (fig. 291). There is no hardware present at this door.

#### *Windows*

W201 and W202 are modern vinyl replacement windows (figs. 292-293).

#### *Mechanical System*

A modern mini-split unit is located above D201 (see fig. 288). Electric baseboard radiators are located on the north and west walls.

#### *Electrical System*

All of the electrical components are modern with flush-mounted switches, outlets, and light fixtures.

#### *Room 202 (Closet)*

A closet, or Room 202, is located at the southwest corner of Room 201. The floor consists of original oak-strip flooring; the walls and ceiling are painted plaster. D202 is a modern hollow-core wood door with a modern knob and historic hinges (fig. 294). D202a is a painted wood panel which accesses the crawlspace along the front eave (no hardware present). A simple shelf and clothes bar occupy the interior.



Figure 287. Room 201 looking west. Photo: HPTC (06/12/12).



Figure 288. Room 201 looking east. Photo: HPTC (06/12/12).



Figure 289. Oak-strip flooring in Room 201. Photo: HPTC (06/12/12).



Figure 290, right. D201 is a replacement hollow-core door. Photo: HPTC (06/12/12).



*Figure 291.* D201A accesses the bathtub plumbing. Photo: HPTC (06/12/12).



*Figure 292.* W201 is a vinyl replacement window. Photo: HPTC (06/12/12).



*Figure 293.* W202 is a vinyl replacement window. Photo: HPTC (06/12/12).



*Figure 294.* Closet Room 202 is located at the southwest corner of Room 201. Photo: HPTC (06/12/12).

### Room 203 – South Bedroom (Second-Floor)

The second-floor south bedroom measures 14'-6" x 12'-8" with a 8'-0" ceiling height (figs. 295-296).

#### *Floor*

The floor in Room 201 is composed of oak-strip flooring (fig. 297).

#### *Walls*

All of the walls are composed of painted plaster.

#### *Ceiling*

The ceiling is composed of painted plaster.

#### *Trim*

All of the painted wood trim is original. This includes baseboard, door casing, and window sills and stools.

#### *Doors*

D203 is a replacement hollow-core wood door with a modern knob and historic hinges (see fig. 140).

#### *Windows*

W203 and W204 are modern vinyl replacement windows (figs. 298-299).

#### *Mechanical System*

A modern mini-split unit is located above D203 and D204 (see fig. 296). Electric baseboard radiators are located on the south and west walls (see fig. 182).

#### *Electrical System*

All of the electrical components are modern with flush-mounted switches, outlets, and light fixtures.

#### *Room 204 (Closet)*

A closet, or Room 204, is located at the southwest corner of Room 202; it measures 3'-3" x 5'-0". The floor consists of original oak-strip flooring; the walls and ceiling are painted plaster. D202 is an original three-panel painted wood door with original hardware, including a mortise set with knobs and hinges (see fig. 157; fig. 300). A simple shelf, bench, and clothes bar occupy the north wall; clothes hooks occupy the south wall (fig. 301). A surface-mounted switch, light fixture, and power lines for the mini-split (including drain lines) are located in the room (fig. 302).



Figure 295. Room 203 looking west. Photo: HPTC (06/12/12).



Figure 296. Room 203 looking east. Photo: HPTC (06/12/12).



Figure 297. The oak-strip floor in Room 203. Photo: HPTC (06/12/12).



Figure 298. W203 is a vinyl replacement window. Photo: HPTC (06/12/12).



*Figure 299.* W204 is a vinyl replacement window. Photo: HPTC (06/12/12).



*Figure 300.* Historic mortise lock set and knob at D204. Photo: HPTC (06/12/12).



*Figure 301.* The north wall of Room 204. Photo: HPTC (06/12/12).



*Figure 302.* The south wall of Room 204. Photo: HPTC (06/12/12).

### Room 205 – Attic

The attic space above the eastern ell measures 10'-3" x 12'-9" with a 6'-3" ceiling height at the peak (fig. 303).

#### *Floor*

The floor in Room 201 is composed of 4'x4' sheets of press board.

#### *Walls/Ceiling*

The walls and angled ceiling are composed of 4'x8' sheets of unpainted plywood with battens.

#### *Door*

D205 is an original painted wood batten door with original rim lock set and hinges (fig. 304).

#### *Mechanical System*

An exhaust fan vent is located at the gable-end ceiling. Exhaust lines for the bathroom below are also run through the room.

#### *Electrical System*

A surface-mounted switch, light fixture, and power lines for the mini-split (including drain lines) are located in the room.



Figure 303. Room 205 looking east. Photo: HPTC (06/12/12).



Figure 304, right. The original batten D205 with rim lock. Photo: HPTC (06/12/12).

## Room 208 – Hallway (Second-Floor) (Fig. 305)

### *Floor*

The carpeting in Room 201 is assumed to cover the original oak-strip flooring.

### *Walls*

All of the walls are composed of painted plaster.

### *Ceiling*

The ceiling is composed of painted plaster.

### *Trim*

All of the painted wood trim is original. This includes baseboard, door and window casing, and window sill and stool.

### *Windows*

W205 is a modern vinyl replacement window (fig. 306).

### *Mechanical System*

Conduit for the mini-split units in adjacent rooms is run through the hallway. An electric baseboard radiator is located on the east wall.

### *Electrical System*

All of the electrical components are modern with flush-mounted switches, outlets, and light fixture.

### *Room 206 (Closet)*

A closet, or Room 206, is located at the southeast corner of Room 208. The floor consists of carpet over original oak-strip flooring; the walls and ceiling are painted plaster. D206 is a modern hollow-core wood door with a modern knob and historic hinges (fig. 307). A simple shelf and clothes bar occupy the interior.

### *Room 207 (Closet)*

A closet, or Room 207, is located at the northeast corner of Room 208. The floor consists of carpet over original oak-strip flooring; the walls and ceiling are painted plaster. D207 is a modern hollow-core wood door with a modern knob and historic hinges (fig. 308). Simple shelves occupy the interior.

### *Fire & Emergency Systems*

A battery-operated smoke detector is located at the ceiling of Room 208.



Figure 305. Room 208 looking south. Photo: HPTC (06/12/12).



Figure 306. W205 is a modern replacement unit. Photo: HPTC (06/12/12).



Figure 307. Room 206 with D206; note modern door knob. Photo: HPTC (06/12/12).



Figure 308. Room 207 with D207. Photo: HPTC (06/12/12).

### Room 209 – Bathroom (Second-Floor)

The second-floor bathroom measures 7'-2" x 5'-1" with an 8'-0" ceiling height (fig. 309).

#### *Floor*

The floor in Room 201 is composed of original black-and-white ceramic hex-tile (fig. 310).

#### *Walls*

The lower half of the walls are clad in ceramic tile (date unknown); the upper half of the walls are composed of painted plaster (fig. 311).

#### *Ceiling*

The ceiling is composed of painted plaster.

#### *Trim*

All of the painted wood trim is original. This includes baseboard, door casing and window casing, and window sill and stool.

#### *Doors*

D201 is a replacement hollow-core wood door with modern knobs and historic hinges (fig. 312). The door opening retains the original marble threshold (see fig. 310).

#### *Windows*

W206 is a modern vinyl replacement window (fig. 311).

#### *Plumbing*

A modern fiberglass bathtub/shower is located along the north wall, a modern toilet is located on the west wall (see fig. 309), and a historic sink is located on the south wall (fig. 312).

#### *Mechanical System*

An exhaust fan is located on the north wall.

#### *Electrical System*

All of the electrical components are modern with flush-mounted switches, outlets, and light fixtures.



*Figure 310.* The original ceramic hex-tile on the floor. Photo: HPTC (06/12/12).

*Figure 309, left.* Room 209 looking north. Photo: HPTC (06/12/12).

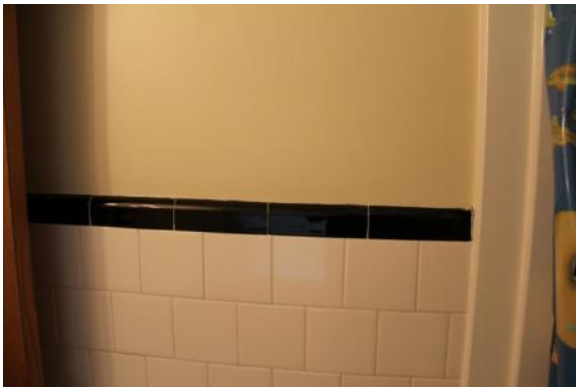


*Figure 311.* The plaster and ceramic tile walls of Room 209. Photo: HPTC (06/12/12).



*Figure 312, right.* D209 is a replacement hollow-core door. Note the modern door knob. Photo: HPTC (06/12/12).



*Figure 313.* W206 is a modern vinyl replacement unit. Photo: HPTC (06/12/12).



*Figure 314.* The bathroom sink in Room 209 is likely original. Photo: HPTC (06/12/12).

## Character-Defining Features

Each historic building is unique, with its own identity and its own distinctive character. Character refers to the visual aspects and physical features that comprise the appearance of historic buildings. Character-defining elements include the overall shape of the building, its materials, craftsmanship, decorative details, interior spaces and features, as well as the various aspects of its site and environment. Identifying and preserving a building's character-defining features is essential.

Character-defining features are defined in Director's Order 28, *Cultural Resources Management Guidelines*, as follows:

A prominent or distinctive aspect, quality, or characteristics of a historic property that contributes significantly to its physical character. Structures, objects, vegetation, spatial relationships, view, furnishings, decorative details, and materials may be such features.

In order to ascertain the important aspects of a building for future reference and analysis character-defining features must be recorded. These are prominent or distinctive aspects, qualities, and characteristics of a historic property that contribute significantly to its physical character as represented at the time of intervention or treatment.

The process used in this assessment for determining the character-defining features was adapted from the NPS Preservation Brief #17: "Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character," and are in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties* and NPS Management Policies and Guidelines, specifically Director's Order 28, *Cultural Resource Management Guidelines*.

Preservation Brief #17 divides the assessment of character-defining features into three steps:

1. Identify the Overall Visual Aspects,
2. Identify the Visual Character at Close Range,
3. Identify the Visual Character of Interior Spaces, Features, and Finishes.

The purpose of Preservation Brief #17 is to help the owner or the architect identify those features or elements that give the building its visual character and that should be taken into account in order to preserve them to the maximum extent possible. The Brief states:

There are different ways of understanding old buildings. They can be seen as examples of specific building types, which are usually related to a building's function.... Buildings can be studied as examples of using specific materials.... They can also be considered as examples of an historical period, which is often related to a specific architectural style....

There are many other facets of an historic building besides its functional type, its materials, or construction or style that contribute to its historic qualities or significance. Some of these qualities are feelings conveyed by the sense of time and place or in buildings associated with events or people. A complete understanding of any property may require documentary research about its style, construction, function, its furnishings or contents; knowledge about the original builder, owners, and later occupants; and knowledge about the evolutionary history of the building. Even though buildings may be of historic, rather than architectural significance, it is their tangible elements that embody its significance for association with specific events or persons and it is those *tangible elements* both on the exterior and interior that should be preserved.

Therefore, the approach taken in this Brief is limited to identifying those visual and tangible aspects of the historic building. While this may aid in the planning process for carrying out any ongoing or new use or restoration of the building, this approach is not a substitute for developing an understanding about the significance of an historic building and the district in which it is located.

If the various materials, features, and spaces that give a building its visual character are not recognized and preserved, then essential aspects of its character may be damaged in the process of change.

A building's character can be irreversibly damaged or changed in many ways, for example, by inappropriate repointing of the brickwork, by removal of a distinctive side porch, by changes to the window sash, by changes to the setting around the building, by changes to the major room arrangements, by the introduction of an atrium, by painting previously unpainted woodwork, etc.

In summary, the Secretary of the Interior's Standards for the Treatment of Historic Properties embody two important goals: 1) the preservation of historic materials and, 2) the preservation of a building's distinguishing character. By succeeding at these two goals, it is likely that a building's historic integrity will be preserved.

## **Extant Character-Defining Features (to be retained)**

### **Overall Visual Aspects**

#### *Shape and Mass*

- Shape and mass of the main block (rectangular, one-and-one-half stories with gable room) with two-bay by one-bay, one-and-one-half story eastern ell with gable roof and two-bay by one-bay, one-story sun porch with gable roof (fig. 315)
- Shape and mass of the garage (square, one-and-one-half story with gable roof) (fig. 316)
- Shape and mass of the connecting exterior breezeway (rectangular, one-story with low gable roof) and exterior stair covering (rectangular, one-story with low shed roof)



*Figure 315.* The main block retains its original shape and mass. Photo: HPTC (021412).



*Figure 316.* The garage retains its original shape and mass. Photo: HPTC (082912).

*Roof and Related Features*

- Main block gable and hipped roof shape (cedar shake covering is not character defining)
- Front dormer gable roof shapes (cedar shake covering is not character defining)
- Rear dormer shed roof shape and hand-crafted and installed metal roof covering (fig. 317)
- Eastern ell gable roof shape (cedar shake covering is not character defining)
- Sun porch gable roof shape (cedar shake covering is not character defining)
- Breezeway gable and shed roof shape (cedar shake and metal roof coverings are not character defining; fig. 318)
- Garage gable roof shape (cedar shake covering is not character defining; see fig. 318)



*Figure 317.* The standing-seam metal covering of the rear dormer shed roof is not original, but is a character-defining feature. Photo: HPTC (07/17/12).



*Figure 318, right.* The standing-seam metal and cedar shake roof coverings of the breezeway and the cedar shake roof covering of the garage are not character-defining. Photo: HPTC (07/17/12).

### Openings

- All window and door placements and openings in main block and garage
- Six-lite hopper garage wood windows (WG101-WG102; fig. 319)
- Three-lite hopper main block basement wood windows (W001-W005; fig. 320)
- Six-lite, two-panel garage wood entry door (DG103; fig. 321)



Figure 319, above. The wood six-lite hopper garage windows are original and character-defining features. Photo: HPTC (07/17/12).

Figure 320, above right. The wood three-lite hopper basement windows are original and character-defining features. Photo: HPTC (06/20/12).

Figure 321, right. The wood six-lite, three-panel wood garage entry door is original and a character-defining feature. Photo: HPTC (07/17/12).



### Projections

- Stone chimney of main block (fig. 322)
- Main block dormers (east and west elevation; see fig. 322, fig. 323)
- Eave and soffits of all buildings (see figs. 322-323)



Figure 323. The rear shed dormer projects from the main block gable roof. Photo: HPTC (02/14/12).

Figure 322, left. The original main block stone chimney projects past the gable roof. The cross-gable front dormers project from the main block gable roof. The soffits project from the first-floor exterior walls on all facades of the buildings. Photo: HPTC (08/29/12).

### Trim and Secondary Features

- Skilled use of concrete
- Skilled use of brick (fig. 324)
- Skilled use of stone (likely Catoctin greenstone; fig. 325)



Figure 324. The gable end walls and the rear (east) façade of the main block are constructed of brick in a 6:1 common bond pattern. Photo: HPTC (06/12/12).



Figure 325. The west (front) façade and chimney of the main block and the garage exterior walls are constructed of local stone (likely Catoctin greenstone). Photo: HPTC (06/12/12).

### Setting

- Configuration of the residence and garage with breezeway, sun porch, and exterior stair (see fig. 233)
- Stone retaining walls marking the perimeter of the Quarters 1 property (fig. 326)
- Rural, wooded location (fig. 327)



Figure 326. Original Stone retaining walls can be seen on the east and west elevations of Quarters 1. Photo: HPTC (06/12/12).



Figure 327. Quarters 1 is located on a heavily wooded lot in Catoctin Mountain Park. Photo: HPTC (06/12/12).

### Character at Close Range

#### Materials at Close Range

- Cast-in-place concrete foundations (fig. 328)
- Stone walls of the west elevation of main block, garage, and piers of the sun porch (see fig. 325)
- Brick walls of the north (covered by non-character-defining vinyl siding) and east elevation of the main block (see fig. 324)
- Handcrafted and installed metal roof finishes of the rear dormer shed roof (fig. 329)



Figure 329. The rear dormer shed roof with handcrafted standing-seam metal roof. Photo: HPTC (07/17/12).

Figure 328, left. Portions of the cast-in-place concrete foundation walls date to the first Quarters 1 complex. Photo: HPTC (06/20/12).

### *Craft Details*

- Detailing of exterior stonework (see fig. 325)
- Detailing of poured concrete foundations (see fig. 328)
- Standing-seam metal roof of rear dormer shed roof (see fig. 329)

### *Interior Visual Character*

#### *Individual Spaces*

- Retention of major room configurations in all buildings on all floors (despite addition of non-character-defining surface materials)

#### *Related Spaces & Sequence of Spaces*

- Use of Quarters 1 as a private residence
- Flow between the individual rooms is extant in the form of original door openings
- Gathering Spaces: fireplaces, etc.

#### *Interior Features*

- Location of main block fireplace and physical attributes (fig. 330)
- All closet locations
- Original wood trim at windows, doors, and baseboards (figs. 331-333)
- Garage and basement wood windows (see figs. 319-320)



*Figure 330.* The main block stone fireplace and hearth is located in the center of the living room. Photo: HPTC (06/12/12).



*Figure 331.* Original wood baseboard can be seen throughout most of the first and second floors. Photo: HPTC (06/12/12).



*Figure 332.* Original interior wood window trim can be seen throughout Quarters 1. Photo: HPTC (06/12/12).



*Figure 333.* Original interior wood door trim can be seen throughout Quarters 1. Photo: HPTC (06/12/12).

#### *Surface Materials and Finishes*

- Plaster walls and ceilings (modern coverings are not character-defining features; fig. 334)
- Wood-strip flooring (modern covering are not character-defining features; fig. 335)
- Ceramic walls and floors and marble door thresholds in first- and second-floor bathrooms (patterns, materials, and details; fig. 336)
- Exposed stone walls in garage (fig. 337)



*Figure 334.* Plaster ceilings and walls can be seen throughout the residence. Photo: HPTC (06/12/12).



*Figure 335.* Wood-strip flooring is original and character defining. Photo: HPTC (06/12/12).



*Figure 337.* The exposed stone walls in the garage are original to the first Quarters 1 complex. Photo: HPTC (07/17/12).

*Figure 336, left.* The tile floors and walls, and marble door thresholds are character-defining features. Photo: HPTC (06/12/12).

## Missing Character-Defining Features

- Slate roof coverings on all roofs except the rear dormer (instead of extant wood shakes; fig. 338)
- Exposed brick walls on main block (instead of extant vinyl siding; fig. 339)
- Wood lap siding (instead of extant vinyl siding; fig. 340)
- Exposed wood roof trim at cornices and eaves on all buildings (instead of extant aluminum boxing)
- Open sun porch (instead of enclosed; fig. 341)
- True divided-lite wood windows in all openings (instead of extant vinyl replacements; fig. 342)
- Original wood exterior doors (nine-lite, cross buck and six-lite, two panel)
- Original three-panel wood interior doors (fig. 343)
- Exposed wood strip floors



*Figure 338.* The roofs (except the rear dormer) were originally clad in slate, as seen in this ca. 1950 photograph. The extant wood shakes and metal are not character-defining features. Photo: Catoctin Mountain Park building file, Building No. 128 Superintendent's Quarters.



*Figure 339, right.* The gable end walls are composed of brick on the first floor. Vinyl siding (not a character-defining feature) now covers much of the brick. Photo: Catoctin Mountain Park building file, Building No. 128 Superintendent's Quarters.

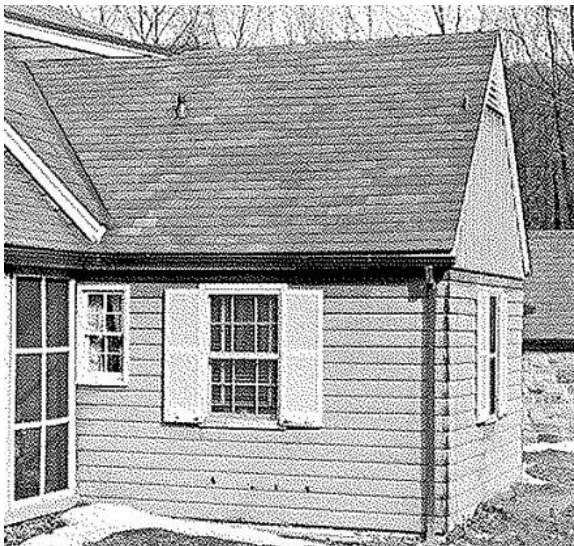


*Figure 340.* Wood lap siding was located on the eastern ell. Vinyl siding (not a character-defining feature) now covers all of the areas where wood siding originally was located. Photo: Catoctin Mountain Park building file, Building No. 128 Superintendent's Quarters.

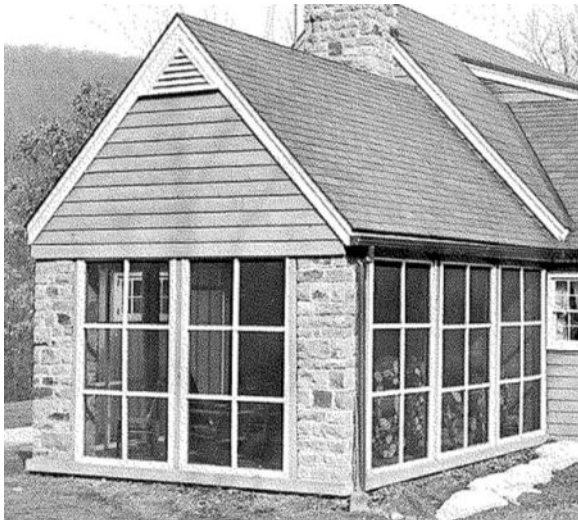


*Figure 341.* The sun porch was originally screened in; it is now entirely enclosed and conditioned as an interior space (not character defining). Photo: Catoctin Mountain Park building file, Building No. 128 Superintendent's Quarters.



*Figure 342.* The original windows were composed of wood and had divided lites. The extant vinyl replacement units are not character-defining features. Photo: Catoclin Mountain Park building file, Building No. 128 Superintendent's Quarters.



*Figure 343, right.* Some original three-panel wood interior doors remain in the residence. Replacement hollow-core doors are not considered character-defining features. Photo: HPTC (06/12/12).

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## Condition Assessment

The conditions assessment definitions used for this HSR are based on those outlined in the NPS PFMD's Asset Management Process (AMP), the Facilities Management Software System (FMSS), and the Facility Condition Assessment Survey (FCAS) and adapted for use by HPTC. For the purpose of this report, these definitions were strictly adhered to as a way to qualitatively assess the current condition of Quarters 1 at Catoctin Mountain Park.

### Qualitative Condition Ratings

#### Good

- Routine maintenance should be sufficient to maintain the current condition; and/or
- A cyclic maintenance or repair/rehabilitation project is not specifically required to maintain the current condition or correct deficiencies.

#### Fair

- The feature generally provides an adequate level of service to operations, but
- The feature requires more than routine maintenance, and
- Cyclic maintenance or repair/rehabilitation work may be required in the future

#### Poor

- Feature requires immediate attention;
- Routine maintenance is need at a much higher level of effort to meet significant safety and legal requirements;
- Cyclic maintenance should be scheduled for the current year; and/or
- A special repair/rehabilitation project should be requested consistent with park requirements, priorities, and long-term management objectives.

### Maintenance Deficiency Priority Ratings (10-Year Rating Period)

#### Minor – Short-Term/Long-Term Priority

- This rating indicates standard preventative maintenance priorities and preservation methods have not been follow; or
- There is reduced life expectancy of affected adjacent or related materials and/or systems within 5 to 10 years and beyond; or
- There is condition with a long-term impact within 5 to 10 years and beyond.

## **Serious – Immediate/Short-Term Priority**

- This rating defines a deteriorated condition that if not corrected within 1 to 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 1 to 5 years if the ongoing deterioration is not corrected; or
- There is ongoing deterioration of adjacent or related materials and/or features as a result of the feature's deficiency.

## **Critical – Immediate Priority**

- This rating defines an advanced state of deterioration which has resulted in the failure of a feature or will result in the failure of a feature if not corrected within 1 year; or
- There is accelerated deterioration of adjacent or related materials or systems as a result of the feature's deficiencies if not corrected within 1 year; or
- There is immediate threat to the health and/or safety of the user; or
- There is failure to meet a legislated requirement.

## **Not Rated**

- The feature was not rated as it was not extant at the time of the report or is non-contributing, removed, and not planned to be replaced.

## **Code Compliance**

Both NPS policies and federal regulations stipulate that when an historic structure is preserved and/or rehabilitated, attempts should be made to meet applicable nationally-accepted model building codes to the maximum extent feasible. Compliance with nationally-accepted codes does not automatically trigger a complete code-based upgrade. Alternative criteria exist for alterations to historic structures; these typically encourage flexibility in the literal application of the code intent.

The *Public Buildings Amendment of 1988* instructs Federal agencies to follow “to the maximum extent feasible,” as determined by the administrator or head of the agency, the “...nationally recognized model building codes and other applicable nationally recognized codes such as electrical codes, and fire and life safety codes.” The National Park Service intends to consult pertinent national, state, and local codes, and typically applies to most strident code requirements. The National Capital Regional Office (NPS) Structural Fire Safety leader will be the Authority Having Jurisdiction (AHJ) for final determination of code applications for these structures.

The National Park Service has prepared Design Standards for all construction projects, including those affecting historic structures.<sup>1</sup> The design standard presents all codes that should be reviewed and includes the most recent copies of the following major codes and applicable laws, policies,

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<sup>1</sup> Denver Service Center. “Design Standards.” *Denver Service Center Workflows*. National Park Service, Department of the Interior. 2009. Accessed at <<http://www.nps.gov/dscw/dstandards.htm>> on March 6, 2012.

codes, directives, standards, and NPS guidelines. The design standards present requirements for accessibility, civil, and environmental engineering, landscape architecture, architecture, including roofing and waterproofing, structural, mechanical, safety and fire protection, electrical, lighting, and sustainability disciplines.

Major codes, laws, standards, and guidelines that are part of the NPS Design Standards include:

- *Architectural Barriers Act Accessibility Standard (ABAAS) for Federal Facilities*, 2004
- *International Building Code (IBC)*, 2009
- *International Existing Building Code (IEBC)*, 2009
- *National Fire Protection Association 101 (NFPA 101)*, Life Safety Code
- *National Historic Preservation Act of 1966 (NHPA)*, amended
- *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (36 CFR 68)*, 1995
- *The Secretary of the Interior's Standards for the Treatment of Historic Properties and the Guidelines for the Treatment of Cultural Landscapes*
- *The Secretary of the Interior's Standards and Guidelines for Archeological Documentation*
- *Uniform Code for Building Conservation*
- *Building Construction and Safety Code (NFPA 5000)*
- *National Fire Protection Association 70 (NFPA 70)*, National Electrical Code
- *Installation of Lightning Protection Systems (NFPA 780)*
- *Code for the Protection of Cultural Resource Properties (NFPA 909)*
- *Code for the Fire Protection of Historic Structures (NFPA 914)*
- *Safeguarding Construction, Alteration, and Demolition Operations (NFPA 241)*
- *Director's Order (DO) 50B, Risk Management (Manual 50B)*
- *Director's Order (DO) 58, Structural Fire Management (Manual 58)*
- *5 U.S.C § 7902 (Safety Program)*
- *15 U.S.C § 2225 (Fire Prevention and Control)*
- *29 U.S.C § 668 (Occupational Safety and Health)*
- *40 U.S.C § 619 (Construction, Alteration, and Acquisition of Public Buildings)*

## Summary of Conditions

Overall Quarters 1 (interior and exterior) meets the definition of “fair” condition and has an overall maintenance deficiency rating categorized as “minor.”

