



## HANNAH P. CLARK HOUSE Condition and Treatment Report

10605 Furnace Road, Lorton, VA



### **Final Report**

October 20, 2017

WJE No. 2017.2430

*Prepared for:*

**Mr. David Buchta**

Fairfax County Park Authority

12055 Government Center Parkway

Fairfax, Virginia

22035

*Prepared by:*

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A handwritten signature in cursive script that reads "Rebecca Wong".

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Rebecca Wong, PMP

A handwritten signature in cursive script that reads "Christine Reynolds".

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Christine Reynolds, PE

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## **HANNAH P. CLARK HOUSE Condition and Treatment Report**

**10605 Furnace Road, Lorton, VA 22079**

### **EXECUTIVE SUMMARY**

The Hannah P. Clark House is located in Lorton, Virginia along Furnace Road in close proximity to the Occoquan River. The house was built around 1876 by Hannah P. Clark and held by the Clark family until 1931. After 1931, it was owned by various entities, including the Enyedi family, until the property sold to the Fairfax County Park Authority in 2011. Since construction, the house has been added onto, moved across the street, and renovated by its various owners. Major alterations, including the additions, made to the house have impacted its historic integrity, primarily during modernization of the home in the 1950s and later. This document serves as a treatment plan for the Hannah P. Clark House, as well as documentation of the current conditions. The treatment plan and associated recommendations are in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards). Recommendations in this document were developed with the review of the 2014 Historic Structure Assessment (HSA) of the house by Elizabeth Peebles, Fairfax County Park Authority Architectural Historian, in conjunction with onsite observations performed on July 5, 2017 by Wiss, Janney, Elstner Associates, Inc. (WJE). The recommendations are separated by features in an attempt to serve as a checklist for Fairfax County Park Authority and any potential Resident Curators to the property.

### **PROJECT BACKGROUND**

The Fairfax County Park Authority is developing a Resident Curator Program that would allow a resident to occupy a historic property owned by Fairfax County that is currently listed on the County's Inventory of Historic Sites. The resident must apply for the property and qualify under the program's requirements. The Hannah P. Clark House is being considered as a potentially eligible property for the Resident Curator Program. One of the main requirements of the Resident Curator Program is that the resident must maintain the building and perform the repairs and restoration required by Fairfax County Park Authority. The work must be completed in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties and the curator are informed by the treatment recommendations contained herein.

The Hannah P. Clark House was constructed around 1876 located on the west side of Furnace Road in Lorton just outside the town of Colchester, Virginia. The house was added on to around 1885 and again around 1890 with the footprint representing what is currently existing. The ca 1885 addition enlarged the original single room two-story house to the west, extending the exterior porch on the north and creating a second room at both the first and second floors. The house added on to again around 1890 to add two more rooms to the south of the first floor and an attic/crawl space above the current kitchen at the second floor. The house was moved across Furnace Road between 1913 and 1925 by using logs and a winch with horses and took two days.<sup>1</sup> At the end of the first day of the move, Hannah and some of her grandchildren hung lanterns on the house to warn travelers and spent the night in the house as it sat on the side of the road. Between 1956 and 1983, the north porch was enclosed and the space was divided to accommodate an added half-bathroom, furnace, and an additional room. In the 1980s, the south porch was enclosed and in 1993 the east wall of the original home was altered by adding a fireplace and replacing windows with two doors.

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<sup>1</sup> Peebles, Elizabeth, *Hannah P. Clark House: Historic Structure Assessment*, 2014, p 33-35.

In the mid-1990s, an open deck on the east elevation was constructed, which currently covers the bulkhead entrance to the cellar. The current location of the house, on the east side of Furnace Road, is located within the north section of the Old Colchester Park and Preserve purchased by the Fairfax County Park Authority in 2006/2007.<sup>2</sup> This property encompasses much of the land owned by the Potter and Clark family during the 19th century, a family that played a large role in the development of Colchester as an agricultural community. As this historic structure is part of the Fairfax County Park Authority inventory, Elizabeth Peebles, Fairfax County Park Authority Architectural Historian, completed a Historic Structure Assessment (HSA) on the house in 2014.

## PROJECT DESCRIPTION

The Hannah P. Clark House is the only remaining structure close to Colchester, Virginia that was built before 1900. The purposes of the 2014 Fairfax County Park Authority HSA report were to understand the history of the property, the architectural development of the house, and to provide a condition assessment.<sup>3</sup> Along with the report, measured floor plans were drafted. To supplement the 2014 HSA report, WJE was retained to perform a condition assessment with subsequent general treatment recommendations to be utilized by the Fairfax County Park Authority and future resident curator.

All survey work and observations were conducted from the ground with the use of binoculars, where needed, and from accessible interior locations. Note, WJE performed a condition survey on all accessible architectural and enclosure features. In addition, WJE did not perform any destructive evaluations (inspection openings or material samples) or detailed reviews of structural or MEP components as part of this scope.

## TREATMENT PLAN

Treatment recommendations and work undertaken on the buildings and site are to be guided by the following:

- Secretary of the Interior’s Standards for the Treatment of Historic Properties (Secretary’s Standards)
- American with Disabilities Act (ADA)
- International Building Code (IBC), 2012
- International Existing Building Code (IEBC), 2012
- Applicable National Park Service Preservation Briefs:
  - Preservation Brief #4 “Roofing for Historic Buildings”
  - Preservation Brief #9 “The Repair of Historic Wooden Windows”
  - Preservation Brief #10 “Exterior Paint Problems on Historic Woodwork”
  - Preservation Brief #16 “The Use of Substitute Materials on Historic Building Exteriors”
  - Preservation Brief #18 “Rehabilitating Interiors in Historic Buildings - Identifying Character-Defining Elements”
  - Preservation Brief #24 “Heating, Ventilating, and Cooling Historic Buildings: Problems and Recommended Approaches”
  - Preservation Brief #28 “Painting Historic Interiors”
  - Preservation Brief #32 “Making Historic Properties Accessible”

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<sup>2</sup> Peebles, Elizabeth, *Hannah P. Clark House: Historic Structure Assessment*, 2014, p 56-57.

<sup>3</sup> Peebles, Elizabeth, *Hannah P. Clark House: Historic Structure Assessment*, 2014, p ii.

- Preservation Brief #39 “Holding the Line: Controlling Unwanted Moisture in Historic Buildings”

Newly installed electrical systems and components, including any significant alterations to existing electrical systems, should comply with applicable provisions of the National Electrical Code (NEC).

The definitions of the four treatments approaches that may be applied to historic structures have been developed in the Secretary’s Standards: preservation, rehabilitation, restoration, and reconstruction. The four definitions are as follows:

**Preservation** is defined as 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, general 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** is defined as 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** is defined as 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 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** is defined as 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.<sup>4</sup>

Of the four treatment approaches, **rehabilitation**, which involves making possible a compatible use through repair, alterations, or additions, is most appropriate for the house given the impact of previous alterations. This treatment would allow for the repairs necessary to stabilize and preserve the building in its existing state, while also permitting modifications (as needed) to accommodate improvements to heating, ventilating, air conditioning, electrical, and plumbing systems, as well as to meet code and accessibility requirements. The treatment **rehabilitation** also permits selective restoration of character-defining elements where missing or altered, if appropriate archival documentation is available.

## Ultimate Treatment and Use

### *Guidelines for Treatment*

Guidelines and requirements for treatment listed below were developed in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties.

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<sup>4</sup> The Secretary of the Interior’s Standards for the Treatment of Historic Properties

The Secretary of the Interior's Standards for **Rehabilitation** are as follows<sup>5</sup>:

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

The basic guidelines for work on the Hannah P. Clark House are as follows:

- Undertake work in compliance with the Secretary of the Interior's Standards for **Rehabilitation**.
- Retain the character of the historic building and environs by protecting the buildings and significant site features.
- Ensure that proposed new elements or construction are compatible with historic character of the buildings and its site.

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<sup>5</sup> The Secretary of the Interior's Standards for the Treatment of Historic Properties, Standards for Rehabilitation.

- Protect adjacent natural resources during construction activities.
- Document through detailed as-built drawings, photographs, and written narrative all changes and treatments to the building and its immediate site. Maintain records of treatments and preserve documentation according to professional archival standards. Maintain a copy of records in Fairfax County archives.
- Retain features and materials at both the exterior and interior of the buildings that date from the period of significance to the greatest extent possible.

## HANNAH P. CLARK HOUSE

### Site Description

The Hannah P. Clark House is located in Lorton, Virginia, off Furnace Road near the Occoquan River and just outside of the town of Colchester. The house is in close proximity to Route 1 and the railroad tracks that parallel the highway to the south. Trees and shrubbery surround the home with two very large trees to the south and east. The house is accessed by a gravel driveway from Furnace Road that terminates in a loop next to the south side of the house, adjacent to the Enyedi Furnace Road Studio and shed structures. Several ancillary structures and features reside on the site including a small fenced garden located on the south side of the home, a railroad tool shed from the 1930s located to the east, and an above grade concrete well to the north. The house is fairly obscured by vegetation from Furnace Road, being only visible at the gravel driveway.

