The Bowman-Hite Property
Warren County, Virginia

Bowman-Hite Farmhouse
Historic Structures Report



Final Submission

Prepared For:
The National Park Service, Cedar Creek and Belle Grove National Historical Park

By:
Michael Spencer, Assistant Professor,
University of Mary Washington

October 2013

Acknowledgements:

The Historic Structures Report (HSR) for the Bowman-Hite house at the Cedar Creek – Belle Grove National Historical Park involved contributions from a large number of organizations and preservation professionals. First, Dr. Tonia Horton of the National Park Service deserves recognition for her efforts in moving the project forward. Thanks also goes to Eric Breitkreutz, Chief of the Historic Architecture Program in the National Park Service's Northeast Region, who found the project dropped in his lap and was kind enough to lend his expertise and see the project through to completion. Diann Jacox, Superintendent for the Cedar Creek- Belle Grove National Historic Park, also deserves acknowledgement for her patience in dealing with my oft moved deadlines. Jerry Fraser, also of the Cedar Creek- Belle Grove National Historic Park, was extremely helpful throughout the project, providing assistance when asked.

I am also grateful to other organizations like the William & Mary, Center for Archaeological Research, as well as Claremont Preservation Consulting, LLC, run by Bryan Townes, for making their reports available. Without their work and observations much less would be known about the farm house and adjacent dependencies.

Within the Department of Historic Preservation, here at the University of Mary Washington, thanks is due to my colleagues who often provided sound advice and insight into the project as it developed, especially Dr. Gary Stanton. Additionally, my research assistant, Kelsey Conway, dedicated hours of her time to compiling the information and conducting research.

Cover image shows the Bowman-Hite house as it appeared during the 1850s (left), 1876-1880s (middle) and today (right). (M. Spencer, 2013)

Table of Contents

List of Figures

List of Tables

Administrative Data

Administrative Data:

Work on the Historic Structures Report (HSR) for the Bowman-Hite house at the Cedar Creek – Belle Grove National Historical Park began in June 2011 through a cooperative agreement between the National Park Service and the University of Mary Washington's Department of Historic Preservation. This agreement was facilitated by the Chesapeake Watershed Cooperative Ecosystem Studies Unit (CW CESU) overseen by Dr. Walter H. Zachritz and was funded in the amount of $39,500. The task agreement number assigned to the project was P11AT00416 and the cooperative agreement number was H3992060006. The project completion date was set for December 31, 2012.

The initial key facilitator for the National Park Service at the outset of the project was Dr. Tonia Horton, Chief of Cultural Resources and Landscape Architect at Cedar Creek and Belle Grove National Historical Park. During the summer of 2012, Dr. Horton left her position at Cedar Creek and project supervision was undertaken by Eric Breitkreutz, Chief of the Historical Architecture Program for the National Park Service's Northeast Region. Throughout the project, Assistant Professor, Michael Spencer, of the University of Mary Washington's Department of Historic Preservation, remained the principal investigator.

Project Objective:

The objective of the HSR was to provide a foundational cultural resource management document for the Bowman-Hite farmhouse and bank barn. The research, narrative, drawings, and analysis included in Part I of the HSR were to form the basis for the next stage of investigation, Part II: Treatment. The Historic Structures Report, Part I was also to include a National Register Nomination draft for the Bowman-Hite House. As of May 2012, the Part II, treatment, component of this project was dropped from the scope.

Part I of the farmhouse and barn HSR will also assist the Park in fulfilling both its Section 110 (planning for historic resources) and 106 (compliance) responsibilities under the National Historic Preservation Act. It will also form the basis for both interim and long-range treatment plans and management decisions for both the farmhouse and bank barn. Part I will address the developmental history of the structures within their historic contexts, elaborate on their existing condition, identify threats to integrity, and provide the baseline recommendations for historic significance.

Background:

The Bowman-Hite property is located in Warren County, Virginia at the northern end of the Shenandoah Valley. Situated near the confluence of Cedar Creek and the Shenandoah River, the mid-19th century farmstead consists of a ca. 1850s brick farmhouse, ca. 1881 Standard Pennsylvania timber frame bank barn, and various dependencies and agricultural structures. During the Battle of Cedar Creek, in 1864, the farmhouse was witness to Confederate General Jubal Early's early morning attack on Union General Sheridan's left flank.

Purchased in 2003 from the Whitham family, the National Park Service acquired the farmstead and eight acres of adjacent land. The Shenandoah Valley Battlefield Foundation (SVBF) purchased the surrounding farmland which incorporated approximately 134 acres. With these two purchases the Bowman-Hite farm has remained relatively intact since 1879.

The historic significance of the property and its two standing primary structures– while known in the broader context – at the time of the project had not been studied. The Park commissioned a land tenure history in FY 2010, which provided the first outline of the property's ownership patterns from the 1730s to present, and significantly narrowed the date ranges for the construction of the buildings. Subsequent projects have also been carried out including measured drawings of the farmstead (2010), a building forensics report (2011), a physical description and inventory assessment (2011), and an archaeological assessment (2012), all of which provided additional information concerning construction dates, significance, and integrity.

Tasks:

Based on established historic structures and preservation documentation methodology, this project will document the evolution of the two primary historic structures at the Bowman-Hite farm, their current condition, character-defining features, historic significance, and contextual associations.

The HSR, Part I will consist of the following elements as outlined in DO-28, "Model HSR Contents":

Executive Summary: concise account of research methodology, major research findings, issues identified during the course of the project's execution, and recommendations for further study. Deviations from general planning documents should be identified here and discussed more fully within the Report.

Administrative Data: names, numbers, and locational data pertinent to the historic structures; related studies.

Developmental History: This section of the proposed HSR will incorporate research and findings from associated field studies now underway, and will include new research, archival documentation, and field analysis to produce a body of evidence sufficient to support the treatment recommendations and National Register nomination for the Bowman-Hite House.

- Historic Background and Context: Expanding recent land tenure history, this section describes the people and events associated with the structures. It should also establish a recommended period or periods of significance.

- Chronology of Development and Use: Expanding recent architectural investigations (building forensics and structural evolution), this section will discuss the physical construction, modification, and use of the structures. It will explore and synthesis the correlation of historic documentation with field observation and materials analysis.

- Physical Description: Expanding recent architectural inventory, this section will provide a systematic accounting of all features, materials, and spaces according to age, significance, and condition. This section should also discuss causes of deterioration and structural condition, and the physical integrity of the structures.

Appendix

- Associated graphics (drawings, photographs, materials analysis). Graphics component will be discussed with ATR as work progresses on the HSR.

- Draft National Register Nomination for Bowman-Hite House: Provide a completed National Register nomination form for the Bowman-Hite house, including associated property map and photos.

Applicable Documents:

National Park Service, *Director's Order-28, Cultural Resource Management*. Washington, DC: DOI-NPS, 1998.

National Park Service, Preservation Brief 43: The Preparation and Use of Historic Structure Reports. Washington, DC: DOI-NPS, 2005.

National Park Service, *National Register Bulletins*. Washington, DC: DOI, various dates.

- 15: *How to Apply the National Register Criteria for Evaluation*
- 16A: *How to Complete the National Register Registration Form*
- 39: *Researching a Historic Property*

National Park Service, *Secretary of the Interior's Standards for the Treatment of Historic Properties*. Washington, DC: 1992.

Weeks, Kay and Anne E. Grimmer, *Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. Washington, DC: DOI/National Park Service, 1995.

Unpublished documents prepared for National Park Service, Cedar Creek and Belle Grove National Historical Park:

- Cultural Landscape Inventory, "Whitham Farmstead." (2007)
- Margaret Peters and Maral Kalbian, "The Bowman-Hite Property, Warren County, Virginia: Narrative History, Timeline, and Annotated Bibliography." (2010)
- Bryan Townes and Michael Spencer, "Measured Drawings and Existing Conditions Documentation for Bowman-Hite House and Barn," (2010)
- Cedar Creek and Belle Grove National Historical Park, "General Management Plan," (2010)
- Michael Spencer, "Forensic Analysis of the Bowman-Hite Farmhouse and Barn," (2011)
- Bryan L. Townes, "Bowman-Hite Farmhouse and Bank Barn Historic Structure Documentation; Building Evolution and Use; Physical Description Inventory," (2011)
- Williams and Mary center for Archaeological Research, "An Archaeological Assessment of the Bowman-Hite Farm Property," (2012)

Executive Summary

Executive Summary:

Research conducted during the creation of the Bowman-Hite farmhouse, Historic Structures Report, uncovered additional information concerning the extant structures as well as the chronological development of the entire farmstead property from 1734-2012. Based on this information, as well as additional physical investigations, a more accurate and complete assessment of the property was determined. In total, five periods of occupation, as well as two periods of significance, were developed. The five periods of occupation reflect major changes in ownership as well as property development.

I. 1734-1843 George and Isaac Bowman
II. 1843-1872 Charles J. Hite and Rebecca Bowman
III. 1872-1881 William Stickley and John Pirkey
IV. 1881-1967 Kerns Family
V. 1967-2003 Whitham Family

The Bowman-Hite farmstead, historically known as the Charlie Hite Farm, illustrates well the Warren County, Virginia family farmsteads, typical of the late-19th and early-20th centuries. This agricultural context is demonstrated by the historic size of the farm from 1881-1942, as well as the intact farmstead, which, includes the extant 1850s farmhouse, spring, late-19th century smoke house, ca. 1881 bank barn and livestock yard, early-20th century cow shed, and early-20th century chicken coops. The farmstead's location within the path of advancing Confederate troops, during the October 19, 1864, Battle of Cedar Creek, also connects the farmhouse directly to this historic event.[1] Through these contexts, Agriculture and Military, the farmstead meets National Register Criterion A, on both a national and local level, demonstrating association with a national historic event, the Battle of Cedar Creek in 1864, as well as its role in conveying local agricultural trends in Warren County, Virginia from 1881-1942.

Further assessment of the material integrity associated with the periods of significance for the farmhouse identified some concerns should the structure be restored. These concerns focused on the period III, rear frame addition. Built between ca. 1876–1880s, by John Pirkey, the wood frame addition was part of an aggressive expansion of the farmstead coinciding with the construction of the extant Standard Pennsylvania Bank Barn. Later 20th century additions have destroyed some of the material integrity of the addition, making restoration problematic.

Despite a loss of 60-70% of its material integrity, enough physical evidence remains to undertake an accurate partial reconstruction. Such action is recommended to assist in the interpretation of the buildings development over time, and to better illustrate how technological and economic development played a role in the tangible agrarian landscape. Retention of this portion of the farmhouse will also provide means to more effectively utilize the structure for other activities beyond battlefield interpretation, should circumstance warrant.

Methodology:
Determination of significance, as well as associated integrity of the Bowman-Hite farmstead focused on areas where archival research validated physical observation. Identifying these instances required a systematic approach to ensure efficient use of time, as well as to limit oversights.

[1] JED Hotchkiss, Hotchkiss Battle Maps, *Sketch of the Battle of Belle Grove*, October 19, 1864, No. 29

Initial work concentrated on compiling information from previous and concurrent projects at the Bowman-Hite farmstead in order to identify areas where more information was needed. This assessment led to the identification of additional archival resources, including Stickley family account books at William & Mary, a 1850s Warren County carpenters journal at the University of Virginia, chancery suites at the Library of Virginia, and local period newspapers at Shenandoah County's public library. Public records from Warren and Shenandoah Counties were also examined, shedding new light on property divisions during the 1840s and 50s, as well as on the last years of Rebecca Bowman's life.

Such information was then used with secondary sources to set the farmstead within a context through which its significance could be evaluated. Once periods of significance were established, the material integrity of the farmhouse was examined through observational analysis and the use of a previously written building forensics report (Spencer, 2011).

The condition of materials associated with the periods of significance was also evaluated. This assessment involved observational analysis, obtainment of baseline conditions, and monitoring areas of concern. The techniques employed to gather the necessary data were non-destructive, with the exception of the resistance drill, which utilized a 3mm wide drill to quantify degradation within floor joists. Electrical resistance moisture meters, required similar type penetrations into the woods surface. Where material was assessed in such a manner, non-visible locations were identified when possible.

New Findings:
Additional archival information found throughout the project helped greatly in the establishment and firming of construction dates associated with the farmstead's structures. This included the Bowman Mill, originally part of the Bowman-Hite farmstead. Initially, oral tradition indicated that this mill was dismantled and used in construction of the bank barn adjacent to the brick farmhouse. However, the discovery of mutual assurance policies, as well as photographs, indicated that the structure was built ca. 1793 as part of a much larger complex, which was eventually sold by Charles Hite and Rebecca Bowman, but was still in existence as late as the 1970s.

Plat maps showing the division of Isaac Bowman's land holdings to his sons and daughters were also discovered in chancery suits from the 1850s. The property descriptions helped to clearly define property boundaries as well as the presence of structures on the various parcels as they were divided in 1843, when Rebecca Bowman "came of age". Specifically, the court cases established Rebecca Bowman's inheritance of the second Bowman Mill complex, as well as previously unknown landholdings both north and south of the current farmstead.

Another important archival discovery was an 1861 deed of trust, which noted the presence of not only the farmhouse but also a separate kitchen. This description fits with post holes and brick rubble found during the archaeological investigation on the south side of the farmhouse, seeming to confirm the location of the structure. The document goes on to further describe the Hite's possessions at the time, including their slaves, of which the document names the adults. From this description as well as other contextual research, it also appears as though the kitchen also functioned as slave housing.

The dates associated with the later, 1876-1880s, John Pirkey frame addition, as well as the ca. 1881, bank barn were also narrowed by the discovery of an auction notice in the Shenandoah Herald from

1879 describing a similar, "recently built" house and barn, owned by John Pirkey.[2] The re-evaluation of tax records also assisted with this process.

Physical investigations associated with this same period, 1876-1880s, also confirmed that much of the material integrity of the frame addition was missing. This was due to the Whitham era additions, which encapsulated some of the frame addition walls, but resulted in the demolition of others, including almost the entire north wall, large portions of the south wall, and almost the entire second floor. Despite a lack of integrity associated with the frame addition, enough evidence does exist for an accurate, partial reconstruction, if warranted. Conversely, the investigation also determined that the period II, brick farmhouse, retained a large amount of its material integrity and is in good condition.

Recommendations for Further Study:
While preliminary paint analysis was conducted as part of the building forensics report, further analysis will be necessary to accurately determine colors and finishes. More accurate analysis will also help establish a timeframe for window replacement, and confirm which window components, within the brick portion of the farmhouse, may be original to the initial period of construction. Further assessment is also necessary to assist in the documentation and evaluation of both the floor painting on the stairwell landing, as well as the stenciling in the same room.

Analysis of the wallpaper fragments found underneath the furred walls will also assist in determining original finishes, specifically in the dining room. Other techniques may also be employed in subsequent investigations to decipher writing found on floor joists in the basement. At this time the writing is too faded and obscured by organic matter to read.

Issues:
Despite significant discoveries concerning the properties development, significance, and integrity, certain problems were encountered during the project. While minor, the change in personnel midway through the project did present some challenges. Additionally, information from other reports, while easily accessible for the most part, was in the case of the Virginia Tech landscape study, inaccessible. Because such information was pertinent to the HSR, it was necessary to undertake this research independently, causing delays.

Deviations:
Due to some of the delays noted above, prior to her exit from the project, Dr. Tonia Horton reduced the scope of the HSR project to only include Part I of a complete HSR. Due dates, while fitting within the final end date of the project, have also been pushed back, allowing more time for completion.

[2] Pirkey is also spelled "Purkey" in numerous documents from the time.