The features with the most serious maintenance deficiencies, taken from Table 2 below, include:

- Rising damp and water infiltration through the basement foundation walls;
- Rising damp through the main block basement slab on grade;
- Retention of water in the basement concrete window wells;
- Cedar shake roof finishes of the main block’s gable and hipped roofs, front dormer gable roofs, and the eastern ell gable roof, the sun porch gable roof, the breezeway shed and gable roofs, and the garage gable roof;
- Roof drainage system for the main block’s gable and hipped roofs, the rear dormer roof, and the eastern ell roof, the sun porch roof, the breezeway roof, and the garage roof;
- Lack of cap on one of the stone chimney’s flues;
- Retention of moisture and mold in the gypsum wallboard and faux-wood paneling wall finishes in the basement;
- Asbestos-containing vinyl tile in the basement;
- Unknown condition of the interior plumbing fixtures;
- Undistributed fire extinguishers;
- Inoperable battery-operated smoke detectors;
- Lack of a fire alarm system;
- Lack of a security system;
- Lack of an emergency lighting and power system;
- Lack of a lightning protection system;
- Neglected care and overgrowth of the maintained landscape surrounding the buildings; and
- Neutral and negative drainage surrounding the entire buildings’ site.

**Table 2. Quarters 1 Summary of Conditions Table**

| UNIFORMAT II Outline Data |                     |                       |                             | Condition Rating                                       | Deficiency Rating  |
|---------------------------|---------------------|-----------------------|-----------------------------|--------------------------------------------------------|--------------------|
| <b>A</b>                  | <b>SUBSTRUCTURE</b> |                       |                             |                                                        |                    |
|                           | <b>A10</b>          | <b>FOUNDATIONS</b>    |                             |                                                        |                    |
|                           |                     | <b>A1010</b>          | <b>Standard Foundations</b> |                                                        |                    |
|                           |                     |                       | <b>A101001</b>              | <b>Wall Foundations</b>                                |                    |
|                           |                     |                       | A101001-1                   | Basement Foundation Walls                              | Poor<br>Serious    |
|                           |                     |                       | A101001-2                   | Sun Porch & Vestibule Foundations                      | Fair<br>Minor      |
|                           |                     |                       | A101001-3                   | Exterior Stair Foundation Walls                        | Fair<br>Minor      |
|                           |                     |                       | A101001-4                   | Breezeway Foundation                                   | Fair<br>Minor      |
|                           |                     |                       | A101001-5                   | Garage Foundation                                      | Fair<br>Minor      |
|                           |                     | <b>A1030</b>          | <b>Slab On Grade</b>        |                                                        |                    |
|                           |                     |                       | <b>A103001</b>              | <b>Standard Slab On Grade</b>                          |                    |
|                           |                     |                       | A103001-1                   | Main Block Basement Slab                               | Fair<br>Minor      |
|                           |                     |                       | A103001-2                   | Sun Porch Slab                                         | Fair<br>Minor      |
|                           |                     |                       | A103001-3                   | Breezeway Slab                                         | Fair<br>Minor      |
|                           |                     |                       | A103001-4                   | Garage Slab                                            | Fair<br>Minor      |
|                           |                     | <b>A2030</b>          | <b>Basement Walls</b>       |                                                        |                    |
|                           |                     |                       | <b>A202003</b>              | Basement Wall Insulation                               | Unknown<br>Unknown |
| <b>B</b>                  | <b>SHELL</b>        |                       |                             |                                                        |                    |
|                           | <b>B10</b>          | <b>SUPERSTRUCTURE</b> |                             |                                                        |                    |
|                           |                     | <b>B1010</b>          | <b>Floor Construction</b>   |                                                        |                    |
|                           |                     |                       | <b>B101001</b>              | <b>Structural Frame</b>                                |                    |
|                           |                     |                       | B101001-1                   | 1 <sup>st</sup> Fl Structural Floor Frame – Main Block | Good<br>Minor      |
|                           |                     |                       | B101001-2                   | 2 <sup>nd</sup> Fl Structural Floor Frame – Main Block | Good<br>Minor      |
|                           |                     |                       | B101001-3                   | Sun Porch Attic Floor Structural Floor Frame           | Good<br>Minor      |
|                           |                     |                       | B101001-4                   | Garage Attic Floor Structural Frame                    | Good<br>Minor      |
|                           |                     |                       | <b>B101002</b>              | <b>Structural Interior Walls</b>                       |                    |
|                           |                     |                       | B101002-1                   | 1 <sup>st</sup> Fl Structural Interior Walls           | Good<br>Minor      |
|                           |                     |                       | B101002-2                   | 2 <sup>nd</sup> Fl Structural Interior Walls           | Good<br>Minor      |
|                           |                     | <b>B1020</b>          | <b>Roof Construction</b>    |                                                        |                    |
|                           |                     |                       | <b>B102001</b>              | <b>Structural Frame</b>                                |                    |
|                           |                     |                       | B102001-1                   | Gable & Hipped Roof Frame – Main Block                 | Good<br>Minor      |
|                           |                     |                       | B102001-2                   | Front Dormer Gable Roof Frames – Main Block            | Good<br>Minor      |
|                           |                     |                       | B102001-3                   | Rear Dormer Shed Roof Frame – Main Block               | Good<br>Minor      |
|                           |                     |                       | B102001-4                   | Rear Ell Gable Roof Frame – Main Block                 | Good<br>Minor      |
|                           |                     |                       | B102001-5                   | Sun Porch Gable Roof Frame                             | Good<br>Minor      |
|                           |                     |                       | B102001-6                   | Breezeway Shed & Gable Roof Frame                      | Good<br>Minor      |
|                           |                     |                       | B102001-7                   | Garage Gable Roof Frame                                | Good<br>Minor      |

(Table 2 continued)

|            |                           |                         |                                                             |                 |
|------------|---------------------------|-------------------------|-------------------------------------------------------------|-----------------|
| <b>B20</b> | <b>EXTERIOR ENCLOSURE</b> |                         |                                                             |                 |
|            | <b>B2010</b>              | <b>Exterior Walls</b>   |                                                             |                 |
|            |                           | <b>B201001</b>          | <b>Exterior Skin</b>                                        |                 |
|            |                           | B201001-1               | Stone Walls – Main Block                                    | Good Minor      |
|            |                           | B201001-2               | Brick Walls – Main Block                                    | Fair Minor      |
|            |                           | B201001-3               | Frame Walls – Main Block                                    | Fair Minor      |
|            |                           | B201001-4               | Frame Walls – Sun Porch                                     | Fair Minor      |
|            |                           | B201001-5               | Stone Walls – Garage                                        | Good Minor      |
|            |                           | B201001-6               | Frame Walls - Garage                                        | Fair Minor      |
|            |                           | B201002                 | Insulation & Vapor Barrier                                  | Unknown Unknown |
|            |                           | B201005                 | Exterior Louvers & Screens                                  | Fair Minor      |
|            |                           | <b>B201008</b>          | <b>Exterior Soffits</b>                                     |                 |
|            |                           | B201008-1               | Exterior Soffits, Eaves & Cornices – Main Block             | Good Minor      |
|            |                           | B201008-2               | Exterior Soffits, Eaves & Cornices – Sun Porch              | Good Minor      |
|            |                           | B201008-3               | Exterior Soffits, Eaves & Cornices – Breezeway              | Good Minor      |
|            |                           | B201008-4               | Exterior Soffits, Eaves & Cornices – Garage                 | Good Minor      |
|            | <b>B2020</b>              | <b>Exterior Windows</b> |                                                             |                 |
|            |                           | B2020-1                 | Basement Windows – Main Block                               | Fair Serious    |
|            |                           | B2020-2                 | 1 <sup>st</sup> & 2 <sup>nd</sup> Floor Windows –Main Block | Good Minor      |
|            |                           | B2020-3                 | Windows – Sun Porch                                         | Good Minor      |
|            |                           | B2020-4                 | Windows – Exterior Stair Enclosure                          | Good Minor      |
|            |                           | B2020-5                 | Windows – Garage                                            | Good Minor      |
|            | <b>B2030</b>              | <b>Exterior Doors</b>   |                                                             |                 |
|            |                           | B2030-1                 | Exterior Doors                                              | Good Minor      |
|            |                           | B2030-2                 | Exterior Storm Doors                                        | Good Minor      |
|            |                           | B203004                 | Overhead Doors                                              | Good Minor      |
| <b>B30</b> | <b>ROOFING</b>            |                         |                                                             |                 |
|            | <b>B3010</b>              | <b>Roof Coverings</b>   |                                                             |                 |
|            |                           | <b>B301001</b>          | <b>Roof Finishes</b>                                        |                 |
|            |                           | B301001-1               | Gable & Hipped Roof Finishes – Main Block                   | Poor Serious    |
|            |                           | B301001-2               | Front Dormer Gable Roof Finishes – Main Block               | Poor Serious    |
|            |                           | B301001-3               | Rear Dormer Shed Roof Finishes – Main Block                 | Good Minor      |
|            |                           | B301001-4               | Eastern Ell Gable Roof Finishes – Main Block                | Poor Serious    |
|            |                           | B301001-5               | Sun Porch Gable Roof Finishes                               | Poor Serious    |
|            |                           | B301001-6               | Breezeway Shed & Gable Roof Finishes                        | Poor Serious    |
|            |                           | B301001-7               | Garage Gable Roof Finishes                                  | Poor Serious    |
|            |                           | B301003                 | Roof Insulation & Fill                                      | Unknown Unknown |
|            |                           | <b>B301004</b>          | <b>Flashings &amp; Trim</b>                                 |                 |
|            |                           | B301004-1               | Dormer Wall Flashing                                        | Good Minor      |
|            |                           | B301004-2               | W204 Exterior Flashing                                      | Good Minor      |

(Table 2 continued)

|   |           |                                                  |      |          |
|---|-----------|--------------------------------------------------|------|----------|
|   | B301004-3 | Breezeway-Side Wall Flashing                     | Good | Minor    |
|   | B301004-4 | Roof Penetration Flashing                        | Good | Minor    |
|   | B301004-5 | Chimney Flashing                                 | Good | Minor    |
|   | B301005   | Gutters & Downspouts                             |      |          |
|   | B301005-1 | Gable & Hipped Roof Drainage System – Main Block | Poor | Critical |
|   | B301005-2 | Rear Dormer Roof Drainage System – Main Block    | Poor | Critical |
|   | B301005-3 | Eastern Ell Roof Drainage System – Main Block    | Poor | Critical |
|   | B301005-4 | Sun Porch Roof Drainage System                   | Poor | Critical |
|   | B301005-5 | Breezeway Roof Drainage System                   | Poor | Critical |
|   | B301005-6 | Garage Roof Drainage System                      | Poor | Critical |
|   | B3020     | Roof Openings                                    |      |          |
|   | B302001   | Roof Openings & Supports                         |      |          |
|   | B302001-1 | Masonry Chimneys (Above Roof Line)               | Poor | Serious  |
|   | B302001-2 | Roof Penetrations (All Roofs)                    | Good | Minor    |
| C | INTERIORS |                                                  |      |          |
|   | C10       | INTERIOR CONSTRUCTION                            |      |          |
|   | C1010     | Partitions                                       | Good | Minor    |
|   | C1020     | Interior Doors                                   | Fair | Minor    |
|   | C1030     | Fittings                                         |      |          |
|   | C103006   | Shelving – Basement                              | Poor | Minor    |
|   | C103008   | Counters – Kitchen                               | Fair | Minor    |
|   | C103009   | Cabinets – Kitchen                               | Fair | Minor    |
|   | C103098   | Other Casework - Fireplaces                      | Fair | Minor    |
|   | C103099   | Other Interior Specialties – Molding & Trim      | Fair | Minor    |
|   | C20       | STAIRS                                           |      |          |
|   | C2010     | Stair Construction                               |      |          |
|   | C201001   | Interior Stair Structure & Finishes              | Good | Minor    |
|   | C201002   | Exterior Stair Structure & Finishes              | Good | Minor    |
|   | C30       | INTERIOR FINISHES                                |      |          |
|   | C3010     | Wall Finishes                                    |      |          |
|   | C301002   | Plaster Wall Finishes                            | Good | Minor    |
|   | C301003   | Gypsum Wallboard Finishes                        | Poor | Serious  |
|   | C301004   | Tile Wall Finishes                               | Fair | Minor    |
|   | C301005   | Painted Wall Finishes                            | Fair | Minor    |
|   | C301099   | Other Wall Finishes                              |      |          |
|   | C301099-1 | Faux-Wood Wall Paneling                          | Poor | Serious  |
|   | C301099-2 | Wood Board and Batten Wall Surfaces              | Poor | Serious  |
|   | C301099-3 | Wood V-Groove Board Wall Surfaces                | Good | Minor    |

(Table 2 continued)

|                      |                          |                                                                     |         |          |
|----------------------|--------------------------|---------------------------------------------------------------------|---------|----------|
| C3020                |                          | Floor Finishes                                                      |         |          |
|                      | C302001                  | Tile Floor Finishes                                                 | Good    | Minor    |
|                      | C302003                  | Wood Flooring                                                       | Fair    | Minor    |
|                      | C302004                  | Resilient Flooring                                                  | Fair    | Minor    |
|                      | C302005                  | Carpeting                                                           | Fair    | Minor    |
| C3030                |                          | Ceiling Finishes                                                    |         |          |
|                      | C303002                  | Plaster Ceiling Finishes                                            | Good    | Minor    |
|                      | C303004                  | Acoustical Ceiling Tiles & Panels                                   | Fair    | Minor    |
|                      | C303005                  | Wood Ceilings                                                       | Good    | Minor    |
|                      | C303006                  | Painted & Stained Ceilings                                          | Good    | Minor    |
|                      | C303007                  | Suspension Systems                                                  | Fair    | Minor    |
| <b>D</b>             | <b>SERVICES</b>          |                                                                     |         |          |
| D20                  | PLUMBING                 |                                                                     |         |          |
|                      | D2010                    | Plumbing Fixtures                                                   |         |          |
|                      | D201001                  | Water Closets (Toilets)                                             | Unrated | Unrated  |
|                      | D201003                  | Lavatories (Bathroom Sinks)                                         | Unrated | Unrated  |
|                      | D201004                  | Sinks – Kitchen and Laundry                                         | Unrated | Unrated  |
|                      | D201005                  | Showers/Tubs                                                        | Unrated | Unrated  |
| D30                  | HVAC                     |                                                                     |         |          |
|                      | D3000                    | Heating & Cooling System                                            | Fair    | Minor    |
| D40                  | FIRE PROTECTION SYSTEMS  |                                                                     |         |          |
|                      | D4030                    | Fire Protection Specialties                                         |         |          |
|                      | D403001                  | Fire Extinguishing Devices                                          | Poor    | Critical |
|                      | D4090                    | Other Fire Protection Systems –<br>Battery-Operated Smoke Detectors | Poor    | Critical |
| D50                  | ELECTRICAL               |                                                                     |         |          |
|                      | D5010                    | Electrical Service & Distribution                                   |         |          |
|                      | D501005                  | Panels                                                              | Good    | Minor    |
|                      | D5020                    | Lighting & Branch Wiring                                            |         |          |
|                      | D502002                  | Lighting Equipment                                                  | Good    | Minor    |
|                      | D5030                    | Communications & Security                                           |         |          |
|                      | D503001                  | Fire Alarm System                                                   | Poor    | Critical |
|                      | D503008                  | Security System                                                     | Poor    | Serious  |
|                      | D5090                    | Other Electrical Systems                                            |         |          |
|                      | D509002                  | Emergency Lighting & Power System                                   | Poor    | Serious  |
|                      | D509004                  | Lightning Protection System                                         | Poor    | Critical |
| <b>G</b>             | <b>BUILDING SITEWORK</b> |                                                                     |         |          |
|                      | G20                      | SITE IMPROVEMENTS                                                   |         |          |
|                      | G2020                    | Parking Areas                                                       | Fair    | Minor    |
|                      | G2030                    | Pedestrian Paving (Sidewalks)                                       | Fair    | Minor    |
|                      | G2040                    | Site Development                                                    |         |          |
|                      | G204001                  | Fencing & Gates                                                     | Fair    | Minor    |
|                      | G204002                  | Retaining Walls                                                     | Poor    | Minor    |
|                      | G204003                  | Exterior Furnishings – Stone Grill                                  | Fair    | Minor    |
|                      | G2050                    | Maintained Landscape                                                | Poor    | Serious  |
| G90                  | OTHER SITE WORK          |                                                                     |         |          |
|                      | G9087                    | Overall Building Site Drainage                                      | Poor    | Critical |
| <i>End of Table.</i> |                          |                                                                     |         |          |

## Quarters 1 Condition Assessment

Note: Additional photographs of all building features are found in the physical description section.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |                      |                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------|------------------|
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | SUBSTRUCTURE |                      |                  |
| A10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | FOUNDATIONS  |                      |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | A1010        | Standard Foundations |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              | A101001              | Wall Foundations |
| <b>A101001-1    Basement Foundation Walls</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |                      |                  |
| <p>All exterior surfaces of the main block’s cast-in-place concrete foundation walls are in good condition. Below-grade surfaces of the foundation walls could not be accessed and therefore cannot be assessed.</p> <p>The interior surfaces of the foundation walls are in poor condition. The walls are painted, which is peeling and flaking due to mold and rising damp (fig. 344). Some cracks can be seen as well with indication of seeping water. Areas of particular concern are in the northeast corner of Room 001 and the east wall of Room 004 (figs. 345-346). Water is getting trapped within the basement window wells (particularly W001) and also under the stone structure at the northeast corner of the main block (fig. 347-348). There is no evidence of a foundation drainage system besides floor drains in the slab in Room 004. See <i>A103001-1 Main Block Basement Slab on Grade</i> for more information.</p> <p>Additionally, many of the interior surfaces of the concrete walls are covered with wood paneling; these walls could not be assessed without being removed (fig. 349).</p> <p>Condition Rating:        Poor<br/>Deficiencies Rating:    Serious</p> |              |                      |                  |
| <div><div><p><i>Figure 344.</i> Evidence of rising damp, through flaking paint, and mold can be seen at the northeast corner of Room 004. Photo: HPTC (06/20/12).</p></div><div><p><i>Figure 345, right.</i> The area of immediate concern at the northeast corner of Room 001. Note the adjacent window opening (W001). Photo: HPTC (06/20/12).</p></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                      |                  |



Figure 346. Cracks have formed in the concrete walls and evidence of seeping water can be seen. Photo: HPTC (06/20/12).



Figure 347. Water is being retained in the well of W001 adjacent to the northwest corner of Room 001. Photo: HPTC (08/29/12).



Figure 348. The mostly-paved area around the well of W001 and the stone structure in the corner is causing the retention of water at the northeast corner of Room 001. Photo: HPTC (08/29/12).



Figure 349. Wood paneling covers many interior faces of the foundation walls hiding the condition of the concrete behind. Photo: HPTC (06/12/12).

#### **A101001-2 Sun Porch & Vestibule Foundations**

The exposed surfaces of the concrete sun porch and vestibule foundation walls are in fair condition. Due to the inaccessibility of the below-grade surfaces, the condition is unknown.

Condition Rating: Fair  
Deficiencies Rating: Minor

| <b>A101001-3</b>                                                                                                                                                                                                                                | <b>Exterior Stair Foundation Walls</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <p>The exposed surfaces of the stone exterior stair foundations walls are in fair condition. Due to the inaccessibility of the below-grade surfaces, the condition is unknown.</p> <p>Condition Rating: Fair<br/>Deficiencies Rating: Minor</p> |                                        |

| <b>A101001-4</b>                                                                                                                                                                                                                             | <b>Breezeway Foundation</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| <p>The exposed surfaces of the concrete breezeway foundation walls are in fair condition. Due to the inaccessibility of the below-grade surfaces, the condition is unknown.</p> <p>Condition Rating: Fair<br/>Deficiencies Rating: Minor</p> |                             |

| <b>A101001-5</b>                                                                                                                                                           | <b>Garage Foundation</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <p>Due to the inaccessibility of the below-grade surfaces of these foundations, the condition is unknown.</p> <p>Condition Rating: Fair<br/>Deficiencies Rating: Minor</p> |                          |

| <b>A1030</b>                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Slab On Grade</b>                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| <b>A103001</b>                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Standard Slab on Grade</b>            |
| <b>A103001-1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Main Block Basement Slab On Grade</b> |
| <p>The concrete main block basement slab is completely covered with rigid tile. See <i>C302004 Resilient Flooring</i> for more information. Due to the inaccessibility of the concrete surfaces, the condition of the slab is unknown.</p> <p>It is unknown if the two drains located in the slab of Room 004 are operable; if operable, it is also unknown where they daylight.</p> <p>Condition Rating: Fair<br/>Deficiencies Rating: Minor</p> |                                          |

| <b>A103001-2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Sun Porch Slab On Grade</b> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <p>The concrete sun porch floor slab is completely covered with carpet on the interior of the room (fig. 350). See <i>C302005 Carpeting</i> for more information. Due to the inaccessibility of the concrete surfaces in these areas, the condition of the slab is unknown.</p> <p>The concrete floor slab is partially seen on the exterior; however is mostly hidden by vegetative growth. Despite limited biological growth across the slab, the concrete appears to be in fair condition (fig. 351).</p> |                                |

Condition Rating: Fair  
Deficiencies Rating: Minor



Figure 350. The sun porch concrete floor slab is covered with carpet on the interior. Photo: HPTC (06.12/12).



Figure 351. The sun porch concrete slab is mostly hidden by vegetative growth on the exterior. Photo: HPTC (03/21/12).

### **A103001-3 Breezeway Slab On Grade**

The concrete breezeway floor slab is completely covered with Astroturf-style carpet (fig. 352). See *C302005 Carpeting* for more information. Furthermore, the Astroturf is largely covered by the accumulation of fallen leaves (fig. 353). Due to the inaccessibility of the concrete surfaces, the condition of the slab is unknown.

Condition Rating: Fair  
Deficiencies Rating: Minor



Figure 352. Astroturf-style carpet covers the breezeway concrete slab. Photo: HPTC (08/29/12).



Figure 353. Leaves cover most of the Astroturf. Photo: HPTC (02/14/12).

| <b>A103001-4 Garage Slab On Grade</b>                                                                                                                                                                                                                             |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>The concrete garage floor slab is entirely exposed. Some staining and cracking can be seen across the surface, but this is of little concern due the utilitarian use of the space (fig. 354).</p> <p>Condition Rating: Fair<br/>Deficiencies Rating: Minor</p> |  |
|                                                                                                                                                                                |  |
| <p>Figure 354. Minor cracking and staining can be seen across the garage concrete slab. Figure: HPTC (07/17/12).</p>                                                                                                                                              |  |

| <b>A2020 Basement Walls</b>                                                                                                                                                           |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>A202003 Basement Wall Insulation</b>                                                                                                                                               |  |
| <p>There is no interior insulation at any of the basement walls. It is not known if there is exterior insulation.</p> <p>Condition Rating: Unknown<br/>Deficiency Rating: Unknown</p> |  |

| <b>B SHELL</b>                                                                                                                                                                                                                                                              |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>B10 SUPERSTRUCTURE</b>                                                                                                                                                                                                                                                   |  |
| <b>B1010 Floor Construction</b>                                                                                                                                                                                                                                             |  |
| <b>B101001 Structural Frame</b>                                                                                                                                                                                                                                             |  |
| <b>B101001-1 1<sup>st</sup> Floor Structural Frame - Main Block</b>                                                                                                                                                                                                         |  |
| <p>Both the wood and steel framing members of the main block first-floor structural floor frame are in good condition. No deflection, warping, bowing, sagging, rotting, or fungus growth could be detected.</p> <p>Condition Rating: Good<br/>Deficiency Rating: Minor</p> |  |

| <b>B101001-2</b>                                                                                                                                                                                                                                                                                                                                                    | <b>2<sup>nd</sup> Floor Structural Frame – Main Block</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| <p>The main block second-floor structural floor frame was inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected. Ratings are given based on overall floor performance and performance of materials in adjacent areas.</p> <p>Condition Rating:      Good<br/> Deficiency Rating:      Minor</p> |                                                           |

| <b>B101001-3</b>                                                                                                                                                                                                                                                                                                                                            | <b>Sun Porch Attic Floor Structural Frame</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| <p>The sun porch attic floor structural frame was inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected. Ratings are given based on overall floor performance and performance of materials in adjacent areas.</p> <p>Condition Rating:      Good<br/> Deficiency Rating:      Minor</p> |                                               |

| <b>B101001-4</b>                                                                                                                                                                                                                                                                                                                                         | <b>Garage Attic Structural Floor Frame</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| <p>The garage attic structural floor frame was inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected. Ratings are given based on overall floor performance and performance of materials in adjacent areas.</p> <p>Condition Rating:      Good<br/> Deficiency Rating:      Minor</p> |                                            |

| <b>B101002</b>                                                                                                                                                                                                                                                                                                                                                               | <b>Structural Interior Walls</b>                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| <b>B101002-1</b>                                                                                                                                                                                                                                                                                                                                                             | <b>1<sup>st</sup> Floor Structural Interior Walls</b> |
| <p>The main block first-floor structural interior wall framing was inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected. Ratings are given based on overall floor performance and performance of materials in adjacent areas.</p> <p>Condition Rating:      Good<br/> Deficiency Rating:      Minor</p> |                                                       |

| <b>B101002-2</b>                                                                                                                                                                                                                                                                                        | <b>2<sup>nd</sup> Floor Structural Interior Walls</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| <p>The main block second-floor structural interior wall framing was inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected. Ratings are given based on overall floor performance and performance of materials in adjacent areas.</p> |                                                       |
| Condition Rating:                                                                                                                                                                                                                                                                                       | Good                                                  |
| Deficiency Rating:                                                                                                                                                                                                                                                                                      | Minor                                                 |

| <b>B1020</b>                                                                                                                                                                                                                                                                            | <b>Roof Construction</b>                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>B102001</b>                                                                                                                                                                                                                                                                          | <b>Structural Frame</b>                           |
| <b>B102001-1</b>                                                                                                                                                                                                                                                                        | <b>Gable &amp; Hipped Roof Frame - Main Block</b> |
| <p>The main block gable and hipped roof frames were inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected. Ratings are given based on overall floor performance and performance of materials in adjacent areas.</p> |                                                   |
| Condition Rating:                                                                                                                                                                                                                                                                       | Good                                              |
| Deficiency Rating:                                                                                                                                                                                                                                                                      | Minor                                             |

| <b>B102001-2</b>                                                                                                                                                                                                                                                                          | <b>Front Dormer Gable Roof Frames - Main Block</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| <p>The main block front dormer gable roof frames were inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected. Ratings are given based on overall floor performance and performance of materials in adjacent areas.</p> |                                                    |
| Condition Rating:                                                                                                                                                                                                                                                                         | Good                                               |
| Deficiency Rating:                                                                                                                                                                                                                                                                        | Minor                                              |

| <b>B102001-3</b>                                                                                                                                                                                                                                                                            | <b>Rear Dormer Shed Roof Frame - Main Block</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| <p>The main block gable rear dormer shed roof frame was inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected. Ratings are given based on overall floor performance and performance of materials in adjacent areas.</p> |                                                 |
| Condition Rating:                                                                                                                                                                                                                                                                           | Good                                            |
| Deficiency Rating:                                                                                                                                                                                                                                                                          | Minor                                           |

| <b>B102001-4</b>                                                                                                                                                                                                                                                                                                                                                 | <b>Eastern Ell Gable Roof Frame - Main Block</b> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| <p>The main block eastern ell gable roof frame was inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected. Ratings are given based on overall floor performance and performance of materials in adjacent areas.</p> <p>Condition Rating:        Good<br/> Deficiency Rating:        Minor</p> |                                                  |

| <b>B102001-5</b>                                                                                                                                                                                                                                                                                                                                    | <b>Sun Porch Gable Roof Frame</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| <p>The sun porch gable roof frame was inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected. Ratings are given based on overall floor performance and performance of materials in adjacent areas.</p> <p>Condition Rating:        Good<br/> Deficiency Rating:        Minor</p> |                                   |

| <b>B102001-6</b>                                                                                                                                                                                                                                                                                                                                               | <b>Breezeway Shed &amp; Gable Roof Frame</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| <p>The breezeway shed and gable roof frames were inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected. Ratings are given based on overall floor performance and performance of materials in adjacent areas.</p> <p>Condition Rating:        Good<br/> Deficiency Rating:        Minor</p> |                                              |

| <b>B102001-7</b>                                                                                                                                                                                                                                                                                                                                                            | <b>Garage Gable Roof Frame</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <p>The garage gable roof frame exhibits some staining which indicates previous roof leaks; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected. Ratings are given based on overall floor performance and performance of materials in adjacent areas.</p> <p>Condition Rating:        Good<br/> Deficiency Rating:        Minor</p> |                                |

| <b>B20</b>                                                                                                                                                                           | <b>EXTERIOR ENCLOSURE</b>       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| <b>B2010</b>                                                                                                                                                                         | <b>Exterior Walls</b>           |
| <b>B201001</b>                                                                                                                                                                       | <b>Exterior Skin</b>            |
| <b>B201001-1</b>                                                                                                                                                                     | <b>Stone Walls - Main Block</b> |
| <p>All exterior surfaces of the main block Catoctin greenstone walls and mortar are in good condition.</p> <p>Condition Rating:        Good<br/> Deficiency Rating:        Minor</p> |                                 |

**B201001-2 Brick Walls – Main Block**

All exposed surfaces of the main block brick walls are in good condition. The conditions of the covered brick walls are unknown due to being covered by vinyl siding—the brick units and/or mortar joints may have been damaged by the installation of the synthetic horizontal siding.