### Structure Description

The Hannah P. Clark House is a two-story peeled sapling and log/wood-framed vernacular farmhouse with intersecting gables, resting atop a brick and concrete foundation. Since its construction around 1876, the home has been moved, added onto, and renovated several times, resulting in the structure that resides on the property today. Consequently, the original character and style of the home are difficult to determine as currently viewed. As such, the house currently reflects the National Folk architectural style with minimal obvious influences due to the many alterations. Exterior ornamentation from the original construction or early additions are no longer in place. Based upon historic photos provided in the 2014 HSA and reported dates of construction, the home was likely originally built in the Folk Victorian style, particularly after the first addition. The decorative brackets and turned support posts of the original north porch are visible in the photographs of Hannah and William Clark ca 1919 and Joan Clark ca 1955-56 provided in the 2014 HSA. In addition, the spindles and newel post of the interior staircase provide hints of that architectural influence.

The home was originally a one-room two-story house constructed in 1876. This original portion was constructed with vertical peeled-log framing, log sapling roof framing, and rough-hewn floor joists and timber sills. Due to the house having been moved, the original foundation is unknown. The original rough-hewn floor beams and sills can be seen in the cellar and rough-hewn second floor joists are exposed and visible at room 101 on the first floor. The peeled log rafters, ceiling joists, and the backside of the plaster and wood lathe ceiling are visible in the attic space. Around 1885, the Clark family doubled the space of the home with a two-story addition along the west side of the home. The current staircase between the first and second floors replaced the original staircase, which was potentially originally located along the east wall.<sup>6</sup> In the 1890s, a kitchen and rear porch were added to the south of the home. All subsequent additions, ca 1885 and 1890, were constructed using mill-sawn lumber. The original location of the kitchen addition is not certain, but it presently sits south of the original one-room section of the home (Period I). The kitchen

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<sup>6</sup> Peebles, Elizabeth, *Hannah P. Clark House: Historic Structure Assessment*, 2014, pp 22 -31.

may have been relocated after the house was moved as the current “L” footprint lies opposite the footprint reflected in the 1903 Railway Survey. In the late 19th century or early 20th century, two porches were added to the home, one on the north side and one on the south side. Around 1913, the Washington Southern Railway Company that served the Colchester area decided that it was necessary to realign the railroad to straighten the tracks, which ultimately aligned through Hannah’s property.<sup>7</sup> Hannah elected to relocate her home across the street, rather than abandon the house. The current foundation is resultant from this relocation and constructed of concrete and brick. Poured concrete walls are visible in the below grade cellar. The original cellar floor was dirt and between 1956 and 1983, concrete was poured for the floor. Several items of the house were repaired or reconstructed due to the stresses of the move including reconstruction of the kitchen roof.<sup>8</sup> In addition, the cellar retrofit of the large wood beam running perpendicular with a centered column may have also occurred during house relocation or once the house was relocated. The HSA created a conjectural drawing of the north (main) facade of the house ca 1915 that shows the porch still open (Figure 1).

After Hannah’s death in 1925, the property was occupied by various family members until it was sold to the Richmond, Fredericksburg and Potomac Railroad Company (RF & PRR) in 1931. In 1956, the house was sold to a land development company for plans to construct residential properties in the area. While that plan never came to fruition, the house became a rental property until 1983. During 1956 and 1983, most of the major alterations currently in place were made to the house. The alterations included interior plumbing and addition of two bathrooms; modern building cooling, heating, and plumbing systems were installed; new kitchen installed; north porch was enclosed and divided into multiple rooms; well pump porch at the south of the house was enlarged and enclosed; many doors were replaced; and the original lathe and plaster walls and ceilings were replaced and/or covered with drywall.<sup>9</sup> The Lewis family purchased the property in 1983 and did not make any significant changes.<sup>10</sup>

In 1986, the Enyedi family purchased the house and completed additional alterations to the home. The south porch was enclosed and the east wall at the first floor was reconstructed to accommodate a fireplace and two doors that lead out to wooden deck that was constructed. In 2000, the Enyedi’s replaced the gutters, downspouts, and wood floor in the kitchen. During this time all of the roofs on the home were also replaced with contemporary asphalt shingle roofs.<sup>11</sup> The house was sold in 2011 to the Fairfax County Park Authority, with minimal work being completed including removal of carpet flooring and mold remediation. With the removal of the carpet, the historic brown painted wood floors are now visible. Current floor plans reflecting the periods of construction and additions are shown in Figure 2 through Figure 6. Based on the enclosed section of the original gable that is visible in the attic space, it appears that the original cladding on the home was white painted wood siding, which is similar to the wood cladding visible in historic photographs and currently observed at the exterior facades (Figure 7). The archeology branch of the Fairfax County Park Authority are currently undergoing investigations adjacent to the house for their prehistoric and historic occupation study of the Colchester area. The house is being temporarily used to support their studies.

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<sup>7</sup> Peebles, Elizabeth, *Hannah P. Clark House: Historic Structure Assessment*, 2014, p 33-36.

<sup>8</sup> Peebles, Elizabeth, *Hannah P. Clark House: Historic Structure Assessment*, 2014, p 35.

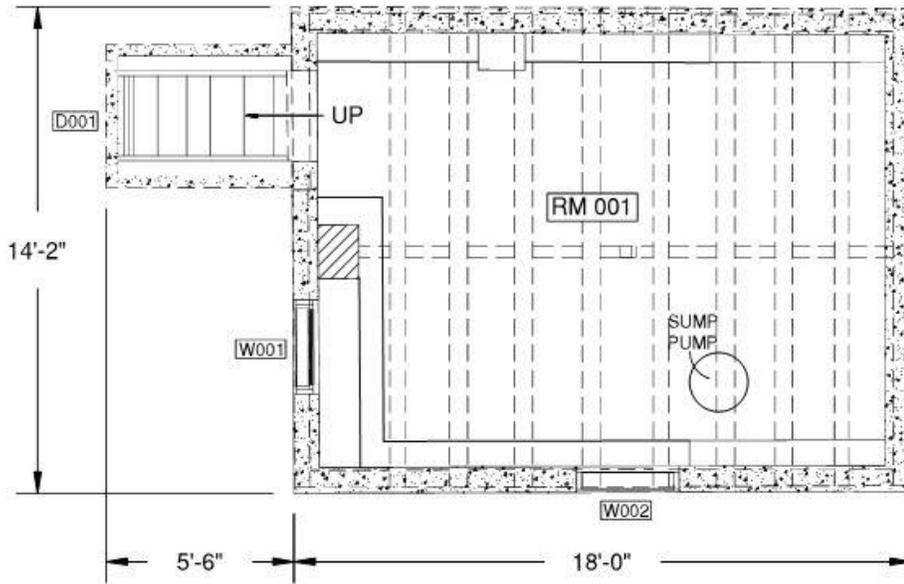
<sup>9</sup> *Ibid*, p 49.

<sup>10</sup> *Ibid*, p 53.

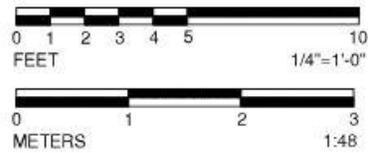
<sup>11</sup> *Ibid*, p 53-55.



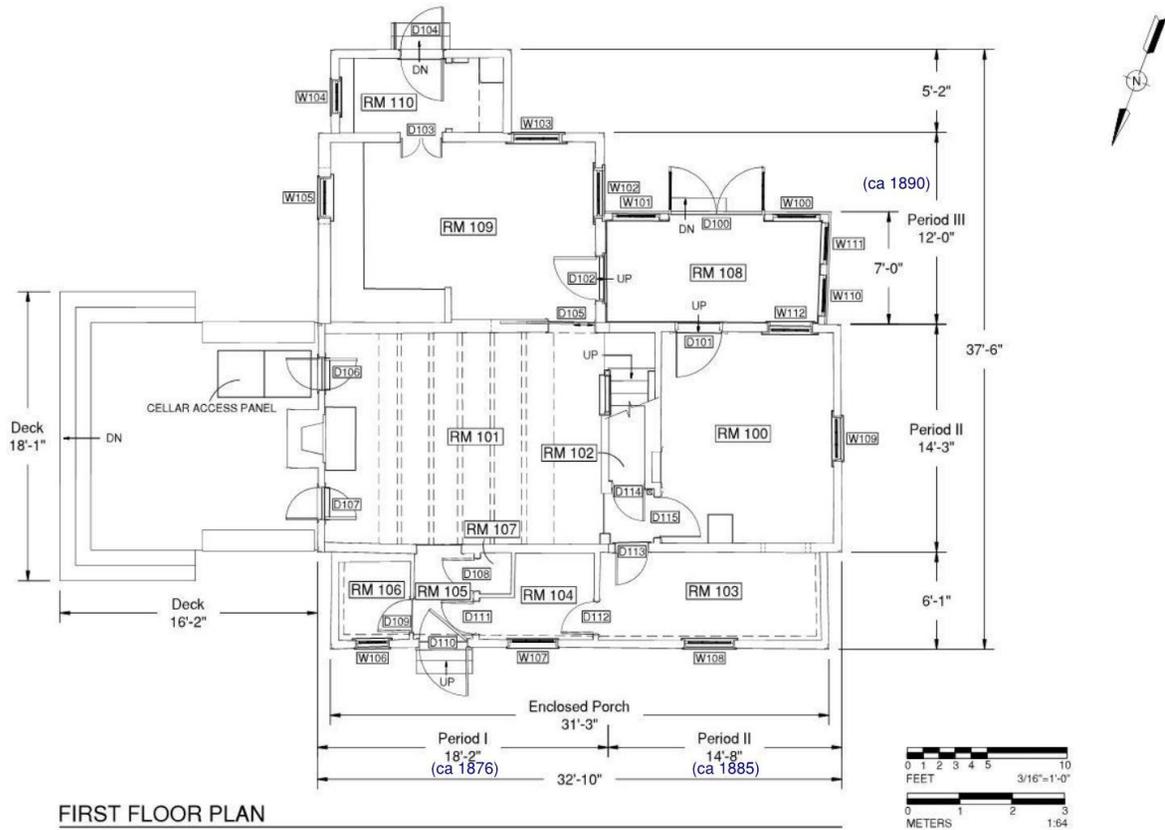
*Figure 1. North (main) elevation of the Hannah P. Clark House ca 1915 courtesy of the Fairfax County Park Authority Historic Structures Assessment Report (2014).*