Historic Background and Context

Historic Background and Context:

The Bowman-Hite farmstead and surrounding 134 acres, now owned by the National Park Service and the Shenandoah Valley Battlefield Foundation (SVBF) has origins dating back to the Shenandoah Valley's original land grants of the 1730s. Over the ensuing 280 years the property has changed and developed with five distinct periods emerging;

I. 1734-1843 George and Isaac Bowman
II. 1843-1872 Charles J. Hite and Rebecca Bowman
III. 1872-1881 William Stickley and John Pirkey
IV. 1881-1967 Kerns Family
V. 1967-2003 Whitham Family

Each of these periods is reflected not only within the land tenure records but also through the tangible landscape.

Period I (1734-1843):

During the early-18th century, Joist Hite came to Pennsylvania from the Palatine region, now located in southwestern Germany.[3] Known for its vineyards and forests, this region of Europe had since 1618 been enveloped in a series of wars, which by the early -18th century, had left the countryside barren. This is the context in which Joist Hite journeyed to the colonies in what was later termed the "great German exodus".[4] While Joist Hite stayed in Pennsylvania for some time after his arrival, by 1731-32, he had accumulated enough wealth to purchase a large amount of land from John and Isaac Van Meter. Both John and Isaac Van Meter had been given land grants of 30,000 and 10,000 acres respectively only a year earlier, in 1730. This land was located in the vicinity of the forks of the Shenandoah River (**fig. 2**). As part of the agreement for obtaining these land grants, the Van Meter's were given two years to divide the land into 1,000 acre tracts, with a family to be settled on each tract.[5] Together with his children; John, Jacob, Isaac, Abraham, Joseph, Mary Bowman, and three sons-in-law; George Bowman, Jacob Chrisman and Paul Froman as well as other families; Joist Hite provided the means for the Van Meter's to fulfill their agreement as well as for his family to establish a new life on the frontier. The Hite family's re-location and settlement is confirmed on June 12, 1734 when patents are issued to "masters of families", which included the Hite's, Bowman's, Chrisman's, and Froman's, all of whom settled on the 1,000 acre tracts.[6]

The 1,000 acre tract of land procured by George Bowman, husband to Mary Bowman, Joist Hite's daughter, and later the site of the Bowman-Hite farmstead, was located in the vicinity of Cedar Creek, about a mile north of the town of Strasburg, Virginia. This particular tract of land is today comprised of acreage from Warren County as well as Shenandoah County and straddles Cedar Creek, just north of its confluence with the Shenandoah River. At the time of the purchase, the entire tract would have been within the boundaries of Frederick County.[7] While George Bowman is recorded as acquiring the

[3] While Joist Hite may have been noted in immigration records as hailing from the Palatinate region, all ships from this region as well as others in close proximity from 1727-1739 were thus noted in the records.
[4] John Wayland, *The German Element of the Shenandoah Valley of Virginia*, Vol. 4, pp 24-25.
[5] *Virginia Magazine*, Vol. XIII, No. 2 pp 115-119.
[6] *Virginia Magazine*, Vol. XIII, No. 2, pp115-119.
[7] Frederick County was subsequently formed from Orange County in 1743 so many of the early land tenure records reside with the clerk's office in this location.

property in 1734, there is no mention of a structure until 1753 when the still extant, Harmony Hall (Fort Bowman) was constructed on the banks of Cedar Creek.[8] This two-story, stone structure, follows many Germanic traditions in terms of form, aesthetics, and construction. Noticeably, the structure incorporates dressed floor joists and large open hearths supported in the basement by massive relieving arches. Later in the mid-19th century, a Greek Revival portico was added, and the original windows replaced.

References to George Bowman, found in the Frederick County order books, note him working as a road surveyor as early as 1743-44, when he is appointed, along with two others, to oversee the construction of a road from Funks Mill crossing Cedar Run Creek.[9] Later, in 1758, George Bowman would again be tasked with road construction, this time from "Peter Stoufers [sic] to George Bowman's Mill…"[10] Bowman's mill on Cedar Creek was the first of two Bowman Mill sites and one of a number of mills to be constructed on Frederick County waterways over the course of the 18th and 19th centuries.[11] This same mill is referenced as early as 1753 in the diary of Moravians traveling through the Shenandoah Valley along the Valley Turnpike.

> *"We went five miles further and came to Baumann's [sic] mill, where we bought several bushels of oats, but we have to wait several hours while it was thrashed. Some Germans visited us and we enquired [sic] about the way, but they gave us little comfort, saying that beyond Augusti [sic] Court House the road was so bad that it was doubtful whether we could travel it. It was five miles from Baumann's to Justice Funks mill…"*[12]

Nearby, during the same period, members of the Hite family were also busy improving their lands. John Hite, oldest son of Joist Hite, builds Springdale around 1753, another stone structure, located where the Valley Pike crosses Opequon Creek. This structure shares many of the same attributes as George Bowman's house, Harmony Hall, built only a short distance away, including the oversized hearths.[13] Near Springdale are the ruins of Joist Hite's house, another mid-18th century stone building (**fig. 1**). Additionally, John Hite Jr., grandson of Joist Hite, would build a large stone mill on Opequon Creek by 1783.[14]

Isaac Hite, the third son of Joist Hite, was given a tract of land encompassing 900 acres in 1737 and located where Cedar Creek flows into the Shenandoah River.[15] This land holding would be expanded to 1,689 acres by 1778.[16] The house, known at the time as Traveler's Rest, would later be built on a portion of this land sometime prior to 1788.[17] However, by 1848 the first structure erected by Isaac Hite in the 18th century had been replaced by the current Federal style brick structure, Long Meadows.[18] Although

---

[8] Harmony Hall National Register Nomination
[9] Frederick County Order Book 1 (1743/44), pp 15,16,29.
[10] Frederick County Order Book 8 (November 7, 1758), pp 134.
[11] Charles Varle Map of Frederick County, Virginia, 1809.
[12] Newton D. Mereness. *Travels in the American Colonies*. Edited under the auspices of the Colonial Dames of America. (New York: The MacMillian Company, 1916), pp 335.
[13] John Wayland, *The German Element of the Shenandoah Valley*, pp 52-53.
[14] Ibid.
[15] While John Wayland's History of Shenandoah County notes the date of 1737, there are no records that note Isaac Hite's ownership until Grant Book T, dated October 30, 1788 (Northern Neck).
[16] 1788 reference to a 1778 land grant, Northern Neck, DB T, October 30, 1788.
[17] Northern Neck, DB T, October 30, 1788.
[18] Long Meadows National Register Nomination, pp. 10.

Isaac Hite's original structure is lost, many of the ancillary structures, including the overseer's house, remain.

Also located on Isaac Hite's original property holding is Belle Grove, the stone plantation house, built by Isaac Hite's son, Isaac Hite Jr., and completed in 1797. While not a first generation Shenandoah Valley structure, the stone foundations of a mid-18th -century structure still exist nearby. "Old Hall" was used prior to the construction of Belle Grove by Isaac Hite Jr. and his wife Nelly Conway Madison, sister of future President of the United States, James Madison, when they inherited the 483 acres upon his father's death in 1795.[19]

George Bowman, brother-in-law to Isaac Hite and uncle to Isaac Hite Jr., passed away in 1768. While George Bowman still had substantial land holdings in Shenandoah County, including Harmony Hall, he had also accumulated vast land holdings in Augusta County, which were bequeathed to his son John Bowman. George Bowman's will of 1764 makes specific note to divide the 720 acres in Shenandoah County into four equal parts with his other sons, Isaac, George, Abraham and Joseph each receiving a portion.

> *"…Item, My will & desire is that the Tract of Land & Plantation Whereon I now Live which contains Seven Hundred & Twenty Acres be divided in four equal parts which I give & Bequeath in manner following vist the House and Plantation with the Land Joining thereto according to the Division, I give my son Isaac to be by him possessed when he comes of age with this reserve only, that it is my Will & Desire that my well beloved wife Mary shall live thereon and Enjoy the same during her Natural Life that part of the Said Tract whereon the Mill is; I give to my son George together with the Mill according to the said Division. That part of the said Tract joining the Plantation According to the sd. Division I give to my son Abraham and the other Remaining part I give to my Son Joseph to be by them Possessed when they come to age…"*[20]

The mill mentioned in the will is likely the same mill mentioned by the Moravian's in 1753 and located at the crossing of the Valley Turnpike and Cedar Creek. Isaac will later build his own mill, the second Bowman Mill, further down Cedar Creek, which is also referred to as Bowman's Mill. George Bowman's mill property would later be sold to the Stickley family, with portions staying in operation well into the 19th century.[21] Even today, 2012, ruins of the mill complex can be seen by the river.

Isaac Bowman's early years following his inheritance were spent on the western frontier with his brothers and cousin, Isaac Hite, accompanying settlers to Kentucky. Later in 1778, at the age of 21, he enlisted with George Roger Clark's Illinois militia and took part in a variety of Revolutionary War assignments, eventually receiving a land grant in Indiana of 2,156 acres for his service.[22] After the war, in 1779, he would again lead a band of settlers west but was captured by a hostile tribe. Feared dead, it was not until 1782 that he made his return to Virginia.[23] Three years after this return, on April 6, 1785 he married Elizabeth Gatewood.[24]

---

[19] National Register nomination for Long Meadows pg 10.
[20] Frederick County Will Book No. 3, pp 431-434 (1764).
[21] *A History of Shenandoah County*, Virginia, pg 695
[22] Wayland, *The Bowman's, A* Pioneering Family, pg. 134.
[23] English, "Conquest of the Country Northwest of the River Ohio", Vol. I, in 1895, pg 121
[24] Personal Property Tax lists, Shenandoah County, 1787

Property tax records from 1787 note that the married couple was living at Harmony Hall and assigns to his possession 8 slaves, 4 horses and 30 head of cattle, considerable wealth by 18th-century standards. The five years following his marriage would see the arrival of five children before Elizabeth would die in 1790. Shortly after her death in 1792, Isaac Bowman would marry Mary Jane Chinn. Through this marriage, both Mary Ann Bowman (b. 1815) and Rebecca Bowman (b. 1821) would be born, Rebecca being the eventual owner of the brick structure now referred to as the Bowman-Hite farmhouse.

In 1793, Isaac Bowman would begin construction of his new mill complex, located on the east side of Cedar Creek in modern day Warren County.[25] Noted previously, this mill complex is different from the first Bowman mill, constructed by George Bowman sometime around 1753 and in ruin by 1895.[26] The site of this complex is located further south near the present day crossing of State route 635, also known as Bowman's Mill Road, over Cedar Creek. While the site contained a merchant mill, there was also a saw mill, a wood-frame house, blacksmith shop and two other wood-frame structures located on the roughly eight acre piece of land by the early-19thcentury. The merchant mill was valued at $5,000 in 1803 and was a 40 x 30 foot, 2 ½ story wood-frame mill with wooden-weatherboard siding situated atop a stone foundation. Perpendicular to the merchant mill, and only separated by six inches, was the 40 x 13 foot, wood-frame saw mill, also clad in wood, which in 1803 was valued at only $300. The Mutual Assurance policy (**fig. 3**) goes on to state that the structures at that time had no signs of decay or deterioration that would result in any devaluation, seemingly coinciding with a build date of 1793, offered by Mrs. Foltz in 1927 and noted in John Wayland's, "A History of Shenandoah County, Virginia".[27] Later in 1806, a revision of the same policy would reiterate the values as well as the condition, but also note additional structures being built on the site. This includes the mention of a wood-frame dwelling house, blacksmith's shop, an unidentified building and lastly a wood-frame structure currently being erected.[28]

> *"There are no buildings (or building) within 20 feet of building A [Merchants Mill]. B (they join as in the plat) but there are one wood of storie [sic] house distance 20 feet from the saw mill; one wooden blacksmith's shop distance fifty feet; the Catt___ one foot from the merchant mill; one unfinished wooden building distance 40 feet beside which there is no building within 70 feet."*[29]

Many of these structures associated with the Isaac Bowman mill complex appear to survive until at least 1895, when an image of the complex was published by William Hayden English in his book, "Conquest of the Country Northwest of the River Ohio, Vol. I" (**fig. 4**). Such a late date also indicates that the structures likely survived the great floods which occurred on Cedar Creek in 1870, 1877, and again in

[25] *A History of Shenandoah County*, Virginia, pg 695

[26] *A History of Shenandoah County*, Virginia, pg 695, Mrs. Foltz states in this history that during the writing of "Conquest of the Country Northwest of the River Ohio", Vol. I, in 1895, the author, William Hayden English, sent a photographer to photograph the George Bowman Mill, however by that time the old mill was in ruins and so an image was taken of Isaac Bowman's mill complex and is included on page 121 of English's book. It should also be noted that the George Bowman mill appears on Civil War maps, indicating its survival up until that point, however by this time it is owned by the Stickley's.

[27] Mutual Assurance Society of Virginia, microfilm, reel 3, vol. 26, policy No. 2110, 1803.

[28] Shenandoah Herald, November 5, 1879, pg 1 col. 5; this article describes a custom built, four room dwelling house, possibly the house constructed in 1803.

[29] Mutual Assurance Society of Virginia, microfilm, reel 4, vol. 39, policy No. 1015 [2110], 1806.

1889.[30] Work Progress Administration Reports (WPA) from 1937 note that the mill was even operating as late as 1897 and was an "overshot" wheel. Even as late as 1971 the mills are noted as standing.[31]

Aside from the descriptions of the mills and mill complex, the Mutual Assurance policies also refer to Isaac Bowman's move from Harmony Hall (ca. 1753), where he had lived since 1787, to Mount Pleasant, located about ½ mile southwest on the west bank of Cedar Creek. The Federal style brick structure, still situated high on a bluff overlooking Harmony Hall and Cedar Creek, was constructed in 1812-1813.[32] However, the Mutual Assurance policy of 1806, for Isaac Bowman's mills, notes the following, "I the underwritten Isaac Bowman, residing at Mount Pleasant in the county of Shenandoah…"[33] The previous policy issued in 1803 makes no mention of Mount Pleasant, but does refer to Isaac Bowman as living in Shenandoah County.[34]

The construction of Mount Pleasant is significant to the region in that it helps illustrate the change in architectural aesthetics within the Bowman and Hite families, from the more traditional use of stone, as seen in 18th -century structures, to that of brick. Subsequent brick structures would be erected by other family members in the years that followed, including the "new" Long Meadows, in 1848 by George W. Bowman.[35] Other prominent local families, such as the Stickley's, would also construct brick houses during this period.