The modern vinyl siding is not considered a character-defining feature and hides the character-defining brick. Furthermore, biological growth and dirt can be seen across the surfaces of the siding further detracting from its appearance (fig. 355).

Condition Rating: Fair  
 Deficiency Rating: Minor



Figure 355. Modern vinyl siding covers the north elevation brick wall of the main block. Photo: HPTC (08/29/12).

**B201001-3 Frame Walls – Main Block**

The main block framed wall frames were inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected.

The exterior modern vinyl siding is not considered a character-defining feature. Furthermore, biological growth and dirt can be seen across the surfaces of the siding further detracting from its appearance (see fig. 355).

Condition Rating: Fair  
 Deficiency Rating: Minor

| <b>B201001-4   Frame Walls – Sun Porch</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <p>The sun porch wall frames were inaccessible for assessment; however no deflection, warping, bowing, sagging, rotting, or fungus growth could be detected.</p> <p>The exterior modern vinyl siding is not considered a character-defining feature. Furthermore, biological growth and dirt can be seen across the surfaces of the siding further detracting from its appearance (see fig. 355).</p> <p>Originally the sun porch was screened in. The full enclosure of the sun porch is not considered a character-defining feature.</p> |       |
| Condition Rating:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Fair  |
| Deficiency Rating:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Minor |

| <b>B201001-5   Stone Walls – Garage</b>                                                                      |       |
|--------------------------------------------------------------------------------------------------------------|-------|
| <p>All exterior surfaces of the garage Catocin greenstone walls and mortar joints are in good condition.</p> |       |
| Condition Rating:                                                                                            | Good  |
| Deficiency Rating:                                                                                           | Minor |

| <b>B201001-6   Frame Walls – Garage</b>                                                                                                                                                                                                                                                                                                                                                          |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <p>The garage wood-framed wall frames exhibit some staining which indicates previous leaks through the siding; however no deflection could be detected.</p> <p>The exterior modern vinyl siding is not considered a character-defining feature. Furthermore, biological growth and dirt can be seen across the surfaces of the siding further detracting from its appearance (see fig. 355).</p> |       |
| Condition Rating:                                                                                                                                                                                                                                                                                                                                                                                | Fair  |
| Deficiency Rating:                                                                                                                                                                                                                                                                                                                                                                               | Minor |

| <b>B201002   Insulation &amp; Vapor Barrier</b>                                                               |         |
|---------------------------------------------------------------------------------------------------------------|---------|
| <p>It is unknown if there is insulation and/or vapor barriers at any of the exterior walls of Quarters 1.</p> |         |
| Condition Rating:                                                                                             | Unknown |
| Deficiency Rating:                                                                                            | Unknown |

| <b>B201005</b>                                                                                                                                                                                                                                                                                                                                                                                         | <b>Exterior Louvers &amp; Screens</b> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <p>All of the exterior louvers at Quarters 1 appear to be in good condition from the exterior.</p> <p>Only the garage exterior louvers could be assessed from the interior. These louvers included screens and were in good condition.</p> <p>Due to the inaccessibility the other louvers from the interior, it is unknown whether they are screened, resulting in a downgraded condition rating.</p> |                                       |
| Condition Rating:                                                                                                                                                                                                                                                                                                                                                                                      | Fair                                  |
| Deficiency Rating:                                                                                                                                                                                                                                                                                                                                                                                     | Minor                                 |

| <b>B201008</b>                                                                                                                                                                                                                                                                                                      | <b>Exterior Soffits</b>                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| <b>B201008-1</b>                                                                                                                                                                                                                                                                                                    | <b>Exterior Soffits, Eaves, &amp; Cornices - Main Block</b> |
| <p>The painted metal-clad exterior soffits and rakes of the main block roofs are in good condition; however these features are not considered character-defining features. The metal is believed to cover the original wood soffits and rakes which are character-defining features and undetermined condition.</p> |                                                             |
| Condition Rating:                                                                                                                                                                                                                                                                                                   | Good                                                        |
| Deficiency Rating:                                                                                                                                                                                                                                                                                                  | Minor                                                       |

| <b>B201008-2</b>                                                                                                                                                                                                                                                                                                  | <b>Exterior Soffits, Eaves, &amp; Cornices - Sun Porch</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| <p>The painted metal-clad exterior soffits and rakes of the sun porch roof are in good condition; however these features are not considered character-defining features. The metal is believed to cover the original wood soffits and rakes which are character-defining features and undetermined condition.</p> |                                                            |
| Condition Rating:                                                                                                                                                                                                                                                                                                 | Fair                                                       |
| Deficiency Rating:                                                                                                                                                                                                                                                                                                | Minor                                                      |

| <b>B201008-3</b>                                                                                                                                                                                                                                                                                                  | <b>Exterior Soffits, Eaves, &amp; Cornices - Breezeway</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| <p>The painted metal-clad exterior soffits and rakes of the breezeway roof are in good condition; however these features are not considered character-defining features. The metal is believed to cover the original wood soffits and rakes which are character-defining features and undetermined condition.</p> |                                                            |
| Condition Rating:                                                                                                                                                                                                                                                                                                 | Fair                                                       |
| Deficiency Rating:                                                                                                                                                                                                                                                                                                | Minor                                                      |

| B201008-4                                                                                                                                                                                                                                                                                                                                                                 | Exterior Soffits, Eaves, & Cornices – Garage |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| <p>The painted metal-clad exterior soffits and rakes of the garage roof are in good condition; however these features are not considered character-defining features. The metal is believed to cover the original wood soffits and rakes which are character-defining features and undetermined condition.</p> <p>Condition Rating: Fair<br/>Deficiency Rating: Minor</p> |                                              |

| B2020                                                                                                                                                                                                                                                                                                                             | Exterior Windows                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B2020-1                                                                                                                                                                                                                                                                                                                           | Basement Windows – Main Block                                                                                                                                                                                                        |
| <p>The original, character-defining basement windows are in fair condition. Many are painted shut making them inoperable. The exteriors of all of the windows are covered with biological growth due to the damp conditions in the window wells (figs. 356-357).</p> <p>Condition Rating: Fair<br/>Deficiency Rating: Serious</p> |                                                                                                                                                                                                                                      |
|  <p><i>Figure 356.</i> The window wells retain water making damp conditions. Photo: HPTC (08/29/12).</p>                                                                                                                                        |  <p><i>Figure 357.</i> The character-defining basement windows are covered with biological growth on their exteriors. Photo: HPTC (08/29/12).</p> |

| B2020-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1 <sup>st</sup> & 2 <sup>nd</sup> Floor Windows – Main Block |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| <p>Despite their good condition, the first- and second-floor main block modern vinyl replacement windows are not considered character-defining features. The replacement windows do not match the original fenestration in style, size, type, divided-lite pattern, proportion of glass-to-frame ratio. The modern windows degrade the character-defining features of the building and lessen its historic integrity.</p> <p>Condition Rating: Good<br/>Deficiency Rating: Minor</p> |                                                              |

| <b>B2020-3</b>                                                                                                                                                                                                                                                                                                                                                   | <b>Windows – Sun Porch</b> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| <p>Despite their good condition, the sun porch modern vinyl replacement windows are not considered character-defining features.</p> <p>Originally the sun porch was screened in (see figs. 42-43). The full enclosure of the sun porch is not considered a character-defining feature.</p> <p>Condition Rating:      Good<br/> Deficiency Rating:      Minor</p> |                            |

| <b>B2020-4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Windows – Exterior Stair Enclosure</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| <p>Despite their good condition, the exterior stair enclosure modern vinyl replacement windows are not considered character-defining features. The replacement windows do not match the original fenestration in style, size, type, divided-lite pattern, proportion of glass-to-frame ratio. The modern windows degrade the character-defining features of the building and lessen its historic integrity.</p> <p>Condition Rating:      Good<br/> Deficiency Rating:      Minor</p> |                                           |

| <b>B2020-5</b>                                                                                                                                      | <b>Windows – Garage</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <p>The original, character-defining garage windows are in good condition.</p> <p>Condition Rating:      Good<br/> Deficiency Rating:      Minor</p> |                         |

| B2030                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Exterior Doors        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>B2030-1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Exterior Doors</b> |
| <p>The non-original exterior doors are in good condition; however they are incompatible with the historic buildings. They are not considered character-defining features. The use of “DIY” builder-type doors degrades the character-defining feature of this historic structure. Weatherstripping and exterior storm doors adds to the proper weatherization of the openings.</p> <p>The original exterior garage entry door is also in good condition and is considered a character-defining feature.</p> <p>Condition Rating:      Good<br/> Deficiency Rating:      Minor</p> |                       |

| <b>B2030-2 Exterior Storm Doors</b>                                                                                                                                                                                            |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <p>The modern aluminum storm doors are in good condition and add to the proper weatherization of the openings; however they are incompatible with the historic lodge. They are not considered character-defining features.</p> |       |
| Condition Rating:                                                                                                                                                                                                              | Good  |
| Deficiency Rating:                                                                                                                                                                                                             | Minor |

| <b>B203004 Overhead Doors</b>                                                                                                                                                          |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <p>The non-original steel overhead garage doors are in good condition; however they are incompatible with the historic lodge. They are not considered character-defining features.</p> |       |
| Condition Rating:                                                                                                                                                                      | Good  |
| Deficiency Rating:                                                                                                                                                                     | Minor |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                    |                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------|
| B30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ROOFING            |                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | B3010              | Roof Coverings                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | B301001            | Roof Finishes                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>B301001-1</b>   | <b>Gable &amp; Hipped Roof Finishes – Main Block</b> |
| <p>The cedar shakes on the main block gable and hipped roofs were installed at least twenty years ago. The roof surfaces show signs of wear, warping, cracking, and biological growth (suggesting the limited use of copper flashing to deter this growth; fig. 358). Despite no signs of leaking, the cedar shakes are nearing the end of their useful lifespan.</p> <p>The cedar-shake covering does not match or replicate the color, texture, or pattern (slate) of the original roof covering material and therefore is not considered a character-defining feature.</p> |                    |                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Condition Rating:  | Poor                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Deficiency Rating: | Serious                                              |



*Figure 358.* The cedar shakes of the main block hipped and gable roofs have neared the end of their useful lifespan. Note the overhanging vegetation that should be cut away from the building. Photo: HPTC (08/29/12).

|                  |                                                      |
|------------------|------------------------------------------------------|
| <b>B301001-2</b> | <b>Front Dormer Gable Roof Finishes – Main Block</b> |
|------------------|------------------------------------------------------|

The cedar shakes on the main block front dormer gable roofs were installed at least twenty years ago. The roof surfaces show signs of wear, warping, cracking, and biological growth (suggesting the limited use of copper flashing to deter this growth; see fig. 358). Despite no signs of leaking, the cedar shakes are nearing the end of their useful lifespan.

The cedar-shake covering does not match or replicate the color, texture, or pattern (slate) of the original roof covering material and therefore is not considered a character-defining feature.

Condition Rating:      Poor  
 Deficiency Rating:    Serious

|                  |                                                    |
|------------------|----------------------------------------------------|
| <b>B301001-3</b> | <b>Rear Dormer Shed Roof Finishes – Main Block</b> |
|------------------|----------------------------------------------------|

The standing-seam copper on the main block rear dormer shed roof is in good condition. Although not original, it matches what was on this roof originally, and is considered a character-defining feature.

Condition Rating:      Good  
 Deficiency Rating:    Minor

**B301001-4****Eastern Ell Gable Roof Finishes –  
Main Block**

The cedar shakes on the main block eastern ell gable roof were installed at least twenty years ago. The roof surfaces show signs of wear, warping, cracking, and biological growth (suggesting the limited use of copper flashing to deter this growth; fig. 359). Despite no signs of leaking, the cedar shakes are nearing the end of their useful lifespan.

The cedar-shake covering does not match or replicate the color, texture, or pattern (slate) of the original roof covering material and therefore is not considered a character-defining feature.

Condition Rating:      Poor  
Deficiency Rating:     Serious



*Figure 359.* The northern slope of the eastern ell cedar roof exhibits warped and weathered shakes nearing the end of their lifespan. Photo: HPTC (07/17/12).

|                  |                                      |
|------------------|--------------------------------------|
| <b>B301001-5</b> | <b>Sun Porch Gable Roof Finishes</b> |
|------------------|--------------------------------------|

The cedar shakes on the sun porch gable roof were installed at least twenty years ago. The roof surfaces show signs of wear, warping, cracking, and biological growth (suggesting the limited use of copper flashing to deter this growth; fig. 360). Despite no signs of leaking, the cedar shakes are nearing the end of their useful lifespan.

The cedar-shake covering does not match or replicate the color, texture, or pattern (slate) of the original roof covering material and therefore is not considered a character-defining feature.

Condition Rating:        Poor  
Deficiency Rating:      Serious



Figure 360. The eastern slope of the sun porch cedar roof exhibits biological growth. Photo: HPTC (08/29/12).

**B301001-6****Breezeway Shed & Gable Roof  
Finishes**

The cedar shakes on the breezeway gable roof were installed at least twenty years ago. The roof surfaces show signs of wear, warping, cracking, and biological growth (suggesting the limited use of copper flashing to deter this growth). Additionally, many of the ridge cap shakes have become detached (fig. 361). Despite no signs of leaking, the cedar shakes are nearing the end of their useful lifespan.

The cedar-shake covering does not match or replicate the color, texture, or pattern (slate) of the original roof covering material and therefore is not considered a character-defining feature.

The standing-seam copper on the breezeway shed and gable roofs are in good condition. This modern covering does not match or replicate the color, texture, or pattern (slate) of the original roof covering material and therefore is not considered a character-defining feature.

Condition Rating: Poor  
Deficiency Rating: Serious

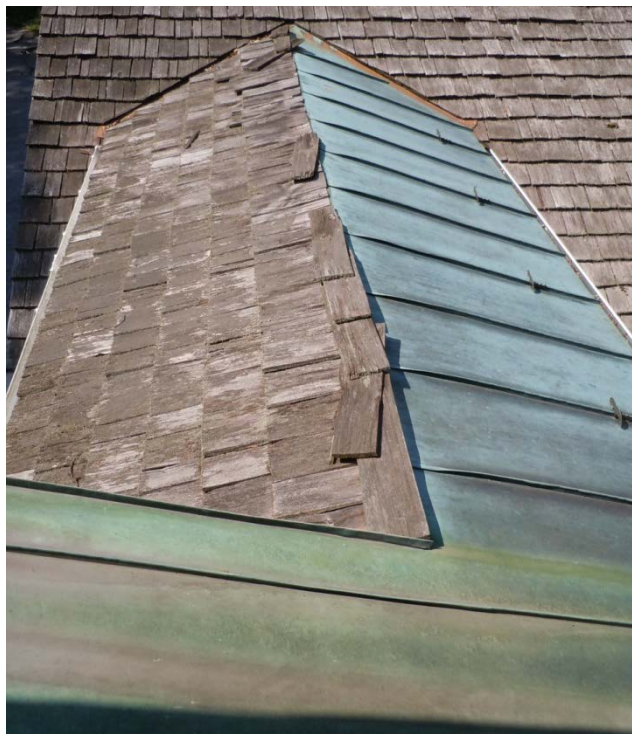


*Figure 361.* The cedar shakes composing the ridge cap have become detached in many places. The copper standing-seam roof is not historically accurate for these roofs. Photo: HPTC (07/17/12).

|                  |                                   |
|------------------|-----------------------------------|
| <b>B301001-7</b> | <b>Garage Gable Roof Finishes</b> |
|------------------|-----------------------------------|

The cedar shakes on the garage gable roof were installed at least twenty years ago. The roof surfaces show signs of wear, warping, cracking, and biological growth (suggesting the limited use of copper flashing to deter this growth; fig. 362). Despite no signs of leaking, the cedar shakes are nearing the end of their useful lifespan.

The cedar-shake covering does not match or replicate the color, texture, or pattern (slate) of the original roof covering material and therefore is not considered a character-defining feature.

Condition Rating:      Poor  
 Deficiency Rating:    Serious



Figure 362. The cedar shakes on the garage gable roof exhibit a large amount of biological growth. Photo: HPTC (08/29/12).

|                |                                   |
|----------------|-----------------------------------|
| <b>B301003</b> | <b>Roof Insulation &amp; Fill</b> |
|----------------|-----------------------------------|

It is unknown if there is roof insulation or fill at any of the roofs of Quarters 1.

Condition Rating:      Unknown  
 Deficiency Rating:    Unknown

|         |                  |
|---------|------------------|
| B301004 | Flashings & Trim |
|---------|------------------|

|                  |                             |
|------------------|-----------------------------|
| <b>B301004-1</b> | <b>Dormer Wall Flashing</b> |
|------------------|-----------------------------|

Despite the lack of visual evidence of flashing at the dormer walls, it is assumed that flashing exists in these locations. No water damage can be seen on the interior of the residence which confirms weather-tight flashing.

Condition Rating:      Good  
 Deficiency Rating:    Minor

| <b>B301004-2 W204 Exterior Flashing</b>                                                                                                           |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| No water damage can be seen on the interior of the second-floor wall under W204 or the first-floor ceiling which confirms weather-tight flashing. |       |
| Condition Rating:                                                                                                                                 | Good  |
| Deficiency Rating:                                                                                                                                | Minor |

| <b>B301004-3 Breezeway-Side Wall Flashing</b>                                                                                                                                                                                                               |       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Despite the lack of visual evidence of flashing at the juncture of the breezeway and side walls, it is assumed that flashing exists in these locations. No water damage can be seen on the interior of the residence which confirms weather-tight flashing. |       |
| Condition Rating:                                                                                                                                                                                                                                           | Good  |
| Deficiency Rating:                                                                                                                                                                                                                                          | Minor |

| <b>B301004-4 Roof Penetration Flashing</b>                                                                                                                                                                                           |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Despite the lack of visual evidence of flashing at the roof penetrations, it is assumed that flashing exists in these locations. No water damage can be seen on the interior of the residence which confirms weather-tight flashing. |       |
| Condition Rating:                                                                                                                                                                                                                    | Good  |
| Deficiency Rating:                                                                                                                                                                                                                   | Minor |

| <b>B301004-5 Chimney Flashing</b>                                                                   |       |
|-----------------------------------------------------------------------------------------------------|-------|
| No water damage can be seen on the interior of the residence which confirms weather-tight flashing. |       |
| Condition Rating:                                                                                   | Good  |
| Deficiency Rating:                                                                                  | Minor |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| B301005                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Gutters & Downspouts                                            |
| <b>B301005-1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Gable &amp; Hipped Roof Drainage System<br/>- Main Block</b> |
| <p>A significant amount of vegetative debris has accumulated in the gutters of the main block gable and hipped roofs. This accumulation has clogged the gutter and drainage into the downspouts causing the backup and retention of water in both the gutters and the downspouts.</p> <p>The modern, vinyl U-shaped gutters and square downspouts are not considered character-defining features as they do not match what would have been at Quarters 1 originally (metal K-style gutters with metal square downspouts). They appear to be smaller than the original gutters and downspouts which were sized for the slope and area of the roofs. This smaller-dimension gutters likely overflow every time there is a heavy rain and contribute to the degradation of the building's exterior surfaces, roof soffits and framing (ice dams), and the building foundation system.</p> <p>The extent of the underground drainage system is unknown (fig. 363). Any degradation of this system could be exacerbating the water damage/infiltration of the concrete foundation walls.</p> <p>Condition Rating:        Poor<br/>Deficiency Rating:      Critical</p> |                                                                 |



Figure 363. The extent of the underground drainage system at Quarters 1 is unknown. Photo: HPTC (03/21/12).

**B301005-2**

**Rear Dormer Roof Drainage System -  
Main Block**

A significant amount of vegetative debris has accumulated in the gutters of the main block rear dormer roof. This accumulation has clogged the gutter and drainage into the downspout causing the backup and retention of water in both the gutters and the downspouts (fig. 364).

The modern, metal K-style gutter is similar to what would have been extant on Quarters 1 originally and is considered a character-defining feature. The modern, metal corrugated downspout is not considered a character-defining feature as it does not match what would have been at Quarters 1 originally (metal square downspouts). They appear to be smaller than the original gutters and downspouts which were sized for the slope and area of the roofs. This smaller-dimension gutters likely overflow every time there is a heavy rain and contribute to the degradation of the building's exterior surfaces, roof soffits and framing (ice dams), and the building foundation system.

Condition Rating:      Poor  
Deficiency Rating:    Critical



*Figure 364.* Vegetative debris has collected in the rear dormer gutter clogging both the gutter and the downspout. Photo: HPTC (08/29/12).

**B301005-3****Eastern Ell Roof Drainage System – Main Block**

A significant amount of vegetative debris has accumulated in the gutters of the main block eastern ell roof. This accumulation has clogged the gutters and drainage into the downspouts causing the backup and retention of water in both the gutters and the downspouts (fig. 365).

The modern, vinyl U-shaped gutter and square downspout (south elevation) are not considered character-defining features as they do not match what would have been at Quarters 1 originally (metal K-style gutters with metal square downspouts). They appear to be smaller than the original gutters and downspouts which were sized for the slope and area of the roofs. This smaller-dimension gutters likely overflow every time there is a heavy rain and contribute to the degradation of the building's exterior surfaces, roof soffits and framing (ice dams), and the building foundation system.

The modern, metal K-style gutter (north elevation) is similar to what would have been extant on Quarters 1 originally and is considered a character-defining feature. The modern, metal corrugated downspout (north elevation) is not considered a character-defining feature as it does not match what would have been at Quarters 1 originally.

The extent of the underground drainage system is unknown. Any degradation of this system could be exacerbating the water damage/infiltration of the concrete foundation walls.

Condition Rating:      Poor  
 Deficiency Rating:    Critical



*Figure 365.* Vegetative debris has accumulated in the gutters of the eastern ell. The U-shaped gutters are not considered to be character-defining features. The size of the gutter is also significantly smaller and cannot carry the rain runoff from this roof. Note communications cables hung from the building – it should be determined if these are active; if not they should be removed, if they are they should be rerouted through the building in an unobtrusive manner. Photo: HPTC (08/29/12).

| <b>B301005-4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Sun Porch Roof Drainage System</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <p>A significant amount of vegetative debris has accumulated in the gutters of the sun porch roof. This accumulation has clogged the gutters and drainage into the downspouts causing the backup and retention of water in both the gutters and the downspouts.</p> <p>The modern, vinyl U-shaped gutters and square downspouts are not considered character-defining features as they do not match what would have been at Quarters 1 originally (metal K-style gutters with metal square downspouts). They appear to be smaller than the original gutters and downspouts which were sized for the slope and area of the roofs. This smaller-dimension gutters likely overflow every time there is a heavy rain and contribute to the degradation of the building's exterior surfaces, roof soffits and framing (ice dams), and the building foundation system.</p> <p>The extent of the underground drainage system is unknown. Any degradation of this system could be exacerbating the water damage/infiltration of the concrete foundation walls.</p> <p>Condition Rating:        Poor<br/> Deficiency Rating:      Critical</p> |                                       |

| <b>B301005-5</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Breezeway Roof Drainage Systems</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <p>A significant amount of vegetative debris has accumulated in the gutters of the breezeway roofs (fig. 366). This accumulation has clogged the gutters and drainage into the downspouts causing the backup and retention of water in both the gutters and the downspouts.</p> <p>The modern, vinyl U-shaped gutter and square downspout (west elevation) are not considered character-defining features as they do not match what would have been at Quarters 1 originally (metal K-style gutters with metal square downspouts). They appear to be smaller than the original gutters and downspouts which were sized for the slope and area of the roofs. This smaller-dimension gutters likely overflow every time there is a heavy rain and contribute to the degradation of the building's exterior surfaces, roof soffits and framing (ice dams), and the building foundation system.</p> <p>The modern, metal K-style gutter (east elevation) is similar to what would have been extant on Quarters 1 originally and is considered a character-defining feature. The modern, metal corrugated downspout (east elevation) is not considered a character-defining feature as it does not match what would have been at Quarters 1 originally.</p> <p>The extent of the underground drainage system is unknown. Any degradation of this system could be exacerbating the water damage/infiltration of the concrete foundation walls.</p> <p>Condition Rating:        Poor<br/> Deficiency Rating:      Critical</p> |                                        |



Figure 366. The accumulation of vegetative debris in a gutter at the breezeway roof has caused the retention of water in the system. Photo: HPTC (08/29/12).