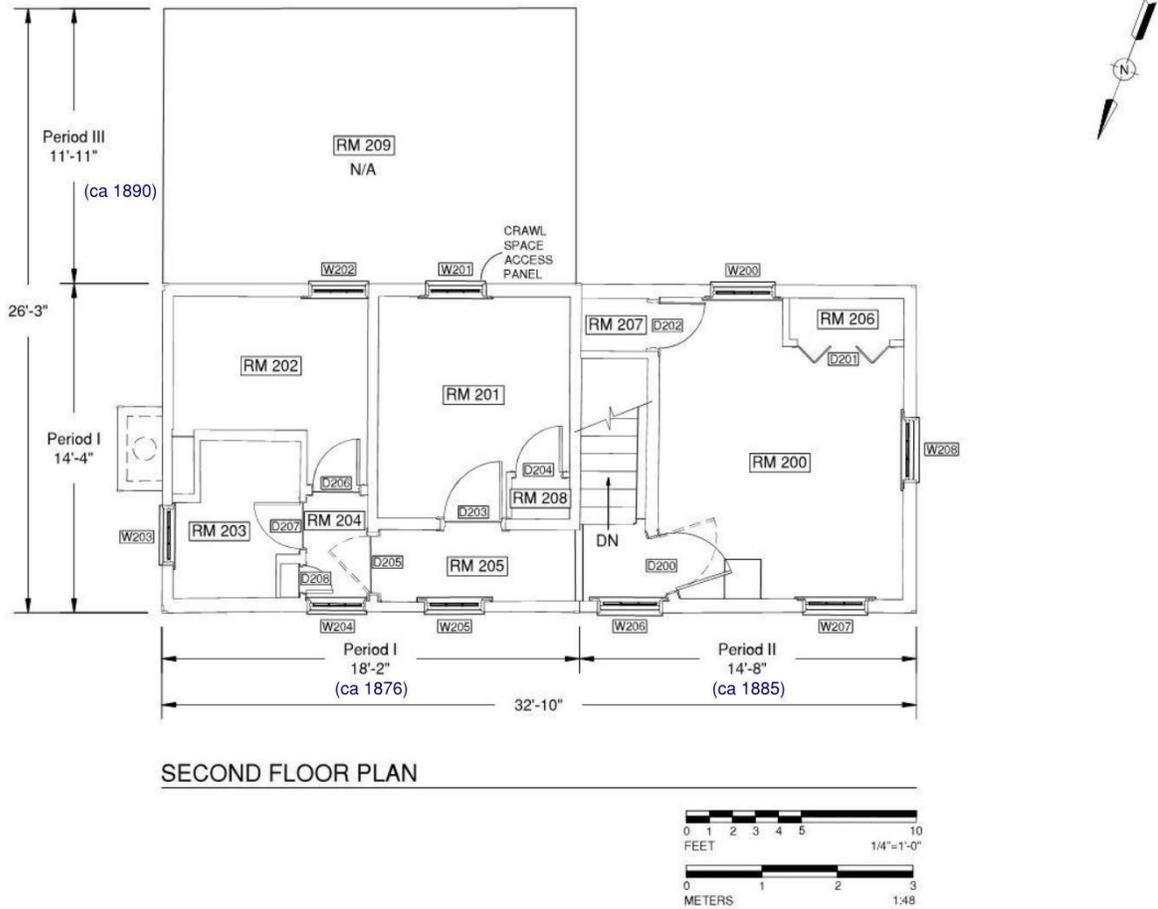
**CELLAR FLOOR PLAN**



*Figure 2. Cellar Floor Plan courtesy of the Fairfax County Park Authority Historic Structures Assessment Report (2014).*

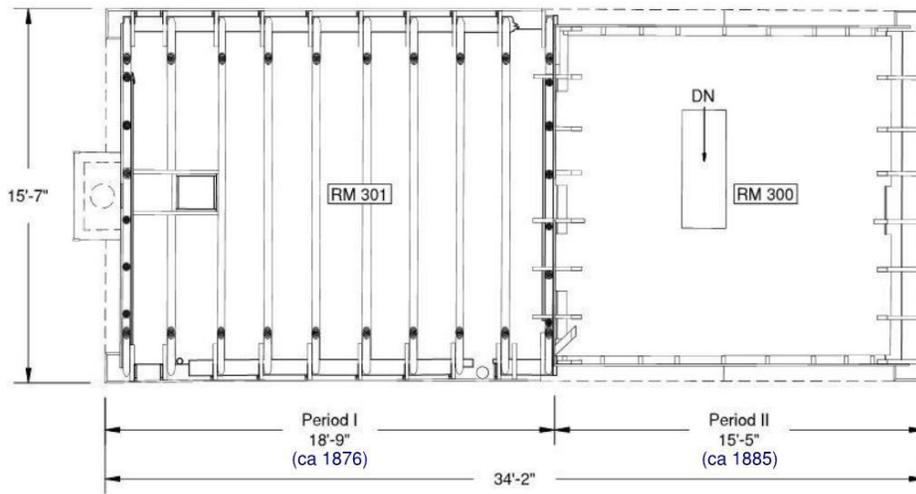


*Figure 3. First floor plan courtesy of the Fairfax County Park Authority Historic Structures Assessment Report (2014) with WJE annotations of estimated construction dates for ease of reference.*

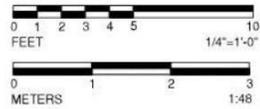


SECOND FLOOR PLAN

*Figure 4. Second floor plan courtesy of the Fairfax County Park Authority Historic Structures Assessment Report (2014) with WJE annotations of estimated construction dates for ease of reference.*



**ATTIC FLOOR PLAN**



*Figure 5. Attic floor plan courtesy of the Fairfax County Park Authority Historic Structures Assessment Report (2014) with WJE annotations of estimated construction dates for ease of reference.*

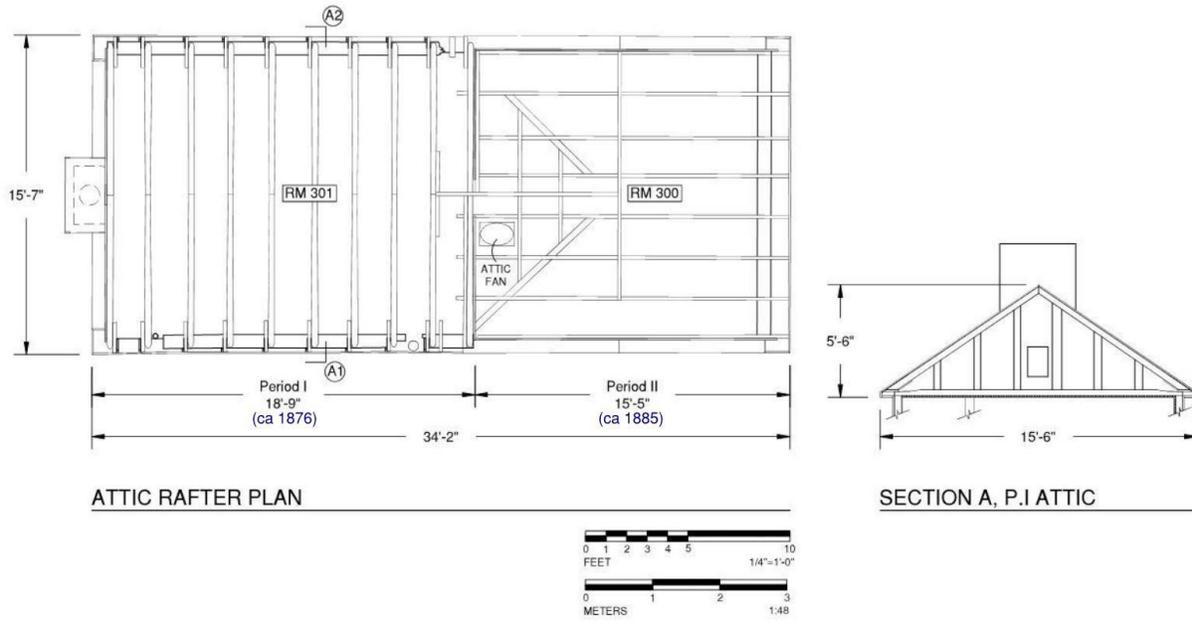


Figure 6. Attic rafter plan courtesy of the Fairfax County Park Authority Historic Structures Assessment Report (2014) with WJE annotations of estimated construction dates for ease of reference.