Isaac Bowman would live for thirteen years at Mount Pleasant before dying in 1826. His will explicitly states that the Virginia holdings should be divided among his six younger children, Isaac, George, Robert, Washington, Mary and Rebecca, as the older children had already received allotments in both Indiana and Kentucky. These holdings would include the following;

> *…whereon I now live that lie in Frederick and Shenandoah counties shall constitute the four other divisions of my real estate…which those holdings consisting of about eleven hundred acres and which shall be divided into four equal parts. Division one to be "My Brick Dwelling with the lands and improvements immediately adjacent…"(Mount Pleasant); My stone house in which I formerly lived with the lands and improvements thereto shall constitute the Second division (Fort Bowman/Harmony Hall)…My merchant mill and the lands and improvement adjacent hereto*

---

[30] *Shenandoah Herald*, June 7, 1889, pg 2, col. 1-3. Local tradition mentioned that the bank barn located adjacent to the Bowman-Hite farmhouse, was constructed using timbers from Bowman's Mill. Evidence indicates that the barn does in fact reuse timbers; however such timbers would not have come from Isaac Bowman's (ca.1793 mill).
[31] Reconnaissance Level Survey, Virginia Department of Historic Resources, Bowman's Mill(DHR# 093-0103)
[32] Virginia Department of Historic Resources, Intensive Level Survey, Mount Pleasant (DHR# 085-0072)
[33] Mutual Assurance Society of Virginia, microfilm, reel 4, vol. 39, policy No. 1015 [2110], 1806.
[34] Mutual Assurance Society of Virginia, microfilm, reel 3, vol. 26, policy No. 2110, 1803. The stone kitchen associated with the brick portion of Mount Pleasant exhibits many of the earlier architectural aesthetics employed by the earlier 18th century structures erected by the Bowman's and Hite's. This may have provided a temporary residence for Isaac and his family while the brick house was constructed; however, no firm evidence currently exists dating that portion of Mount Pleasant prior to 1812-1813. It is also unclear as to why Isaac would have moved from Harmony Hall almost six years before construction of the brick portion of Mount Pleasant.
[35] Long Meadows, National Register nomination, pg 10; It should be noted that in *A History of Shenandoah County*, Virginia, pg 695, Mr. Foltz notes that her mother tried to procure the diamond quarrels from the first Long Meadows (built by Isaac Hite in the 18th century) of which were inscribed initials of Hite family brides. Unfortunately, the request came too late and the diamond quarrels were destroyed. This tradition seems to have been carried on as the sidelights of the 1848 Long Meadows show etchings from the mid 19th century.

shall constitute the third division…and my tract commonly called the island tract shall constitute the fourth division."[36]

While the will outlines the divisions of the property (**fig. 5**), Isaac Bowman noted that his estate was to stay intact to pay for the education of his children. Not until December 1843, when Rebecca Bowman, the youngest of Isaac Bowman's children reached the age of twenty-one, was the estate formally divided. As noted in the will, the land was divided into four, somewhat even tracts; the brick house tract (243 acres), the stone house tract (210 acres), the mill tract (498 acres), and the island tract (200 acres). Because of this division, not all of Isaac Bowman's children would receive land allotments, but in certain cases would be compensated monetarily. The process of deciding who was allotted which tracts ultimately came down to chance, with each devisee drawing "straws". Ultimately, it was Robert Bowman who was initially given the "brick house" tract, otherwise known as the Mount Pleasant tract; George and Mary Bowman Brinker drew the "stone house" tract, known also as Harmony Hall; Washington Bowman obtained the Island tract; and Rebecca Bowman received the 498 acre tract known as the mill tract, consisting of land within Warren and Shenandoah counties.

Despite these divisions, issues arose less than a year later concerning the fair allocation of property. Specifically, these concerns involved Washington Bowman's island tract and Robert Bowman's Mount Pleasant tract. In the case of Washington's Island tract, it was decided by all siblings that their father originally intended to attach more land to this division for equitable division purposes, as in 1843 it had no improvements. During 1842-43, the chancery suit concerning the property notes that each recipient of the other three tracts of land would provide the following, based on land value assessment, to Washington Bowman in order to provide the means for him to establish a comfortable home; Robert Bowman $1833.33, George and Mary Brinker $333.33, and Rebecca Bowman $333.33 for a total of $2,500.[37]

The second issue that appears to have been a point of contention in the Bowman family was the division of Robert Bowman's Mount Pleasant tract. Early on Isaac S. Bowman brings a case against his brother in order to obtain a portion of this property. Ultimately, the property is divided nearly in half, with Lot No. 1, consisting of 129.5 acres, going to Robert Bowman, and Lot No. 2, consisting of 113.5 acres, including Mount Pleasant, a corn crib, and barn, going to Isaac Bowman. Other property, not contiguous with these tracts, was also brought into the suit, bolstering both Isaac's and Robert's acreage.[38]

Period II (1843-1872):

While Rebecca Bowman may have owned substantial property by 1843, census records still note her living with family until 1850. The 1840 census specifically mentions her living at Mount Pleasant with her older brother and head of household, Isaac S. Bowman, as well as her other brothers George, Robert, and Washington.[39] In 1850, after her marriage to Charles J. Hite on May 10, 1849, Rebecca is

[36] Shenandoah County Will Book N, pp 521-526 (1826)
[37] Chancery Suit, Shenandoah County, Washington Bowman vs. Robert C Bowman, 1853-012 (Library of Virginia)
[38] Chancery Suit, Shenandoah County, Washington Bowman vs. Robert C Bowman, 1853-012 (Library of Virginia); It should be noted that the suit also mentions a previous division of the property in early 1843 which included dividing Mount Pleasant literally "down the center passage" as well as the nearby barn. This document also places, via survey calls, the gardens at Mount Pleasant as well as a corn crib and the previously mentioned barn.
[39] 1840 United States Federal Census for Shenandoah County, Virginia, roll 371, pg 578, image 760.

still noted as living with her brother, George W. Bowman, at the recently constructed Long Meadows.[40] Despite her residence at Long Meadows in 1850, the Warren County land tax records of 1849 indicate both Charles J. Hite and his wife, Rebecca F. W. Bowman as owners of a 222 ¼ acre parcel with $1,200 in taxable improvements.[41]

Rebecca Bowman's husband, Charles J. Hite, was born in Berkley Virginia, now West Virginia, to James Madison Hite and Elizabeth Harrison Briscoe around 1822.[42] Charles Hite's youth was spent at Western View, the family plantation located near Kearneysville, in present day Jefferson County, West Virginia. The Greek Revival, brick plantation house, was built in 1831 using a transverse-hall floor plan and would likely influence, along with other Bowman family structures, what Charles and Rebecca Hite would build.[43]

However, prior to construction of the extant Bowman-Hite farmhouse, a number of property transactions took place. The first of which was the selling of the mill property, complete with "water rights and privileges", to George Bowman, Rebecca's brother, on September 14, 1850, in the amount of $2,050. At the time, the mill parcel consisted of 8 acres and a number of structures, including a small-frame house.[44] Additionally, Warren County land tax records note in 1850 that Charles and Rebecca are being charged with 393+ acres with $500 in improvements.[45] This represents a substantial land purchase of roughly 171 acres from 1849.[46]

With finances seemingly in place and design aesthetics in mind, both Charles Hite and Rebecca Bowman build their own brick farmhouse in the later part of the 1850s. The Greek Revival aesthetics and side-passage plan chosen for the structure resemble closely what is being constructed in and around Warren County at the time. While described as a "mansion house" and noted as being of "good brick and commodious", the structure lacks the size and grandeur found in other nearby family homes such as Long Meadows (1848) and Mount Pleasant (1812).[47]

A kitchen was also erected during the same period, and is noted specifically in 1861, "…to secure on his [Hite's] household & kitchen, the said household & kitchen furniture is herby subject to debt."[48] Recent

---

[40] Dodd, Jordon, Liahona Research, comp. Maryland Marriages, 1667-1899. (database in Provo-UT: the Genealogical Network, Inc., 2000); 1850 United States Federal Census for Shenandoah County, Virginia.
[41] Warren County Land Tax Records, 1836-1850; Warren County Minutes from June 19, 1854 note that Charles Hite is to be appointed "surveyor of the road from Bowman's Ford on Cedar Creek to Long Meadows Ford".
[42] Kalbian, The Bowman-Hite Property: Narrative History, Timeline, and Annotated Bibliography, (2010), pg 8.
[43] Allen, Uncommon Vernacular, pp 83
[44] Warren County Deed Book E, pg 66 (1850); It is possible that the property was sold to raise the necessary capital to finance the construction of the house as well as the purchase of additional acreage. The selling of the mill lot, likely still containing the small "frame house" mentioned in 1806, also may help explain where Rebecca Bowman and Charles Hite were residing after their marriage and prior to completion of their home.
[45] Warren County Land Tax Records, 1850
[46] The likely explanation is that the Shenandoah County property was sold around the same time as the mill property 8 acres (1850s) and the property owned by George and Mary Bowman Brinker, on the east side of Cedar Creek, was acquired by Charles and Rebecca to consolidate their land holdings in Warren County as well as buffer the home site from adjoining property boundaries. There may also be some inaccuracies in the Warren County land tax assessments at this time.
[47] Warren Sentinel, December 2, 1870 (found in Chancery Suit, 1880-012, Rebecca Hite vs. George Hupp (trst.), Warren County)
[48] Warren County Deed Book H, pg 16 (1861)

archaeological excavations by the William & Mary Center for Archaeological Research seem to confirm the presence of a nearby earth-fast domestic structure southwest of the main house. Associated with this particular excavation were a number of ceramic fragments, as well as brick rubble. Other features also in the same vicinity, such as a cistern, located at the southeast corner of the farmhouse and a stone foundation located south of the earth-fast domestic structure allude to the presence of a typical mid-19th century domestic yard (**fig. 7**).[49] Missing from this space was the presence of any slave housing, as the 1860 slave census notes no such buildings on the property.[50] Instead, it is likely that the kitchen would have provided living space for the majority of the farms slaves. The notation of two dining room tables in an 1861 household inventory, as well as the mention of furniture in the kitchen, further alludes to this possibility. Additionally, maps from the Civil War indicate the presence of multiple structures near the brick farmhouse.[51]

One of these maps, created by Jedediah Hotchkiss of the Battle of Belle Grove on Wednesday, October 19, 1864, shows the name "C.J. Hite" on land on the east side of Cedar Creek. Four dots mark buildings in the vicinity, two north and two south of the old road, but it is unclear exactly which one would have been the Hite dwelling and subsequent dependencies (**fig. 6**). Bowman's Merchant Mill (Isaac Bowman's), by then owned by George Bowman, is prominently depicted on Cedar Creek, along with the saw mill and subsequent dependencies.[52] Another iteration of the map also shows the "C. Hite" property, however, with three structures north of the old road and another south. The mill complex is also prominently shown.[53]

The period from 1850-1852, shows substantial growth in the personal property holdings of Charles and Rebecca Hite with tax records from 1851 noting ownership of five slaves and four horses, as well as a gold watch. By 1852 these holdings have grown to include 34 head of cattle, $8.00 worth of "plate", $135.00 worth of furniture, and $1,500 in solvent bonds.[54] Later 1861 records will note the Hite's furniture possessions as constituting five bedsteads with bedding, one dozen and a half chairs (18), two dining room tables, one refrigerator, carpeting and the rest of the household and kitchen furniture.[55] Such large numbers of chairs and beds were necessary in order to accommodate Charles and Rebecca, their five children, as well as their eight slaves.

Tax records from 1850, when Charles Hite was first listed in Warren County, note him as owning only one horse and one slave. However, by 1851, after marrying Rebecca, this number grows to five. From 1839 records concerning the Isaac Bowman estate, it seems that Rebecca's portion of the estate, administered by George Bowman, profited from work conducted by four of her slaves, Moses, Emanuel, Delila, and Dina.[56] Combined with Charles Hite's slave, this coincides with the 1851 personal property assessment. Additionally, an April 11, 1861 agreement between Charles and Rebecca Hite and her brother, George Bowman to secure debt notes the Hite's ownership of eight slaves, specifically a man named Dan, another named Moses, and his wife, Delilah, as well as their five children, two boys and

[49] *An Archaeological Assessment of the Bowman-Hite Farm Property*, William and Mary Center for Archaeological Research, 2012
[50] 1860 United States Federal Slave Census, Schedule 5, Warren County, pg
[51] "An Archaeological Assessment of the Bowman-Hite Farm Property", William and Mary Center for Archaeological Research, 2012.
[52] JED Hotchkiss, Hotchkiss Battle Maps, *Sketch of the Battle of Belle Grove*, October 19, 1864, No. 29
[53] JED Hotchkiss, Hotchkiss Battle Maps, *Sketch of the Battle of Belle Grove*, October 19, 1864, No. 195
[54] Warren County Personal Property Tax Records, 1851-1861, Charles J. Hite
[55] Warren County Deed Book H, pg 16 (1861)
[56] Shenandoah County Will Book T, 521 (1834-1836); Shenandoah County Will Book V, 18-19 (1839).

three girls aged ten and under.[57] From these accounts, it appears as through Moses and Delilah are with Rebecca Bowman at least from 1839 until they are sold to a local man, John W. Cooley, in May of 1863.[58]

Throughout the 1850s, the Bowman-Hite farm appears to be a thriving enterprise. Agricultural census records from 1860 indicate that the farm was worth $13,000, almost double that of the average Warren County farm. Helping add to such value was the 285 acres of improved land, almost ⅔ of Charles and Rebecca's land holdings. Such a high ratio of improved to unimproved land exceeded the average 1:1 ratio seen throughout most of Warren County during this time. Charles Hite also appears to be heavily invested in machinery, with an aggregate value of $350.00, much higher than the county average of $109.[59] Records from 1861 confirm Hite's investment in progressive farming methods, noting three McCormick ploughs, four or five double shovel ploughs, one barrow, gearing for six horses, two farm horse wagons, and one two-horse wagon.[60]

While Hite's farm was atypical in its size and value, the crops he grew and the livestock raised were similar to other farms in the region. Livestock mentioned in the 1860 census includes sheep, swine (hogs), cattle, dairy cows, mules, ox, and horses. This livestock diversification remains consistent into 1861. Crops were also diversified with corn, wheat, rye, oats, potatoes, hay, clover, and limited orchard products being grown. However, like many of the farms in the area in 1860, Hite was heavily invested in corn and wheat. The prominence of corn and wheat, as well as the dependencies necessary for processing and storage, is illustrated by the mention of a "corn house" adjacent to Mount Pleasant, as noted in a Chancery Suit of 1843. This suit also mentions a barn on the same farm, and it is noted that the "floor" of the barn can be used by both George and Isaac Bowman, possibly indicating the use of the structure for not only cattle but also the threshing of wheat. [61]

The period from 1851-1860 on the Bowman-Hite farm also saw the growth of Charles and Rebecca's family. Their first child, Mary E. was likely born around 1850, although dates vary. Mary was followed in 1852 by George S., then John B. in 1855, Francis in 1858 and lastly Ellen R. in 1859.[62] That said, "Bettie" is named as a daughter in a Chancery Suit in 1874, but there is no record of her in either the 1860 or 1870 census.[63] Unfortunately, as was somewhat common for the time, it appears that Charles and Rebecca experienced the death of two of their children, George and Francis sometime during the Civil War, as no records of them exist past 1860.[64] During the same time that Charles and Rebecca's family was expanding, so was the family of two of their slaves, Moses and Delilah, who would have five children from 1851-1860.