**B301005-6    Garage Roof Drainage System**

A significant amount of vegetative debris has accumulated in the gutters of the garage roof (fig. 367). This accumulation has clogged the gutters and drainage into the downspouts causing the backup and retention of water in both the gutters and the downspouts.

Furthermore, the modern, vinyl U-shaped gutters and square downspouts are not considered character-defining features as they do not match what would have been at Quarters 1 originally (metal K-gutters with metal downspouts). They appear to be smaller than the original gutters and downspouts which were sized for the slope and area of the roofs. This smaller-dimension gutters likely overflow every time there is a heavy rain and contribute to the degradation of the building’s exterior surfaces, roof soffits and framing (ice dams), and the building foundation system.

The extent of the underground drainage system is unknown (fig. 368). Any degradation of this system could be exacerbating the water damage/infiltration of the concrete foundation walls.

Condition Rating:        Poor  
Deficiency Rating:      Critical



Figure 367. Collected vegetative debris can be seen in the garage roof gutters. Photo: HPTC (08/29/12).



Figure 368. The extent of the underground drainage system at Quarters 1 is unknown. Photo: HPTC (08/29/12).

|                                                                                                                                                                                                                                                                                                                                                                                     |                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| B3020                                                                                                                                                                                                                                                                                                                                                                               | Roof Openings                             |
| B302001                                                                                                                                                                                                                                                                                                                                                                             | Roof Openings & Supports                  |
| <b>B302001-1</b>                                                                                                                                                                                                                                                                                                                                                                    | <b>Masonry Chimneys (Above Roof Line)</b> |
| <p>The masonry of both chimneys is in good condition. One of the flues of the stone chimney lacks a cap causing the downgraded condition rating (fig. 369).</p> <p>The brick chimney located at the sun porch was constructed in 1992 and is not considered a character-defining feature of Quarters 1.</p> <p>Condition Rating:      Poor<br/> Deficiency Rating:      Serious</p> |                                           |



Figure 369. The eastern flue of the stone chimney lacks a chimney cap. Photo: HPTC (08/29/12).

### **B302001-2 Roof Penetrations (All Roofs)**

The roof penetrations appear to be in good condition.

Condition Rating: Good  
Deficiency Rating: Minor

### **C INTERIORS**

#### **C10 INTERIOR CONSTRUCTION**

#### **C1010 Partitions**

All of the interior partition walls appear to be in good condition.

Condition Rating: Good  
Deficiency Rating: Minor

#### **C1020 Interior Doors**

All of the interior doors on the first and second floors are in good condition. The hollow-core replacement doors are not considered character-defining features.

All of the doors in the basement exhibit biological growth and water staining on the lower approximately one foot of each door and are in poor condition (fig. 370).

Condition Rating: Fair  
Deficiency Rating: Minor



Figure 370. Water staining on the lower portion of a basement door. Arrow indicates level of rising damp on virtual surfaces. Photo: HPTC (06/20/12).

|                                                                                                                                                                                                     |                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| C1030                                                                                                                                                                                               | Fittings                   |
| <b>C103006</b>                                                                                                                                                                                      | <b>Shelving – Basement</b> |
| <p>The modern basement shelving in Room 001 is in poor condition. It exhibits biological growth over the shelving surfaces.</p> <p>Condition Rating:      Poor<br/> Deficiency Rating:    Minor</p> |                            |

|                                                                                                                                                |                           |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <b>C103008</b>                                                                                                                                 | <b>Counters – Kitchen</b> |
| <p>The kitchen counters are worn and dated, but are in fair condition.</p> <p>Condition Rating:      Fair<br/> Deficiency Rating:    Minor</p> |                           |

|                                                                                                                                                |                           |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <b>C103009</b>                                                                                                                                 | <b>Cabinets – Kitchen</b> |
| <p>The kitchen cabinets are worn and dated, but are in fair condition.</p> <p>Condition Rating:      Fair<br/> Deficiency Rating:    Minor</p> |                           |

| C103098 Other Casework - Fireplaces                                                                                                                                                                                                                                     |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>The modern woodstove insert in the main block fireplace is not a character-defining feature. With its installation, the keystone of the original stone arched firebox opening was damaged (fig. 371).</p> <p>Condition Rating: Fair<br/>Deficiency Rating: Minor</p> |  |
|  <p>Figure 371. The stone keystone was damaged when the modern woodstove was added to the main block fireplace. Photo: HPTC (06/12/12).</p>                                          |  |

| C103099 Other Interior Specialties - Molding & Trim                                                                                                                                                                          |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>All of the interior molding and trim on the first and second floors is in good condition. Basement trim and molding varies in condition from poor to good.</p> <p>Condition Rating: Fair<br/>Deficiency Rating: Minor</p> |  |

|                                                                                                                                                                                                                       |                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| C20                                                                                                                                                                                                                   | STAIRS                                         |
| C2010                                                                                                                                                                                                                 | Stair Construction                             |
| <b>C201001</b>                                                                                                                                                                                                        | <b>Interior Stair Structure &amp; Finishes</b> |
| <p>Both the basement and main stairs are in good structural condition. Tread and riser carpet is not original and is not a character-defining feature.</p> <p>Condition Rating: Good<br/>Deficiency Rating: Minor</p> |                                                |

|                                                                                                                                                                                                                                 |                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| <b>C201002</b>                                                                                                                                                                                                                  | <b>Exterior Stair Structure &amp; Finishes</b> |
| <p>The exterior stairs are in good structural condition. The Astroturf is in fair condition; it is not original and not considered a character-defining feature.</p> <p>Condition Rating: Good<br/>Deficiency Rating: Minor</p> |                                                |

|                                                                                                                                                                                                                                               |                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| C30                                                                                                                                                                                                                                           | INTERIOR FINISHES            |
| C3010                                                                                                                                                                                                                                         | Wall Finishes                |
| <b>C301002</b>                                                                                                                                                                                                                                | <b>Plaster Wall Finishes</b> |
| <p>All of the plaster wall finishes are in good condition (seen in Rooms 101-105, 107-112, 201-204, and 206-209). There is no evidence of cracking, flaking, or discoloration.</p> <p>Condition Rating: Good<br/>Deficiency Rating: Minor</p> |                              |

|                                                                                                                                                                                                                                                                       |                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| <b>C301003</b>                                                                                                                                                                                                                                                        | <b>Gypsum Wallboard Finishes</b> |
| <p>The gypsum wallboard finishes in the basement (Room 004) are in poor condition. Biological growth and water staining can be seen at the lower approximately one foot of the wallboard (fig. 372).</p> <p>Condition Rating: Poor<br/>Deficiency Rating: Serious</p> |                                  |



Figure 372. Water staining and bio-growth on the lower foot of the basement wallboard. Photo: HPTC (06/20/12).

#### **C301004 Tile Wall Finishes**

Overall the tile wall finishes are in good condition (seen in Rooms 107 and 209). The first-floor bathroom wall tile has had a few rudimentary patches on the western wall (due to the removal of a radiator) which detracts from the tile work throughout the rest of the room (fig. 373). Additionally, the same area of tile exhibits biological growth and rust from an adjacent metal HVAC vent.

Condition Rating: Fair  
 Deficiency Rating: Minor



Figure 373. Rudimentary repairs were made to the ceramic wall tile in the first-floor bathroom. Note the rusty floor register due to high humidity in this area. Photo: HPTC (06/12/12).

| <b>C301005   Painted Wall Finishes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>The painted wall surfaces on the first and second floors are in good condition (seen in all rooms except Room 205).</p> <p>The painted wall surfaces in the basement are in poor to fair condition (seen in Rooms 001 and 004). Water infiltration and biological growth have affected a majority of the painted wall surfaces on this level (fig. 374; see fig. 372). It is unknown if this is a recent or pre-existing condition.</p> <p>Condition Rating:      Fair<br/> Deficiency Rating:      Minor</p> |  |
|  <p><i>Figure 374. Blistering and flaking paint on the basement concrete foundation wall surfaces indicates that rising damp has occurred. Photo: HPTC (06/20/12).</i></p>                                                                                                                                                                                                                                                    |  |

| <b>C301099   Other Wall Finishes</b>                                                                                                                                                                                                                                                                       |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>C301099-1   Faux-Wood Wall Paneling</b>                                                                                                                                                                                                                                                                 |  |
| <p>The faux-wood wall paneling seen throughout the basement is in poor condition (seen in Rooms 001 and 002). Biological growth and water staining can be seen at the lower approximately one foot of the paneling (fig. 375).</p> <p>Condition Rating:      Poor<br/> Deficiency Rating:      Serious</p> |  |



Figure 375. Water staining and bio-growth on the lower foot of the basement paneling. Photo: HPTC (06/20/12).

### **C301099-2 | Wood Board and Batten Wall Surfaces**

The painted wood board and batten wall surfaces in the sun porch is in good condition; however it dates to the permanent enclosure of that room, and therefore is not considered a character-defining feature to Quarters 1.

According to the 2010 “Asbestos-Containing Materials Survey,” the “masonry seam sealant” between the stone chimney and wood board and batten wall in the sun porch contains asbestos and is in “poor condition” (fig. 376).<sup>1</sup>

The plywood board and batten wall finish in the second-floor attic is in fair condition, but is of little concern due to the utilitarian space.

Condition Rating:      Poor  
 Deficiency Rating:    Serious

<sup>1</sup> Boggs Environmental Consultants, Inc. “Asbestos-Containing Materials Survey (US EPA AHERA Level).” *Quarters #1 (HS128), Catoclin Mountain National Park, Thurmont, Maryland 21788*. Prepared for Prizim, Inc. June 16, 2010.



Figure 376. The "masonry seam sealant" between the stone wall and the wood wall is known to contain asbestos and is in poor condition. Photo: HPTC (06/12/12).

|                  |                                          |
|------------------|------------------------------------------|
| <b>C301099-3</b> | <b>Wood V-Groove Board Wall Surfaces</b> |
|------------------|------------------------------------------|

The painted wood V-groove board wall surfaces are in good condition (seen in Room 208).

|                    |       |
|--------------------|-------|
| Condition Rating:  | Good  |
| Deficiency Rating: | Minor |

|       |                |
|-------|----------------|
| C3020 | Floor Finishes |
|-------|----------------|

|                |                            |
|----------------|----------------------------|
| <b>C302001</b> | <b>Tile Floor Finishes</b> |
|----------------|----------------------------|

The tile floor finishes (Rooms 107 and 209) are in good condition.

|                    |       |
|--------------------|-------|
| Condition Rating:  | Good  |
| Deficiency Rating: | Minor |

| C302003 Wood Flooring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <p>The oak-strip floor finishes which are exposed are character-defining features (seen in Rooms 108, 109, and 201-204). Widespread scratches dull the surface finishes resulting in a fair condition rating (figs. 377-378). Floors have not been maintained as indicated by buildup of floor wax in corners and unfinished wood and scratched wood in high-traffic areas.</p> <p>Oak-strip flooring is assumed to be covered with carpet in Rooms 101-105, 110, 111, and 206-208. The condition of these wood floors is unknown.</p> <p>Wood pressboard flooring is seen in Room 205. It is in fair condition, but is of little concern due to the utilitarian space.</p> <p>Condition Rating: Fair<br/>Deficiency Rating: Minor</p> |                                                                                     |
|  <p><i>Figure 377 and Figure 378, right.</i> The exposed oak-strip floors on the first and second floors are in a dull, but fair condition. Scratches indicate a lack of maintenance. Photo: 06/12/12.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |

## C302004 Resilient Flooring

According to the 2010 “Asbestos-Containing Materials Survey,” some of the vinyl-floor tiles (VFT) in the basement contains asbestos (fig. 379-380).<sup>2</sup> These include:

- 9”x9” Brown with White Streaks VFT (3.2% asbestos content)
- 9”x9” White with Grey Streaks VFT (1.4% asbestos content)
- 9”x9” White VFT (1.8% asbestos content)
- 9”x9” Orange with Brown Streaks VFT (3.8% asbestos content).

The report states that all of the asbestos-containing floor tiles are in poor condition; however a condition scale was not provided and it is unknown if the tiles are in poor condition because they simply contain asbestos or for another reason. NPS FMSS guidelines state that asbestos-containing materials are not considered in poor condition unless they are friable. The report does not state whether the tiles are friable or non-friable. Based on field observations, the tiles appear in fair condition overall and are not dangerous.

The resilient flooring in the kitchen was not chosen to be tested by the environmental consultants, and therefore is believed to not contain asbestos. Despite being worn, this floor is in fair condition.

Condition Rating: Fair  
Deficiency Rating: Minor

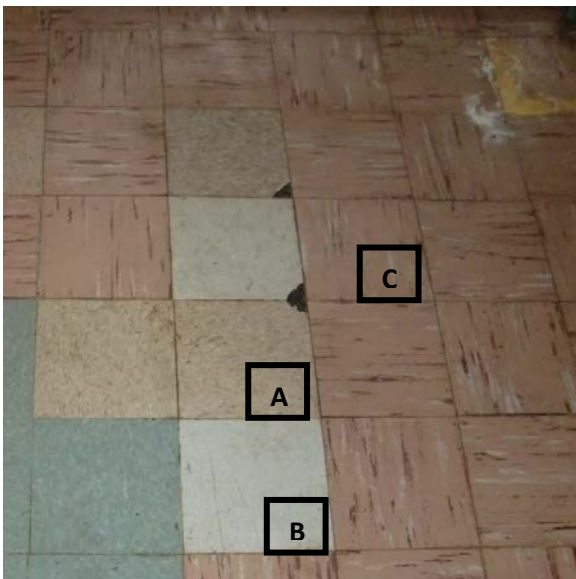


Figure 379. Vinyl basement tiles which contain asbestos include the brown with white streaks (A), the white with grey streaks (B), and the orange with brown streaks (C). Photo: HPTC (03/21/12).



Figure 380. The white vinyl floor tiles (D) also contain asbestos. Photo: HPTC (06/20/12).

<sup>2</sup> Boggs Environmental Consultants, Inc. “Asbestos-Containing Materials Survey (US EPA AHERA Level).” *Quarters #1 (HS128), Catocin Mountain National Park, Thurmont, Maryland 21788*. Prepared for Prizm, Inc. June 16, 2010.

| <b>C302005 Carpeting</b>                                                                                                                                                                                                                                                                                |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <p>The modern carpeting is not a character-defining feature and likely covers original oak-strip flooring (seen in Rooms 101-106, 110, 111, and 206-208); however it is in good condition.</p> <p>The exterior Astroturf-style carpet (located on the breezeway) is worn, but is in fair condition.</p> |       |
| Condition Rating:                                                                                                                                                                                                                                                                                       | Fair  |
| Deficiency Rating:                                                                                                                                                                                                                                                                                      | Minor |

| C3030                                                                                                             | Ceiling Finishes |
|-------------------------------------------------------------------------------------------------------------------|------------------|
| <b>C303002 Plaster Ceiling Finishes</b>                                                                           |                  |
| <p>The plaster ceiling finishes are in good condition (seen in Rooms 101-105, 107-112, 201-204, and 206-209).</p> |                  |
| Condition Rating:                                                                                                 | Poor             |
| Deficiency Rating:                                                                                                | Minor            |

| <b>C303004 Acoustical Ceiling Tiles &amp; Panels</b>                                                                                                                                                                                                                                                                         |       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <p>Acoustical ceiling tiles can be seen in basement rooms 001 and 002. The 2'x2' tiles in Room 001 are suspended; various water stains can be seen across the ceiling (fig.381). The 1'x1' tiles in Room 002 are adhered directly to the ceiling; problems include pulling away from the substrate and dents (fig. 382).</p> |       |
| Condition Rating:                                                                                                                                                                                                                                                                                                            | Fair  |
| Deficiency Rating:                                                                                                                                                                                                                                                                                                           | Minor |



Figure 381. A water stain on an acoustical ceiling tile in Room 001. Photo: HPTC (06/20/12).



Figure 382. Acoustical ceiling tiles in Room 002 are pulling away from the substrate. Photo: HPTC (06/20/12).

| <b>C303005</b>                                                                                                                                                                                                                                                                                                      | <b>Wood Ceilings</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <p>The wood beadboard ceiling of the sun porch and breezeway is in good condition.</p> <p>The plywood board and batten wall finish in the second-floor attic is in fair condition, but is of little concern due to the utilitarian space.</p> <p>Condition Rating:      Good<br/> Deficiency Rating:      Minor</p> |                      |

| <b>C303006</b>                                                                                                                                                                                                                                                                                                                                                                   | <b>Painted &amp; Stained Ceilings</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <p>The painted ceiling surfaces on the first and second floors are in good condition (seen in all rooms except Rooms 106 and 205). Neither a color history nor number of paint layers is known.</p> <p>The stained ceiling surfaces (beadboard) of the sun porch and breezeway are in fair condition).</p> <p>Condition Rating:      Good<br/> Deficiency Rating:      Minor</p> |                                       |

| <b>C303007</b>                                                                                                                                                                                                                                                                                 | <b>Suspension Systems</b> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <p>The metal suspension system for the acoustical ceiling tiles in Room 001 are is in fair condition. It hangs from a temporary wood frame (also in fair condition) attached to the permanent floor structure above.</p> <p>Condition Rating:      Fair<br/> Deficiency Rating:      Minor</p> |                           |

| <b>D</b>                                                                                                                                                                                                                                  | <b>SERVICES</b>                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <b>D20</b>                                                                                                                                                                                                                                | <b>PLUMBING</b>                |
| <b>D2010</b>                                                                                                                                                                                                                              | <b>Plumbing Fixtures</b>       |
| <b>D201001</b>                                                                                                                                                                                                                            | <b>Water Closets (Toilets)</b> |
| <p>With the water turned off at Quarters 1, the toilets are inoperable. Their condition when operable is unknown. Installation date of toilets is unknown.</p> <p>Condition Rating:      Unrated<br/> Deficiency Rating:      Unrated</p> |                                |

|                                                                                                                                                                                |                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| <b>D201003</b>                                                                                                                                                                 | <b>Lavatories (Bathroom Sinks)</b> |
| <p>With the water turned off at Quarters 1, the bathroom sinks are inoperable. Their condition when operable is unknown. Installation dates of bathroom sinks are unknown.</p> |                                    |
| Condition Rating:                                                                                                                                                              | Unrated                            |
| Deficiency Rating:                                                                                                                                                             | Unrated                            |

|                                                                                                                                                                                                        |                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| <b>D201004</b>                                                                                                                                                                                         | <b>Sinks - Kitchen and Laundry</b> |
| <p>With the water turned off at Quarters 1, the kitchen and laundry sinks are inoperable. Their condition when operable is unknown. Installation date of the kitchen and laundry sinks is unknown.</p> |                                    |
| Condition Rating:                                                                                                                                                                                      | Unrated                            |
| Deficiency Rating:                                                                                                                                                                                     | Unrated                            |

|                                                                                                                                                                                                                                                                                                          |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>D201005</b>                                                                                                                                                                                                                                                                                           | <b>Showers/Tubs</b> |
| <p>With the water turned off at Quarters 1, the bathroom shower and bathroom shower/tub are inoperable. Their condition when operable is unknown. The first-floor bathroom shower stall is original to the residence; the installation date of the second-floor bathroom shower/tub unit is unknown.</p> |                     |
| Condition Rating:                                                                                                                                                                                                                                                                                        | Unrated             |
| Deficiency Rating:                                                                                                                                                                                                                                                                                       | Unrated             |

|                                                                                                                                                                                                                                                                                                                                             |                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| D30                                                                                                                                                                                                                                                                                                                                         | HVAC                                |
| <b>D3000</b>                                                                                                                                                                                                                                                                                                                                | <b>Heating &amp; Cooling System</b> |
| <p>The various heating and cooling systems (forced-air system, mini-split system, auxiliary radiators/heaters, and woodstoves) of Quarters 1 appear to be individually operational and in fair to good condition. It is not known how efficiently all of these systems operate together or when each system was added to the residence.</p> |                                     |
| Condition Rating:                                                                                                                                                                                                                                                                                                                           | Fair                                |
| Deficiency Rating:                                                                                                                                                                                                                                                                                                                          | Minor                               |

|                                                                                                                                                                                                                                                                                                     |                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| D40                                                                                                                                                                                                                                                                                                 | FIRE PROTECTION SYSTEMS           |
| D4030                                                                                                                                                                                                                                                                                               | Fire Protection Specialties       |
| <b>D403001</b>                                                                                                                                                                                                                                                                                      | <b>Fire Extinguishing Devices</b> |
| <p>The fire extinguishers for Quarters 1 were serviced in June 2012 but were never redistributed throughout the complex (fig. 383). Extinguishers must be hung on wall brackets according to National Fire Protection Association Code No. 10: <i>Standard for Portable Fire Extinguishers</i>.</p> |                                   |

Condition Rating: Fair  
 Deficiency Rating: Minor



Figure 383. The fire extinguishers were not redistributed throughout Quarters 1 after they were last serviced. Photo: HPTC (06/12/12).

**D4090**

**Other Fire Protection Systems –  
 Battery-Operated Smoke Detectors**

The battery-operated smoke and carbon-monoxide detector on the first floor is not operational. The battery-operated smoke detector on the second floor is operational, but is chirping.

Condition Rating: Poor  
 Deficiency Rating: Critical

**D50 ELECTRICAL**

**D5010 Electrical Service & Distribution**

**D501005 Panels**

The electrical panels (one main panel and two subpanels) appear to be in good condition. The assessment performed by HPTC was a visual inspection and does not fulfill code requirements for regular electrical services by a registered electrician.

Condition Rating: Good  
 Deficiency Rating: Minor

|                                                         |                           |
|---------------------------------------------------------|---------------------------|
| D5020                                                   | Lighting & Branch Wiring  |
| <b>D502002</b>                                          | <b>Lighting Equipment</b> |
| The lighting equipment appears to be in good condition. |                           |
| Condition Rating:                                       | Good                      |
| Deficiency Rating:                                      | Minor                     |

|                                                      |                           |
|------------------------------------------------------|---------------------------|
| D5030                                                | Communications & Security |
| <b>D503001</b>                                       | <b>Fire Alarm System</b>  |
| There is no fire alarm system located at Quarters 1. |                           |
| Condition Rating:                                    | Poor                      |
| Deficiency Rating:                                   | Critical                  |

|                                                    |                        |
|----------------------------------------------------|------------------------|
| <b>D503008</b>                                     | <b>Security System</b> |
| There is no security system located at Quarters 1. |                        |
| Condition Rating:                                  | Poor                   |
| Deficiency Rating:                                 | Serious                |

|                                                                        |                                              |
|------------------------------------------------------------------------|----------------------------------------------|
| D5090                                                                  | Other Electrical Systems                     |
| <b>D509002</b>                                                         | <b>Emergency Lighting &amp; Power System</b> |
| There is no emergency lighting and power system located at Quarters 1. |                                              |
| Condition Rating:                                                      | Poor                                         |
| Deficiency Rating:                                                     | Serious                                      |

|                                                                |                                    |
|----------------------------------------------------------------|------------------------------------|
| <b>D509004</b>                                                 | <b>Lightning Protection System</b> |
| There is no lightning protection system located at Quarters 1. |                                    |
| Condition Rating:                                              | Poor                               |
| Deficiency Rating:                                             | Critical                           |

|                                                                                                                                                                                    |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <b>G</b>                                                                                                                                                                           | <b>BUILDING SITEWORK</b> |
| <b>G20</b>                                                                                                                                                                         | <b>SITE IMPROVEMENTS</b> |
| <b>G2020</b>                                                                                                                                                                       | <b>Parking Areas</b>     |
| <p>The paved parking area exhibits minor cracking throughout the entire area, but is in fair condition (fig. 384).</p> <p>Condition Rating: Fair<br/> Deficiency Rating: Minor</p> |                          |
|                                                                                                 |                          |
| <p><i>Figure 384. Minor cracking can be seen across the asphalt parking area. Photo: HPTC (08/29/12).</i></p>                                                                      |                          |

|                                                                                                                                                                                                                                                                                                                                                    |                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>G2030</b>                                                                                                                                                                                                                                                                                                                                       | <b>Pedestrian Paving (Sidewalks)</b> |
| <p>The concrete pedestrian paving, or sidewalks, (front of the residence and behind garage) is in good condition; parts are partially covered with vegetative growth. The flagstone patio (rear of residence) is in poor condition and is entirely covered with vegetative growth.</p> <p>Condition Rating: Fair<br/> Deficiency Rating: Minor</p> |                                      |

|                                                                                                                                                                                                                                                                                                                                                                                           |                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| G2040                                                                                                                                                                                                                                                                                                                                                                                     | Site Development          |
| <b>G204001</b>                                                                                                                                                                                                                                                                                                                                                                            | <b>Fences &amp; Gates</b> |
| <p>The chain-link fence is not a character-defining feature. A large portion on the eastern side was crushed by a fallen tree and had not been repaired as of the date of this report.</p> <p>The wood picket fence at the breezeway is not a character-defining feature. It is covered with biological growth (fig. 385).</p> <p>Condition Rating: Fair<br/>Deficiency Rating: Minor</p> |                           |
|  <p><i>Figure 385. The wood picket fence is not a character-defining feature. Photo: HPTC (08/29/12).</i></p>                                                                                                                                                                                          |                           |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>G204002</b>                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Retaining Walls</b> |
| <p>The Catoctin greenstone retaining walls are in overall poor condition.</p> <p>The western (front) wall is partially covered with biological growth or vegetative debris and larger stones have become detached from the wall (fig. 386).</p> <p>The mortar in the top horizontal face of the eastern (rear) wall is disintegrating allowing the top-course stones to shift (fig. 387).</p> <p>Condition Rating: Poor<br/>Deficiency Rating: Minor</p> |                        |



Figure 386. The front retaining wall has dislodged stones and is partially overgrown with vegetation. Photo: HPTC (03/21/12).



Figure 387. The rear retaining wall has degrading mortar and easily-moveable stones. Photo: HPTC (03/21/12).

### **G204003 Exterior Furnishings – Stone Grill**

The Catocin greenstone grill is partially covered with biological growth or vegetative debris. The metal grate and door exhibit rust across most surfaces. Overall the grill is in fair condition.