*Figure 7. Previously exterior west gable of the Period I section of the home as viewed from the Period II attic space.*



*Figure 8. Photograph of Hannah P. Clark holding William Clark on the home's north porch ca 1919. Note wood siding and porch ornamentation. Photograph courtesy of the Fairfax County Park Authority Historic Structures Assessment Report (2014).*



*Figure 9. Photograph of Joan Clark, one of the last Clark family members to live in the house, sitting atop the north porch railing ca 1955-56. Photograph courtesy of the Fairfax County Park Authority Historic Structures Assessment Report (2014).*

## **Exterior Condition**

### ***General***

- Vegetation was observed in close proximity to the home with evidence of dried vegetation on the house that may have travelled along the power lines connecting to the home (Figure 10).
- Insect activity was observed at the exterior of the house including abandoned insect nests and a trail of ants on the foundation.

### ***Wood Siding***

- Deteriorated wood was observed at locations throughout the exterior siding, generally on trim elements at corners and below gutters (Figure 11, Figure 12, and Figure 13). Some of these areas may correspond to damage due to water runoff or overflow. Soft wood areas were particularly found in accessible areas below the southeast corner gutter and adjacent to the wood sided chimney on the east facade (Figure 14 and Figure 15). One section of siding at the chimney was soft enough to allow an awl to pass through the material.
- Paint deterioration such as peeling, cracking, and discoloration was observed throughout the exterior of the home with some areas coincidental with wood deterioration as the wood material became exposed with the compromised coating (Figure 16 and Figure 17).
- A large area of ferrous staining was observed on the east facade, adjacent to a water spigot (Figure 18). Other attached metal elements had deteriorated coatings and resultant corrosion (Figure 19). Corrosion was also observed at fasteners in the siding on the south facade (Figure 20).
- Isolated cracks and missing areas of wood were observed in wood siding, generally originating from the end of the board or at fasteners (Figure 21, Figure 22, and Figure 23). Separation of some cornice wood members were visible, typically occurring at corners (Figure 24). In addition, one utility line anchor protrudes through the cornice on the east facade through a rough opening that could allow water to enter into the boxed cornice (Figure 25).

### ***Foundation***

- The foundation appears to be in generally good condition. Isolated cracks and spalls were observed in the concrete parge coat at the areas visible at the exterior of the home allowing brick to become exposed (Figure 26 and Figure 27). Two unsealed pipe penetrations through the foundation to the cellar are located at the north facade to accommodate existing utilities.

### ***Concrete***

- Concrete stairs are located below the north and south exterior doors and are in good condition. A horizontal crack was observed along the base of the southeast concrete stairs.

### ***Chimney***

- The wood siding at the chimney is in poor to fair condition and is primarily addressed in the wood section above. A considerable amount of deteriorated wood was observed at the top of the chimney adjacent to the roof interface. This area also had ferrous staining that appears to be originating from the chimney cap or vent stack (Figure 28).

## **Doors**

- The doors of the home are in fair to good condition with the paint generally faded, cracked, and peeling on the doors and adjacent trim (Figure 29). Minor separation between joinery was observed at two locations on the exterior doors (Figure 30). The east doors surrounding the chimney have considerable wood deterioration with partially missing wood members at the screen doors (Figure 31 and Figure 32).
- The screen door on the south side of the home does not fully close with the weather stripping between the screen door and interior door loose and peeling away from the wood (Figure 33).
- One side of the French doors on the southwest side is slightly displaced, but likely does not impact function.
- Minor deterioration was observed at exterior doors such as one area at the north screen door where there is a rip in the screen as well as ferrous staining at hinges (Figure 34).
- The wooden handrail adjacent to the door on the south side of the home is deteriorated and no longer bearing with a large amount of material missing at the base of the post (Figure 35).

## **Windows**

- In general, the windows are in fair condition with some windows having one or both sashes replaced. At locations where only one sash was replaced, the dimensions of the sash are thinner and as a result sit differently in the sash channel and do not fully engage with the sash lock. The original shutters have been replaced with fixed slatted shutters. Evidence of previous shutter hinge locations are still visible along the frames of the windows. Of note, none of the north façade windows have shutters.
- Two windows located at the north facade and one at the south façade of the second floor, Period I section are racked towards the centerline of the original portion of the house. The north facade windows are slightly displaced towards each other in a similar orientation to floor and ceiling slope observed at the interior. The south facade window slopes towards the center of the house also following floor slope orientation. The window sashes and muntins appear to be absorbing the racking currently with sashes sitting fully in the glazing pocket with no cracked glazing lites (Figure 36 through Figure 38).
- Typical window conditions included cracked, displaced, or missing glazing putty; flaked and peeling paint; missing and removed interior hardware; flaked and peeling coating at the shutters with isolated areas of broken or missing slats; (Figure 39 through Figure 44). Several of the windows are covered at the exterior or interior with an acrylic glass directly fastened to the frame.
- Isolated conditions observed were cracked glass lites, muntin deterioration typically at the upper sash meeting rail (Figure 45), an area of missing wood from a window sill, an area of missing interior molding, one window with a cracked muntin, and one damaged muntin that reveals the edge of a glass lite (Figure 46 and Figure 47).
- There are ventilation windows in the cellar, one window, that is not visible from the exterior contains a deteriorated wood awning cover with polyethylene plastic at the interior (Figure 48).

## **Roof**

- The asphalt shingles are in fair condition with gutters and downspouts in good condition. Metal flashing appears to have been integrated with the last re-roofing work at the secondary roofs.
- Debris was observed along all gutters, which could be due to build up in the gutters or they could be undersized to accommodate the water flow (Figure 49). Most downspouts do not have splash pads that is resulting in the discharged water being deposited close to the foundation (Figure 50).
- Vegetation was observed growing on the roof and underneath the eaves as well as dark soiling at some areas of shingles (Figure 51 and Figure 52). There were also several shingles missing at the edge of the south gable (Figure 53).

- There are noticeable low spots on the main roof, above the Period I section of the house (Figure 54). The peeled log raters are toe-nailed together without the use of a ridge beam or board, except where retrofitted.

### **Wood Deck**

- The wood deck added on the east is generally in good condition with areas of minor deterioration due to exposure to the elements. Handrails have been removed with only the pockets for the posts remaining (Figure 55).

### **Lighting Fixtures**

- The exterior lighting fixtures are not original and are in good condition with only one fixture on the north side having a broken pane of glass (Figure 56).



*Figure 10. Vegetation underneath eave and along the power lines at the west facade.*



*Figure 11. Deteriorated wood at trim element on corner. Note exposed brick at foundation where parge coat and brick mortar are no longer intact.*



*Figure 12. Deteriorated wood at cornice element on northwest corner behind gutter.*



*Figure 13. Deteriorated wood siding on east facade, adjacent to chimney.*



*Figure 14. Deteriorated wood soffit and siding beneath gutter at south east corner.*



*Figure 15. Area of deteriorated wood siding at the east chimney.*



*Figure 16. Typical paint deterioration on wood siding.*



*Figure 17. Typical paint deterioration on wood siding with some areas of wood exposed.*



*Figure 18. Ferrrous staining on east facade adjacent to water spigot.*



*Figure 19. Corrosion on metal elements attached to facade due to deteriorated coatings.*



*Figure 20. Localized ferrous staining due to exposed nails in the siding on south facade.*



*Figure 21. Split in wood originating from edge of wood board above fastener.*



*Figure 22. Split in wood originating from southwest corner.*



*Figure 23. Missing section of wood siding with metal flashing below on north facade.*



*Figure 24. Separation of wood fascia board adjacent to the gutter.*



*Figure 25. Rough opening through the cornice for the utility line anchor.*



*Figure 26. Crack and delamination in parge coat that covers brick foundations.*



*Figure 27. Spall in parge coat allowing the brick to become exposed.*



*Figure 28. Dark and ferrous staining at the chimney.*



*Figure 29. Typical paint deterioration of exterior doors.*



*Figure 30. Typical separation of joinery at doors.*



*Figure 31. Missing section of wood at the horizontal member of an east screen door.*



*Figure 32. Missing section of wood at the base of an east screen door.*



*Figure 33. Deteriorated weather seal for screen door on southeast exterior door.*



*Figure 34. Corroded hinges at southwest french doors, typical condition for exterior doors on the home.*



*Figure 35. Missing section of wood at the southeast exterior door handrail post.*