While the period from 1851-1860 were prosperous times for Charles and Rebecca Hite, the Civil War would bring dramatic changes. Cracks in the farms prosperity began to appear as early as September 10, 1860 when a deed of trust was taken out with a local wealthy farm owner, William Stickley and for $4,100. The scene was re-counted in an 1872 deposition which noted that the deed of trust was signed by Mr. Hite on a sideboard in his house where he was also engaged in "punching".[65] The note for this

[57] Warren County Deed Book H, pg 16 (1861)
[58] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880
[59] 1860 United States Federal Agricultural Census, Schedule 4, Warren County, Virginia, pg 211.
[60] Warren County Deed Book H, pg 16 (1861)
[61] Chancery Suit, Shenandoah County, Washington Bowman vs. Robert C Bowman, 1853-012 (Library of Virginia)
[62] 1860 United States Federal Population Census, Schedule 1, Warren County, Virginia, pg 110.
[63] Chancery Suit, Shenandoah County, Virginia, "Robert Bowman (estate) v. Rebecca Hite", 1874.
[64] 1870 United States Federal Population Census, Schedule 1, Frederick County, pg 87.
[65] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880

loan was due by September 10, 1863, and, should the loan not be repaid, sale of the property would be advertised in the local newspaper.[66] While a large amount, it was not unfathomable to think that it could be repaid in the three years considering payouts for crops during the time. While a decade removed, a Chancery Suit from 1874, involving adjacent property, provides good information on possible profits to local farmers. The suit notes that one bushel of corn could sell between $275-300, with a moderately good growing season producing six-eight bushels per acre.[67]

However, by March 14, 1861 the financial situation for Charles and Rebecca seems to have worsened considerably. Another deed of trust was entered into with the Bank of Winchester, again in the amount of $4,100 and secured by Robert Bowman, Rebecca's brother. A short time later, creditors begin to require "more ample and substantial securities" as more lenders than just Stickley and the bank are involved. In fact between, 1859-1861, the Hite's enter into six substantial loan obligations totaling $13,873.00, not including interest. The breakdown of the debts owed and year by the Hite's is as follows; $1,500 Bank of Winchester (1859), $3,000 (1859), $273 (1859), $4,100 Bank of Winchester (1860), $4,100 William Stickley (1860), and $900 (1861).[68] Robert Bowman once again assists his sister and her husband, offering to secure these debts, but requiring the farm, house, kitchen, slaves and furniture as collateral.[69]

Despite the economic hardships, evidence suggests that Rebecca Hite remained on the farm for the duration of the Civil War, as a 1872 deed refers to a possible 1867 auction of the property and to the property as that "upon which they [Rebecca and Charles Hite] then & lately resided…". However, a May 20, 1863 note from Rebecca Hite to W.P. Williams, acting trustee, states that "I have sold to Mr. John Cooley my negroes amount $3340.00 which amount I wish you to authorize and in trust him to pay over to me - as I wish to make a purchase of others to fill their place." The fact that a trustee has been placed in control of the estate implies that Rebecca's husband is not residing at the house during the war. It also appears from later depositions, that the war was hard on the farm. James M. Bly notes in 1871, that prior to the war, the farm was worth $1,000 per year, but in its present condition, only $500-$700.[70]

By 1867 it seems that Charles and Rebecca were finding themselves increasingly under pressure from their mounting debt and were living in nearby Middletown, in Frederick County, Virginia, while renting the farm for additional income.[71] James. M. Bly and Connor Stickley are two such renters from 1867-1869, with Bly noting that he "cultivated a portion of it – the greater portion".[72] During 1869, the Hite's would begin renting the property to John R. Baldwin who allows Charles Hite, and a business partner, John W. Winsburrow, to conduct logging operations on the land. However, this effort for additional revenue is soon stopped by the court as his lenders note that Hite and his partner have "…been engaged in chopping and selling timber in such large quantities as to render said real estate an incomplete security."[73] About the same time the injunction to stop the logging of the property is issued; Charles Hite disappears, abandoning his wife Rebecca and his children. By November 1871, with Charles Hite

[66] Warren County, Virginia, Clerks Office, Deed Book G, pg 415.
[67] Chancery Suit, Shenandoah County, Virginia, "Robert Bowman (estate) v. Rebecca Hite", 1874.
[68] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880.
[69] Warren County, Virginia, Clerks Office, Deed Book G, pg 415.
[70] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880.
[71] 1870 U.S. Federal Census, Schedule 1, Middletown, Frederick County, Virginia.
[72] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880.
[73] Chancery Suit, Warren County, Virginia, "Richardson vs. Charles I. Hite", 1876.

gone, Samuel M. Grove is renting the farm from Rebecca, and will continue to do so through 1873.[74] Records indicate that in 1872, his crops consisted mainly of wheat, corn, and oats. The corn production for that year consisted of about 35.57 barrels on 65 acres, a small crop for the year. With prices at $3.50 per barrel, this meant that Grove was able to sell his crop for $124.50. However, the rental agreement at the time was for 2/5 share of the crop, which resulted in Grove netting just $30 for his efforts.

Despite help from her family, notably Robert Bowman, who is noted as paying the taxes on the property in 1867, likely due to his status as a trustee, the Hite's debts are called in by George Hupp on December 2, 1870.[75] Hupp immediately places an ad in the Warren Sentinel for a public auction to be held on January 7, 1871. Rebecca Hite protests the sale, noting that the rent from the land "is the only support now left to complaintant [Rebecca Hite]" and that the timing would not be good as "money is scarce" in the county.[76] Despite delays, and two failed attempts to auction off the property, due to no bids, William Stickley purchases the farm on September 16, 1872 for $8,000, almost half of the $15,880 assessment.

The sale of the Hite farm is a microcosm of what was occurring to similar land owners across the South. With much of their previous wealth invested in slave labor, and now worthless Confederate bonds and currency, many families had no recourse but to sell their property. Additionally, falling prices for commodities, such as wheat, corn, and livestock, initially following the Civil War meant that there was little ability for farmers, such as Charles Hite, to pay off any debts.

Period III (1872-1881):

Following the sale at auction of the Bowman-Hite farm to William D. Stickley in 1872, the house continues to be rented to Samuel M. Grove until 1873. The 1873 map of the Cedar Creek battlefield, drawn by Gillespie, verifies this noting the occupant of the structure as Mark Grove (Samuel M. Grove).[77] At the time William D. Stickley owns the 397 +/- acres of the Bowman-Hite farm, he also owns a large amount of adjacent property, including the first Bowman Mill, to the north, across Cedar Creek, where he resides.[78]

Stickley's ownership of the Bowman-Hite property is short lived, as he sells the property just four years after the Chancery Suit in 1876 to John Pirkey for $5,200.[79] Under Pirkey's ownership, 1876-1886, the rear frame portion of the Bowman-Hite farmhouse was added and the side porch extended. Additionally, the existing bank barn was constructed during this time, ca. 1881, with the land tax values jumping from $300 to $500 from 1880-1881.[80] Land tax records from 1882 also specifically mention a

[74] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880.
[75] Warren County Land Tax Books (1867)
[76] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880.
[77] Atlas 82:9; 85:33, 38, 99:2; Gillespie, LC #537: ``Battlefields of Fisher's Hill and Cedar Creek Virginia'' Prepared by Bvt. LT. Col. G. L. Gillespie, major of Engineers, USA, from surveys made under his directions, by order of Lt. Gen. P.H. Sheridan, etc., 1873, uncolored, Scale 1:12,000, 2 sheets, each 121x69cm, overall size 121x138cm; While the map is detailed there appear to be inconsistencies as the Bowman Mill is located on the north bank of Cedar Creek, east of Mount Pleasant, however no other source indicate this with later images and observations seeming to run contrary to this placement.
[78] Lake Atlas, Shenandoah County, Virginia 1885.
[79] Warren County, Virginia, Clerks Office, Deed Book K, pg 198.
[80] Warren County Land Tax Books, 1876 and 1881.

large barn on the property.[81] Physical examination of the barn's material confirms this late-19th century construction date.[82]

This new construction at the Bowman-Hite property would seem to coincide with the period from 1876-1879, when Pirkey is also constructing a "good new frame dwelling house, stabling and other necessary improvements…" (**fig. 8**) on the southern end of the Bowman-Hite farm adjacent to the Bowman Mill site, then occupied by Daniel Coverstone.[83] However, like the Hite's just over a decade prior, the Pirkey's appear to have run into financial problems. In the August 8, 1879 issue of the Shenandoah Herald, their new frame dwelling house, as well as 270 acres of the old Charlie Hite farm, are being auctioned to secure debts owed to Philip Grove.[84]

H.C. Wilson eventually purchases this land and will remain in the vicinity for the remainder of the 19th century. H.C. Wilson's purchase, however, did not include the Bowman-Hite farmhouse, which remains with Pirkey until he officially sold it, along with 128 acres, to Abrams H. Kerns in 1886 for $2,800.[85] This particular land transfer between Pirkey and Kerns specifically mentions the brick house, noting "the road leading to the yard, or near it, of the brick house now occupied by said Kerns or rather near the wall on said tract to be the line between Kerns & owners of remaining tract of the "Charley Heite" farm (in possession of H.C. Wilson)."[86]

Period IV (1881-1967):

While the formal transfer of the 128 acres occurred on 1886, Kerns appears to have been paying taxes on the 128 acres of land as early as 1881.[87] The mention of Abraham Kerns already occupying the structure, as noted in the deed of 1886 seemingly confirms this suspicion. Procurement of the Bowman-Hite farmstead would have added to Kerns already substantial land holdings, especially for a young man in his mid twenties. In addition to the 128 acres associated with the Bowman-Hite farm in 1881, he owned another 44.5 acres in Warren County also along Cedar Creek, as well as 75 +/- acres in Shenandoah County.

These properties were obtained through inheritance, as a report by Daniel Stickley notes in October 1868, stating Abraham Kerns holdings as the "farm land of which his father Henry Kern did seize and posses."[88] Despite these holdings, the 1870 census notes the 17 year old "A. Kerns" as living with his sister, Sarah and her husband George Amos Hinkins, in Shenandoah County and working as a farmhand.[89] However by 1880, the census notes that he has moved to Warren County and is renting a portion of his dwelling house to John Pingley and his family.[90]

[81] Warren County Land Tax Records, 1882.
[82] Spencer, Building Forensics Report, 2011
[83] Shenandoah Herald, August 6, 1879, pg 1 col. 4.; Shenandoah Herald, November 5, 1879, pg 1 col. 5
[84] Shenandoah Herald, August 6, 1879, pg 1 col. 4.
[85] Warren County, Virginia, Clerks Office, Deed Book Q, pg 271.
[86] Warren County, Virginia, Clerks Office, Deed Book Q, pg 271.
[87] Warren County Land Tax Books, 1881.
[88] Shenandoah County Clerk's Office, Deed Book 9, pg 95-97 (1868)
[89] 1870 United States Federal Population Census, Schedule 1, Shenandoah County
[90] 1880 United States Federal Population Census, Schedule 1, Warren County

The year 1881, apart from taking up residence in the Bowman-Hite farm house, also saw Abraham Kern marry Ella O. (unknown maiden name).[91] In the four years following his marriage, Kern would accumulate some personal wealth, being noted in 1885 as having one horse, four head of cattle, two carriages, one clock, and one sewing machine.[92] He and his wife Ella would also have their first and only child, Charles Grover Kerns, who was born July 25, 1884.[93]

However, by December 4, 1886, less than a month prior to his purchase of the 128 acre portion of the Bowman-Hite farm, which included the brick house, Kerns sells 44.5 acres of land to Adaline Rittenour for $800. This property is noted as being in Warren County, partially along Cedar Creek, bordering D. Stickley's and H. Wilson's property lines.[94] However, no structures existed on the property at the time of the sale as a later land tax assessment for 1888 notes that "a $400 value had been added for buildings".[95] Kerns would also go on to sell his 74 acres in Shenandoah County on February 10, 1900, to George Hinkins, his brother in-law.[96]

The farm would more or less remain intact for the next ten years, until March 9, 1896, when Kerns and his neighbors to the east, M.C. Wilson and O. Wilson, enter into an agreement to transfer approximately ½ acre of land. It appears as though the construction of the county road, now Bowman's Mill Road, cut portions of the contiguous land holdings of both Kerns and the Wilsons. In order to ascertain more defined property boundaries, land was exchanged with the "said road" becoming "the line between the said parties and to be used jointly between the places…"[97] The deed goes on to mention "A.H. Kerns barn yard" confirming the presence of multiple agrarian structures including the bank barn built ca. 1881.[98]

Unfortunately, tragedy would strike the Kerns family on April 4, 1900, when, at the age of 45, Abraham Kerns would accidently shoot and kill himself on the farm.[99] While this event is tragic, the ensuing legal documents help paint a vivid picture of the Bowman-Hite farm at the turn of the 19th century. A subsequent August 31, 1900 inventory lists possessions associated with the house as well as property associated with the farming operation. Some of the farm animals, crops, and implements noted include a bull, red cows, milk cows, four tons of hay ($61), three hogs ($15), 360 bushels of wheat ($216), drill wheat ($20), a spring tooth harrow ($70), a horse rake and mower ($150) and a vice and grind stone ($2). Additionally, a safe ($5), a clock ($1), six split bottom chairs ($10.50), one suit of furniture-walnut ($14) as well as various notes and money accounts were also noted and likely were placed within the Bowman-Hite farmhouse.[100] While the August date of the inventory does not account for the corn crop being grown on the farm, it does place the Kern farm on par with other farms of moderate size in Warren County during the same period. This is especially evident in the size of the farm which at 128 acres falls under the average farm size of 143 acres in Warren County during this time.

---

[91] Warren County Personal Property Tax Books, 1881
[92] Warren County Personal Property Tax Books, 1885
[93] Charles G. Kerns' birth date is confirmed by the 1906 inventory and settlement of his father's estate that notes he reached maturity July 25, 1905.
[94] Warren County, Virginia, Clerks Office, Deed Book Q, pg 272.
[95] Warren County Land Tax Books, 1888.
[96] Shenandoah Clerks Office, Deed Book 52, pg 136.
[97] Warren County, Virginia Deed Book 1, pg 319 (1896)
[98] Ibid
[99] Richmond Times Dispatch, April 6, 190
[100] Warren County Will Book G, pg 433 (1907)

Several other entries associated with the will and running from 1900-1907 note a number of small changes to the properties structures over that time, including the painting of the house by Charles Kern in 1905, the installation of lightning rods on the barn in 1905 (still intact), and the running of wire fencing in 1901, 1904, and 1905.[101] The wire fencing noted marks the final evolution in fencing types seen in the region, which originally began with stone fences in the 18th and early-19th century. These fences were followed by wood "worm" fences in the mid-to-late-19th century, as seen in many of the photographs taken of the area in the 1870s and 80s.

Despite the death of her husband, Ella and her son Charles would continue to live on the property for the rest of their lives. In 1910, the census lists Ella as a "general farmer" and her 26 year old son Charles as the "farm manager".[102] The next census would still list Ella as head of the household, with Charles still living there and serving as a "farm laborer".[103] However, Mary Cornelia Kerns is also noted as living in the house in 1920, having married Charles Kerns. The three members of the Kerns family would continue to keep the farm afloat through the Great Depression, despite the severe impact on other farms in Warren County and the surrounding region.

Charles Kerns pre-deceased his mother, dying on October 29, 1941. A year prior, he wrote his will naming his wife, Mary Kerns as the heir. He also notes that he had lived his entire life of the farm, a total of 57 years. The inventory of the property, taken in January of 1942, notes the presence of livestock on the farm, including a black heifer, a Roane Durham cow, a Guernsey cow, and a Roane Durham male.[104] Soon after the passing of Charles, Mary moved off the farm to nearby Middletown in Frederick County, Virginia, but still retained possession of the property until 1967.[105]

Period V (1967-2003):

Mary finally sold the 127.5 acres, including the brick house, on December 20, 1967, to Lloyd and Ruth Whitham.[106] Both Ruth and Lloyd would add substantially to the farmhouse in 1971, as well as construct additional structures on the property.[107] The most noticeable alterations consisted of enclosing the south porch on the farm house, as well as the addition of the two-car garage on the east side. The east wing was also raised to a full two stories, with the new additions completely enclosing the rear frame addition added by Pirkey, 1876-1880s. Lastly, a cinder block front porch was added replacing the Greek Revival porch seen in an image from 1971.

Lloyd Whitham would pass away in 1993 with his wife, Ruth, passing in 2002. The 127.5 acres of the Bowman-Hite farm then passed to a residual trust, of which Charles Whitham served as trustee. On March 21, 2003, eight acres, including the Bowman-Hite farm house, was sold to the United States

[101] Warren County Will Book G, pg 433 (1907)
[102] 1910 United States Federal Population Census, Schedule 1, Warren County, VA .
[103] 1920 United States Federal Population Census, Schedule 1, Warren County, VA .
[104] Warren County Clerk's Office, Will Book L, pg 375; Warren County Clerk's Office, Will Book L, pg 411, 440
[105] Warren County, Virginia Land Tax Records, 1948.
[106] Warren County, Virginia Deed Book 157, pg 393-394 (1967)
[107] Reconnaissance Level Survey, Virginia Department of Historic Resources, "Whithaven" [Hite-Bowman House] (DHR# 093-0138)

Department of the Interior, and approximately 134 acres conveyed on the same date to the Shenandoah Valley Battlefields Foundation (SVBF).[108]

Today the core of the Bowman-Hite farm is managed by the National Park Service as part of the Cedar Creek/Belle Grove National Battlefield Park. Not only does the current farmstead built in the 1850s serve as a legacy on the Civil War battlefield, but also illustrates the prevalent vernacular architecture of the period. The surrounding ancillary structures, most notable the large timber frame bank barn, also help convey the feeling of a typical late-19th and early-20th century middling farm in the Warren County area.