Condition Rating: Fair  
Deficiency Rating: Minor

### **G2050 Maintained Landscape**

Plantings encompass Quarters 1 on most elevations. Many of these plants are within inches of the buildings' foundation walls, exterior walls, windows, roof drainage systems, and roof coverings (fig. 388). Dead and decaying vegetative debris has collected along many of the remaining elevations (fig. 389). Additionally, the grass has not been maintained for an extended period of time.

All of these conditions, within close proximity of the buildings, can cause water retention, again adding to the water drainage issues at the foundations.

Condition Rating: Poor  
Deficiency Rating: Serious



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| G90                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | OTHER SITE WORK                |
| G9087                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Overall Building Site Drainage |
| <p>Neutral and negative drainage can be seen on all elevations of Quarters 1 (fig. 390). These conditions cause ponding and allow water to collect at the base of the buildings walls seeping into the foundations. Water damage (including mold, staining, spalling, etc.) will occur to interior and exterior faces of the buildings' foundations.</p> <p>The basement window wills are composed entirely of concrete and do not allow for water drainage (fig. 391). This condition has exacerbated the problems described above.</p> <p>Condition Rating: Poor<br/>Deficiency Rating: Critical</p> |                                |



*Figure 390.* Neutral and negative drainage can be seen across the rear elevation. Photo: HPTC (08/29/12).



*Figure 391, right.* Water has no way of draining from the concrete basement window wells. Photo: HPTC (08/29/12).

## **Part 2 | Treatment and Use**

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## Requirements for Treatment and Use

The treatment and use of Quarters 1 must be considered within a framework of applicable laws, agreements, and policies. These mandates govern a wide range of management issues beyond the preservation, protection, and interpretation of the Catoctin Mountain Park's cultural resources. They extend to issues of visitor and staff use, safety, and universal accessibility, among others. Because Catoctin Mountain Park does not have any finalized planning documents for the park at the time of this report (May 2013), the following mandates and guidelines must help inform the ultimate treatment and use of Quarters 1. The park's Foundation Plan was finalized and signed on April 3, 2013. The park's Resource Stewardship Strategy will be planned in May 2013.

### National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) mandates that federal agencies, like the National Park Service, take into account the effects of their actions on properties listed or eligible for listing on the National Register of Historic Places and gives the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment.<sup>1</sup> Quarters 1 is listed as a contributing structure in the Catoctin Mountain Park Historic District and any undertakings (expenditure of federal funds) will be reviewed in accordance to NPS policy and federal historic preservation laws including the service-wide *Programmatic Agreement Among the National Park Service (U.S. Department of the Interior), the Advisory Council on Historic Preservation and the National Conference of State Historic Preservation Officers for Compliance with Section 106 of the National Historic Preservation Act* (2008).<sup>2</sup>

Section 110 of the NHPA clarifies the broad historic preservation responsibilities of Federal agencies with the intention of ensuring that historic preservation is fully integrated into the ongoing programs of all Federal agencies by identifying, protecting, and avoiding unnecessary damage to historic properties. Additionally, each agency is required to use historic properties available to it and when managing these properties, must consider preservation of their historic, archaeological, architectural, and cultural values.<sup>3</sup>

### Executive Order No. 11593

Executive Order No. 11593: Protection and Enhancement of the Cultural Environment (1971) mandates that "the Federal Government shall provide leadership in preserving, restoring, and maintaining the historic and cultural environment of the Nation."<sup>4</sup> Responsibilities of federal agencies include:

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<sup>1</sup> The NHPA of 1966 was last amended in 2006. A downloadable copy is located at (<http://www.achp.gov/nhpa.html>).

<sup>2</sup> A copy of this agreement can be found on the NPS's website at (<http://www.nps.gov/policy/106agreement.pdf>).

<sup>3</sup> More information on Section 110 can be found on the NPS's website at ([http://www.nps.gov/hps/fapa\\_110.htm](http://www.nps.gov/hps/fapa_110.htm)).

<sup>4</sup> A copy of this E.O. can be found on the NPS's website at ([http://www.nps.gov/history/history/online\\_books/anps/anps\\_7b.htm](http://www.nps.gov/history/history/online_books/anps/anps_7b.htm)).

- Nominating “...to the Secretary of the Interior all sites, buildings, districts, and objects under their jurisdiction of the control that appear to qualify for listing on the National Register of Historic Places.”
- Exert caution “...during the interim period until inventories and evaluation...are completed to assure that any federally owned property that might qualify for nomination is not inadvertently transferred, sold, demolished, or substantially altered.”
- “Initiate measures to assure that where as a result of Federal action or assistance a property listed on the National register of Historic Places is to be substantially altered or demolished, timely steps be taken to make or have made records, including measured drawings, photographs, and maps, of the property, and that copy of such records then be deposited in the Library of Congress as part of the Historic American Buildings Survey or Historic American Engineering Record for future use and reference.”
- “Initiate measures and procedures to provide for the maintenance, through preservation, rehabilitation, or restoration, of federally owned and registered sites professional standards prescribed by the Secretary of the Interior.”

## Executive Order No. 13006

Executive Order No. 13006: Locating Federal Facilities on Historic Properties (1996) mandates that “the Federal Government shall utilize and maintain, wherever operationally appropriate and economically prudent, historic properties and district...” Furthermore, “any rehabilitation or construction that is undertaken pursuant to this order must be architecturally compatible with the character of the surrounding historic district or properties.”<sup>5</sup>

## Secretary of the Interior’s Standards

Treatments of the Quarters 1 buildings are to be guided by *The Secretary of the Interior’s Standards for Historic Preservation Projects*.<sup>6</sup> Descriptions of the four standards are as follows:

- **Preservation:** “the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.”
- **Rehabilitation:** “the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.”
- **Restoration:** “the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from

<sup>5</sup> A copy of this agreement is located on the ACHP’s website at (<http://www.achp.gov/EO13006.html>).

<sup>6</sup> Weeks, Kay D. and Anne E. Grimmer. “The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings.” United States Department of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Heritage Preservation Services, Washington, DC, 1995.

other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.”

- **Reconstruction:** “the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.”

Because Quarters 1 is intact, reconstruction is not a treatment consideration.

## DO-28

*DO-28 Cultural Resource Management Guideline* is intended to guide the National Park Service through successful cultural resource management through three steps<sup>7</sup>:

- **Research:** “identify, evaluate, document, register, and establish other basic information about cultural resources;”
- **Planning:** “ensure that this information is well integrated into management processes for making decisions and setting priorities;” and
- **Stewardship:** “planning decisions are carried out and resources are preserved, protected, and interpreted to the public.”<sup>8</sup>

Through the development of this HSR, the research and planning (for treatment and use) of Quarters 1 is addressed. The general preservation philosophy integrated into this HSR is best represented by the following: “Better to preserve than to repair, better repair than restore, better restore than [re]construct. It is ordinarily better to retain genuine old work of several periods, rather than arbitrarily to ‘restore’ the whole, by new work, to its aspect at a single period.”<sup>9</sup> The demolition of a structure listed or eligible for listing on the National Register is allowable “only when all alternatives have been determined infeasible in the planning process.”<sup>10</sup>

Decisions for the future stewardship of Quarters 1 are under the purview of Catoctin Mountain Park. As part of NPS-28 “stewardship focuses on five major activities:

- Control of treatment and use,
- Monitoring conditions of deterioration and structural failure,
- Protecting from human and environmental threats,
- Retaining or delegating responsibility for structures, and
- Developing the skills, knowledge, and attitudes needed to support the program.”<sup>11</sup>

<sup>7</sup> A copy of NPS-28 can be found at [http://www.nps.gov/history/history/online\\_books/nps28/28contents.htm](http://www.nps.gov/history/history/online_books/nps28/28contents.htm).

<sup>8</sup> NPS-28, p. 1.

<sup>9</sup> The Advisory Board on National Parks, Historic Sites, Buildings, and Monuments policy statement (1936). NPS-28, p. 2.

<sup>10</sup> NPS-28, p. 122.

<sup>11</sup> NPS-28, p. 127.

## ***A Call to Action***

In 2011, National Park Service Director, John Jarvis, put forth his vision for NPS employees and partners “to commit to actions that advance the service toward a shared vision for 2016 and our second century.”<sup>12</sup>

Action Item #25, “What’s Old is New,” addresses preservation actions: “Modernize historic preservation methods and technologies, show how historic structures can be made sustainable, and support efforts to rebuild the economic vitality of rural and urban communities by updating the Secretary of the Interior’s Standards and Guidelines for the Treatment of Historic Properties in consultation with historic preservation partners.”

This HSR has determined that Quarters 1 may be rehabilitated and meet the NPS sustainability guidelines, as described in *The Secretary of the Interior’s Standards for Rehabilitation & Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings*, and general historic preservation goals for rehabilitation.

Additionally, creativity and flexibility are encouraged when applying Actions and should not hinder the day-to-day operations of the NPS.

## **International Building Code**

According to The Public Buildings Amendments of 1988, any building constructed or altered by a Federal agency must, “to the maximum extent feasible, be in compliance with one of the nationally recognized model building codes and with other applicable nationally recognized codes.” The International Building Code (IBC) is one of the allowable recognized model building codes.<sup>13</sup>

Treatments of the buildings and site are to be guided by the International Building Code (IBC).<sup>14</sup> Threats to public life, safety, and welfare are to be addressed; however, because Quarters 1 is historic, alternatives to full legislative and code compliance are recommended where compliance would needlessly compromise the integrity of the historic building with the removal of character-defining features or infringement upon the national register characteristics of the site and/or structures.

## **Accessibility**

With no construction activity to initiate changes, it is premature to recommend accessibility design modifications to Quarters 1. Additionally, an accessibility assessment was not included in the scope of work for this project and therefore recommended accessibility treatments will not be provided. However, it should be noted that modifications are likely as property use evolves and rehabilitation work commences. The most appropriate response will take into account scoping and technical

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<sup>12</sup> More information on A Call to Action is located on the NPS website at (<http://www.nps.gov/calltoaction/>).

<sup>13</sup> The General Services Administration had more information on this amendment and other accepted building codes at (<http://www.gsa.gov/portal/content/101288>).

<sup>14</sup> IBC is overseen by the International Code Council. More information is located at <http://www.iccsafe.org/CS/Pages/default.aspx>.

design requirements of the Architectural Barrier Act Accessibility Standards and skillful application of preservation principles to preserve the historic character and historical integrity of this property.<sup>15</sup> Refer to NPS Preservation Brief #32: “Making Historic Properties Accessible” for more information.<sup>16</sup>

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<sup>15</sup> The Architectural Barrier Act Accessibility Standards are under the authorization of the United States Access Board. More information can be found through Access Board’s website (<http://www.access-board.gov/aba/>).

<sup>16</sup> Jester, Thomas C. and Sharon C. Park. “Making Historic Properties Accessible.” Preservation Brief 32. Washington, DC, September 1993. Accessible at (<http://www.nps.gov/hps/tps/briefs/brief32.htm>).

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## Alternatives for Treatment and Use

When evaluating alternative uses and treatments for an historic structure, emphasis is placed on the preservation of the extant historic materials and the resolution of conflicts; especially those that may arise as a result of the mandate to preserve and the necessity for use.

The following treatment and use options have been developed in consultation with park and regional office staff:

### **A) Stabilize and Mothball Interior and Exterior (No Use)**

This option does not provide for the rehabilitation or preservation of the interior or exterior of the buildings nor the removal of non-sympathetic or non-character-defining features. It temporarily stabilizes and mothballs the interior and exterior of buildings until a final treatment and use can be determined.

Recommended treatments for Option A: Stabilization (No Use) are included in Table 3 below (more details are discussed in the Recommended Treatments for Ultimate Preferred Use: Option D). Some stabilization treatment tasks will contribute to the permanent long-term preservation of Quarters 1. Others are temporary in nature and will be replaced with more substantial or permanent materials during the rehabilitation process. This normally follows the stabilization and mothball treatment stage by several years.

The use of temporary window louvers is a common strategy employed in stabilization projects. Passive air movement reduces the damaging effects of water infiltration in an unheated building and also reduces the effects of mold and mildew. Additionally, all active systems would be powered off. For more information, see NPS Preservation Brief #31: “Mothballing Historic Structures” and Preservation Tech Note, Windows #10: “Temporary Window Vents in Unoccupied Historic Buildings.”<sup>17</sup>

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<sup>17</sup> Preservation Briefs can be accessed through this NPS website: <http://www.nps.gov/tps/how-to-preserve/briefs.htm>.  
Preservation Tech Notes can be accessed through this NPS website: <http://www.nps.gov/tps/how-to-preserve/tech-notes.htm>.

| <b>Table 3. Recommended Treatments for Option A: Stabilization (No Use)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>A10 Foundations</i>                                                      | <ul style="list-style-type: none"> <li>• Provide ventilation and dehumidification in basement.</li> <li>• Install a sump pump, pit, and drain line.</li> <li>• Remove vegetative debris from around and/or covering slab foundations (sun porch and breezeway) and clean.</li> </ul>                                                                                                                                                                                                                                                                                                                        |
| <i>B20 Exterior Closure</i>                                                 | <ul style="list-style-type: none"> <li>• Install temporary wood window vents to select basement, first-floor, and second-floor windows for ventilation purposes.</li> <li>• Repair exterior louvers and/or screens, as necessary.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                |
| <i>B30 Roofing</i>                                                          | <ul style="list-style-type: none"> <li>• Install downspout extenders to carry roof runoff at least 10'-0" from all exterior perimeter walls.</li> <li>• Quarterly maintenance to include cleaning of gutters and flushing of downspouts.</li> <li>• Repair extant cedar-shake roofs <b>OR</b> remove cedar-shake roofs and replace with temporary fiberglass shingle roof.</li> <li>• Repair and/or replace flashing and roof penetrations when replacing roof coverings.</li> <li>• Install a custom-fitted, vented, and screened sheet metal chimney cap over both flues of the stone chimney.</li> </ul> |
| <i>C10 Interior Construction</i>                                            | <ul style="list-style-type: none"> <li>• Remove basement shelving and treat mold and/or moisture issues.</li> <li>• Remove non-historic interior doors to allow for better interior air circulation.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                             |
| <i>C30 Interior Finishes</i>                                                | <ul style="list-style-type: none"> <li>• Remove basement gypsum wallboard and treat mold and/or moisture issues.</li> <li>• Remove basement faux-wood paneling and treat mold and/or moisture issues.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                            |
| <i>D30 HVAC</i>                                                             | <ul style="list-style-type: none"> <li>• Power off the HVAC system.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <i>D40 Fire Protection</i>                                                  | <ul style="list-style-type: none"> <li>• Distribute fire extinguishers throughout buildings.</li> <li>• Park Law Enforcement rangers to monitor buildings.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <i>D50 Electrical</i>                                                       | <ul style="list-style-type: none"> <li>• Install a demountable UL-rated lightning protection system.</li> <li>• Power off electrical system.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <i>G20 Site Improvements</i>                                                | <ul style="list-style-type: none"> <li>• Trim overhanging branches within 12'-0" of the buildings.</li> <li>• Clean, repoint, and stabilize exterior stone retaining walls and stone grill.</li> <li>• Remove vegetative debris from paved parking areas.</li> <li>• Keep all pedestrian paving clean and in good condition.</li> </ul>                                                                                                                                                                                                                                                                     |
| <i>G90 Building Site Drainage</i>                                           | <ul style="list-style-type: none"> <li>• Regrade areas immediately around buildings to avoid neutral and negative drainage.</li> <li>• Remove basement window screens and replace temporarily with Plexiglas with side vents.</li> <li>• Remove foundation plantings within 3'-0" of the buildings.</li> </ul>                                                                                                                                                                                                                                                                                              |

## **B) Exterior Preservation Only (No Use)**

This alternative does not provide for the rehabilitation of the interior of the building nor the removal of non-sympathetic or non-character-defining features. It provides rudimentary building services for maintenance purposes only and retains the building in its current condition as a scene-setter for Catoctin Mountain Park's cultural landscape. It also mitigates all extant asbestos.

Recommended treatments for Option B: Exterior Preservation (No Use) are included in Table 4 below (more details are discussed in the Recommended Treatments for the Preferred Use: Option D).

| <b>Table 4. Recommended Treatments for Option B: Exterior Preservation (No Use)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>A10 Foundations</i>                                                              | <ul style="list-style-type: none"> <li>• Provide ventilation and dehumidification in basement.</li> <li>• Install a sump pump, pit, and drain line.</li> <li>• Remove vegetative debris from around and/or covering slab foundations (sun porch and breezeway) and clean.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                  |
| <i>B20 Exterior Closure</i>                                                         | <ul style="list-style-type: none"> <li>• Preserve basement windows using traditional practices.</li> <li>• Repair exterior louvers and/or screens, as necessary.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <i>B30 Roofing</i>                                                                  | <ul style="list-style-type: none"> <li>• Investigate underground drain lines; clean, scope, map, and reline, repair, and replace, as necessary.</li> <li>• Perform roof drainage calculations</li> <li>• Quarterly maintenance to include cleaning of gutters and flushing of downspouts.</li> <li>• Repair extant cedar-shake roofs OR remove cedar-shake roofs and replace with temporary fiberglass shingle roof.</li> <li>• Repair and/or replace flashing and roof penetrations when replacing roof coverings.</li> <li>• Install a custom-fitted, vented, and screened sheet metal chimney cap over both flues of the stone chimney.</li> </ul> |
| <i>C10 Interior Construction</i>                                                    | <ul style="list-style-type: none"> <li>• Remove basement shelving and treat mold and/or moisture issues.</li> <li>• Remove non-historic interior doors to allow for better interior air circulation.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <i>C30 Interior Finishes</i>                                                        | <ul style="list-style-type: none"> <li>• Remove basement gypsum wallboard and treat mold and/or moisture issues.</li> <li>• Remove basement faux-wood paneling and treat mold and/or moisture issues.</li> <li>• Abate asbestos-containing masonry seam sealant from between stone chimney and wood and batten walls in the sun porch by professionals trained in safely handling asbestos materials.</li> <li>• Abate asbestos-containing basement vinyl-floor tiles by professional trained in safely handling asbestos materials.</li> </ul>                                                                                                       |
| <i>D30 HVAC</i>                                                                     | <ul style="list-style-type: none"> <li>• Inspect HVAC system using a certified mechanical contractor; perform needed repairs.</li> <li>• Clean and disinfect ducts; replace filters regularly.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <i>D40 Fire Protection</i>                                                          | <ul style="list-style-type: none"> <li>• Distribute fire extinguishers throughout buildings.</li> <li>• Park Law Enforcement rangers to monitor buildings.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <i>D50 Electrical</i>                                                               | <ul style="list-style-type: none"> <li>• Install a demountable UL-rated lightning protection system.</li> <li>• Install a demountable fire alarm system.</li> <li>• Inspect electrical system using a certified electrical inspector; perform needed repairs.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                              |
| <i>G20 Site Improvements</i>                                                        | <ul style="list-style-type: none"> <li>• Trim overhanging branches within 12'-0" of the buildings.</li> <li>• Clean, repoint, and stabilize exterior stone retaining walls and stone grill.</li> <li>• Remove vegetative debris from paved parking areas.</li> <li>• Keep all pedestrian paving clean and in good condition.</li> </ul>                                                                                                                                                                                                                                                                                                               |
| <i>G90 Building Site Drainage</i>                                                   | <ul style="list-style-type: none"> <li>• Regrade areas immediately around buildings to avoid neutral and negative drainage.</li> <li>• Remove basement window screens and replace temporarily with Plexiglas with side vents.</li> <li>• Remove foundation plantings within 3'-0" of the buildings.</li> </ul>                                                                                                                                                                                                                                                                                                                                        |

### C) Exterior Preservation and Interior Rehabilitation (Research Center & Archival Storage)

This methodology consists of the continued preservation maintenance of the exterior of the structure. It does not address the removal of non-sympathetic or non-character-defining features that are outside the period of significance (after construction date of 1948).

Upgrades to the interior would prepare the spaces for archival storage by the park, friends' group, or other independent renter). This could include multiple HVAC zones, the installation of a high-end ventilation and filtration system, structural reinforcement for increased archival loads, removal of kitchen and bathroom, closure of the fireplaces, etc.

Recommended treatments for Option C: Exterior Preservation and Interior Rehabilitation (Research Center & Archival Storage) are included in Table 5 below (more details are discussed in the Recommended Treatments for the Preferred Use: Option D).

| <i>Table 5. Recommended Treatments for Option C: Exterior Preservation and Interior Rehabilitation (Research Center &amp; Archival Storage)</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>A10 Foundations</i>                                                                                                                          | <ul style="list-style-type: none"> <li>• Provide ventilation and dehumidification in basement.</li> <li>• Install a sump pump, pit, and drain line.</li> <li>• Investigate the extent of underground foundation and building drains; repair/reconstruct as necessary.</li> <li>• Apply waterproofing membrane to exterior of foundation walls <b>OR</b> install "ground roof system."</li> <li>• Investigate underground basement floor drain lines; clean, scope, map, and reline, repair, and replace, as necessary.</li> <li>• Remove vegetative debris from around and/or covering slab foundations (sun porch and breezeway) and clean.</li> </ul>                                       |
| <i>B10 Superstructure</i>                                                                                                                       | <ul style="list-style-type: none"> <li>• Determine load-carrying capacity of floor systems in each room of building.</li> <li>• Determine placement of fixed-point loads (archival storage) based on load map of floor systems.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <i>B20 Exterior Closure</i>                                                                                                                     | <ul style="list-style-type: none"> <li>• Prepare a detailed basement window schedule.</li> <li>• Preserve basement windows using traditional practices.</li> <li>• Repair exterior louvers and/or screens, as necessary.</li> <li>• Clean brick exterior walls.</li> <li>• Clean vinyl-sided exterior walls.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                       |
| <i>B30 Roofing</i>                                                                                                                              | <ul style="list-style-type: none"> <li>• Investigate underground drain lines; clean, scope, map, and reline, repair, and replace, as necessary.</li> <li>• Perform roof drainage calculations to upgrade roof drainage system.</li> <li>• Quarterly maintenance to include cleaning of gutters and flushing of downspouts.</li> <li>• Repair extant cedar-shake roofs <b>OR</b> remove cedar-shake roofs and replace with temporary fiberglass shingle roof.</li> <li>• Repair and/or replace flashing and roof penetrations when replacing roof coverings.</li> <li>• Install a custom-fitted, vented, and screened sheet metal chimney cap over both flues of the stone chimney.</li> </ul> |

(Table 5 continued)

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>C10 Interior Construction</i>  | <ul style="list-style-type: none"> <li>• Remove basement shelving and treat mold and/or moisture issues.</li> <li>• Remove non-historic interior doors to allow for better interior air circulation.</li> <li>• Remove fireplace insert and close fireplace opening without hindering historic materials.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <i>C20 Stairs</i>                 | <ul style="list-style-type: none"> <li>• Remove all carpet from stairs.</li> <li>• Refinish wood interior stairs with a Tung-oil-based product.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <i>C30 Interior Finishes</i>      | <ul style="list-style-type: none"> <li>• Remove basement gypsum wallboard and treat mold and/or moisture issues.</li> <li>• Remove basement faux-wood paneling and treat mold and/or moisture issues.</li> <li>• Abate asbestos-containing masonry seam sealant from between stone chimney and wood and batten walls in the sun porch by professionals trained in safely handling asbestos materials.</li> <li>• Abate asbestos-containing basement vinyl-floor tiles by professional trained in safely handling asbestos materials.</li> <li>• Remove all carpet from Quarters 1.</li> <li>• Refinish all wood floors with a Tung-oil-based product.</li> <li>• Scrape peeling paint on basement walls; monitor rising damp efflorescence.</li> <li>• Remove acoustical ceiling tiles and suspension system.</li> </ul> |
| <i>D20 Plumbing</i>               | <ul style="list-style-type: none"> <li>• Survey plumbing system using a registered plumber; perform needed repairs.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <i>D30 HVAC</i>                   | <ul style="list-style-type: none"> <li>• Inspect HVAC system using a certified mechanical contractor; perform needed repairs.</li> <li>• Clean and disinfect ducts; replace filters regularly.</li> <li>• Remove mini-split systems; redesign overall HVAC system of buildings.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <i>D40 Fire Protection</i>        | <ul style="list-style-type: none"> <li>• Distribute fire extinguishers throughout buildings.</li> <li>• Keep battery-operated smoke and carbon monoxide detectors in good working order; include hardwired –backup system.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <i>D50 Electrical</i>             | <ul style="list-style-type: none"> <li>• Install a demountable UL-rated lightning protection system.</li> <li>• Install a permanent fire alarm system.</li> <li>• Install a permanent security system.</li> <li>• Install an emergency lighting &amp; power system, if necessary.</li> <li>• Inspect electrical system using a certified electrical inspector; perform needed repairs.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <i>G20 Site Improvements</i>      | <ul style="list-style-type: none"> <li>• Trim overhanging branches within 12'-0" of the buildings.</li> <li>• Clean, repoint, and stabilize exterior stone retaining walls and stone grill.</li> <li>• Remove vegetative debris from paved parking areas.</li> <li>• Keep all pedestrian paving clean and in good condition.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <i>G90 Building Site Drainage</i> | <ul style="list-style-type: none"> <li>• Regrade areas immediately around buildings to avoid neutral and negative drainage.</li> <li>• Remove basement window screens.</li> <li>• Reconstruct horizontal concrete bottom of basement windows to include a drain; install metal grate above</li> <li>• <b>OPTION:</b> Install a "ground roof system."</li> <li>• Remove foundation plantings within 3'-0" of the buildings.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                    |

**D) Interior and Exterior Rehabilitation (Residential Use)**

This treatment consists of the exterior rehabilitation of Quarters 1 through the removal of late-twentieth-century additions. It returns the building to its appearance in ca. 1948, when it was constructed. Documentation of the exterior appearance of the building to the period of significance is reflected in several historic photographs taken in ca. 1950. This is the preferred (recommended) ultimate treatment.

This treatment accommodates park use of the building interior and would prepare the spaces for use as housing or other compatible use, e.g. gallery space or education center (either by the park, friends' group, or other independent renter). This is the preferred (recommended) ultimate use.

Recommended treatments for Option D: Interior and Exterior Rehabilitation (Residential Use) are included in the Recommended Treatments for the Preferred Use section on p. 237.

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## Preferred Ultimate Treatment and Use

Quarters 1 has been used as a residence from the time it was constructed in 1947 through the present, though periodic vacancies can be noted. The buildings have been vacant since July 2009.<sup>18</sup>

Because there are no funded and/or active projects occurring at Quarters 1 presently, the ultimate treatment and use recommendations provided are meant to guide the ultimate treatment and do not provide a construction or architectural program. The identification of resource impacts should be fully assessed once a construction or architectural program is finalized.

Considering the applicable laws, agreements, and policies discussed above, the Preferred Ultimate Treatment of Quarters 1 is as follows:

- *Exterior Rehabilitation* with removal of non-sympathetic modern accretions and retention and preservation of character-defining features important to the original design and construction of the building, ca. 1947.
- *Interior Rehabilitation* with removal of non-character-defining finishes and features and the preservation of character-defining features.