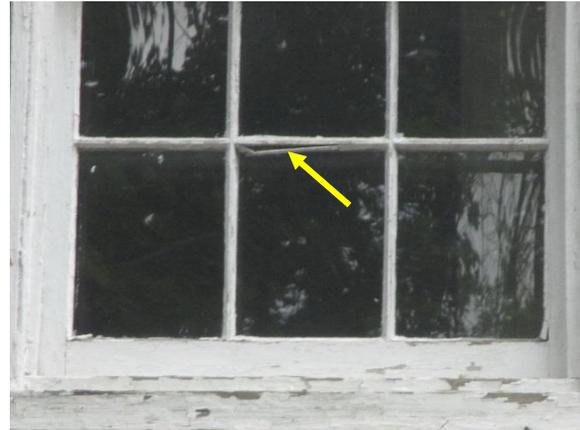
*Figure 36. North facade windows, W204 and W205, sloped towards each other.*



*Figure 37. Window 204 sloped to the west.*



*Figure 38. Window 205 sloped to the east.*



*Figure 39. Typical deterioration of glazing putty at windows.*



*Figure 40. Typical flaked paint on window elements and frame.*



*Figure 41. Typical deterioration of paint on window shutters revealing previous green paint.*



*Figure 42. Broken and missing slat on shutter at south facade.*



*Figure 43. Typical paint and glazing putty deterioration at windows.*



*Figure 44. Typical deterioration of muntins at interior.*



*Figure 45. Muntin deterioration at upper sash meeting rail.*



*Figure 46. Area of missing wood at a first floor window sill on west facade.*



*Figure 47. Cracked muntin in room 109.*



*Figure 48. Window in basement that is not visible from exterior and may be infilled. Deteriorated wood can be seen around the frame.*



*Figure 49. Debris build-up and staining at gutters providing evidence of overflow.*



*Figure 50. Downspouts terminate near the foundation without any splash pads.*



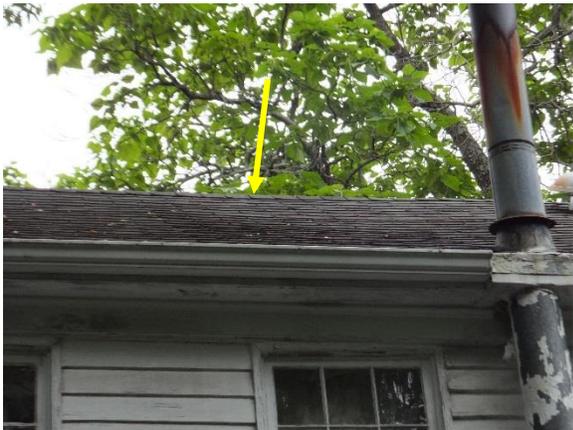
*Figure 51. Vegetation growing on the roof at the second roof on the north.*



*Figure 52. Soiling of asphalt shingles at the secondary roof on the south.*



*Figure 53. Missing shingles at the edge of the south gable.*



*Figure 54. Low spot on main gabled roof above the Period I section of the home.*



*Figure 55. Removed handrails at the deck on east side of home. Note condition of wood decking.*



*Figure 56. Lighting fixture on north facade with cracked glass at front.*

## Interior Condition

### *Interior Wall Finishes*

- Interior wall finishes consist of drywall, plaster, and wood paneled siding. Cracking of plaster and drywall was observed throughout the home generally located near window or door frames, fixtures, or wall seams (Figure 57, Figure 58, Figure 59, and Figure 60). There were also areas of flaking and stained paint with isolated areas of damaged plaster and drywall.
- All baseboards have been removed from the second floor walls, leaving separation of the wall finish to the dimensional lumber (Figure 61). The dimensional lumber at the base of the wall in room 200 is starting to pull away from the wall (Figure 62). Sections of crown molding in room 100 are starting to separate from the ceiling (Figure 63).
- Diagonal cracking was observed on the wall in the stairwell, originating from a doorframe, traveling to the ceiling with another originating from the handrail travelling to the stringer against the wall (Figure 64 and Figure 65).
- Evidence of water infiltration was observed below some windows and at the ceiling of the enclosed south porch (Figure 66). Areas of plaster are missing from the sloped ceiling of the closet below the stairwell (room 115) revealing wood lathe (Figure 67). Burn marks on the ceiling in room 100 was observed related to heat damage from the lighting fixture (Figure 68).
- Walls and ceilings were observed to be sloping on the eastern portion (Period I section) at the first and second floor of the house (Figure 69 and Figure 70).
- Pipe penetrations were observed at the southeast corner in room 101, protruding through the floor and going through the wall to the kitchen (Figure 71).
- Two panels of wood siding at the southwest corner of room 103 are loose with one panel able to be easily removed. This panel covers the previous exterior door that lead to the once open porch (Figure 72 and Figure 73).

### *Wood*

- The 3/4 round floor beams in the cellar have numerous signs of deterioration including areas of soft and/or splintered wood with evidence of previous pest damage. Most of the beams, as well as the retrofit beam, and columns have a white coating (Figure 74). The solid sawn column located at the center of the cellar is deteriorated and split at the base with soft wood where it contacts the concrete floor (Figure 75). This deterioration may be from water damage, as water was observed pooling on the cellar floor near the adjacent water heater located along the north wall. The base of the column is loose and does not appear to be bearing on the basement slab. A manufactured 2" x 4" wood piece has been installed directly adjacent to the original column as a retrofit to support the solid sawn column.
- Deteriorated, soft wood was observed at the underside of the timber sill in front of the hatch door to the cellar (Figure 76). A split was observed through the entire north timber sill in the cellar (Figure 77). Dark staining was observed at the retrofitted beam nearest to the chimney in the cellar (Figure 78).
- One of the exposed second floor beams appears to have some pest damage near the north wall while another has a split (Figure 79 and Figure 80).
- In the attic, observations included potential pest damage along the edge of a rafter, a rotated rafter, split and cracking decking, and staining at the west attic flooring (Figure 81 through Figure 85). The wood was dry and may be residual staining from previous water infiltration.
- Several peeled log rafters in the inaccessible eastern section of the attic show signs of deflection. Several have milled lumber set adjacent to the rafters and at nailer plates (Figure 86). The historic peeled log rafters are toe-nailed with no ridge beam or board (Figure 87). There are multiple campaigns

of decking applied on top of the rafters with consistent white stain blooming at the older decking members.

### **Concrete**

- In the cellar, there is a spall and ferrous staining at a pipe penetration in the cellar near the access hatch and ferrous staining near the mechanical equipment (Figure 88 and Figure 89).
- Ponding of water was observed on the concrete floor in the cellar near the mechanical equipment (Figure 90). The water appears to be originating from a ventilation opening in the north wall that is currently covered with sheet metal (Figure 91).

### **Floors**

- The historic wood floors in the home have been painted brown with several areas of white paint splatter (Figure 92). There are isolated areas of scraped paint exposing the wood floor and carpet remnants (Figure 93).
- The wood floors at the first and second floor of the Period I section of the house are sloping towards the center of the house. The second floor appears to slope slightly more so to the south and room 202 has a high point at the south end of the room with the floor sloping towards the walls. (Figure 94).
- Isolated areas of linoleum tiles are chipped throughout.

### **Doors**

- Several of the doors have been replaced with contemporary doors. Typical damage observed at historic doors was minor cracking in the wood and separation at joinery (Figure 95 and Figure 96).
- Isolated deterioration included a crack at a hinge with the pin not fully engaged, impact damage to a door frame and a knob, a partially burned door exposing the interior core, deteriorated weather stripping at a previously exterior door, and water staining at the base of the north exterior door (Figure 97 through Figure 102).
- Two doors at the first floor, D115 and D101, do not fully close. At D115, the sloped floor may be contributing to this. At D101, the door is exhibiting slight separation at the joinery, which may be causing the door to no longer fit into the doorframe. Approximately two doorframes and doors on the second floor are not level (Figure 103).
- One door on the second floor is missing with the hinges and latch remaining. Door thresholds and rim locks have been removed from several doors within the home (Figure 104).

### **Fixtures**

- The interior lighting fixtures all appear to be replacements and are in good working condition.



*Figure 57. Crack in plaster around door frame on second floor. Crack traced for clarity.*



*Figure 58. Crack and vertical displacement in ceiling at lighting fixture in room 104 (enclosed north porch).*



*Figure 59. Crack in plaster wall around window frame on second floor. Crack traced for clarity.*



*Figure 60. Cracks in plaster beneath window sill. Cracks traced for clarity.*



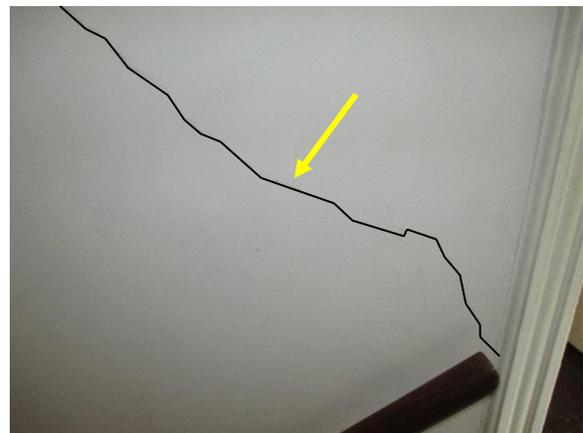
*Figure 61. Typical condition in rooms that are missing baseboards: paint build-up line across wall and scraped paint at bottom of baseboard.*



*Figure 62. Horizontal cracking at location of previous baseboard in room 200.*



*Figure 63. Separation of crown molding from ceiling and wall.*



*Figure 64. Diagonal cracking in stairwell. Crack traced for clarity.*



Figure 65. Cracking originating at the handrail connection in stairwell. Crack traced for clarity.