[108] Warren County Clerk's Office, Instrument Number 030003079; Warren County Clerk's Office, Instrument Number 030003078.; The 142 acres differs considerable from the 127.5 acres noted throughout the 19th and 20th centuries.

Figure 1: 1930s image of the Joist Hite house (mid-18th century), located adjacent to Springdale, Frederick County, Virginia. (Handley Regional Library)

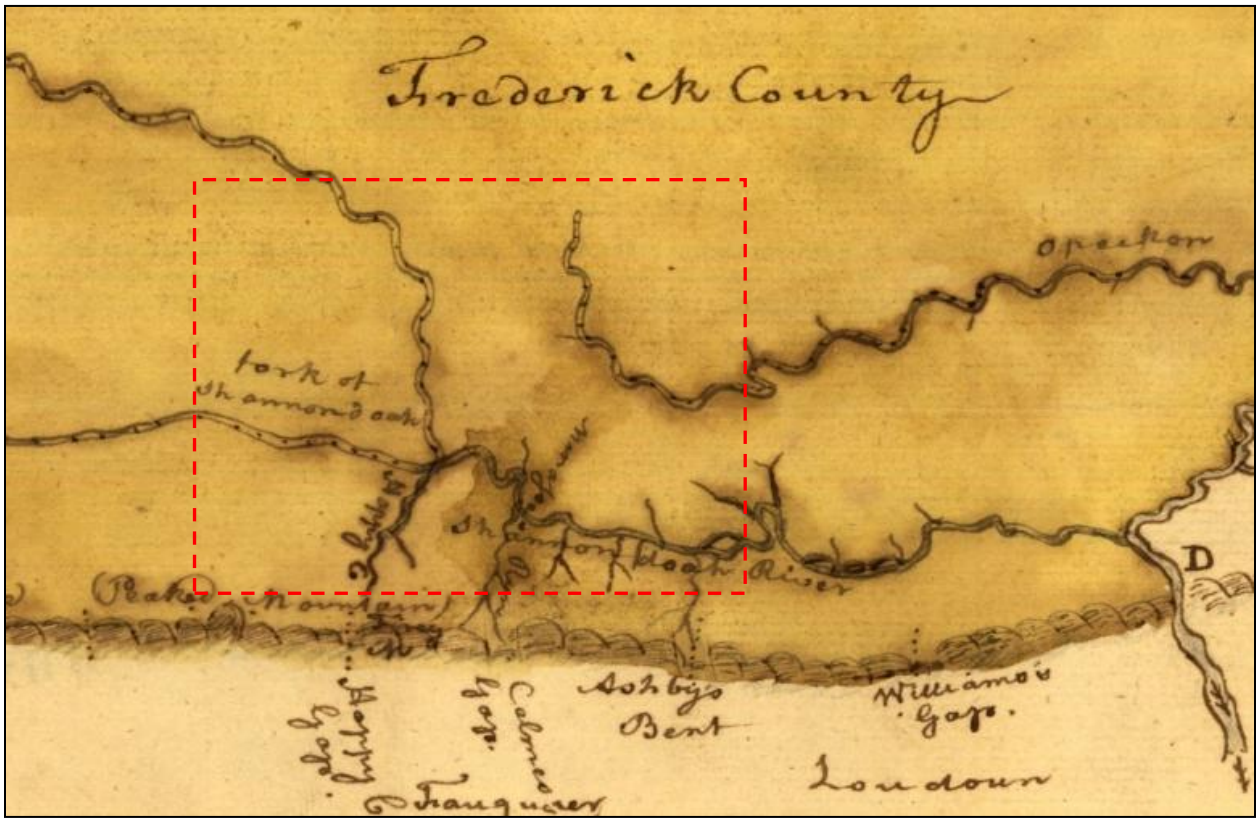


Figure 2: 1769 map of the Frederick County region, drawn by J. Moffett. The fork of the Shenandoah River, where Joist Hite and George Bowman received their land patents is indicated by the red box. (Library of Congress)

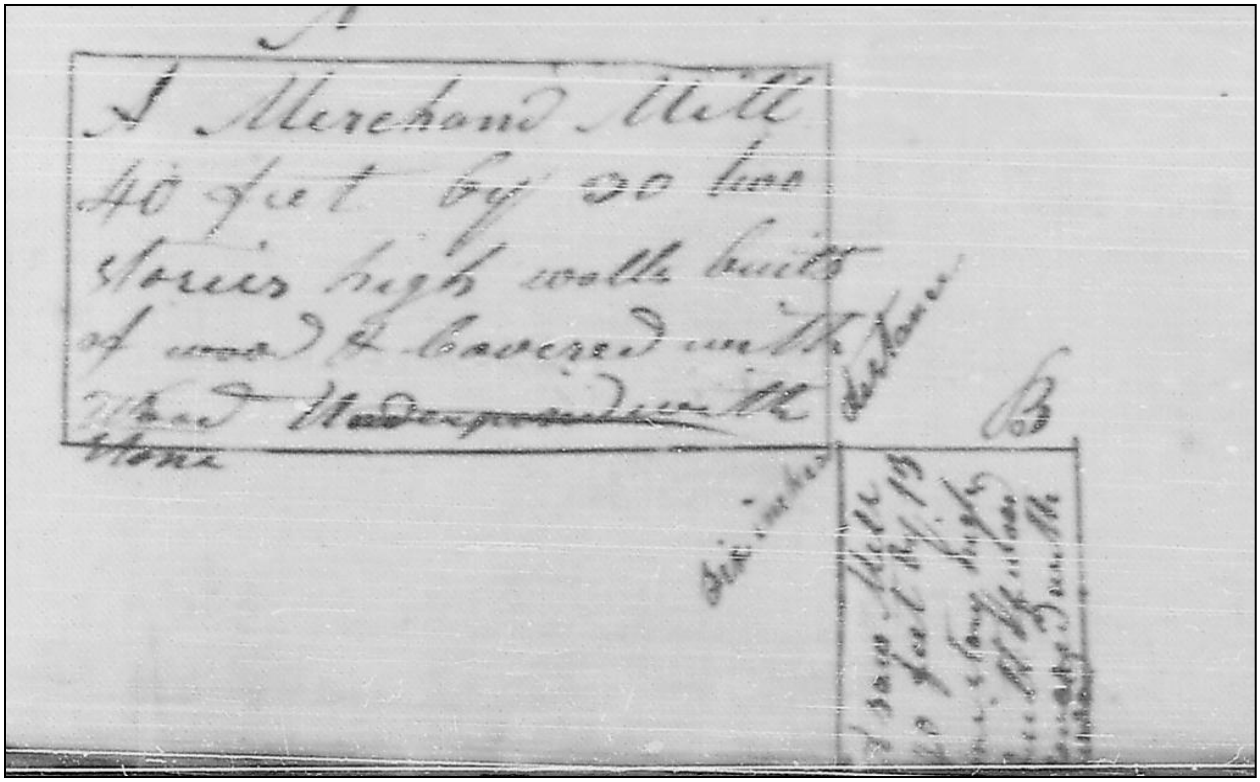


Figure 3: 1803 Mutual Assurance policy for Bowman's Mill. The image shows the outline of both the merchant mill (A) and the saw mill (B). The gap between the two is noted as "six inches". These mills and the complex built around them in 1806 were constructed by Isaac Bowman in 1793. They would survive well into the later part of the 19th century.

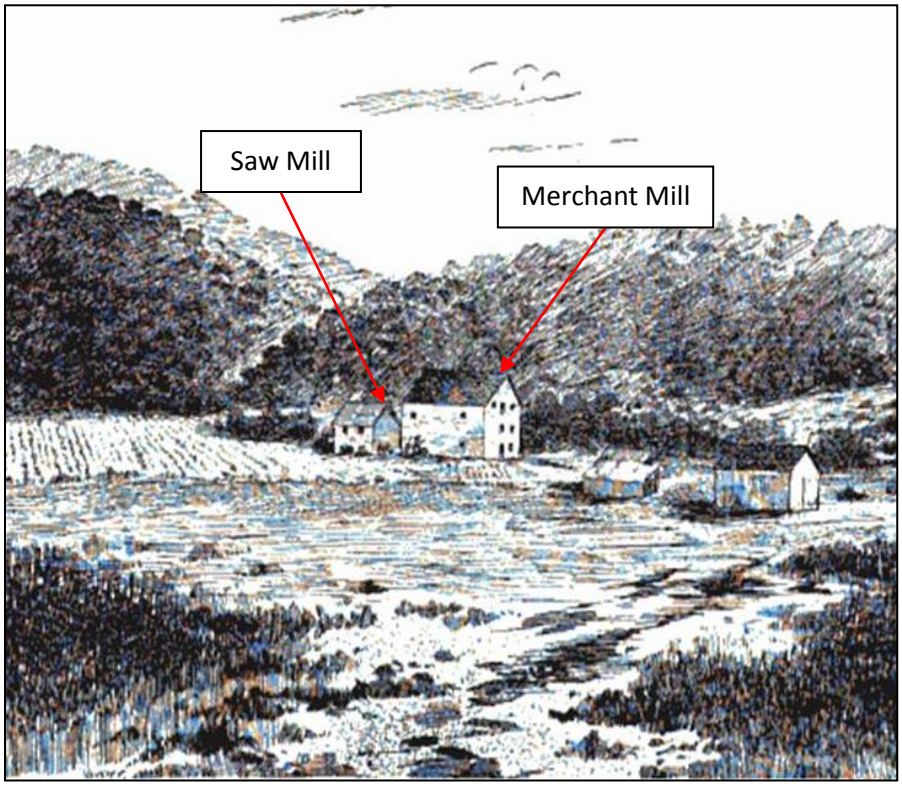


Figure 4: Late-19th century image showing Isaac Bowman's mill complex. This would have been the same complex sold by Charles and Rebecca Hite in 1850 to Rebecca's brother George Bowman. (English)

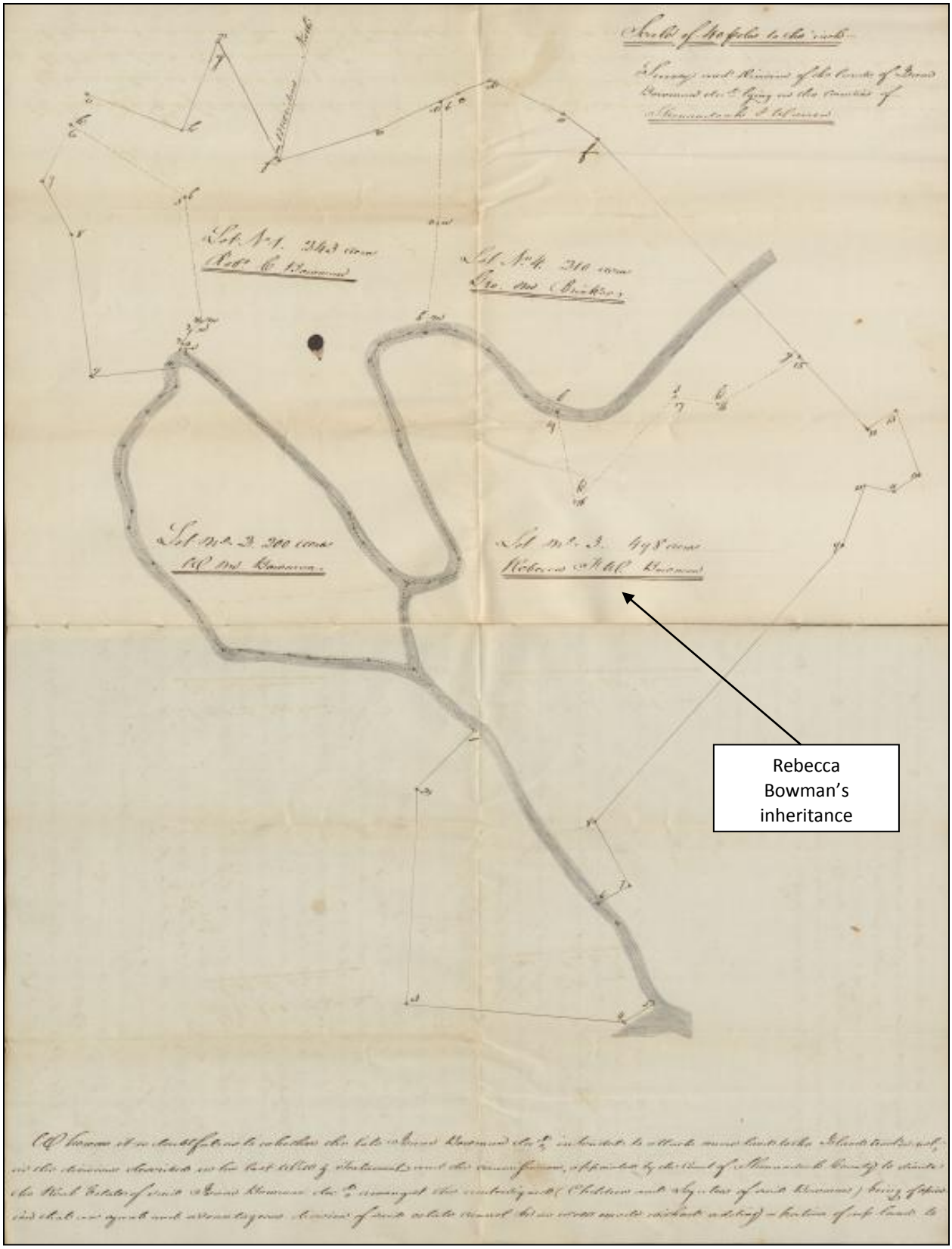


Figure 5: 1843 plat showing the division of Isaac Bowman's land among his youngest children. Rebecca Hite would inherit the large section of land on the east (right) side of Cedar Creek (Library of Virginia).

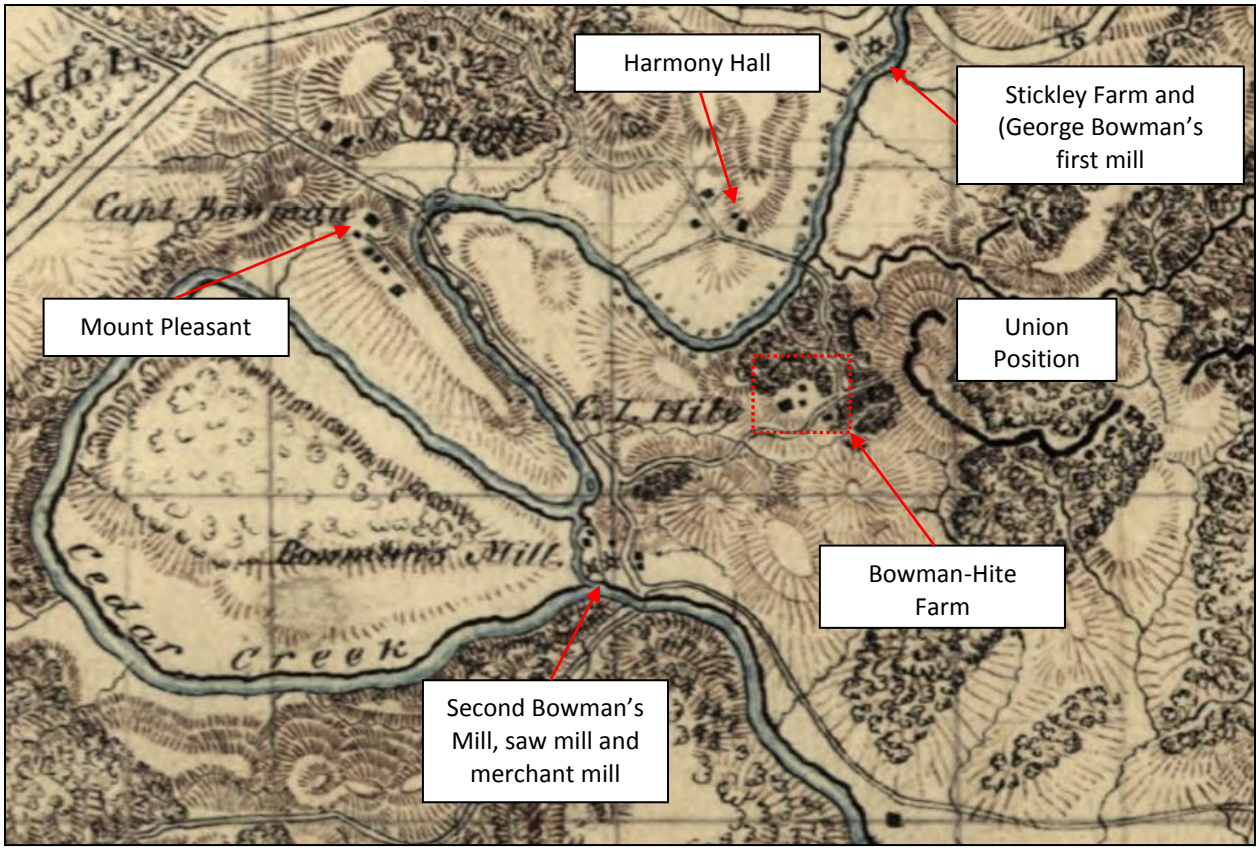


Figure 6: 1864, J.D. Hotchkiss map showing the C.I. Hite farm and ancillary structures as well as the two mills associated with the Bowman's mill complex, at this time no longer owned by Charles and Rebecca Hite (Library of Congress).