Also considering the applicable laws, agreements, and policies discussed above, the Preferred Ultimate Use of Quarters 1 is to continue its use as park housing or other administrative use (gallery or education center). This option would require the least amount of rehabilitation work requiring adverse affects on historic character.

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<sup>18</sup> Martin, Lily, Administrative Support Assistant, Catoctin Mountain Park. Email message to Scott Bell, Chief, Resource Management, Catoctin Mountain Park. October 19, 2012.

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## Recommended Treatments by Feature

The following recommended treatments (Preferred Option D) are intended to repair, maintain, and preserve with the least degree of intervention Quarters 1 and its character-defining features while elevating its Facility Condition Index Rankings to “GOOD.” These treatments include limited replacement in-kind as defined by *The Secretary of the Interior’s Standards for the Treatment of Historic Properties*.

Quarters 1 retains a moderate level of historic integrity and exterior rehabilitation to 1947 and interior rehabilitations for continued use as park housing are the recommended ultimate treatment and use.

The rehabilitation of the interior and the exterior must conform to the guidance and mandates put forth by the National Historic Preservation Act (Section 106, Section 110, and ACHP), Executive Order No. 13006, the *Secretary of the Interior’s Standards for Historic Preservation Projects*, NPS-28 *Cultural Resource Management Guideline*, the International Building Code, and the Architectural Barrier Act Accessibility Standards.

Quarters 1 was found to be in generally fair condition with minor maintenance deficiencies; there are, of course, certain features in poor condition with serious deficiencies just as there are features in good condition with minor deficiencies. Many of the changes to the buildings, including the covering up to total removal of character-defining features, were done in the last twenty-five years. The time is approaching for certain repairs, as these features reach the end of their service lives, including major component replacement tasks (roofing, fire protection, and site drainage) and periodic housekeeping based on an overall comprehensive analysis and condition assessment of the site and structures.

The following recommended treatments are placed in priority order of the building features with the highest level of maintenance deficiency (Table 6). The list starts with ratings of POOR and CRITICAL and continues through to GOOD and MINOR and presents a path to obtaining a good condition and lessening of the maintenance burden.

The hierarchal list divides the recommended treatments into three basic groupings based on the overall maintenance deficiency ratings of CRITICAL, SERIOUS, or POOR. Within these basic groupings, each item is ordered by its overall condition ratings of POOR, FAIR, and GOOD.

The assessment of Quarters 1 determined that several critical features were found to be in a state of moderate deterioration (rated POOR); this indicates these features may need to be repaired or replaced. This type of maintenance activity (repairing) is recognized within the definition of preservation maintenance. Other recently improved features were noted with moderate- to low-levels of deterioration (rated FAIR or GOOD) and should be repaired and maintained using traditional preservation techniques rather than replaced. Other features were found to be in good condition (rated GOOD) and should continue to be maintained and cleaned when necessary.

Utility systems (building services) vary from being unused or even “turned off” to requiring periodic servicing to needing system inspections to ensure proper working condition. Building systems are observed as part of the assessment walkthrough, but are not assessed for code compliance and were not included as part of the scope of work for the building investigation and assessment project.

Consideration should be given to the removal of non-character-defining features and building components that are not sympathetic to the overall appearance of the Quarters 1.

Because there are no funded and/or planned projects occurring at Quarters 1 presently, the treatment recommendations provided are meant to guide the ultimate treatment and do not provide a construction or architectural program for rehabilitation. The identification of resource impacts should be fully addressed once a comprehensive design package for rehabilitation is finalized.

## **Treatment Timeframes**

As part of the planning process required by NPS-28, the recommended treatments for each feature have been divided into different timeframes. The “Immediate” timeframe is for features that must be repaired or replaced in the next one to three years, and are often the items which are in the worst condition (poor and critical). The “Short-Term” timeframe is for features which should be addressed in the next three to five years and are likely the items which are in moderate condition (fair and serious). Features found to be in good condition with a maintenance deficiency of minor have been categorized in the “Long-Term” timeframe. Typically these features currently require routine maintenance to maintain their current condition employing preventative maintenance methodologies but there is a reduced life expectancy within the five to ten year period and beyond.

In addition to the about-listed timeframes, certain building features require treatment within one year of this report. They are listed in the following section: Emergency Operational Recommendations.

## **Emergency Operational Recommendations**

Plans should be made to institute an emergency operational treatment plan as soon as possible. The items which should be initiated at once, i.e. Timeframe: *Emergency (within 1 year)*, include:

- A101001-1 Basement Foundation Walls:

The interior of the basement should be monitored for water infiltration and some ventilation and/or dehumidification should be provided. Coordination of exterior drainage is vital to keep water away from the walls. See G9087 Overall Building Site Drainage and B301005 Roof Drainage Systems for more information.

A sump pump, pit, and drain line should be installed. The pit should be drained out through extant working drain lines or temporarily through a hose line at floor level to the exterior drainage system, and daylight at least 3’-0” from the exterior building perimeter.

- **G2050 Maintained Landscape:**

Overhanging branches within twelve feet of structure should be trimmed away from the roof to prevent leaves, small branches, and other debris from building up and keeping the roof damp.

The emergency operational recommendations are also included under the Unifomat II layout (see page 51) by condition and deficiency rating in the Recommended Treatments for Quarters 1 section below. Additionally, these emergency treatments will contribute to the permanent long-term preservation of the buildings, but are necessary now in order to protect the features themselves and surrounding features.

Recommended treatments for items with an urgent need (Timeframe: Immediate (1-3 years)), less urgent need (Timeframe: Short-Term (3-5 years)), and minor need (Timeframe: Long-Term (5-10 years)), as described above are included under the Unifomat II layout by condition and deficiency rating in the **Recommended Treatments for Quarters 1** section below.

## General Building Security

In the event the overall rehabilitation is delayed beyond six months of the final submission of this report, the following general recommendations for building security should also be considered as part of the Emergency Operation Treatments.

Although not addressed specifically as part of the assessment, general building security is an important point to consider in the emergency or long-term care of structures. Any building not in active use is considered mothballed (a type of preservation)<sup>19</sup> and should also be stabilized. The following preliminary recommendations are offered:

- To give the building a more lived-in look attention should be paid to the appearance of the interior window treatments from the exterior. All interior window treatments, in this case interior blinds, should be in working order and kept in a position that allows light into the building but discourages unwarranted entry; or uncover first-floor windows, install ventilation louvers, etc.
- Several interior lights should be placed on seven-day timers to alternate lighting pattern after dark. This is especially true in winter when days are shorter and a dark building suggests an unoccupied building.
- Exterior motion-sensitive security lighting set on a daylight-sensing device will also assist in the deterrence of vandalism and breaking and entry attempts. Such devices should not be mounted directly to the building but placed on light poles or in nearby trees; all wiring should be protected and tamper resistant.

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<sup>19</sup> Park, Sharon C. "Mothballing Historic Buildings." Preservation Brief 31. National Park Service, Washington, DC, September 1993.

| Table 6. Quarters 1 Prioritized Treatment List (Preferred Option D) |                             |                                                                        |                                     |                                                            |                  |                   |
|---------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------|------------------|-------------------|
| Major Group Element                                                 | Group Element               | Individual Element                                                     | Specific Element                    | Sub-Element                                                | Condition Rating | Deficiency Rating |
| CRITICAL                                                            |                             |                                                                        |                                     |                                                            |                  |                   |
| D Services                                                          | D50 Electrical              | D5090 Other Elect. Systems                                             | D509004 Lightning Protection System |                                                            | Poor             | Critical          |
| D Services                                                          | D50 Electrical              | D5030 Comm. & Security                                                 | D503001 Fire Alarm System           |                                                            | Poor             | Critical          |
| D Services                                                          | D40 Fire Protection Systems | D4030 Fire Protection Specialties                                      | D403001 Fire Extinguishing Devices  |                                                            | Poor             | Critical          |
| D Services                                                          | D40 Fire Protection Systems | D4090 Other Fire Protection Systems – Battery-Operated Smoke Detectors |                                     |                                                            | Poor             | Critical          |
| G Building Sitework                                                 | G90 Other Site Work         | G9087 Overall Building Site Drainage                                   |                                     |                                                            | Poor             | Critical          |
| B Shell                                                             | B30 Roofing                 | B3010 Roof Coverings                                                   | B301005 Gutters & Downspouts        | B301005-1 Gable & Hipped Gutters & Downspouts – Main Block | Poor             | Critical          |
| B Shell                                                             | B30 Roofing                 | B3010 Roof Coverings                                                   | B301005 Gutters & Downspouts        | B301005-2 Rear Dormer Gutters & Downspouts – Main Block    | Poor             | Critical          |
| B Shell                                                             | B30 Roofing                 | B3010 Roof Coverings                                                   | B301005 Gutters & Downspouts        | B301005-3 Eastern Ell Gutters & Downspouts – Main Block    | Poor             | Critical          |
| B Shell                                                             | B30 Roofing                 | B3010 Roof Coverings                                                   | B301005 Gutters & Downspouts        | B301005-4 Sun Porch Gutters & Downspouts                   | Poor             | Critical          |
| B Shell                                                             | B30 Roofing                 | B3010 Roof Coverings                                                   | B301005 Gutters & Downspouts        | B301005-5 Breezeway Gutters & Downspouts                   | Poor             | Critical          |
| B Shell                                                             | B30 Roofing                 | B3010 Roof Coverings                                                   | B301005 Gutters & Downspouts        | B301005-6 Garage Gutters & Downspouts                      | Poor             | Critical          |
| SERIOUS                                                             |                             |                                                                        |                                     |                                                            |                  |                   |
| A Sub-structure                                                     | A10 Foundations             | A1010 Std. Foundations                                                 | A101001 Wall Foundations            | A101001-1 Basement Foundation Walls                        | Poor             | Serious           |
| G Building Sitework                                                 | G20 Site Improvements       | G2050 Maintained Landscape                                             |                                     |                                                            | Poor             | Serious           |
| C Interiors                                                         | C30 Interior Finishes       | C3010 Wall Finishes                                                    | C301003 Gypsum Wallboard Finishes   |                                                            | Poor             | Serious           |
| C Interiors                                                         | C30 Interior Finishes       | C3010 Wall Finishes                                                    | C301099 Other Wall Finishes         | C301099-1 Faux-Wood Wall Paneling                          | Poor             | Serious           |
| B Shell                                                             | B30 Roofing                 | B3010 Roof Coverings                                                   | B301001 Roof Finishes               | B301001-1 Gable & Hipped Roof Finishes                     | Poor             | Serious           |
| B Shell                                                             | B30 Roofing                 | B3010 Roof Coverings                                                   | B301001 Roof Finishes               | B301001-2 Front Dormer Gable Roof Finishes – Main Block    | Poor             | Serious           |
| B Shell                                                             | B30 Roofing                 | B3010 Roof Coverings                                                   | B301001 Roof Finishes               | B301001-4 Eastern Ell Gable Roof Finishes – Main Block     | Poor             | Serious           |
| B Shell                                                             | B30 Roofing                 | B3010 Roof Coverings                                                   | B301001 Roof Finishes               | B301001-5 Sun Porch Gable Roof Finishes                    | Poor             | Serious           |
| B Shell                                                             | B30 Roofing                 | B3010 Roof Coverings                                                   | B301001 Roof Finishes               | B301001-6 Breezeway Shed & Gable Roof Finishes             | Poor             | Serious           |
| B Shell                                                             | B30 Roofing                 | B3010 Roof Coverings                                                   | B301001 Roof Finishes               | B301001-7 Garage Gable Roof Finishes                       | Poor             | Serious           |

(Table 3 continued)

| Major Group Element | Group Element             | Individual Element             | Specific Element                          | Sub-Element                                  | Condition Rating | Deficiency Rating |
|---------------------|---------------------------|--------------------------------|-------------------------------------------|----------------------------------------------|------------------|-------------------|
| B Shell             | B30 Roofing               | B3020 Roof Openings            | B302001 Roof Openings & Supports          | B302001-1 Masonry Chimneys (Above Roof Line) | Poor             | Serious           |
| D Services          | D50 Electrical            | D5030 Comm. & Security         | D503008 Security System                   |                                              | Poor             | Serious           |
| C Interiors         | C30 Interior Finishes     | C3010 Wall Finishes            | C301099 Other Wall Finishes               | C301099-2 Wood Board & Batten Wall Surfaces  | Poor             | Serious           |
| D Services          | D50 Electrical            | D5090 Other Elect. Systems     | D509002 Emergency Lighting & Power System |                                              | Poor             | Serious           |
| B Shell             | B20 Exterior Enclosure    | B2020 Exterior Windows         | B2020-1 Basement Windows – Main Block     |                                              | Fair             | Serious           |
| MINOR               |                           |                                |                                           |                                              |                  |                   |
| C Interiors         | C10 Interior Construction | C1030 Fittings                 | C103006 Shelving - Basement               |                                              | Poor             | Minor             |
| G Building Sitework | G20 Site Improvements     | G2040 Site Development         | G204002 Retaining Walls                   |                                              | Poor             | Minor             |
| A Sub-structure     | A10 Foundations           | A1030 Slab On Grade            | A103001 Standard Slab On Grade            | A103001-1 Main Block Basement Slab           | Fair             | Minor             |
| A Sub-structure     | A10 Foundations           | A1030 Slab On Grade            | A103001 Standard Slab On Grade            | A103001-2 Sun Porch Slab                     | Fair             | Minor             |
| A Sub-structure     | A10 Foundations           | A1030 Slab On Grade            | A103001 Std Slab On Grade                 | A103001-3 Breezeway Slab                     | Fair             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2010 Exterior Walls           | B201005 Exterior Louvers & Screens        |                                              | Fair             | Minor             |
| G Building Sitework | G20 Site Improvements     | G2020 Parking Areas            |                                           |                                              | Fair             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2010 Exterior Walls           | B201001 Exterior Skin                     | B201001-2 Brick Walls – Main Block           | Fair             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2010 Exterior Walls           | B201001 Exterior Skin                     | B201001-3 Frame Walls – Main Block           | Fair             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2010 Exterior Walls           | B201001 Exterior Skin                     | B201001-6 Frame Walls – Garage               | Fair             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2010 Exterior Walls           | B201001 Exterior Skin                     | B201001-4 Frame Walls – Sun Porch            | Fair             | Minor             |
| C Interiors         | C10 Interior Construction | C1020 Interior Doors           |                                           |                                              | Fair             | Minor             |
| D Services          | D30 HVAC                  | D3000 Heating & Cooling System |                                           |                                              | Fair             | Minor             |
| G Building Sitework | G20 Site Improvements     | G2040 Site Development         | G204001 Fencing & Gates                   |                                              | Fair             | Minor             |
| C Interiors         | C30 Interior Finishes     | C3020 Floor Finishes           | C302004 Resilient Flooring                |                                              | Fair             | Minor             |
| C Interiors         | C30 Interior Finishes     | C3020 Floor Finishes           | C302003 Wood Flooring                     |                                              | Fair             | Minor             |
| C Interiors         | C30 Interior Finishes     | C3010 Wall Finishes            | C301005 Painted Wall Finishes             |                                              | Fair             | Minor             |
| C Interiors         | C10 Interior Construction | C1030 Fittings                 | C103008 Counters - Kitchen                |                                              | Fair             | Minor             |
| C Interiors         | C10 Interior Construction | C1030 Fittings                 | C103009 Cabinets – Kitchen                |                                              | Fair             | Minor             |
| C Interiors         | C10 Interior Construction | C1030 Fittings                 | C103098 Other Casework – Fireplaces       |                                              | Fair             | Minor             |
| C Interiors         | C30 Interior Finishes     | C3010 Wall Finishes            | C301004 Tile Wall Finishes                |                                              | Fair             | Minor             |

(Table 3 continued)

| Major Group Element | Group Element             | Individual Element                      | Specific Element                                                   | Sub-Element                                                     | Condition Rating | Deficiency Rating |
|---------------------|---------------------------|-----------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------|------------------|-------------------|
| C Interiors         | C30 Interior Finishes     | C3020 Floor Finishes                    | C302005 Carpeting                                                  |                                                                 | Fair             | Minor             |
| C Interiors         | C30 Interior Finishes     | C3030 Ceiling Finishes                  | C303004 Acoustical Ceiling Tiles & Panels                          |                                                                 | Fair             | Minor             |
| C Interiors         | C30 Interior Finishes     | C3030 Ceiling Finishes                  | C303007 Suspension Systems                                         |                                                                 | Fair             | Minor             |
| A Sub-structure     | A10 Foundations           | A1010 Std. Foundations                  | A101001 Wall Foundations                                           | A101001-2 Sun Porch & Vestibule Foundations                     | Fair             | Minor             |
| A Sub-structure     | A10 Foundations           | A1010 Std. Foundations                  | A101001 Wall Foundations                                           | A101001-3 Ext. Stair Foundation Walls                           | Fair             | Minor             |
| A Sub-structure     | A10 Foundations           | A1010 Std. Foundations                  | A101001 Wall Foundations                                           | A101001-4 Breezeway Foundation                                  | Fair             | Minor             |
| A Sub-structure     | A10 Foundations           | A1010 Std. Foundations                  | A101001 Wall Foundations                                           | A101001-5 Garage Foundation                                     | Fair             | Minor             |
| A Sub-structure     | A10 Foundations           | A1030 Slab On Grade                     | A103001 Std. Slab On Grade                                         | A103001-4 Garage Slab                                           | Fair             | Minor             |
| C Interiors         | C10 Interior Construction | C1030 Fittings                          | C103099 Other Interior Specialties – Molding & Trim                |                                                                 | Fair             | Minor             |
| G Building Sitework | G20 Site Improvements     | G2030 Pedestrian Paving (Sidewalks)     |                                                                    |                                                                 | Fair             | Minor             |
| G Building Sitework | G20 Site Improvements     | G2040 Site Development                  | G204003 Exterior Furnishings – Stone Grill                         |                                                                 | Fair             | Minor             |
| D Services          | D50 Electrical            | D5010 Electrical Service & Distribution | D501005 Panels                                                     |                                                                 | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2010 Exterior Walls                    | B201008 Exterior Soffits                                           | B201008-1 Ext. Soffits, Eaves & Cornices – Main Block           | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2010 Exterior Walls                    | B201008 Exterior Soffits                                           | B201008-2 Ext. Soffits, Eaves & Cornices – Sun Porch            | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2010 Exterior Walls                    | B201008 Exterior Soffits                                           | B201008-3 Ext. Soffits, Eaves & Cornices – Breezeway            | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2010 Exterior Walls                    | B201008 Exterior Soffits                                           | B201008-4 Ext. Soffits, Eaves & Cornices – Garage               | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2020 Exterior Windows                  | B2020-2 1 <sup>st</sup> & 2 <sup>nd</sup> Fl. Windows – Main Block |                                                                 | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2020 Exterior Windows                  | B2020-3 Windows – Sun Porch                                        |                                                                 | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2020 Exterior Windows                  | B2020-4 Windows - Exterior Stair Enclosure                         |                                                                 | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2030 Exterior Doors                    | B2030-1 Exterior Doors                                             |                                                                 | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2030 Exterior Doors                    | B2030-2 Exterior Storm Doors                                       |                                                                 | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure    | B2030 Exterior Doors                    | B203004 Overhead Doors                                             |                                                                 | Good             | Minor             |
| C Interiors         | C20 Stairs                | C2010 Stair Construction                | C201001 Interior Stair Structure & Finishes                        |                                                                 | Good             | Minor             |
| B Shell             | B10 Super-structure       | B1010 Floor Construction                | B101001 Structural Frame                                           | B101001-1 1 <sup>st</sup> Fl. Structural Floor Frame–Main Block | Good             | Minor             |

(Table 3 continued)

| Major Group Element | Group Element          | Individual Element       | Specific Element                  | Sub-Element                                                     | Condition Rating | Deficiency Rating |
|---------------------|------------------------|--------------------------|-----------------------------------|-----------------------------------------------------------------|------------------|-------------------|
| B Shell             | B10 Super-structure    | B1010 Floor Construction | B101001 Structural Frame          | B101001-2 2 <sup>nd</sup> Fl. Structural Floor Frame–Main Block | Good             | Minor             |
| B Shell             | B10 Super-structure    | B1010 Floor Construction | B101001 Structural Frame          | B101001-3 Sun Porch Attic Floor Structural Floor Frame          | Good             | Minor             |
| B Shell             | B10 Super-structure    | B1010 Floor Construction | B101001 Structural Frame          | B101001-4 Garage Attic Floor Structural Frame                   | Good             | Minor             |
| B Shell             | B10 Super-structure    | B1010 Floor Construction | B101002 Structural Interior Walls | B101002-1 1 <sup>st</sup> Fl. Structural Interior Walls         | Good             | Minor             |
| B Shell             | B10 Super-structure    | B1010 Floor Construction | B101002 Structural Interior Walls | B101002-2 2 <sup>nd</sup> Fl. Structural Interior Walls         | Good             | Minor             |
| B Shell             | B10 Super-structure    | B1020 Roof Construction  | B102001 Structural Frame          | B102001-1 Gable & Hipped Roof Frame–Main Block                  | Good             | Minor             |
| B Shell             | B10 Super-structure    | B1020 Roof Construction  | B102001 Structural Frame          | B102001-2 Front Dormer Gable Roof Frames – Main Block           | Good             | Minor             |
| B Shell             | B10 Super-structure    | B1020 Roof Construction  | B102001 Structural Frame          | B102001-3 Rear Dormer Shed Roof Frame–Main Block                | Good             | Minor             |
| B Shell             | B10 Super-structure    | B1020 Roof Construction  | B102001 Structural Frame          | B102001-4 Rear Ell Gable Roof Frame – Main Block                | Good             | Minor             |
| B Shell             | B10 Super-structure    | B1020 Roof Construction  | B102001 Structural Frame          | B102001-5 Sun Porch Gable Roof Frame                            | Good             | Minor             |
| B Shell             | B10 Super-structure    | B1020 Roof Construction  | B102001 Structural Frame          | B102001-6 Breeze-way Shed & Gable Roof Frame                    | Good             | Minor             |
| B Shell             | B10 Super-structure    | B1020 Roof Construction  | B102001 Structural Frame          | B102001-7 Garage Gable Roof Frame                               | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure | B2010 Exterior Walls     | B201001 Exterior Skin             | B201001-1 Stone Walls – Main Block                              | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure | B2010 Exterior Walls     | B201001 Exterior Skin             | B201001-5 Stone Walls – Garage                                  | Good             | Minor             |
| B Shell             | B20 Exterior Enclosure | B2020 Exterior Windows   | B2020-5 Windows – Garage          |                                                                 | Good             | Minor             |
| B Shell             | B30 Roofing            | B3010 Roof Coverings     | B301001 Roof Finishes             | B301001-3 Rear Dormer Shed Roof Finishes – Main Block           | Good             | Minor             |
| B Shell             | B30 Roofing            | B3010 Roof Coverings     | B301004 Flashings & Trim          | B301004-1 Dormer Wall Flashing                                  | Good             | Minor             |
| B Shell             | B30 Roofing            | B3010 Roof Coverings     | B301004 Flashings & Trim          | B301004-2 W204 Exterior Flashing                                | Good             | Minor             |
| B Shell             | B30 Roofing            | B3010 Roof Coverings     | B301004 Flashings & Trim          | B301004-3 Breezeway-Side Wall Flashing                          | Good             | Minor             |
| B Shell             | B30 Roofing            | B3010 Roof Coverings     | B301004 Flashings & Trim          | B301004-4 Roof Penetration Flashing                             | Good             | Minor             |

(Table 3 continued)

| Major Group Element  | Group Element             | Individual Element             | Specific Element                            | Sub-Element                                 | Condition Rating | Deficiency Rating |
|----------------------|---------------------------|--------------------------------|---------------------------------------------|---------------------------------------------|------------------|-------------------|
| B Shell              | B30 Roofing               | B3010 Roof Coverings           | B301004 Flashings & Trim                    | B301004-5 Chimney Flashing                  | Good             | Minor             |
| B Shell              | B30 Roofing               | B3020 Roof Openings            | B302001 Roof Openings & Supports            | B302001-2 Roof Penetrations (All Roofs)     | Good             | Minor             |
| C Interiors          | C10 Interior Construction | C1010 Partitions               |                                             |                                             | Good             | Minor             |
| C Interiors          | C20 Stairs                | C2010 Stair Construction       | C201002 Exterior Stair Structure & Finishes |                                             | Good             | Minor             |
| C Interiors          | C30 Interior Finishes     | C3010 Wall Finishes            | C301002 Plaster Wall Finishes               |                                             | Good             | Minor             |
| C Interiors          | C30 Interior Finishes     | C3010 Wall Finishes            | C301099 Other Wall Finishes                 | C301099-3 Wood V-Groove Board Wall Surfaces | Good             | Minor             |
| C Interiors          | C30 Interior Finishes     | C3020 Floor Finishes           | C302001 Tile Floor Finishes                 |                                             | Good             | Minor             |
| C Interiors          | C30 Interior Finishes     | C3030 Ceiling Finishes         | C303002 Plaster Ceiling Finishes            |                                             | Good             | Minor             |
| C Interiors          | C30 Interior Finishes     | C3030 Ceiling Finishes         | C303005 Wood Ceilings                       |                                             | Good             | Minor             |
| C Interiors          | C30 Interior Finishes     | C3030 Ceiling Finishes         | C303006 Painted & Stained Ceilings          |                                             | Good             | Minor             |
| D Services           | D50 Electrical            | F5020 Lighting & Branch Wiring | D502002 Lighting Equipment                  |                                             | Good             | Minor             |
| NOT RATED or UNKNOWN |                           |                                |                                             |                                             |                  |                   |
| D Services           | D20 Plumbing              | D2010 Plumbing Fixtures        | D202001 Water Closets (Toilets)             |                                             | Not Rated        | Not Rated         |
| D Services           | D20 Plumbing              | D2010 Plumbing Fixtures        | D202003 Lavatories (Bathroom Sinks)         |                                             | Not Rated        | Not Rated         |
| D Services           | D20 Plumbing              | D2010 Plumbing Fixtures        | D202004 Sinks – Kitchen & Laundry           |                                             | Not Rated        | Not Rated         |
| D Services           | D20 Plumbing              | D2010 Plumbing Fixtures        | D202005 Showers/Tubs                        |                                             | Not Rated        | Not Rated         |
| A Sub-structure      | A20 Basement Construction | A2020 Basement Walls           | A202003 Basement Wall Insulation            |                                             | Unknown          | Unknown           |
| B Shell              | B20 Exterior Enclosure    | B2010 Exterior Walls           | B201002 Insulation & Vapor Barrier          |                                             | Unknown          | Unknown           |
| B Shell              | B30 Roofing               | B3010 Roof Coverings           | B301003 Roof Insulation & Fill              |                                             | Unknown          | Unknown           |
| End of Table.        |                           |                                |                                             |                                             |                  |                   |