Figure 66. Evidence of water infiltration on interior finishes with related cracking on the second floor.



Figure 67. Missing plaster below the stairs revealing the wood lath.

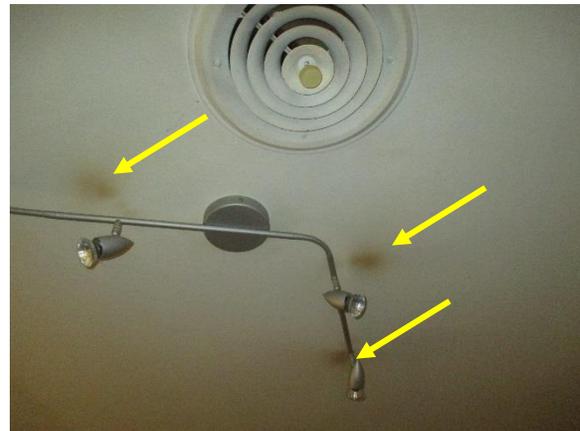


Figure 68. Burn marks on ceiling at room 100 above the light fixture.



Figure 69. Sloped ceiling and resultant wall finishes in room 101.



Figure 70. Sloped ceiling in second floor hallway, note cracking in finishes.



*Figure 71. Pipe penetration through floor and wall in room 101.*



*Figure 72. Delamination of wood panel at the soffit in room 103.*



*Figure 73. Panel able to be easily removed reveals the original exterior door location when room 103 was an open porch. Note exterior wood siding still in place.*



*Figure 74. Soft and splintered 3/4 round beams in cellar.*



*Figure 75. Soft and split wood at base of solid sawn column in cellar. Retrofit manufactured wood piece has been installed adjacent to the original column.*



*Figure 76. Deteriorated wood at underside of timber sill at hatch to cellar.*



*Figure 77. Full-depth split through timber sill in cellar.*



*Figure 78. Dark stain on beam in cellar, adjacent to chimney. Note white coating on original 3/4 round beams and underside of first floor.*



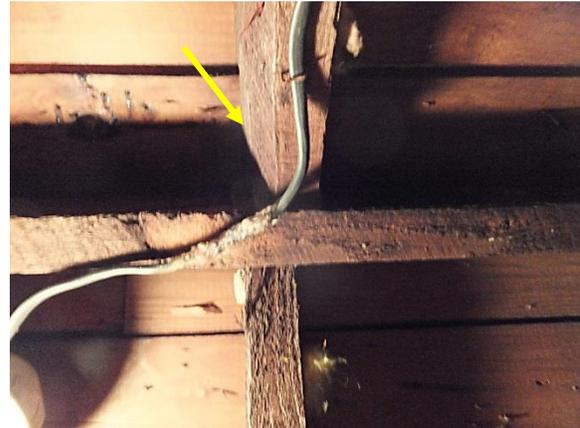
*Figure 79. Damaged edge of rafter potentially from pest activity.*



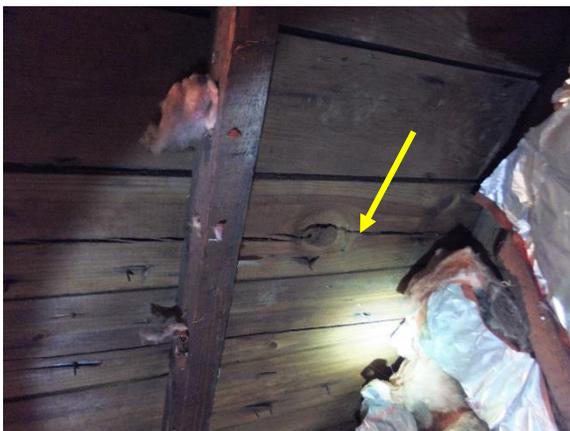
*Figure 80. Split in beam in room 101.*



*Figure 81. Deteriorated wood in room 101, potentially due to pest damage.*



*Figure 82. Rotated rafter in west attic.*



*Figure 83. Cracked decking timber in attic.*



*Figure 84. Split decking timber in attic.*



*Figure 85. Stain from previous water infiltration on west attic floor.*



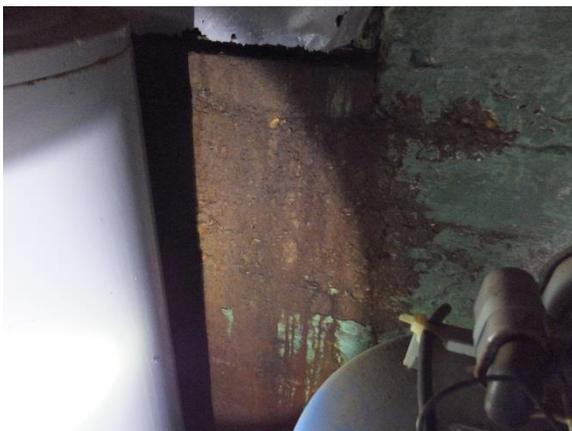
*Figure 86. Peeled log rafters in attic with additional milled lumber for decking.*



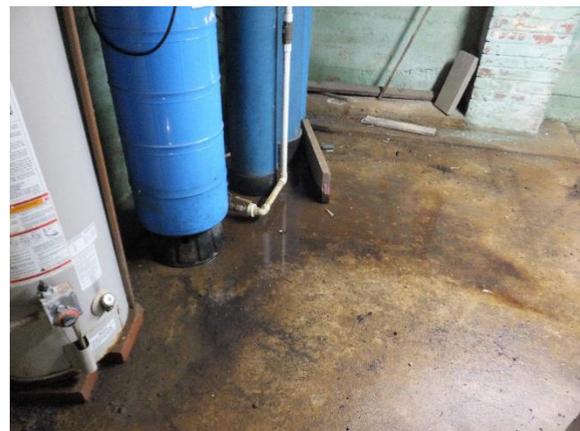
*Figure 87. Historic peeled log rafters toe-nailed without a ridge beam or board in attic.*



*Figure 88. Spall at pipe penetration at concrete in cellar.*



*Figure 89. Rust staining on concrete wall in cellar.*



*Figure 90. Water pooling on concrete floor in cellar.*



*Figure 91. Unsealed ventilation window opening in cellar below-grade wall.*



*Figure 92. Typical brown painted wood floor with white splattered paint.*



*Figure 93. Paint scraped from wood floor.*



*Figure 94. Sloped floor in room 202.*



*Figure 95. Typical separation of joinery at historic interior doors.*



*Figure 96. Crack through panel of a historic interior door.*



*Figure 97. Crack at hinges of door D113. Hinges also appear to be misaligned with the pin not fully engaged.*



*Figure 98. Gouge in door frame at door D103.*



*Figure 99. Crushed door knob at door D115.*



*Figure 100. Burn through door D113.*



*Figure 101. Deterioration of seal at door D106.*



*Figure 102. Water staining at base of exterior door D110.*



*Figure 103. Door in room 200 on second floor is not plumb.*



*Figure 104. Outline of rim lock that was removed.*

## Recommendations

All work performed on the structures and site features should be documented through notes, photographs, and measured drawings and/or sketches, or with as-built annotations to construction documents at project completion. These records should be permanently archived with Fairfax County Park Authority as a part of the record of the property and to provide information for future repairs and ongoing maintenance. In addition, these records will allow future observers to identify which materials are original, replacement, and their date of installation.

### ***Prioritization of Treatment***

Based on the observed conditions from the July 5, 2017 site visit, the following priority treatments are recommended for work the restoration on the Hannah P. Clark House:

1. Engage a structural engineer to perform further investigation at areas of potential structural concern including:
  - a. Deteriorated floor beams and column in the cellar
  - b. Cracks in parge coating at exterior surfaces of foundation
  - c. Sloped ceilings and floors at the first and second floor
  - d. Racking of the second floor windows at the Period I section
  - e. Cracked plaster and drywall around window frames on the second floor
  - f. Deflecting sapling rafters in the attic
2. Secure the building envelope such that moisture infiltration cannot further degrade the remaining historic elements. Work related to exterior envelope waterproofing should follow to prevent water infiltration and deterioration of building envelope materials, and to address conditions that may lead to continued deterioration and loss of historic fabric. These types of repairs include, but are not limited to:
  - a. Window and door repairs
  - b. Removing vegetation away from the home
  - c. Regrading of soil to slope away from the home, particularly near cellar ventilation windows and downspout discharge locations
  - d. Clearing gutters and roofs of dirt and debris
  - e. Installing splash pads and/or extension pipes for downspouts
3. Replace light fixture in room 100 as the burn marks in the ceiling may be evidence that the heat of the bulbs are a fire hazard.

### ***Exterior***

Based on the observed conditions from the July 5, 2017 site visit, the following treatments are recommended for the restoration on the Hannah P. Clark House:

#### ***General***

- Perform insect and pest control measures to minimize insect activity.
- Perform and schedule cyclical maintenance tasks such as building envelope and site inspection, painting of exterior wood and metal elements, inspection and replacement of joint sealants, tree and vegetation care, cleaning of gutters, and other ongoing maintenance tasks to minimize impact to the historic site

and building fabric. Performance of cyclical maintenance will reduce the need for large-scale repair projects in future.