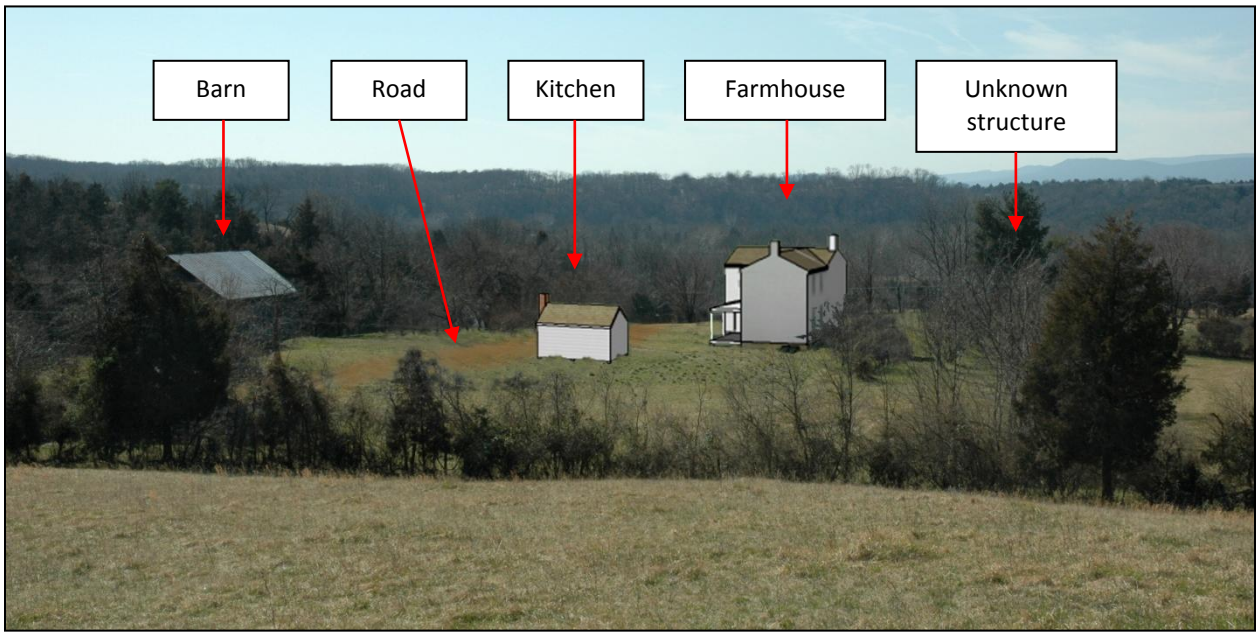


Figure 7: A virtual rendering of what the Bowman-Hite farm would have likely looked like from Union positions on top of the hill in 1863-64. Note the location of the roadway between the house and the barn. The unknown structure, as depicted by the image and noted on the period map is located in the vicinity of the current shed/meat house. (Spencer, 2012)

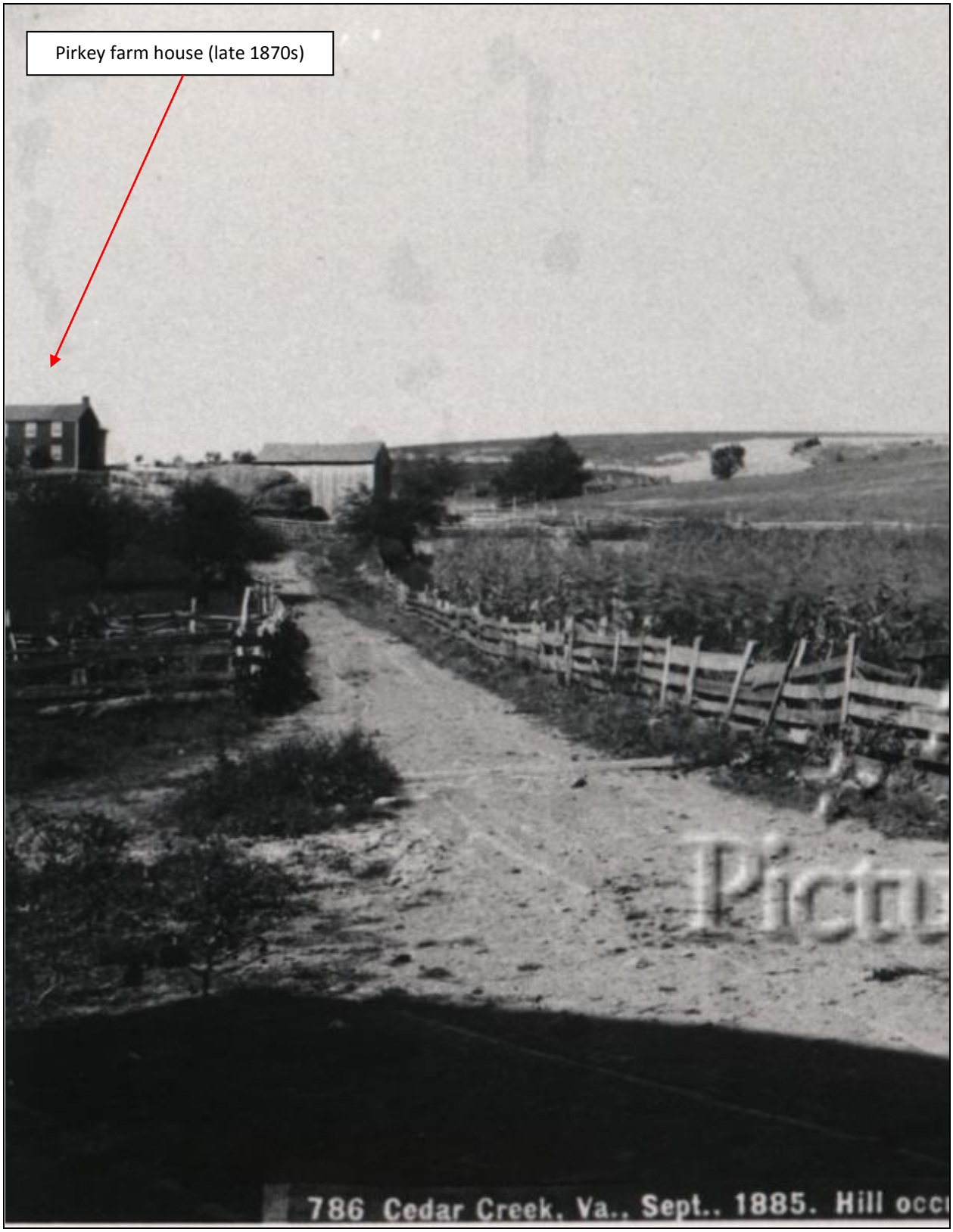


Figure 8: 1885 image showing the frame structure and barn that Pirkey built 1876-1879 (extreme left). The Bowman-Hite farm is just behind the crest of the hill on the left.

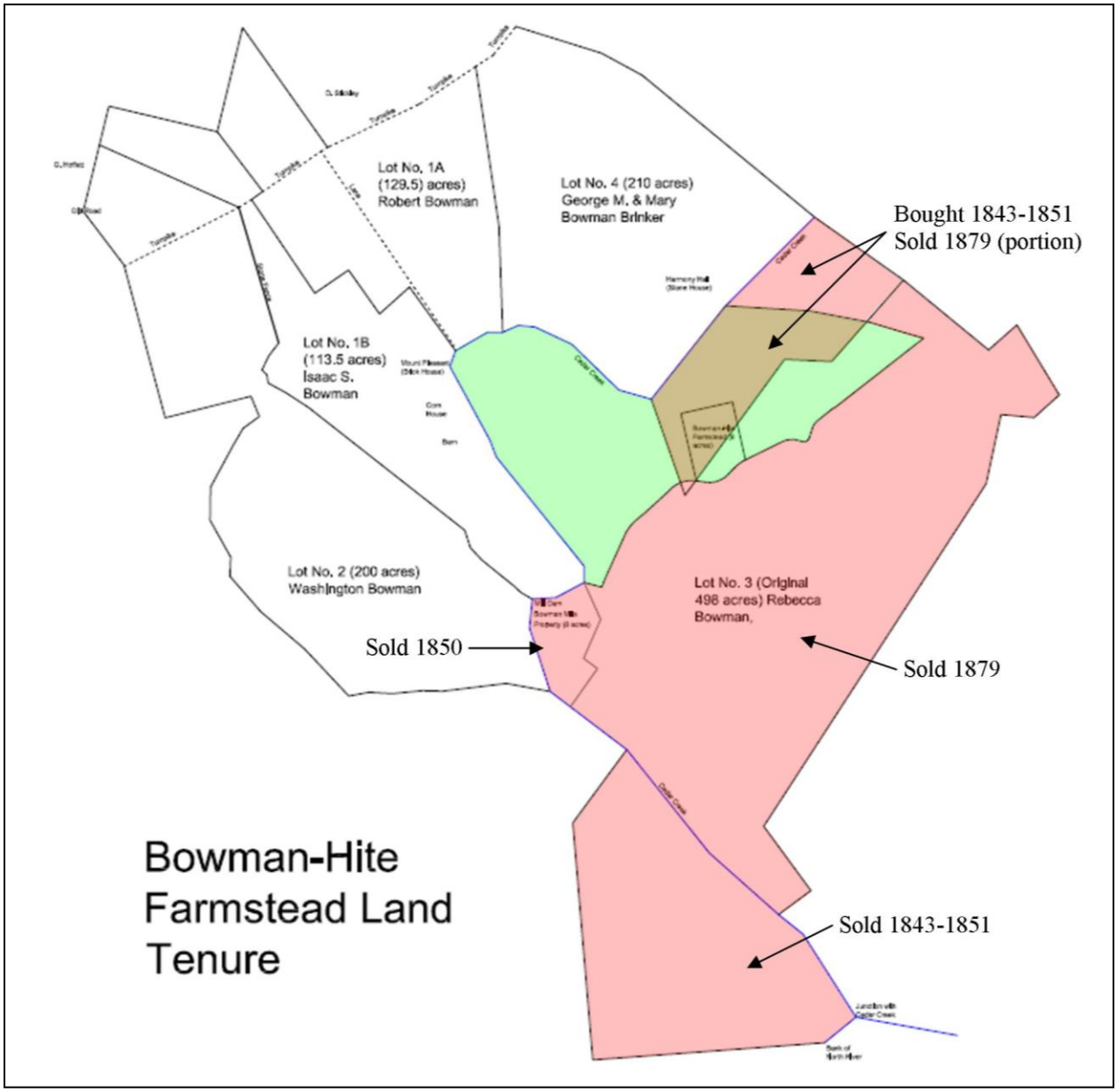


Figure 9: Map showing the various land divisions associated with the Bowman-Hite farm from its creation in 1843 until today. Note the brown shaded area is property that was originally acquired during the 1840s-50s and then a portion sold in 1879.

Chronology of Development and Use

Chronology of Development and Use:

Exploration of the Shenandoah Valley began early in the 18th century, with settlement by Germanic families like the Hite's and Bowman's in the 1730s and 40s. Only archaeological evidence remains from the early log, and post-in-ground structures, initially built for shelter although, more substantial, second generation buildings, from the 1750s do survive. Fort Bowman, a.k.a. Harmony Hall (**fig. 12**), built in ca. 1753 by George Bowman, early land owner Joist Hite's son-in law, is one such example which showcases the use of Germanic building traditions as well as local materials, such as the abundant limestone.[109] Not until the early-19th century was brick manufactured locally, gradually replacing stone construction in Warren County and the surrounding region. Jefferson County, West Virginia, once part of Virginia, where Charles J. Hite grew up, saw this change as well, shifting from stone construction, to a combination of stone and brick, and finally completely to brick by the mid-19th century. Foundations continued to be the exception to this transition and were laid in limestone well into the 20th century.[110]

The brick farmhouse on Cedar Creek (**fig. 26**)**,** built ca. 1850s, by Charles Hite and Rebecca Bowman demonstrates well this evolution in building materials within the Warren County region. Evolution of building aesthetics and form can also be seen in the Bowman-Hite house when compared to other nearby buildings. While initially rich in Germanic building traditions, by the mid-19th century, both the Bowman's and Hite's seem to have tossed aside traditional techniques in favor of period trends and styles, albeit in the case of the Bowman-Hite house, vernacular renditions.

From 1876-1881, under John Pirkey's ownership, a shift in the region's construction techniques can be clearly delineated with the use of balloon frame construction for the Bowman-Hite house, rear frame kitchen addition (**fig. 26**). During this same period, the extant barn, is built using traditional timber framing techniques, but incorporates more modern circular sawn timber and wire nails. More substantial alterations are made to the farmhouse during the Whitham period of ownership from 1967-2003, when modern 20th-century methods and materials were used to enclose the structure's side porch, raise the frame addition another story, expand the front porch (demolishing the previous porch), and add a two-car garage.

Understanding of the chronological developments (**fig. 48**) associated with the farmhouse helps to better understand the larger cultural landscape of the farmstead as well as its place within the broader regional context. Through this lens five distinct periods on the Bowman-Hite farmstead emerge. Each period reflecting not only building development on the farmstead, but also technological, economical, and aesthetic changes within the region;

I. 1734-1843 George and Isaac Bowman
II. 1843-1872 Charles J. Hite and Rebecca Bowman
III. 1872-1881 William Stickley and John Pirkey
IV. 1881-1967 Kerns Family
V. 1967-2003 Whitham Family

[109] *Virginia Magazine*, Vol. XIII, No. 2, pg. 115-119.
[110] Allen, *Uncommon Vernacular*, pg 244-246.