## Quarters 1 Recommended Treatments (Preferred Option D)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|
| D509004 Lightning Protection System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Poor | Critical |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>A permanent UL-rated lightning protection system should be installed. It should be designed to be demounted in the event of future roof replacement or installed concurrent with new roof flashing and roof drainage systems. Design features should include exposed downlead cables and the use of minimally-sized aerial terminals (government points). Attention should be paid to the selection of fasteners for the downlead cables into masonry walls. Penetrations through the roof should not be allowed. Require submittals from installers including layout of installation. Chimneys need a minimum of one point per chimney. Recommended suppliers/installers include Independent Lightning Protection Company, Goshen, IN (<a href="http://ipclp.cpm/html/contact/html">http://ipclp.cpm/html/contact/html</a>).</p> <p>A lightning risk assessment is part of the project evaluation checklist found in DSC Fire Protection Standards for properties undergoing rehabilitation work. Installing lightning protection is consistent with Director's Order #58: "Structural Fire Management", requiring NPS construction to have safeguards assuring life safety design and minimizing the chances of catastrophic loss of property.</p> |      |          |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|
| D503001 Fire Alarm System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Poor | Critical |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>A fire detection and alarm system should be installed. While not mandatory by building code for a property of this type (size, use, and occupancy classifications), a detection and alarm system is consistent with Director's Order #50B: "Occupational Safety and Health Program" and Director's Order #58: "Structural Fire Management", requiring NPS to take measures, deemed necessary, for life-safety protection of occupants during emergencies.</p> <p>The system should be hardwired to the electrical service (minimum of two devices per floor). The local fire marshal, representative from the fire department, Fire Protection Engineer, or technical representative of the Authority Having Jurisdiction (in the National Capital Region, contact the Associate Regional Director for operations and Education for the specific point of contact) should be consulted for recommendations on size, number, type, and placement of smoke/heat detectors. A holistic hard-wired system should be installed with an automated call-out feature connected to a local emergency response agency; this system should meet building codes and have an integrated battery-backup system.</p> |      |          |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|
| D403001 Fire Extinguishing Devices                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Poor | Critical |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>The local fire marshal, representative from the fire department, Fire Protection Engineer, or technical representative of the Authority Having Jurisdiction (in the National Capital Region, contact the Associate Regional Director for operations and Education for the specific point of contact) should be consulted for recommendations on number, size, type, and placement of fire extinguishers. This system should meet building codes and emergency training should be provided to the NPS site staff.</p> |      |          |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|
| D4090 Other Fire Protection Systems – Battery-Operated Smoke Detectors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Poor | Critical |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>The local fire marshal, representative from the fire department, Fire Protection Engineer, technical representative of the Authority Having Jurisdiction (in the National Capital Region, contact the Associate Regional Director for operations and Education for the specific point of contact), or experienced facility manager should be consulted for recommendations on number, size, type, and placement of battery-operated smoke/heat detectors. This system should meet building codes and have an integrated hardwired-backup system.</p> |      |          |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|
| G9087 Overall Building Site Drainage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Poor | Critical |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>Negative drainage toward the building and neutral drainage should be corrected immediately. Minor regrading of soil to create positive surface drainage near (within 12'-0") the building should be completed on all elevations. Every effort should be made to ensure water is running away from the buildings.</p> <p>The modern basement window well coverings should be restructured. The screens should be removed and replaced with Plexiglas to disallow water from entering and being captured within the window well. Vents should be installed in the sides of the covers to allow air to pass through the window well. The new cover will need to be designed.</p> <p>Alternatively, a "ground roof system" may be employed in selected areas.<sup>1</sup> This type of system establishes a barrier to limit the amount of surface water that reaches the foundation wall. Initially all site drainage and roof water discharge issues need to be addressed to verify no additional water is being deployed at the foundation. At the same time, water infiltration issues at the basement foundation walls should be addressed.</p> <p>All foundation plantings within 3'-0" of the building should be removed and replanted outside of that zone. Disturbed soil areas should be filled with compacted clay-soil material.</p> <p>Similar recommendations were included in Stanley Briscoe's October 2009 Leak Analysis Report: "Re-grade ground surface or install swales around the perimeter of the building to divert storm water run-off away from the foundation walls. This includes all planting areas. At the rear of the building install an area drainage system to collect and move water away from this area, to the area that is located on the lower site level at the right end of the structure if you are standing in front of the building."<sup>2</sup></p> <p><u>Timeframe:</u> <i>Short-Term (3-5 years)</i></p> <p>The horizontal bottom concrete surface of the window well should be reconstructed to include a drain which connects to the operable roof drainage and overall building site drainage system.</p> <p>A flat metal grate should be installed on top of the concrete well to deter the accumulation of leaves into the well and ensure building occupant and maintenance staff safety.</p> |      |          |

<sup>1</sup> See "Water in Buildings: An Architect's Guide to Moisture and Mold" by William B. Rose (John Wiley & Sons, 2005) and "Details for a Dry Foundation" by William B. Rose (*Fine Homebuilding*, August-September 1997).

<sup>2</sup> Briscoe, Stanley (Chief, Design Services Division, National Capital Region). "Ranger Quarters #1 Leak Analysis Report." Memorandum to Superintendent, Catocin Mountain Park, National Capital Region. October 16, 2009.

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|
| B301005-1 Gable & Hipped Roof Drainage System – Main Block                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Poor | Critical |
| B301005-2 Rear Dormer Roof Drainage System – Main Block                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Poor | Critical |
| B301005-3 Eastern Ell Roof Drainage System – Main Block                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Poor | Critical |
| B301005-4 Sun Porch Roof Drainage System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Poor | Critical |
| B301005-5 Breezeway Roof Drainage System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Poor | Critical |
| B301005-6 Garage Roof Drainage System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Poor | Critical |
| <p>The roof drainage systems include the building's gutters, downspouts, and underground roof water drainage discharge system.</p> <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>All downspouts should be in working order and should drain into their underground drainage system boots. Underground drain lines should be investigated to determine if they are operable. Cleaning, scoping, and mapping may be accomplished as one task and should be documented. If underground lines are inoperable, they should be relined, repaired, or replaced. Surface runoff from roof drainage is not acceptable.</p> <p>Roof drainage system calculations need to be performed to determine accurate sizes for gutters and downspouts. Gutters and downspouts may need to be replaced if determined under-sized by calculations.</p> <p>Gutters and downspouts require quarterly maintenance, including the cleaning of gutters and the flushing of downspouts.</p> <p>Similar recommendations were included in Stanley Briscoe's October 2009 Leak Analysis Report: "Verify gutters are properly sized for the amount of roof surface that they are receiving water from. If you can measure roof area in square feet, we can assist with checking the proper size of gutter that is required."<sup>3</sup></p> <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>Preservation planning should include the removal of the non-character-defining vinyl and aluminum gutters and downspouts and the installation of metal gutters and downspouts to match those specified in the original design drawings and those seen in archival photographs.</p> |      |          |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------|
| A101001-1 Basement Foundation Walls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Poor | Serious |
| <p>A condition rating of poor and the maintenance deficiency rating were selected for this feature because <u>poor</u> condition indications "a special repair or rehabilitation project should be requested consistent with park requirements, priorities, and long-term management objectives." It is anticipated that the scope of work required to return the building foundation feature to good condition (see pp. 165-166 for definitions) will require special non-park based appropriations; therefore, from a funding and planning point-of-view, <u>poor</u> is the best selection. It should be noted that there are no structural deficiencies with the foundation; the deficiency is strictly related to exterior water management and water resistance of the extant foundation. Exterior water management and foundation waterproofing of some type is the recommended treatment.</p> |      |         |

<sup>3</sup> Ibid.

Timeframe: *Emergency (within 1 year)*

The interior of the basement should be monitored for water infiltration and some ventilation and/or dehumidification should be provided. Coordination of exterior drainage is vital to keep water away from the walls. See G9087 Overall Building Site Drainage and B301005 Roof Drainage Systems for more information.

A sump pump, pit, and drain line should be installed. The pit should be drained out through extant working drain lines or temporarily through a hose line at floor level to the exterior drainage system, and daylight at least 3'-0" from the exterior building perimeter.

Timeframe: *Immediate (1-3 years)*

As part of a comprehensive basement waterproofing project the exterior perimeter should be excavated at selected locations to determine the extent of the underground foundations and building drains. Planning and design of new foundation drainage and waterproofing system allows for funding allocations through PMIS and FMSS systems to be prioritized.

Timeframe: *Short-Term (3-5 years)*

Exterior waterproofing of the foundation walls with a bituminous (or other similar) coating may be required in conjunction with the replacement of the roof drainage system drain lines and the buildings' drains (if any). In some instances, if drain lines are intact, replacing or relining of the drain lines may be successful without excavations through the use of scoping systems.

Ultimately the entire exterior of basement foundation walls may have to be treated with an exterior waterproofing membrane at the foundation level with a new building drainage system integrated into the site drainage system.

Alternatively, a "ground roof system" may be employed in selected areas. See G9087 Overall Building Site Drainage for more information.

| G2050 Maintained Landscape                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Poor | Serious |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------|
| <p><u>Timeframe:</u> <i>Emergency (within 1 year)</i></p> <p>Overhanging branches within twelve feet of structure should be trimmed away from the roof to prevent leaves, small branches, and other debris from building up and keeping the roof damp.</p> <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>Any foundation plantings within 3'-0" of the building should be removed and replanted outside of that zone. The surrounding landscape (including sodded areas and planting beds) should be maintained on a regular basis.</p> <p>A Cultural Landscape Inventory/Report should be commissioned within the next 5 years.</p> |      |         |

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------|
| C301003 Gypsum Wallboard Finishes                                                                                                                                                                                                                                                                                                                                                          | Poor | Serious |
| <p><u>Time frame:</u> <i>Immediate (1-3 years)</i></p> <p>The basement gypsum wallboard should be removed to inspect the wall framing beneath. Mold and moisture issues should be treated.</p> <p>Do not re-install interior wall coverings until ultimate use has been determined for basement areas. Preferred recommended treatment is that no interior wall covering be installed.</p> |      |         |

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------|
| C301099-1 Faux-Wood Wall Paneling                                                                                                                                                                                                                                                                                                                                                                                               | Poor | Serious |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>The non-character-defining basement faux-wood paneling should be removed to inspect the concrete foundation walls beneath. Mold and moisture issues should be treated.</p> <p>Do not re-install interior wall coverings until ultimate use has been determined for basement areas. Preferred recommended treatment is that no interior wall covering be installed.</p> |      |         |

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| B301001-1 Gable & Hipped Roof Finishes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Poor | Serious |
| B301001-2 Front Dormer Gable Roof Finishes – Main Block                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Poor | Serious |
| B301001-4 Eastern Ell Gable Roof Finishes – Main Block                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Poor | Serious |
| B301001-5 Sun Porch Gable Roof Finishes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Poor | Serious |
| B301001-6 Breezeway Shed & Gable Roof Finishes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Poor | Serious |
| B301001-7 Garage Gable Roof Finishes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Poor | Serious |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>Immediate maintenance and repair to the extant cedar-shake roofs is required to prevent leaks to the interior. Missing, broken, or slipping shakes should be replaced using traditional methods. Zinc or copper strips may be nailed at the ridge cap to control biological growth. Overhanging branches within twelve feet of structure should be trimmed away from the roof to prevent leaves, small branches, and other debris from building up and keeping the roof damp. Adequate ventilation is important to ensure heat and moisture do not accumulate in attic spaces. Cleaning of the cedar (either by chemical treatment or powerwashing) should only be undertaken by professionals who understand the age, condition, and environment of the roof. More information can be found through the Cedar Shake &amp; Shingle Bureau (<a href="http://www.cedarbureau.org/">http://www.cedarbureau.org/</a>). The roofs may be swept of excess debris in the interim using a soft broom.</p> <p>Alternate treatment is to remove deteriorated wood and metal roofs and install temporary fiberglass shingle roof as an Emergency Maintenance treatment.</p> <p><u>Timeframe:</u> <i>Short-Term (3-5 years)</i></p> <p>The non-character-defining cedar-shake roofs of the main block gable and hipped roofs, front dormer gable roofs, and eastern ell gable roof, the sun porch gable roof, the garage gable roof, and the breezeway shed and gable roofs, and also the standing-seam metal roof of the breezeway, should be removed. Appropriate planning and funding strategies should be implemented within three years to address feature deficiencies (this includes PMIS and FMSS document).</p> |      |         |

Prior to the installation of the new roofs, an inspection of the roof sheathing, framing, and flashings should be completed. Sheathing and framing repairs should be completed as needed. All roof work should be coordinated into a comprehensive project encompassing all features and aspects of the roof covering, flashing, drainage, chimney, lightning protection, cornices, overhangs, and features directly related to preventing water infiltration of the building.

Upon replacement of the roofing, new slate roofs should be installed to match the original appearance of the Quarters 1 roofs based on archival photographs. Refer to the NPS Preservation #29: "The Repair, Replacement, and Maintenance of Historic Slate Roofs," or other professional slate installation manuals.

|                                              |      |         |
|----------------------------------------------|------|---------|
| B302001-1 Masonry Chimneys (Above Roof Line) | Poor | Serious |
|----------------------------------------------|------|---------|

Timeframe: *Immediate (1-3 years)*

Remove the extant chimney cap from the west flue of the stone chimney. Install a custom-fitted, vented, and screened non-corrosive sheet metal cap (stainless steel or copper; galvanized metal is second preference) which covers both flues of the stone chimney to prevent water from entering the flues and to allow passive ventilation and exhaust. This also prevents unwanted birds and rodents from nesting in chimneys. See B&B Sheet Metal (<http://www.bbsheetmetal.com/>) for similar products or contact a local metal fabricator and have design commissioned.

Timeframe: *Short-Term (3-5 years)*

The non-character-defining brick sun porch chimney should be removed when the sun porch infill walls are removed. Care should be taken to ensure that surrounding character-defining features and materials are not harmed during removal of the chimney. Repairs to the roof should be made as part of the reroofing project. Repairs to stone corner pier should be done at the same time.

|                         |      |         |
|-------------------------|------|---------|
| D503008 Security System | Poor | Serious |
|-------------------------|------|---------|

Timeframe: *Short-Term (3-5 years)*

A security system should be installed. The system should be attached to the electrical service. A holistic hardwired system should be installed with an automated call-out feature connected to a local emergency response agency or regional dispatch office; this system should meet building codes and have an integrated battery-backup system.

|                                               |      |         |
|-----------------------------------------------|------|---------|
| C301099-2 Wood Board and Batten Wall Surfaces | Poor | Serious |
|-----------------------------------------------|------|---------|

Timeframe: *Short-Term (3-5 years)*

The masonry seam sealant should be removed from between the stone chimney and the wood board and batten wall in the sun porch due to the presence of asbestos and replaced with a sustainable water-based caulk. Abatement must be performed by professionals trained in safely handling asbestos material.

Boggs Environmental Consultants (BEC) recommends in their “Asbestos-Containing Material Survey” the following:

1. “Should the renovation activities result in the discovery of additional suspect ACBMs and/or PACMs, BEC recommends halting all work activities with subsequent bulk sample collection and analysis of discovered ACBMs and/or PACMs, to determine asbestos content.”
2. “BEC recommends, in accordance with Federal and MD law, a licensed asbestos abatement contractor is required to conduct the removal of any and all ACBMs located at Quarters #1 (HS128).”
3. “BEC recommends, in accordance with Federal and MD law, an accredited and MD-licensed “asbestos abatement project designer” prepare a detailed work plan to govern the removal of ACBMs and/or PACMs at the subject site.”
4. “BEC recommends, in accordance with Federal and MD law, a third-party Industrial Hygiene firm employing a MD-licensed “asbestos abatement air clearance monitor” perform baseline, continuous, and post abatement air quality surveillance at the asbestos work area(s) prior to permitting reoccupancy of the work area(s).”
5. “BEC recommends, in abundance of caution, managing and/or treating homogenous areas, of which PLM/DS analysis revealed an asbestos content of <1% asbestos (trace), as asbestos-containing building construction materials.”<sup>4</sup>

Timeframe: *Long-Term (5-10 years)*

The non-character-defining sun porch enclosure walls should be removed. Refer to B201001-4 Frame Walls – Sun Porch for more information.

|                                           |      |         |
|-------------------------------------------|------|---------|
| D509002 Emergency Lighting & Power System | Poor | Serious |
|-------------------------------------------|------|---------|

Timeframe: *Long-Term (5-10 years)*

Depending upon the ultimate use of the building, emergency lighting and power may be required. Consult local building codes and/or a service contractor to determine the size and extent of the system.

|                                       |      |         |
|---------------------------------------|------|---------|
| B2020-1 Basement Windows – Main Block | Fair | Serious |
|---------------------------------------|------|---------|

Timeframe: *Immediate (1-3 years)*

A detailed window schedule should be prepared to plan future historic preservation tasks. Appropriate planning and funding strategies should be implemented within three years to address feature deficiencies (this includes PMIS and FMSS program documents).

Timeframe: *Short-Term (3-5 years)*

The character-defining wood-frame basement windows should be preserved. Traditional preservation, as follows, would correct extant maintenance deficiencies. Also see NPS Preservation Brief #9: “The Repair of Historic Wood Windows” for more information.

<sup>4</sup> Boggs Environmental Consultants, Inc. “Asbestos Survey Quarters #1,” pp. 5-6.

The sash should be carefully inspected for treatment needs. Generally this includes the following steps: removal of sash; paint abatement; necessary carpentry repairs performed; and sash reglazed, primed, and painted. All deteriorated paint should be removed from the window jambs, necessary carpentry repairs completed, and the jambs primed and painted. Sash components deteriorated beyond repair must be replaced in kind, including like material or substitute materials lending an identical finished appearance. The window should be installed with reproduction hardware (if historic hardware is non-extant or not reusable) and concealed interlocking weatherstripping.

If window replacement is needed, care must be taken to accurately document historic window details for faithful reproductions of such features. Sash reproduction will follow NPS Technical Preservation Services publication "Documentation Requirements for Window Replacement" to record any salient details and to inspect replacement units for matching qualities.

|                             |      |       |
|-----------------------------|------|-------|
| C103006 Shelving - Basement | Poor | Minor |
|-----------------------------|------|-------|

Timeframe: *Immediate (1-3 years)*

The non-character-defining basement wood shelving should be removed to inspect and clean the concrete foundation walls beneath. Mold and moisture issues should be treated by a remediation specialist or removed from the walls using a non-abrasive cleaner, such as D/2 Biological Solution (<http://www.d2bio.com>), a non-abrasive, non-toxic cleaning solution.

|                                              |      |       |
|----------------------------------------------|------|-------|
| G204002 Retaining Walls (Exterior Landscape) | Poor | Minor |
|----------------------------------------------|------|-------|

Timeframe: *Immediate (1-3 years)*

Biological growth should be removed from the walls using a non-abrasive cleaner, such as D/2 Biological Solution (<http://www.d2bio.com>), a non-abrasive, non-toxic cleaning solution.

Timeframe: *Short-Term (3-5 years)*

Selective repointing and stabilization of loose stones is necessary. Deteriorated mortar joints should be raked out. Repairs to the stone walls should use a mortar which matches the historic mortar in color and texture.

|                                    |      |       |
|------------------------------------|------|-------|
| A103001-1 Main Block Basement Slab | Fair | Minor |
|------------------------------------|------|-------|

Timeframe: *Immediate (1-3 years)*

The basement slab floor drains should be in working order and drain into their underground drainage system. Underground drain lines should be investigated to determine if they are operable. Cleaning, scoping, and mapping may be accomplished as one task and should be documented. If underground lines are inoperable, they should be relined, repaired, or replaced.

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| A103001-2 Sun Porch Slab                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Fair | Minor |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>Once surrounding vegetative debris is removed from around Quarters 1, biological growth should be removed from the exterior of the sun porch slab using a non-abrasive cleaner, such as D/2 Biological Solution (<a href="http://www.d2bio.com">http://www.d2bio.com</a>), a non-abrasive, non-toxic cleaning solution.</p>                                                                                                                                                                                                                                              |      |       |
| A103001-3 Breezeway Slab                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Fair | Minor |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>Vegetative debris and the exterior carpeting should be removed from the breezeway in order to inspect and clean the concrete slab beneath.</p>                                                                                                                                                                                                                                                                                                                                                                                                                           |      |       |
| B201005 Exterior Louvers & Screens                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Fair | Minor |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>Further inspection of the exterior louvers is needed to determine if interior screens are extant. If extant, periodic housekeeping and maintenance is required. If not extant, screens should be added to the interior faces of each louver to deter rodents and insects from entering.</p>                                                                                                                                                                                                                                                                              |      |       |
| G2020 Parking Areas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Fair | Minor |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>Vegetative debris should be cleared from the paved parking areas so that they may be fully inspected.</p> <p><u>Timeframe:</u> <i>Short-Term (3-5 years)</i></p> <p>Extant asphalt paving (non-sustainable) should be removed and replaced with a permeable asphalt pavement system and ground water retention swale at perimeter locations.</p>                                                                                                                                                                                                                         |      |       |
| B201001-2 Brick Walls – Main Block                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Fair | Minor |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>Once surrounding vegetative debris is removed from around Quarters 1, biological growth should be removed from the exterior of the main block brick walls slab using a non-abrasive cleaner, such as D/2 Biological Solution (<a href="http://www.d2bio.com">http://www.d2bio.com</a>), a non-abrasive, non-toxic cleaning solution.</p> <p>Appropriate planning and funding strategies should be implemented within three years to address feature deficiencies (this includes PMIS and FMSS program documents), i.e. siding removal, brick repairs and repointing.</p> |      |       |

Timeframe: *Long-Term (5-10 years)*

The non-character-defining vinyl siding should be removed in order to inspect the exterior brick walls of the main block. Removal of any paint (presence is unknown) should be completed using a non-abrasive method. Refer to the PROSOCO product catalog for examples of paint removal products (<http://www.prosoco.com>).

Repair of damaged brick and mortar should occur once a thorough assessment of the exterior has been completed. Replacement of damaged or destroyed brick units should be done after matching extant bricks in color, shape, texture, aggregate content, and size. Pointing mortar should match the historic mortar in color and texture.

|                                    |      |       |
|------------------------------------|------|-------|
| B201001-3 Frame Walls – Main Block | Fair | Minor |
| B201001-6 Frame Walls - Garage     | Fair | Minor |

Timeframe: *Immediate (1-3 years)*

Once surrounding vegetative debris is removed from around Quarters 1, biological growth should be removed from the main block and garage frame-wall vinyl siding using a non-abrasive cleaner, such as D/2 Biological Solution (<http://www.d2bio.com>), a non-abrasive, non-toxic cleaning solution.

Appropriate planning and funding strategies should be implemented within three years to address feature deficiencies (this includes PMIS and FMSS program documents).

Timeframe: *Long-Term (5-10 years)*

The non-character-defining vinyl siding should be removed in order to inspect the condition beneath. If the historic wood siding is extant, a condition assessment should be performed to determine the condition.

Removal of the wood siding should only be done if it is in poor condition. Localized repair to the exterior cladding is a traditional maintenance methodology and is encouraged. If the wood siding is missing or beyond repair, it should be removed and replaced with siding that is similar in color, texture, and appearance to the original specification and as seen in historic photographs or any original pieces found in-situ.

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|-----------------------------------|------|-------|
| B201001-4 Frame Walls – Sun Porch | Fair | Minor |
|-----------------------------------|------|-------|

Timeframe: *Immediate (1-3 years)*

Once surrounding vegetative debris is removed from around Quarters 1, biological growth should be removed from the sun porch vinyl siding using a non-abrasive cleaner, such as D/2 Biological Solution (<http://www.d2bio.com>), a non-abrasive, non-toxic cleaning solution.

Appropriate planning and funding strategies should be implemented within three years to address feature deficiencies (this includes PMIS and FMSS program documents).

**Timeframe:** *Long-Term (5-10 years)*

The sun porch infill exterior walls should be removed (non-character-defining features). Restoration of the open-air wood porch features should be completed using the original design drawings and historic photographs as guides.

**C1020 Interior Doors**

Fair

Minor

**Timeframe:** *Immediate (1-3 years)*

A door schedule should be completed to document the types, details, sizes, hardware, conditions and recommended treatments of all doors and door openings.

Non-historic interior basement doors should be removed to allow for better interior air circulation (D001-003). The extant historic basement door should be cleaned and retained (D004).

**Timeframe:** *Long-Term (5-10 years)*

Non-historic interior doors on the first and second floors should be removed (D102, D105, D107, D109, D111, D201-203, D206-207, and D209). Replacement doors, including those for door openings with missing doors (D103, D110, and D112), should match extant historic doors. Extant historic doors should be cleaned and retained (D101, D104, D106, D108, D204).

**D3000 Heating & Cooling System**

Fair

Minor

**Timeframe:** *Ongoing*

The heating and cooling system should be inspected by a certified mechanical contractor to determine the condition of the system recommend needed repairs to the existing system, complete needed repairs, and commission and balance the system.

Duct cleaning and disinfection should be carried out on any hot air or chilled fixed-metal duct work. All filters should be replaced.

**Timeframe:** *Short-Term (3-5 years)*

Mini-split units should be removed as they are non-sustainable reactions to localized climactic conditions. Redesign of building HVAC system should be undertaken as part of the holistic rehabilitation of the property. NPS *Guidelines for Sustainability for Rehabilitation of Historic Buildings* suggests review of ground-sourced heating and cooling for replacement systems in lieu of fossil-fuel-based systems.

**G204001 Fencing & Gates**

Fair

Minor

**Timeframe:** *Short-Term (3-5 years)*

The chain-link fence is not a character-defining feature and should be removed.

The wood privacy fence separating the parking area from the breezeway should be removed as it is a modern accretion. A more compatible fence and/or gate should be designed to be compatible and may be installed in its place.

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|----------------------------|------|---------|
| C302004 Resilient Flooring | Poor | Serious |
|----------------------------|------|---------|

Timeframe: *Short-Term (3-5 years)*

The non-character-defining basement vinyl-floor tiles should be removed due to damaged asbestos-containing tiles. Abatement must be performed by professionals trained in safely handling asbestos material.

Boggs Environmental Consultants (BEC) recommends in their "Asbestos-Containing Material Survey" the following:

1. "Should the renovation activities result in the discovery of additional suspect ACBMs and/or PACMs, BEC recommends halting all work activities with subsequent bulk sample collection and analysis of discovered ACBMs and/or PACMs, to determine asbestos content."
2. "BEC recommends, in accordance with Federal and MD law, a licensed asbestos abatement contractor is required to conduct the removal of any and all ACBMs located at Quarters #1 (HS128)."
3. "BEC recommends, in accordance with Federal and MD law, an accredited and MD-licensed "asbestos abatement project designer" prepare a detailed work plan to govern the removal of ACBMs and/or PACMs at the subject site."
4. "BEC recommends, in accordance with Federal and MD law, a third-party Industrial Hygiene firm employing a MD-licensed "asbestos abatement air clearance monitor" perform baseline, continuous, and post abatement air quality surveillance at the asbestos work area(s) prior to permitting reoccupancy of the work area(s)."