### ***Wood Siding***

- Remove all loose, soft, and deteriorated wood. Perform wood dutchman or full member replacement where required. Replaced members are to utilize in-kind materials.
- All exterior wood elements should be cleaned and repainted on a cyclical basis. Exterior corroding elements, such as hose bibs, should be cleaned and repaired where necessary to inhibit future corrosion and subsequent impact to the siding. In this climate, maintenance cycles for residential grade coatings on wood are typically between 7 and 10 years and depend heavily on the substrate's preparation, exposure, and bond between the new coating and existing elements. At isolated areas requiring repainting, remove the paint layers down to bare wood. Feather the edges of the surrounding paint and allow wood to fully dry. Install prime and repaint.
- Repair cracks in wood siding where possible. Evaluate locations of missing areas of wood in siding. Minor missing material may remain; however, if missing material begins to expose flashing or the joints between wood siding elements, a wood dutchman should be performed.
- Reattach any wood siding and trim pieces that are no longer fully attached. Evaluate flashings to ensure they are properly placed and integrated to minimize water shedding that could impact wood materials.
- Remove abandoned anchors and embedments and seal holes in order to prevent water infiltration.

### ***Foundation***

- Seal around pipe penetrations through foundation to minimize water infiltration.

### ***Concrete***

- Rout and seal cracked step on the south facade.

### ***Chimney***

- Evaluate flashing, if existent, at chimney to roof interface. Repair or install new flashing to assist with the water drainage to gutters. Remove loose, soft, and deteriorated wood. Perform epoxy patch or wood dutchman, where required.
- Evaluate cap flashing to determine if metal needs to be cleaned and a corrosion inhibiting coating applied. Replace cap flashing if missing material due to corrosion is observed.
- Clean and repaint wood siding once repairs have been made.

### ***Doors***

- Remove all loose and deteriorated paint to a clean wood substrate. Evaluate isolated areas of separation at joinery to determine if repairs are required to re-engage connection. Remove and repair any soft or deteriorated wood. Perform isolated repairs, such as epoxy patches, if deterioration or damage is found once coatings have been removed.
- Clean and repaint all doors once repairs, if required, have been made.
- Replace deteriorated weather stripping at doors to ensure they are weathertight.
- Reset/adjust slightly displaced French door at the south porch.
- Repair or replace non-historic storm doors at the east facade.

### ***Windows***

- Remove acrylic glass covering windows.
- Remove flaked and deteriorated paint at shutters and window surfaces and repaint, including sash channels and sills. Remove soft and deteriorated wood. Perform repairs at deterioration observed such

as installation of consolidant, epoxy patches, isolated dutchman repairs, and wood pinning at any loose or disengaged elements.

- Once cracked glazing lites are replaced (priority treatment recommendation), repair areas of deteriorated glazing putty.
- During window restoration work, inspect all rope lifts, sash locks, weather stripping, and other hardware to permit for full and unhindered operation, replacing in-kind where required.
- Repair hinged ventilation windows in the cellar to close, and replace screens, or other type of permeable material, to allow for ventilation of the space while minimizing openings for animals.
- Monitor areas of previous water infiltration below windows after work is complete to ensure the leakage has been repaired.
- *OPTION* - Replace non-historic window shutters with more era-appropriate shutters if archival documentation can be found to inform general dimensions and design.

### ***Roof***

- Coordinate structural evaluation of sapling rafters at the Period I section of the house with partial or full replacement of asphalt shingles. Evaluate sizing and placement of gutters to ensure they are adequate for water flow.

### ***Wood Deck***

- Reinstall handrails at the east open porch steps.
- Clean and seal wood deck and benches. Remove any loose, soft, and deteriorated wood. Perform partial or full wood dutchman if required.

### ***Lighting Fixtures***

- Replace broken glass at light fixture on north facade.
- Clean all light fixtures.

### ***Interior***

#### ***Interior Wall Finishes***

- Minor cracks, damage, and deterioration in finishes should be repaired in place by filling cracks or damaged areas with compatible new material. Some material, particularly at water-damaged plaster, may need to be removed until sound material is found to ensure any compromised material is removed. Repaint plaster once repairs have been made. Monitor areas with previous water damage to ensure there are no active leaks.
- Repaint walls and ceilings to represent the typical interior finishes of the period of historical significance.
- Evaluate potential use for room 103 and consider removing wall paneling to expose original wood siding along the south wall.
- Reattach crown molding trim pieces that are becoming detached in isolated locations.
- Replace missing baseboards with appropriate profiling and dimensions typical of the time period of significance.

#### ***Wood***

- Coordinate the evaluation of structural wood members with a structural engineer (priority treatment recommendation). Remove any loose, soft, and deteriorated wood of non-structural members. Remove split or damaged wood. Perform partial or full depth wood dutchman where required.
- Reset rotated rafter at the Period II section.

- Monitor area of water staining in attic after roof replacement to ensure that leaks are no longer present.

***Concrete***

- Clean ferrous staining from concrete surfaces in the cellar using the most gentle cleaner possible. Minimize water coming into contact with ferrous metals.

***Floors***

- Remove paint on wood floors and refinish in a manner that represents a typical interior finish of the time period of historic significance.
- Remove and replace non-historic linoleum floor tiles with considerable staining or damage. Consider replacing with materials that may have been in place if archival documentation is found.

***Doors***

- Clean and repaint or refinish all doors. Repair at joinery and areas of minor damage where needed. Replace any missing thresholds.
- Remove and rehang doors that are unable to close to attempt obtaining full operability of the doors.
- Replace damaged non-historic door to room 103.
- Replace missing historic doors and hardware with materials appropriate of the historic time period.
- *OPTION* - Replace contemporary doors, doors dating after 1960, with more historic appropriate doors.

***Fixtures***

- Clean all light fixtures.
- Clean or replace all plumbing fixtures and appliances as required. Existent fixtures are not historic.

## **Appendix A - Cost Estimate**

**Hannah P. Clark House  
RECOMMENDATIONS COSTS SUMMARY**

<b>BUILDING</b>	<b>ESTIMATE TOTAL</b>	<b>GENERAL CONDITIONS 15%</b>	<b>CONTINGENCY 20%</b>	<b>DESIGN ALLOWANCE 12%</b>	<b>GRAND TOTAL</b>	<b>TOTAL SQUARE FEET</b>	<b>COST/FT2</b>
House	\$118,057.88	\$17,708.68	\$29,514.47	\$17,708.68	<b>\$182,989.71</b>	<b>1670</b>	<b>\$109.57</b>
<b>TOTAL FOR ALL BUILDINGS</b>	\$118,057.88	\$17,708.68	\$29,514.47	\$17,708.68	<b>\$182,989.71</b>	<b>1670</b>	<b>\$109.57</b>

**RECOMMENDATIONS COSTS SUMMARY INCLUDING OPTIONS**

<b>BUILDING</b>	<b>ESTIMATE TOTAL</b>	<b>GENERAL CONDITIONS 15%</b>	<b>CONTINGENCY 20%</b>	<b>DESIGN ALLOWANCE 12%</b>	<b>GRAND TOTAL</b>	<b>TOTAL SQUARE FEET</b>	<b>COST/FT2</b>
House	\$122,182.88	\$18,327.43	\$30,545.72	\$18,327.43	<b>\$189,383.46</b>	<b>1670</b>	<b>\$113.40</b>
<b>TOTAL INCLUDING OPTIONS FOR ALL BUILDINGS</b>	\$122,182.88	\$18,327.43	\$30,545.72	\$18,327.43	<b>\$189,383.46</b>	<b>1670</b>	<b>\$113.40</b>

Note: The projections are based upon the assumption that the work will be undertaken in cost effective parcels where a contractor/laborer will be able to absorb overhead, access, and equipment/tool costs across several similar items. This cost estimate includes restoration of existing elements only and does not include mechanical, plumbing, and comfort upgrades (such as bathroom renovations). Mechanical, lighting, HVAC, plumbing, and reconfiguration upgrades are significant costs.