Period I (1734-1843):

Exploration of the Shenandoah Valley began as early as the first decades of the 18th century and by 1728, the Virginia Council along with Governor William Gooch granted the first lands to speculators. These large land grants were then divided and sold to settlers for a cheap price, providing that they were "improved" within two years of purchase.[111] Often the improvement on the land consisted of a log structure or a small post-in-ground dwelling. These types of structures were likely what Joist Hite and his family members, including his son-in-law George Bowman, erected in 1731-32. The presence of at least temporary dwellings is confirmed in 1734 when the land patents for Bowman and Hite are officially recorded. Recent archaeological excavations in Jefferson County, West Virginia have uncovered post holes associated with a hall-parlor structure, dating to the 1740s. This structure erected by William Green shows a direct link architecturally to eastern Maryland where Green was from and where this type of construction was still prevalent. While not Germanic, Green's house indicates the continuation of regional and ethnic building traditions, brought from cultural hearths, to the Shenandoah Valley. Similar architectural links with Germanic traditions, taken from Pennsylvania, appear on the Valley landscape in the 1750s.[112]

Roadways, such as the "Wagon Road", later the Valley Turnpike, as noted on the 1755, "Map of the Most Inhabited Parts of Virginia", helped spread settlers from the lower end of the Shenandoah Valley, near Pennsylvania and the Germanic cultural hearth, to the upper reaches of the valley located closer to the Cumberland Gap.[113] Eventually this road would converge with the Wilderness Road providing access to new frontiers in Kentucky, Tennessee, and North Carolina. While the majority of early settlers to the valley were Germanic, a large number of Scotch-Irish and English settlers also brought their building traditions.

While early construction in the valley was temporary, by the 1750s more substantial construction methods were being employed by families of means. The most popular early house type employed by early German settlers was called a Flurküchenhaus, or a hall-kitchen house. Such a house was typically asymmetrical in its plan as well as fenestration, with an off-center, internal fireplace serving as a focal point. Not large, the house would often consist of two to four rooms, with a full cellar. Depending on available space, the cellar would be accessed from either an interior or exterior staircase. The primary room was called the Küche and was often accessible via an exterior front and rear door. This room was more informal and was utilized not only as a living space but also as a kitchen. Because of this function, the room was serviced by a large cooking fireplace. The more formal room, or the Stube, was similar in function to the parlor of early English structures, with the exception that meals were often taken in the room. Plate-iron stoves were used to heat this room and were fed coal through an opening in the Küche fireplace. While a number of 1 ½-story examples are known, two-story structures were not unusual, with the second floor often accessed by two staircases. Large unfinished attics, like Harmony Hall (ca. 1753), would also be incorporated in the design, allowing for increased storage.[114]

[111] Hofstra, *The Planting of New Virginia: Settlement and Landscape in the Shenandoah Valley*. pg. 5, 7-8.
[112] Allen, *Uncommon Vernacular*, pg 25.
[113] Joshua Fry and Peter Jefferson, *A Map of the Most Inhabited Parts of Virginia*, 1755; it should be noted that the "upper valley" is the southern end while the lower valley constitutes the northern portion.
[114] Chappell, *Acculturation in the Shenandoah Valley*, pg 29.

Log and stone were preferred by German settlers as exterior construction materials in Virginia during this early period, despite a strong tradition of Fachwerk, or half-timbering.[115] The majority of surviving buildings from this period in the Frederick, Shenandoah, and Warren County region are built of rubble coursed limestone. Log buildings have also survived in Page County, near the Massanutten Settlement. These log buildings include Fort Egypt (mid-18th century) (**fig.11**), Fort Rhodes (ca. 1765), the Abram Strickler House (mid-late-18th century), the Andrew Keyser House (ca.1765), and the Charles Keyser House (late-18th century). Despite this variation in exterior building materials, nearly all surviving examples have limestone foundations. In addition to the exterior construction methods, many of these early structures also posses' complex roof systems typical of Germanic construction methods in Europe during the 18th century. Primarily, these systems incorporated the use of common rafters supported by a complex and heavily framed sub-structure. Rather than the rafter sitting on a falseplate, as was typical in English construction, the rafters would be placed directly on the joist. Later in the 18th and early-19th centuries, such roof systems would be replaced by principal rafter systems.[116]

Detailing, both exterior and interior, often revolved around exposure of the buildings structural system. This included exposing interior joists and summer beams which often incorporated decorative beaded edges. Other aspects of finish work would be considered by later standards to be austere. Trim and molding was minimal, and was reserved for chair rails, baseboards, and the cornice above the fireplace mantle. Interior walls were often of vertical board construction, utilizing both panels as well as tongue and grove boards with beaded edges. Lastly, "kicks", or the lowering of the roof pitch near the eaves, a common characteristic of Germanic roofs was utilized. Such traditions and detail had all but vanished in the valley by the early-19th century.[117]

The home of Joist Hite (ca. 1740s) in today's Frederick County, Virginia has much in common with the Flurküchenhaus form (**fig. 10**).[118] While only the coursed rubble limestone walls and chimney remain, the form of the building, as well as its asymmetrical fenestration, is easily discernible. Situated on a sloping hillside, the one-and-a-half story stone structure exhibits not only a front entry but also direct exterior access to the cellar. There appears to have only been two rooms on the first floor, with the front entry leading directly into the Küche, which is dominated by the asymmetrically placed interior chimney and corresponding hearth. On the other side of the chimney is the slightly larger Stube.[119]

Built a few years later in 1753 by George Bowman, Fort Bowman or Harmony Hall, on the banks of Cedar Creek (**fig. 12**), also exhibits some Germanic building characteristics. Constructed of coursed rubble limestone, the two-story, double-pile building is situated on the side of a hill that gently slopes towards the creek. This placement allows for exterior access to the full basement, in addition to interior access. The fenestration of the structure is symmetrical on both the front and rear façades, with a central passage flanked on both sides by windows which are spanned by segmental stone arches.[120] However, the fenestration on the gable ends is asymmetrical, necessary to avoid the interior end chimney stacks.

---

[115] Chappell, *Acculturation in the Shenandoah Valley*, pg 29.
[116] Chappell, *Acculturation in the Shenandoah Valley*, pg 27-55.
[117] Chappell, *Acculturation in the Shenandoah Valley*, pg 27-55.
[118] The ruins of Joist Hite's house and tavern (ca. 1740s) stands adjacent to Springdale which was built in 1753 by John Hite, Joist Hite's son. However, the structure has been much altered over time obscuring any exterior Germanic building techniques apart from the stonework.
[119] Winchester-Frederick County Historical Society Collection, "Ruins of Joist Hite Home" (photograph); Louisa Morrow Crawford Collection (Handley Regional Library), "Springdale-Hite's Tavern", ca 1890 (photograph).
[120] Segmental arches were a common way to create window openings in the region prior to the 19th century.

While the general aesthetics, building materials, and even structural systems display elements of Germanic building traditions, the central passage plan is more English in origin.[121] This hallway bisects the structure with two rooms on the east side and one large room on the west. The first of the two east rooms appears to have been unheated. The smaller room, immediately to the rear of the first, has a large cooking fireplace reminiscent of the Küche (**fig.16**). Also situated within the large hearth area is a small niche where coals may have been fed into a plate stove situated in the adjacent room. The single west room is also heated with a large fireplace, although the size and detailing of the room indicates a more formal use similar to the Stube (**fig. 13**). The second floor is also bisected by a central hall, with two rooms on the east and two on the west. Separating all rooms are paneled walls, two inches wide (**fig. 17**). A stairwell placed within the central hallway connects all floors, including the basement and attic spaces.

The attic is a large open space, allowing for easy access to the complex roof structure. Fort Bowman's system utilizes common rafters, which in turn are supported by a larger sub structure consisting of principal rafters and double collar ties (**fig. 14 & 15**). Such a system shares similarities with the Schiefferstadt House (ca. 1758) in Frederick Maryland, as well as the Golden Plough Tavern (ca. 1741) in York, Pennsylvania, although both of these examples have a slight camber to the rafter collars.[122] The common rafter feet also sit directly on the joists at Fort Bowman. A roof "kick", is clearly visible on both gable ends of the structure (**fig. 12 & 14**).

Interior detailing and finish work also clearly distinguishes it from later valley structures as it exhibits large exposed framing members, notably the joists and large summer beam complete with chamfering. While the basement joists rest directly on the summer beam, the first and second floor joists appear to be mortised into the member, a characteristic more common in the 19th century. The cellar also shares similar characteristics with other Germanic structures in the Shenandoah Valley, such as the small niches, known locally as pine holes (**fig. 18**). Some speculate that pine knots, or other lighting material, would be burned in such niches.[123] Large relieving arches under the massive stone chimney stacks on both gable ends dominate the basement and indicate the structures mid-18th century construction.

Other structures associated with the Bowman and Hite families were also built during the same period, although it is not until 1797, with the building of Belle Grove by Isaac Hite Jr. and his wife Nelly Conway Madison that the third generation begins to leave its mark on the built environment.[124] While Belle Grove is known for its Roman Classicism, its association with the Hite and Bowman families also illustrates how little remained of Germanic building traditions within the Shenandoah Valley just fifty years removed from settlement. Perhaps the only characteristic it shares with its Germanic architectural roots is the limestone construction, likely an issue of cost and necessity rather than tradition.

The construction of Belle Grove seems to coincide with the last vestiges of Germanic building traditions, of which architectural historian, Ed Chappell, notes as disappearing from the Valley by ca. 1800. Sixteen years later, in 1812-13, Rebecca Bowman's (later Rebecca Hite's) childhood home, Mount Pleasant (**fig.**

[121] Such a form is more in keeping with English and Scotch-Irish building traditions than Germanic. This is perhaps already demonstrating the shift in ethnic building practices from the first generation, Joist Hite's tavern/home at Springdale, to the second generation, George Bowman and his home Fort Bowman.
[122] Chappell, *Acculturation in the Shenandoah Valley*, pg 27-55.
[123] Chappell, *Acculturation in the Shenandoah Valley*, pg 35.
[124] National Register Nomination for Long Meadows, Warren County, Virginia, pg. 10.

19) is constructed by Isaac Bowman. The Federal style brick building is situated high on a bluff overlooking Cedar Creek and Isaac's father's house, Fort Bowman. The building illustrates well the transition from stone to brick construction in the region, as well as the assimilation of popular architectural aesthetics within the Bowman and Hite families[125]

Considered large and well apportioned for its time, Mount Pleasants, two-story, five-bay, center-hall, double-pile plan, creates a symmetry which is illustrated by both the front and rear fenestration. The center-passage plan of the house was at the time of construction, popular in the region among the more elite planters and merchants, replacing the earlier hall-parlor and Flurküchenhaus forms. Contrasting the earlier house forms used by Isaac Bowman's father and grandfather, the true center-hall plan allowed for a more formal arrangement of rooms, with the hall clearly delineating between private and public spaces.[126] Perhaps the biggest change seen at Mount Pleasant was the removal of the hearth and kitchen from the central mass to a stone wing located on the north side of the building. This kitchen wing is dominated by a large cooking fireplace (**fig. 20**) reminiscent of Fort Bowman and may possibly pre-date the adjacent brick structure.[127] Additional fireplaces, possibly used for food preparation, are also found within the basement, which is only accessible from the exterior. Detached kitchens were becoming increasingly prevalent in the region during the early-19th century.[128]

Like other houses in the area the brick structure sits atop a raised limestone foundation. However, unlike earlier structures, the exterior walls are made entirely of brick. During the early-19th century, the use of brick in the region was expensive compared with local limestone. Not until transportation improved and quality bricks could be purchased from Baltimore, MD in the 1840s did costs begin to decrease. Mount Pleasants use of Flemish bond on both the front and rear elevations is a further indication of the Bowman's status within the community. However, as was typical for the time, the less exposed gable ends are laid in a more economical 1:5 common bond. The use of these bond patterns was typical for the region, as Flemish bond enjoyed popularity until the mid 1830s; whereas, secondary elevations transitioned from a 1:3 to a 1:5 common bond pattern around the 1810s.[129] Further detailing in the brickwork can be seen by the use of penciling, which still remains under the porch on the south elevation. This technique involved painting the brick with a red wash and then "penciling" the mortar joints with white paint (**fig. 21**). The result was visually striking and helped to hide any inconsistencies found within the brickwork.

The interior flooring system also shows changes in regional building technologies employing mill sawn lumber rather than hand hewn timbers used throughout the 18th century. However, the larger kerf marks seen on the exposed joists coincides with an early period in saw mill technology (**fig. 25**). Presence of gauge marks on the underside of the floorboards also points to an early milling date, prior to increased consistency and standardization.[130] Joining the wood members throughout the basement

[125] Virginia Department of Historic Resources, Intensive Level Survey, Mount Pleasant (DHR# 085-0072)
[126] Allen, *Uncommon Vernacular*, pg 52.
[127] Design aesthetics associated with the stone kitchen wing are more typical of those associated with the 18th and early 19th century in the Shenandoah County region. Reference to Isaac Bowman living at a "Mount Pleasant" in Shenandoah County in the 1806, provides some evidence that the stone wing may have existed prior to the 1812-13 brick building.
[128] Allen, Uncommon Vernacular, pg. 122.
[129] Allen, Uncommon Vernacular, pg 216.
[130] Gauging was a way in which the builder could get inconsistent and irregular floorboards to lay on similar floor joists. The process consisted of using a adze to "carve out" a portion of the floorboard where it came into contact

are a series of joints including mortise and tenons, bare face tenons, and through tenons all secured by tree nails.

Exterior details and fenestration also differ considerably from earlier local structures. Notably the front and rear elevation windows are all double-hung, wood sash windows with the first floor windows arranged in a nine-over-nine configuration and a nine-over-six configuration on the second floor. Such rectangular glass lights and their configuration is typical for the period and differs from 17th and early-18th century casement windows which utilized glass cut into diamond shapes known as quarrels. This type of glass is noted in a description of the first Long Meadows (ca 1740s) during the mid-19th century, prior to its demolition,

"*The window panes at Long Meadows [Traveler's Rest] were all small, some of them diamond shaped. On panes in the parlor Mr. James Buchanan, who married Col. Hite's eldest daughter, cut his lady love's name (Anne Hite) and the date of their engagement, with the diamond in their engagement ring. When Mrs. J. S. B. Davison, nee Mary Eltinge Hite, heard the old house was being torn down, she immediately send a request to Col. Bowman for this pane, but she was too late, it had been shattered*."[131]

Also coinciding with the Federal design aesthetic are the elliptical fanlights with tracery placed above both the front and rear entryways. The south facing gable wall also contains an elliptical window in the attic, which is flanked on both sides by ¼ round windows. On the opposite, north facing attic wall is a circular window. Projecting through the roof and creating a broken rake on each gable end are large, centrally placed interior end chimneys. The detailing of the broken rake was another feature of pre-1820 lower Shenandoah Valley construction.[132] Additional exterior details of interest include the highly ornate Federal style cornice, as well as the flat stone jack arches with keystones above each window.[133]

The interior exhibits the same high level of Federal aesthetics as the exterior and can be seen in the chair rails and ornate mantles located on the first floor. Attention to detail is also paid to the primary staircase located within the central hallway, which exhibits delicate stair brackets as well as a radiused stair rail connection on the second floor, similar to, Fertile Plain (ca. 1818) located in nearby Jefferson County, West Virginia.[134] Additionally, the original door locks and escutcheon plates remain intact, with a vast majority being characterized as "Dutch elbow locks" (**fig. 22**), also known as German or Pennsylvania type locks. These locks work by lifting the latch via a downward motion rather than the twisting of a handle. The period of use for these locks lasted from settlement until the 1850s.[135] While differences abound, one similarity between Mount Pleasant and Fort Bowman can be found in the basements of both structures, which exhibit small niches known as "pine holes".

The boyhood home of Charles Hite, Western View, was built in Jefferson County, Virginia, by his father James Hite in 1831. Like Mount Pleasant, this early-19th-century structure utilized brick construction with a Flemish bond pattern on its front façade. The structure was two-stories high and three-bays

---

with the joist. In this manner each floorboard was customized to its particular location. As lumber became more standardized in the 1850s this process gradually diminished.

[131] Pequet du Bellet, "Some Prominent Virginia Families, Vol. 4", pg 363; The tradition of etching dates and initials into the sidelights at Long Meadows continued well into the Civil War with carvings still visible as of 2011.