"BEC recommends, in abundance of caution, managing and/or treating homogenous areas, of which PLM/DS analysis revealed an asbestos content of <1% asbestos (trace), as asbestos-containing building construction materials."<sup>5</sup>

Once removed, mold and moisture issues (pertaining to the concrete slab) should be treated. Concrete slabs may be coated with moisture-resisting finish product.

|                       |      |       |
|-----------------------|------|-------|
| C302003 Wood Flooring | Fair | Minor |
|-----------------------|------|-------|

Timeframe: *Short-Term (3-5 years)*

The exposed wood floors should be refinished with a water-based product, such as Waterlox (<http://waterlox.com>), a tung-oil based product, versus a petroleum-based product.

Timeframe: *Long-Term (5-10 years)*

When the extant carpet is removed, the underlying wood floors should be refinished with a water-based product, such as Waterlox.

<sup>5</sup> Boggs Environmental Consultants, Inc. "Asbestos Survey Quarters #1," pp. 5-6.

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| C301005 Painted Wall Finishes                                                                                                                                                                                                                                                                                                                                                                                                                    | Fair | Minor |
| <p><u>Timeframe:</u> <i>Short-Term (3-5 years)</i></p> <p>Peeling paint on the basement walls should be scraped and then left unpainted. The coating of the concrete is not recommended unless required for waterproofing.</p> <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>The painted wall finishes of the first and second floor are in fair condition and should continue to receive periodic housekeeping and maintenance.</p> |      |       |

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| C103008 Counters – Kitchen                                                                                                                                                                                                                                                                     | Fair | Minor |
| C103009 Cabinets – Kitchen                                                                                                                                                                                                                                                                     | Fair | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>The kitchen counters and cabinets were replaced after Quarters 1 was constructed. The counters and cabinets should be replaced during interior rehabilitation work with more historically compatible and sustainable selections.</p> |      |       |

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| C103098 Other Casework – Fireplaces                                                                                                                                                                                                                                     | Fair | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>The non-historic fireplace insert should be removed. A more compatible insert is permissible which does not damage historic fabric. The broken keystone should be repaired using a traditional technique.</p> |      |       |

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| C301004 Tile Wall Finishes                                                                                                        | Fair | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>Tile wall repairs should be completed with matching tile and grout.</p> |      |       |

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| C302005 Carpeting                                                                                                                                                                                                                                                                               | Fair | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>Remove carpet to expose wood floors. And reduce indoor-air contaminants. See C302003 Wood Flooring for more information. Area rugs will function in work or high-traffic areas to protect the original wood floors, if necessary.</p> |      |       |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| C303004 Acoustical Ceiling Tiles & Panels                                                                                                                               | Fair | Minor |
| C303007 Suspension Systems                                                                                                                                              | Fair | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>The acoustical ceiling tiles and suspension system should be removed to inspect the wood framing beneath.</p> |      |       |

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| A101001-2 Sun Porch & Vestibule Foundations                                                                                                                                                                                                                                                                                                                                                                                                                                           | Fair | Minor |
| A101001-3 Exterior Stair Foundation Walls                                                                                                                                                                                                                                                                                                                                                                                                                                             | Fair | Minor |
| A101001-4 Breezeway Foundation                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Fair | Minor |
| A101001-5 Garage Foundation                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Fair | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The sun porch and vestibule foundations, exterior stair foundation walls, breezeway foundation, and garage foundation are in fair condition and should continue to receive periodic housekeeping and maintenance.</p> <p>Annual and comprehensive FMSS inspections using Building Inspection Guidance 4100 requirements and PFMD Best Practices for Buildings WBS 4100 will result in more detailed analysis of foundation conditions.</p> |      |       |

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| A103001-4 Garage Slab                                                                                                                                     | Fair | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The garage slab is in fair condition and should continue to receive periodic housekeeping and maintenance.</p> |      |       |

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| C103099 Other Interior Specialties – Molding & Trim                                                                                                                      | Fair | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The interior molding and trim are in fair condition and should continue to receive periodic housekeeping and maintenance.</p> |      |       |

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| G2030 Pedestrian Paving (Sidewalks)                                                                                                                                                                                                                                                                                                                                            | Fair | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>All walks should be maintained in good condition. Monitor areas for excessive cracking and unlevel areas. If repairs are required, historic concrete patterns, textures, and colors should be replicated.</p> <p>Vegetative growth should be cleared from the east elevation flagstone patio so that it may be fully inspected.</p> |      |       |

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| G204003 Exterior Furnishings – Stone Grill                                                                                                                   | Fair | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The exterior stone masonry grill is in fair condition. It should receive periodic maintenance and repointing.</p> |      |       |

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| D501005 Panels                                                                                                                                                                                                                                                                                                                                                                             | Good | Minor |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>An electrical diagram of the system is required to ensure the system is up to code. A certified electrical inspector should be hired to verify the capacity of the system is adequate for future proposed use, and inspect or recommend repairs to the system. Any repairs should be done in accordance with electrical code.</p> |      |       |

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| B201008-1 Exterior Soffits, Eaves & Cornices – Main Block                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Good | Minor |
| B201008-2 Exterior Soffits, Eaves & Cornices –Sun Porch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Good | Minor |
| B201008-3 Exterior Soffits, Eaves & Cornices –Breezeway                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Good | Minor |
| B201008-4 Exterior Soffits, Eaves & Cornices – Garage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Good | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>The metal (aluminum) coverings should be removed in order to inspect the wood portions beneath. Any deteriorated wood portions should be repaired/replaced using consolidation and/or Dutchman repairs. If replaced, a highly-graded and weather-resistant species should be used. All deteriorated paint should be scraped, sanded, primed, and painted with two coats of exterior latex paint. The paint color should match the existing. The paint should be tested to determine if is lead-based before commencing any work.</p> |      |       |

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| B2020-2 First- & Second-Floor Windows – Main Block                                                                                                                                                                                          | Good | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>Consideration should be given to installing thermally-efficient reproductions of the original wood windows shown in historic photographs and on the original design drawings.</p> |      |       |

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| B2020-3 Windows – Sun Porch                                                                                                                                                                                    | Good | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>The non-character-defining sun porch enclosure walls/windows should be removed. Refer to B201001-4 Frame Walls – Sun Porch for more information.</p> |      |       |

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| B2020-4 Windows – Exterior Stair Enclosure                                                                                                                                                                                                                                                                                                                                                                                                    | Good | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>Consideration should be given to installing reproductions of the original wood windows shown in historic photographs and on the original design drawings.</p>                                                                                                                                                                                                                       |      |       |
| B2030-1 Exterior Doors                                                                                                                                                                                                                                                                                                                                                                                                                        | Good | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>Long-term planning should allow for the removal and replacement of the extant modern exterior doors. They should be replaced with replica historic doors and frames based on the original design drawings and historic photographs. Minimum thickness of exterior doors is 0'-1-3/4". Exterior door hardware should replicate period hardware and meet accessibility standards.</p> |      |       |
| B2030-2 Exterior Storm Doors                                                                                                                                                                                                                                                                                                                                                                                                                  | Good | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>Long-term planning should allow for the removal and replacement of the exterior storm doors. They should be replaced with custom-fabricated exterior storm doors. These new storm units should meet rehabilitation standards with minimal structure, vented frames, and vandal-resistant glass. A neutral frame color, or color matching an historic color, should be selected.</p> |      |       |
| B203004 Overhead Doors (Garage)                                                                                                                                                                                                                                                                                                                                                                                                               | Good | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>Long-term planning should allow for the removal and replacement of the extant modern overhead garage doors. They should be replaced with replica historic doors and frames based on the original design drawings and historic photographs. Exterior door hardware should replicate period hardware.</p>                                                                             |      |       |
| C201001 Interior Stair Structure & Finishes                                                                                                                                                                                                                                                                                                                                                                                                   | Good | Minor |
| <p><u>Timeframe:</u> <i>Long-Term (5-10 years)</i></p> <p>The carpet should be removed to inspect the wood stair elements beneath. Wood stairs should be cleaned and refinished with a Tung-oil varnish product or painted to match the historic finish (Waterlox or long-wearing paint). Installation of carpet runners will protect the wood and provide user safety yet allow the edges to be exposed.</p>                                 |      |       |

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| B101001-1 First Floor Structural Floor Frame – Main Block                                                                                                                                                                                                                                                                                                                 | Good | Minor |
| B101001-2 Second Floor Structural Floor Frame – Main Block                                                                                                                                                                                                                                                                                                                | Good | Minor |
| B101001-3 Sun Porch Attic Floor Structural Floor Frame                                                                                                                                                                                                                                                                                                                    | Good | Minor |
| B101001-4 Garage Attic Floor Structural Frame                                                                                                                                                                                                                                                                                                                             | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The first-floor and second-floor structural floor frames of the main block and the attic floor structural floor frames of the sun porch and garage are in good condition. If deflection, warping, bowing, sagging, rotting or fungus growth is noted at any time, further investigation into this system will be required.</p> |      |       |

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| B101002-1 First Floor Structural Interior Walls                                                                                                                                                                                                                                                         | Good | Minor |
| B101002-2 Second Floor FI Structural Interior Walls                                                                                                                                                                                                                                                     | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The first-floor and second-floor structural interior walls are in good condition. If deflection, warping, bowing, sagging, rotting or fungus growth is noted at any time, is noted at any time, further investigation into this system will be required.</p> |      |       |

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| B102001-1 Gable & Hipped Roof Frame – Main Block                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Good | Minor |
| B102001-2 Front Dormer Gable Roof Frames – Main Block                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Good | Minor |
| B102001-3 Rear Dormer Shed Roof Frame – Main Block                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Good | Minor |
| B102001-4 Rear Ell Gable Roof Frame – Main Block                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Good | Minor |
| B102001-5 Sun Porch Gable Roof Frame                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Good | Minor |
| B102001-6 Breezeway Shed & Gable Roof Frame                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Good | Minor |
| B102001-7 Garage Gable Roof Frame                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The gable and hipped roof frames, front dormer gable roof frames, the rear dormer shed roof frame, and the rear ell gable roof frame of the main block, the gable roof frame of the sun porch, the shed and gable roof frame of the breezeway, and the gable roof frame of the garage are in good condition. If deflection, warping, bowing, sagging, rotting or fungus growth is noted at any time, is noted at any time, further investigation into this system will be required.</p> |      |       |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| B201001-1 Stone Walls – Main Block                                                                                                                                                                                | Good | Minor |
| B201001-5 Stone Walls – Garage                                                                                                                                                                                    | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The main block and garage exterior stone walls are in good condition. If deflection is noted at any time, further investigation into this system will be required.</p> |      |       |

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| B2020-5 Windows – Garage                                                                                                                                               | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The historic garage windows are in good condition and should continue to receive periodic housekeeping and maintenance.</p> |      |       |

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| B301001-3 Rear Dormer Shed Roof Finishes – Main Block                                                                                                                                                        | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The main block rear dormer shed standing-seam metal roof finishes are in good condition and should continue to receive periodic housekeeping and maintenance.</p> |      |       |

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| B301004-1 Dormer Wall Flashing System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Good | Minor |
| B301004-2 W204 Exterior Flashing System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Good | Minor |
| B301004-3 Breezeway-Side Wall Flashing System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Good | Minor |
| B301004-4 Roof Penetration Flashing System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Good | Minor |
| B301004-5 Chimney Flashing System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>Any future repair and/or replacement of flashing should be done with the most noble metal component and traditional flashing details, i.e. base flashing, counter flashing, and step flashing, where applicable. See Sheet Metal and Air Conditioning Contractor's National Association (SMACNA) handbook (<a href="http://www.smacna.org/bookstore">http://www.smacna.org/bookstore</a>) or the Copper Development Association A4053 – Copper in Architect-Design Handbook and A047-A –Primer on Copper Roofing (<a href="http://www.copper.org/publications/pub_list/architecture.html">http://www.copper.org/publications/pub_list/architecture.html</a>) for appropriate roof flashing details.</p> |      |       |

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| B302001-2 Roof Penetrations (All Roofs)                                                                                                                                                                                                                                         | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>All roof penetrations are in good condition. If any water damage is noted at any time, further investigation into these penetrations will be required. All roof penetrations should be replaced during future reroofing efforts.</p> |      |       |

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| C1010 Partitions                                                                                                                                                                                | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The interior partition walls are in good condition. If deflection is noted at any time, further investigation into this system will be required.</p> |      |       |

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| C201002 Exterior Stair Structure & Finishes                                                                                                                                                                   | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The exterior stair structures and finishes are in good condition and should continue to receive periodic housekeeping and maintenance.</p>                         |      |       |
| C301002 Plaster Wall Finishes                                                                                                                                                                                 | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The interior plaster wall finishes throughout the building are in good condition and should continue to receive periodic housekeeping and maintenance.</p>         |      |       |
| C301099-3 Wood V-Groove Board Wall Surfaces                                                                                                                                                                   | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The interior wood V-groove board wall finishes on the second floor are in good condition and should continue to receive periodic housekeeping and maintenance.</p> |      |       |
| C302001 Tile Floor Finishes                                                                                                                                                                                   | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The interior ceramic tile floor finishes of the bathrooms are in good condition and should continue to receive periodic housekeeping and maintenance.</p>          |      |       |
| C303002 Plaster Ceiling Finishes                                                                                                                                                                              | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The interior plaster ceiling finishes throughout the building are in good condition and should continue to receive periodic housekeeping and maintenance.</p>      |      |       |
| C303005 Wood Ceilings                                                                                                                                                                                         | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The interior wood ceilings in the sun porch and breezeway are in good condition and should continue to receive periodic housekeeping and maintenance.</p>          |      |       |
| C303006 Painted & Stained Ceilings                                                                                                                                                                            | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The interior painted and stained ceilings throughout the building are in good condition and should continue to receive periodic housekeeping and maintenance.</p>  |      |       |

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| D502002 Lighting Equipment                                                                                                                                                             | Good | Minor |
| <p><u>Timeframe:</u> <i>Ongoing</i></p> <p>The lighting equipment throughout Quarters 1 is in good condition and should continue to receive periodic housekeeping and maintenance.</p> |      |       |

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| D202001 Water Closets (Toilets)                                                                                                                                                                                                                                            | Not Rated | Not Rated |
| D202003 Lavatories (Bathroom Sinks)                                                                                                                                                                                                                                        | Not Rated | Not Rated |
| D202004 Sinks – Kitchen and Laundry                                                                                                                                                                                                                                        | Not Rated | Not Rated |
| D202005 Showers/Tubs                                                                                                                                                                                                                                                       | Not Rated | Not Rated |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>The plumbing system should be surveyed by a registered plumber to determine the condition of the system and identify any needed repairs. Aging fixtures should be replaced with new water-efficient fixtures.</p> |           |           |

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| A202003 Basement Wall Insulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Unknown | Unknown |
| B201002 Insulation & Vapor Barrier                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Unknown | Unknown |
| B301003 Roof Insulation & Fill                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Unknown | Unknown |
| <p><u>Timeframe:</u> <i>Immediate (1-3 years)</i></p> <p>The basement walls should be inspected to determine if exterior below-grade insulation is extant. The first- and second-floor exterior walls should be inspected to determine if insulation or a vapor barrier are extant. The roof framing should be inspected to determine if insulation and/or fill are extant. This will require some destructive investigation.</p> <p>If extant, the condition of the insulation will dictate the recommended future treatment (removal and replacement and/or repair).</p> <p>If not extant, or deemed inadequate, a whole-building energy audit should be performed to determine the actual insulative and vapor barrier needs of the building. Refer to the <i>Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings</i>. Recommendations include:</p> <ul style="list-style-type: none"> <li>• “Using a variety of analytical tools, such as a comprehensive energy audit, blower door tests, infrared thermography, energy modeling or daylight modeling, to gain an understanding of the building’s performance and potential before implementing any weatherization or retrofit treatments.”</li> <li>• “Developing a weatherization plan based on the results of the energy analysis of the building’s performance and potential.”</li> <li>• “Understanding the inherent thermal properties of the historic building materials and the actual insulating needs for the specific climate and building type before adding or changing insulation.”</li> <li>• “Using the appropriate type of insulation in unfinished spaces and ensuring the space is adequately ventilated.”</li> <li>• “Ensuring that air infiltration is reduced before adding wall insulation.”</li> <li>• “Installing appropriate wall insulation, only if necessary, after lower impact treatments have been carried out.”</li> </ul> |         |         |

## Effects of Recommended Treatments (Preferred Option D)

The potential effects of the recommended treatments for interior and exterior rehabilitation (Preferred Treatment and Use Option D) are outlined in the Table 4. The table is ordered by prescribed timeframe: emergency first, immediate second, short-term third, and long-term last. Effects to historic fabric, recommended mitigating measures, and beneficial outcomes are examined. Treatment recommendations which include periodic housekeeping and maintenance, reassessment, or are in good and minor conditions, are not discussed.

| Table 4. Quarters 1 Recommended Treatment Effects (Preferred Option D)                                           |                                                                                                                                           |                                                                                           |                                                                                                  |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Recommended Treatment ( <i>Timeframe</i> )                                                                       | Potential Effect on Historic Fabric                                                                                                       | Mitigating Measures                                                                       | Beneficial Effects                                                                               |
| Install a demountable lightning protection system on roof/chimney. ( <i>Immediate</i> )                          | May be minimal impact to extant historic fabric for routing of new system; appurtenances will be visible on the exterior of the building. | Routing plan will be reviewed by NPS prior to execution.                                  | Required by NPS policy (Director's Order No. 58).                                                |
| Install a hard-wired fire detection and alarm system with integrated battery-backup system. ( <i>Immediate</i> ) | May be minimal impact to extant historic fabric for routing of new system; appurtenances will be visible on the interior of the building. | Routing plan will be reviewed by NPS prior to execution.                                  | Required by NPS policy (Director's Order No. 58 and 50B).                                        |
| Install fire extinguishers according to building codes. ( <i>Immediate</i> )                                     | No adverse effect; will be visible on the interior of the building.                                                                       | Location plan will be reviewed by NPS prior to execution.                                 | Required by NPS policy.                                                                          |
| Install battery-operated smoke detectors according to building codes. ( <i>Immediate</i> )                       | No adverse effect; will be visible on the interior of the building.                                                                       | Location plan will be reviewed by NPS prior to execution.                                 | Required by NPS policy.                                                                          |
| Regrade areas adjacent to building to establish positive site drainage. ( <i>Immediate</i> )                     | No adverse effect; not considered historic fabric.                                                                                        | Archaeological compliance may be required.                                                | Will lessen chance of water infiltration into basement and deterioration of concrete foundation. |
| Restructure window well coverings to inhibit water penetration and allow ventilation. ( <i>Immediate</i> )       | No adverse effect; not considered historic fabric.                                                                                        | Extant feature exhibits critical maintenance deficiencies which have resulted in failure. | Will lessen chance of water infiltration into basement and deterioration of concrete foundation. |
| Install drains in bottom of window wells which are connected to site drainage system. ( <i>Short-Term</i> )      | Minor amounts of historic fabric may be removed in order to stabilize remaining adjacent materials.                                       | Work will be documented; new work will be compatible with rehabilitation treatment.       | Will lessen chance of water infiltration into basement and deterioration of concrete foundation. |
| Install metal grate over window wells. ( <i>Short-Term</i> )                                                     | No adverse effect.                                                                                                                        | None required (reversible).                                                               | Threat to safety of user will be corrected.                                                      |

(Table 4 continued)

| Recommended Treatment ( <i>Timeframe</i> )                                                                                                                                      | Potential Effect on Historic Fabric                                                                                                       | Mitigating Measures                                                                                 | Beneficial Effects                                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Investigate and restore underground roof drainage lines.<br>( <i>Immediate</i> )                                                                                                | No adverse effect.                                                                                                                        | Archaeological compliance may be required; will allow further investigation of building foundation. | Will lessen chance of water infiltration into basement and deterioration of concrete foundation.                                                            |
| Install sump pump, pit, and drain line.<br>( <i>Emergency</i> )                                                                                                                 | May be minimal impact to extant historic fabric for routing of new system; appurtenances will be visible on the exterior of the building. | Routing plan will be reviewed by NPS prior to execution.                                            | Will lessen chance of moisture retention in basement and deterioration of concrete foundation.                                                              |
| Install an exterior waterproofing membrane to the foundation walls and a foundation drainage system at base of the walls.<br>( <i>Short-Term</i> )                              | Repairs historic fabric; returns to good condition.                                                                                       | Repairs will not be visibly intrusive.                                                              | Serious maintenance deficiencies will be corrected; will lessen chance of water infiltration into basement and deterioration of concrete foundation.        |
| Remove foundation plantings and overhanging tree limbs.<br>( <i>Emergency</i> )                                                                                                 | No adverse effect.                                                                                                                        | Cultural Landscape Inventory should be completed to determine if plantings are of significance.     | Will not retain moisture at building foundation; increases air circulation; lessens chance of mold and mildew.                                              |
| Investigate and restore basement slab floor drains and underground drain lines.<br>( <i>Immediate</i> )                                                                         | No adverse effect.                                                                                                                        | None required.                                                                                      | Will lessen chance of moisture retention in basement and deterioration of concrete slab.                                                                    |
| Implement recommended treatments from HSR for all interior finishes including floors, walls, ceilings, and interior specialties.<br>( <i>Immediate, Short-Term, Long-Term</i> ) | Minor amounts of historic fabric may be removed in order to stabilize remaining adjacent materials.                                       | Work will be documented.                                                                            | Character-defining features and historic fabric will be returned to good condition and contribute to the overall integrity of the historic interior spaces. |
| Repair cedar-shake roofs.<br>( <i>Immediate</i> )                                                                                                                               | No adverse effect.                                                                                                                        | None required.                                                                                      | Serious maintenance deficiencies will be corrected.                                                                                                         |
| Replace non-CDF cedar-shake and standing-seam metal roofs with slate roof coverings.<br>( <i>Short-Term</i> )                                                                   | No adverse effect; not considered historic fabric.                                                                                        | Replacement slate will be compatible with extant historic fabric.                                   | Return building to character-defining appearance.                                                                                                           |
| Install a chimney cap to stone chimney which covers both flues.<br>( <i>Immediate</i> )                                                                                         | No adverse effect; new cap will be visible on the exterior.                                                                               | None required.                                                                                      | Will lessen chance of water, rodent, and insect infiltration into chimney flues.                                                                            |
| Install a hardwired security system with integrated battery-backup system.<br>( <i>Short-Term</i> ).                                                                            | May be minimal impact to extant historic fabric for routing of new system; appurtenances will be visible on the exterior of the building. | Routing plan will be reviewed by NPS prior to execution.                                            | Threat to safety of user will be corrected.                                                                                                                 |

(Table 4 continued)

| Recommended Treatment ( <i>Timeframe</i> )                                                                               | Potential Effect on Historic Fabric                                                                                                       | Mitigating Measures                                                                                                 | Beneficial Effects                                                                            |
|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Install a hardwired emergency lighting and power system with integrated battery-backup system.<br>( <i>Long-Term</i> )   | May be minimal impact to extant historic fabric for routing of new system; appurtenances will be visible on the exterior of the building. | Routing plan will be reviewed by NPS prior to execution.                                                            | Threat to safety of user will be corrected.                                                   |
| Preserve historic basement windows.<br>( <i>Short-Term</i> )                                                             | Traditional repairs to historic fabric; no adverse effect.                                                                                | Repairs are compatible with extant historic fabric.                                                                 | Historic fabric returned to good condition.                                                   |
| Selectively repoint and stabilize loose stones in retaining walls and exterior stone grill.<br>( <i>Short-Term</i> )     | Traditional repairs to historic fabric; no adverse effect.                                                                                | Repairs are compatible with extant historic fabric.                                                                 | Historic fabric returned to good condition.                                                   |
| Remove wood privacy fence.<br>( <i>Short-Term</i> ).                                                                     | No adverse effect; this feature is not considered historic fabric.                                                                        | Work will be documented.                                                                                            | Return building to character-defining appearance.                                             |
| Replace non-historic gutters and downspouts with a historically-compatible roof drainage system.<br>( <i>Long-Term</i> ) | No adverse effect; these features are not considered historic fabric.                                                                     | Replacements will be compatible with extant historic fabric.                                                        | Preservation of a character-defining feature.                                                 |
| Remove sun porch brick chimney.<br>( <i>Long-Term</i> )                                                                  | No adverse effect; this feature is not considered historic fabric.                                                                        | Work will be documented.                                                                                            | Return building to character-defining appearance.                                             |
| Remove vinyl siding from brick walls.<br>( <i>Long-Term</i> )                                                            | None; this material is not considered historic fabric.                                                                                    | Traditional repair to historic brick walls.                                                                         | Historic fabric returned to good condition; return building to character-defining appearance. |
| Remove vinyl siding from wood-sided frame walls.<br>( <i>Long-Term</i> )                                                 | None; this material is not considered historic fabric.                                                                                    | Traditional repair to historic wood siding; replacement wood siding to be patterned after historic wood siding.     | Historic fabric returned to good condition; return building to character-defining appearance. |
| Remove metal coverings on exterior soffits and eaves.<br>( <i>Long-Term</i> )                                            | No adverse effect; metal coverings not considered historic.                                                                               | Work will be documented; rehabilitation of wood soffits and eaves will be compatible with rehabilitation treatment. | Return building to character-defining appearance.                                             |
| Replace vinyl windows (main block).<br>( <i>Long-Term</i> )                                                              | No adverse effect; not considered historic.                                                                                               | Work will be documented; installation of new wood windows will be compatible with rehabilitation treatment          | Return building to character-defining appearance.                                             |
| Remove sun porch infill walls and windows and replace with screen units.<br>( <i>Long-Term</i> )                         | No adverse effect; not considered historic.                                                                                               | Work will be documented; new work will be compatible with rehabilitation treatment.                                 | Return building to character-defining appearance.                                             |
| Replace exterior doors.<br>( <i>Long-Term</i> )                                                                          | No adverse effect; not considered historic.                                                                                               | Work will be documented; installation of new wood doors will be compatible with rehabilitation treatment            | Return building to character-defining appearance.                                             |

(Table 4 continued)

| Recommended Treatment <i>(Timeframe)</i>                    | Potential Effect on Historic Fabric                         | Mitigating Measures                                                                                             | Beneficial Effects                                                          |
|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Install custom storm doors.<br><i>(Long-Term)</i>           | Minimal impact to exterior door frames; work is reversible. | Custom-designed and fabricated storm units will not detract from appearance of building.                        | Will enhance energy performance of building and protect new exterior doors. |
| Install custom overhead garage doors.<br><i>(Long-Term)</i> | No adverse effect; not considered historic.                 | Work will be documented; installation of new wood garage doors will be compatible with rehabilitation treatment | Return building to character-defining appearance.                           |
| <i>End of Table 4.</i>                                      |                                                             |                                                                                                                 |                                                                             |



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