**Hannah P. Clark House**

<b>Recommendations</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Cost</b>	<b>Comments</b>
<b>Priorities</b>					
Engage a structural engineer to perform an investigation at areas of potential structural concern.	12	hr.	\$169.00	\$2,028.00	At current WJE contract rates.
Replace cracked glazing lites.	5	ea.	\$110.00	\$550.00	
Replace light fixture in room 100 due to heat hazard.	1	ea.	\$250.00	\$250.00	
<b>Exterior</b>					
Perform insect and pest control measures to minimize insect activity.	1	ea.	\$450.00	\$450.00	Cost for initial service, cyclical service is recommended.
Perform and schedule cyclical maintenance tasks such as building envelope and site inspection, painting of exterior wood and metal elements, inspection and replacement of joint sealants, tree and vegetation care, cleaning of gutters, and other ongoing maintenance tasks to minimize impact to the historic site and building fabric.	1	unit	\$500.00	\$500.00	
Remove all loose, soft, and deteriorated wood. Perform wood dutchman or full member replacement where required.	30	sf	\$27.50	\$825.00	Wood siding, including chimney
Repair cracks in wood siding where possible.	4	lf	\$30.00	\$120.00	
Evaluate locations of missing areas of wood in siding. Minor missing material may remain; however, if missing material begins to expose flashing or the joints between wood siding a wood dutchman should be performed.	4	sf	\$25.00	\$100.00	
Reattach any wood siding and trim pieces that are no longer fully attached.	2	lf	\$15.00	\$22.50	
Remove abandoned embedments and seal holes in order to prevent water infiltration.	8	ea.	\$30.00	\$240.00	

**Hannah P. Clark House**

<b>Recommendations</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Cost</b>	<b>Comments</b>
Seal around pipe penetrations through foundation to minimize water infiltration.	2	ea.	\$27.50	\$55.00	
Rout and seal cracked step on the south facade.	2	lf	\$10.00	\$20.00	
Evaluate flashings, if existent, at secondary roof and chimney-to-roof interface.	4	hrs.	\$169.00	\$676.00	At current WJE contract rates.
Repair or install flashing any deteriorated or missing flashings.	70	lf	\$25.00	\$1,750.00	
Evaluate cap flashing to determine if metal needs to be cleaned and corrosion inhibit coating applied.	1	hrs.	\$169.00	\$169.00	At current WJE contract rates.
Replace cap flashing if missing material due to corrosion is observed.	10	lf	\$25.00	\$250.00	
Remove all loose and deteriorated paint to a clean wood substrate.	825	sf	\$22.00	\$18,150.00	Wood siding; assuming 50% of painted surface is deteriorated.
Clean and repaint wood siding once repairs have been made.	1,650	sf	\$3.00	\$4,950.00	
Remove all loose and deteriorated paint at doors to a clean substrate.	65	sf	\$3.00	\$195.00	Not including french doors; assuming 50% of paint will need removed
Evaluate isolated areas of separation at door joinery to determine if repairs are required to re-engage connection.	2	ea.	\$50.00	\$100.00	
Replace non-historic storm doors at the east facade.	2	ea.	\$300.00	\$600.00	NOTE: these doors were the only doors with deteriorated wood, so their repair was included in this count above
Clean and repaint all doors once repairs, if required, have been made.	135	sf	\$3.00	\$405.00	4 solid doors @ approx. 7 ft. tall, 2 ft. wide (both sides); 4 screen doors and 2 french doors approx. eight of area is wood

**Hannah P. Clark House**

<b>Recommendations</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Cost</b>	<b>Comments</b>
Replace deteriorated weatherstripping at doors to ensure they are weathertight.	110	lf	\$5.00	\$550.00	6 doors total (including 2 french doors) @ approx. 7 ft. tall, 2 ft. wide; assuming weatherstripping at threshold as well
Reset/adjust slightly displaced French door at the south porch.	1	ea.	\$150.00	\$150.00	
Remove acrylic material covering windows.	7	ea.	\$100.00	\$700.00	4 exterior acrylic 3 interior acrylic
Remove flaked and deteriorated paint at shutters and window surfaces, including sash channels and sills.	100	sf	\$3.00	\$300.00	15 shutters @ 3' x 1'; 17 windows @ 2'x3', 1 @ 2'x1.5' (not including sunroom windows because those did not have any flaking paint); assume 50% will need removed (from both interior and exterior)
Remove soft and deteriorated wood. Perform repairs at deterioration observed such as installation of consolidant, epoxy patches, isolated dutchman repairs, and wood pinning at any loose or disengaged elements.	2	sf	\$27.50	\$55.00	Interior of 2 windows on 2nd floor
Once cracked glazing lites are replaced, repair areas of deteriorated glazing putty.	175	lf	\$3.00	\$525.00	17 windows @ approx. 2'x3' (10 lf putty; 1 window interior), 1 window @ 2'x1.5' (5 lf putty) (assumed 100% of all putty would need repaired/replaced)
During window restoration work, inspect all rope lifts, sash locks, weatherstripping, and other hardware to permit for full and unhindered operation, replacing in-kind where required.	6	hrs.	\$169.00	\$1,014.00	Allowance for inspections does not include repairs. At WJE rates per contract.

**Hannah P. Clark House**

<b>Recommendations</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Cost</b>	<b>Comments</b>
Repair hinged ventilation windows in the cellar to close and replace screens, or other type of permeable material, to allow for ventilation of the space while minimizing openings for animals.	1	ea.	\$150.00	\$150.00	Approx. 2'x3' window
Monitor areas of previous water infiltration below windows after work is complete to ensure the leakage has been repaired.	4	hrs.	\$169.00	\$676.00	At current WJE contract rates.
<b>OPTION</b> - Replace non-historic window shutters with more era-appropriate shutters if archival documentation can be found to inform general dimensions and design.	33	ea.	\$125.00	\$4,125.00	15 existing shutters and 18 shutters missing (9 windows without shutters).
Replace asphalt shingle roof.	1,170	sf	\$15.00	\$17,550.00	Assumed 100% replacement; based on measurements from floor plan
Coordinate structural evaluation of sapling rafters at the Period I section of the house with partial or full replacement of asphalt shingles.	4	hrs.	\$169.00	\$676.00	At current WJE contract rates.
Evaluate sizing and placement of gutters to ensure they are adequate for water flow.	4	hrs.	\$169.00	\$676.00	At current WJE contract rates.
Reinstall handrails at the east open porch steps.	8	lf	\$250.00	\$2,000.00	
Clean and seal wood deck and benches.	275	sf	\$5.00	\$1,375.00	2 benches @ 6ft long, 16" wide; deck @ approx. 265 sf
Remove any loose, soft, and deteriorated wood. Perform partial or full wood dutchman if required.	13	sf	\$27.50	\$364.38	Verify amount of repairs required after removal of soft and deteriorated wood.
Replace broken glass at light fixture on north facade.	1	ea.	\$200.00	\$200.00	
Clean all light fixtures.	4	ea.	\$50.00	\$200.00	
<b>Interior</b>					

**Hannah P. Clark House**

<b>Recommendations</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Cost</b>	<b>Comments</b>
Minor cracks, damage, and deterioration in finishes should be repaired in place by filling cracks or damaged areas with compatible new material. Some material, particularly at water-damaged plaster, may need to be removed until sound material to ensure any compromised material is removed.	70	lf	\$38.50	\$2,695.00	
Monitor areas with previous water damage to ensure there are no active leaks.	4	hrs.	\$169.00	\$676.00	At current WJE contract rates.
Repaint walls and ceilings to represent the typical interior finishes of the period of historical significance.	5,600	sf	\$3.50	\$19,600.00	Assume all walls and ceilings are painted (except wood paneling)
Evaluate potential use for Room 103 and consider removing wall paneling to exposed original wood siding along the south wall.	275	sf	\$6.00	\$1,650.00	Approx. 275 sf of wood paneling
Reattach crown molding trim pieces that are becoming detached in isolated locations.	3	lf	\$15.00	\$45.00	2 locations
Replace missing baseboards with appropriate profiling and dimensions typical of the time period of significance.	105	lf	\$20.00	\$2,100.00	3 rooms on 2nd floor
Reset or sister rotated rafter at the Period II section of the attic and monitor to ensure rotation does not occur again.	8	lf	\$750.00	\$5,850.00	1 rafter approx. 8 ft. long
Clean ferrous staining from concrete surfaces in the cellar using the most gentle cleaner possible. Minimize water coming into contact with ferrous metals.	15	sf	\$3.00	\$45.00	
Remove paint on wood floors and refinish in a manner that represents a typical interior finish of the time period of historic significance.	900	sf	\$12.00	\$10,800.00	900 sf of painted wood

**Hannah P. Clark House**

<b>Recommendations</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Cost</b>	<b>Comments</b>
Remove and replace non-historic linoleum floor tiles with considerable staining or damage. Consider replacing with materials that may have been in place if archival documentation is found.	125	sf	\$10.00	\$1,250.00	440 sf of non historic wood (kitchen, porch enclosure); 125 sf of non historic linoleum tiles (2nd floor bathroom and sunroom)
Clean and repaint or refinish all doors. Repair at joinery and areas of minor damage where needed.	18	ea.	\$245.00	\$4,410.00	18 doors @ approx. 2'x7'
Replace any missing thresholds.	4	lf	\$30.00	\$120.00	2 thresholds @ 2' long
Replace damaged non-historic door to room 103.	1	ea.	\$250.00	\$250.00	
Replace missing historic doors and hardware with materials appropriate of the historic time period.	4	ea.	\$300.00	\$1,200.00	1 missing door, 3 historic doors missing hardware
<b>OPTION</b> - Replace contemporary doors, doors dating after 1960, with more historic appropriate doors.	15	ea.	\$300.00	\$4,500.00	Not including any exterior doors
Clean all interior light fixtures.	18	ea.	\$50.00	\$900.00	Approximate (assuming 1 per room)
Clean or replace all plumbing fixtures and appliances as required. Existent fixtures are not historic.	6	ea.	\$400.00	\$2,400.00	

**Summary Total**

**\$118,057.88**

**Summary Total Including Options**

**\$122,182.88**