[132] Allen, *Uncommon Vernacular*, pg. 247.

[133] McAlister, *A Field Guide to American House*, pg. 159.

[134] Allen, *Uncommon Vernacular*, pg. 270-279.

[135] Allen, *Uncommon Vernacular*, pg. 296.

wide. Both the front and rear elevations were designed with symmetry in mind. The front elevation incorporated a centrally placed entryway, accessed via a Greek Revival porch, and flanked by windows on either side, whereas the rear elevation consisted of four-bays, the two central-bays being doors that opened from the interior parlor spaces onto the rear porch. The most striking difference was the transverse-hall floor-plan at Western View. While Jefferson County, West Virginia has a large concentration of such structures, the form is rare in Virginia, with the exception of some larger 18th and early-19th century homes in the Tidewater region. The interior of the house, like Mount Pleasant, also exhibits a high level of refinement, with elaborate door and window casings, as well as stair brackets.[136]

Subsequent brick structures would also be erected by other family members in the years prior to construction of the Bowman-Hite farmhouse, including the "new" Long Meadows, in 1848 by George W. Bowman (**fig. 23**), brother of Rebecca Hite (Bowman) and son of Isaac Bowman, the builder of Mount Pleasant.[137] This structure, unlike Mount Pleasant, shows more Greek Revival design influence, although a Federal style elliptical window was set within the front roof pediment. Long Meadows is a five-bay, double-pile, two-story brick building with a central-hall plan. While the primary stair is located within the central hall, there is evidence that a secondary stair was also built leading from the second floor landing into the dining room. Covering the structure is a hipped roof with four projecting chimney stacks corresponding to the interior room configuration.

The raised foundation of the structure is limestone and provides for a full basement, which includes a large cooking hearth complete with existing iron cranes intended to hold large cooking implements. This area is accessible through an exterior entryway as well as an internal staircase located directly underneath the primary stairs on the first floor. Flemish brick bond, while fading from use in the region during the time of construction, was still used on the primary façade. Internally, the wood framing of the building, as exposed in the basement, shows signs of mill sawn lumber with a mix of small and large kerf marks. These marks typically became smaller as cutting technologies improved throughout the 19th century. However, the mix of kerf marks coupled with beading on some of the joists indicates potential re-use as well as replacement.[138] Mortise and tenon, as well as bare faced tenon joints appear to be used extensively throughout. A single, double through tenon (**fig.24**), secured by a tree nail was also identified where the trimmer for the basement stair connected to the joist. Whereas the joists may have been re-used from the previous "Long Meadows" (ca. 1740), gauge marks are not apparent on the floorboards, indicating the tops of the joists were likely planed.[139]

Wooden nine-over-nine and nine-over-six, double-hung, sash windows are located on the first and second floors. Flat jack arches, of one-and-a-half brick courses, are used over the first floor windows, and a single-course jack arch is used over the second floor windows. The larger one-and-a-half brick flat arch fell out of popularity in the 1840s, whereas the one course flat jack arch was predominantly used after 1835.[140] The front entryway is accessed through a one-story, Greek Revival porch, one-bay wide,

[136] Allen, *Uncommon Vernacular*, pg 87.
[137] Long Meadows, National Register nomination, pg 10
[138] The beaded joists match those found in the overseers house which is thought to date to the 18th century and the original building period associated with the first Long Meadows.
[139] The undersides of floorboards were often undercut or gauged so that the upper side would form an even surface. This was especially necessary when floorboards were laid on hewn joists.
[140] Allen, *Uncommon Vernacular*, pg 217.

with a typical Greek door surround consisting of sidelights and full rectangular transom. Carved into the glass of the sidelights are initials and inscriptions dating to the Civil War.[141]

Period II (1843-1872):

While still a minor, Rebecca Bowman inherited the property that would become the Bowman-Hite farm from her father, Isaac Bowman, upon his death in 1826.[142] However, it is not until a Chancery Suit in 1843, brought about by the coming of age of Rebecca, that Isaac Bowman's estate is divided among his named heirs. Ultimately, Rebecca is given what is at the time called the "mill tract", consisting of 498 acres in both Warren and Shenandoah Counties. Included within this large parcel of land is the mill complex built by Rebecca's father, Isaac Bowman, in 1793, which included a small frame house, located nearby, in addition to the mills. The other land divisions were assigned and noted as follows; Robert Bowman was initially given the "brick house" tract, otherwise known as the Mount Pleasant tract; George and Mary Bowman Brinker drew the "stone house" tract, known also as Harmony Hall or Fort Bowman; and Washington Bowman obtained the Island tract, which, at the time, contained no residence. However, in the issue of fairness, Washington Bowman was given additional funds from his siblings based on land value assessment of their inheritance, in order to provide the means for him to establish a "comfortable home" on the Island tract. The amounts were noted as follows; Robert Bowman $1833.33, George and Mary Brinker $333.33, and Rebecca Bowman $333.33 for a total of $2,500.[143] Such information provides good information on what the family considered to be the cost of constructing a "comfortable home" at the time. Later, in the Chancery suit, the "brick house tract" would be further divided, with Isaac Bowman being given Mount Pleasant and Robert Bowman adjacent farmland where he would eventually erect another home. Later in life, Rebecca Hite would inherit this house and live there for the remainder of her life.[144] During this entire process, Rebecca was still residing at her childhood home Mount Pleasant, directly across from her new land holdings.

On May 10, 1849, Rebecca Bowman married Charles J. Hite. The following year in 1850, Rebecca is still noted as living with her brother, George W. Bowman, at the recently constructed Long Meadows.[145] Despite her residence at Long Meadows in 1850, the Warren County land tax records of 1849 indicate both Charles J. Hite and his wife, Rebecca F. W. Bowman as owners of a 222 ¼ acre parcel with $1,200 in taxable improvements.[146] The mention of only 222+ taxable acres is notable, as this is a sharp decrease from the original inheritance in Warren County of roughly 400 acres in 1843.[147] Further division of Rebecca's inheritance occurs on September 14, 1850, when the 8-acre mill complex is sold to Rebecca's brother, George Bowman, for $2,050, complete with all "water rights and privileges".[148] However, the deed description is unclear whether this sale includes the saw mill and other dependencies or only the

[141] Visit to Long Meadows, December 2011
[142] Shenandoah County Will Book N, pp 521-526 (1826); Isaac Bowman left explicit instructions in his will that the Shenandoah/Warren County estate was to remain intact until the youngest child came of age in order to pay for their education and well being. Therefore, at this time the farm, including Rebecca's eventual inheritance in Warren County was likely run by one of her older brothers, possibly George or Isaac Jr.
[143] Chancery Suit, Shenandoah County, Washington Bowman vs. Robert C Bowman, 1853-012 (Library of Virginia)
[144] Chancery Suit, Shenandoah County, Virginia, "Robert Bowman (estate) v. Rebecca Hite", 1874.
[145] Dodd, Jordon, Liahona Research, comp. Maryland Marriages, 1667-1899. (database in Provo-UT: the Genealogical Network, Inc., 2000); 1850 United States Federal Census for Shenandoah County, Virginia.
[146] Warren County Land Tax Records, 1836-1850; Warren County Minutes from June 19, 1854 note that Charles Hite is to be appointed "surveyor of the road from Bowman's Ford on Cedar Creek to Long Meadows Ford".
[147] Warren County Land Tax Records, 1836-1850
[148] Warren County Deed Book E, pg 66 (1850)

grist mill. Additionally, Warren County land tax records note in 1850 that Charles and Rebecca are being charged with 393+ acres and $500 in improvements, a $700 decrease in taxable improvements but a 171 acre gain from 1847 when the entire mill complex was in their possession.[149] Upon consolidating land holdings in Warren County and receiving $2,050 for sale of the mill complex, Charles and Rebecca appear to have their finances in order to possibly build a home by the start of 1851. This period also coincides with the birth of their first child, Mary Hite, a possible impetus for the young couple to establish their own household.

During the 1850s, one of the likely styles of architecture to be employed for any new construction in the Warren County region was Greek Revival. While diminishing in popularity in certain locations, such design aesthetic was still prevalent in the region, with examples like Long Meadows being built only a few years prior. Such a design aesthetic was also familiar territory for both Rebecca and Charles Hite, each having lived in such houses, Charles at Western View during his childhood, and Rebecca recently at Long Meadows. The local builders in the area would also have been familiar with this style of architecture, albeit on a more vernacular level.

The Greek Revival inspired, side passage, brick farmhouse that Charles and Rebecca Hite eventually built ca. 1850s was a popular type in the region during the first quarter of the 19th century, before it gradually faded out of fashion after the Civil War. The side passage, also called a foyer or hall, would have helped separate and define the interior spaces of the structure considered desirable in the antebellum south, and in many cases served as a room in its own right. Such a design not only provided the necessary separation of spaces on a budget, but also allowed for expansion to a more formal center hall plan if desired.

While used in the region, this form was substantially different than the center and transverse hall plans. Additionally, the form of the structure differed from the rectangular forms seen at Western View, Mount Pleasant, Fort Bowman, and Long Meadows by incorporating a rear brick “ell”. While the brick ell provided for an additional two rooms, one on the first floor and another on the second floor, the later was originally accessible only by a secondary staircase in the dining room (**fig. 43**). The presence of a secondary staircase was not uncommon in the region, with both Long Meadows and the Daniel Stickley House having them. As originally built, the primary staircase located in the side passage, only provided access to one upstairs bedchamber. The first floor parlor room was designed to be located directly off the side passage, and, like all other rooms in the original portion of the house, contained a fireplace. The exception to this was the cellar, located under the rear “ell”, which was only accessible through an exterior entrance on the east gable wall.[150]

The use of this cellar space below the rear ell was likely for storage, including food, as the walls appear to have been whitewashed. Such an application was in an effort to promote cleanliness in areas associated with food storage and preparation. However, while the stone base of the brick “ell” chimney mass is evident in the basement, there appears to never have been an open hearth for cooking. Instead, the cooking functions at the Bowman-Hite farmhouse followed a trend throughout the South and were removed to an ancillary structure nearby.

[149] Warren County Land Tax Records, 1850

[150] Exterior access to the cellar was likely less of a design reference to earlier Germanic traditions and more about saving the space necessary for another stair.

Documents from the period list a kitchen specifically differentiated from the main house, "…to secure on his [Hite's] household & kitchen, the said household & kitchen furniture is herby subject to debt."[151] Recent archaeological excavations by the William & Mary Center for Archaeological Research seem to confirm the presence of a nearby earth-fast domestic structure southwest of the main house. Associated with this particular excavation were a number of ceramic fragments, as well as brick rubble. Other features also in the same vicinity, such as a cistern located at the southeast corner of the farmhouse and a stone foundation located south of the earth-fast domestic building, allude to the presence of a mid-19th-century domestic yard.[152] At the time, kitchens often doubled as slave housing. The notation of two dining room tables in an 1861 household inventory, as well as the mention of furniture specifically in the kitchen, indicates this possibility. Additionally, maps from the Civil War indicate the presence of multiple structures near the brick farmhouse (**fig. 6 & 7**).[153]

Apart from the plan and form, another noticeable variation from other Bowman and Hite family homesteads was the smaller size of the structure. Standing two-stories tall, three-bays wide, and a single-pile deep, excluding the rear "ell", the original structure only consisted of four distinct rooms plus the primary stairwell and foyer. This made the Bowman-Hite farmhouse roughly half the size of other family structures like Mount Pleasant or the recently built Long Meadows.[154] However, the functioning space of the structure was greatly expanded with the inclusion of the covered front and side porches. These outdoor "rooms" would have been used for a variety of tasks that would have been uncomfortable if done inside during the hot summer months. The front porch would have served as a social space or a location to await guests. The side porch would have taken on a more practical role associated with the domestic yard. Despite some shortcomings in the size of the structure, the use of brick together with select vernacular design components would still have adequately displayed Charles and Rebecca's relative success and standing within the region as well as their future ambitions.

The 1:5 common bond brick construction displayed at the house (**fig. 27**) sits atop a raised limestone foundation, with the stone fashioned with a pitching chisel and the mortar tooled with a "V" joint.[155] Utilization of this local limestone for the foundation is typical of period buildings in the region as is the brick bond pattern.[156] However, in some areas the 1:5 bond varies to a 1:6 or even a 1:9. This bond pattern is similar in many respects to the 1859 Stickley house located about a mile north along Cedar Creek (**fig. 28**). While brick had become more affordable in the region by the 1840s and 1850s with improved transportation from manufacturing hubs like Baltimore, Maryland, as well as the establishment of local brick manufacturers, the material was still considered to be expensive.[157] Utilizing common bond was a typical way to save some expense, as it used fewer bricks. During the mid-19th

[151] Warren County Deed Book H, pg 16 (1861)
[152] *An Archaeological Assessment of the Bowman-Hite Farm Property*, William and Mary Center for Archaeological Research, 2012
[153] "An Archaeological Assessment of the Bowman-Hite Farm Property", William and Mary Center for Archaeological Research, 2012.
[154] Both Washington and Robert Bowman's houses were likely built around the same time as the Bowman-Hite farmhouse and would provide for an interesting comparison, however at the time of this report both have been demolished with limited references known.
[155] The adjoining stone structure at nearby Mount Pleasant also features a "V" joint. As these particular joints have graffiti from Union an Confederate soldiers such a joint type can be dated to at least the 1860s in this area but was likely favored much earlier with stone construction.
[156] Elements of the original "V" joint can still be made out where the foundation wall was sheltered by the previous front porches.
[157] Statistical Gazetteer of Virginia (1855), pg 423

century, the use of the more expensive English and Flemish bond patterns for primary facades was also becoming somewhat dated, illustrated by the almost exclusive use of common bond patterns in places like Harpers Ferry and Bolvair by the 1840s and 1850s.[158] While at times brick was made on site, quality bricks, made to withstand weathering, were obtained from dedicated brickyards. As early as the 1790s, brickyards were operating in nearby Jefferson County, and, in 1850, census records list a brick maker by the name of Samuel W. Pratt operating in Front Royal, the county seat of Warren County.[159] Three bricklayers are also noted in the same census; Richard Proctor, James Nihiser, and John Fetzer.[160] The Bowman family also had dealings in the 1830s with a bricklayer from Shenandoah County named Cornelius Vincent, who is noted in the 1850 Shenandoah County census as still practicing the trade.[161]

Bricklayers, like stone masons, both utilized lime mortar. The process of manufacturing lime mortar stayed relatively rudimentary and unrefined prior to the Civil War. Initially, the lime was burnt in a "rick". Because of the layers of wood placed in between the layers of lime it was common for charcoal, from the lime burning process, to be included in the final mortar mix. Un-slacked lime can also be seen in such mortar as enough time was rarely given for the burnt lime to fully slack. Brick dust was also added at times to increase the hydraulic and setting times of the mortar. Samples from the brick portion of the Bowman-Hite house, as well as samples from Mount Pleasant and Long Meadows, show these impurities associated with antebellum mortar (**fig. 30**).

Exterior details associated with the house further demonstrate the evolution of construction in the region, as well as antebellum building aesthetics. One such detail is the single coursed, splayed flat brick jack arch located above each window. The use of a single brick course was typical after the 1830s in the region. Prior to 1835, such an arch would have been constructed using a staggered brick and a half course.[162] Even as late as the 1840s, this practice was being employed and can be seen at Long Meadows, which uses both types of splayed brick jack arch (**fig. 31**). The brick corbelling located at the cornice of the Bowman-Hite house was another added decorative feature and something commonly found during the early-to-mid 19th century, before fading out of fashion in the 1850s.[163]

Windows and glass, while somewhat of a luxury in settlement times, had improved in quality and price by the 1850s.[164] Set within a relatively simple wood casing, the Bowman-Hite first floor windows are arranged in a two-over-two fashion, likely replaced during alterations in the 1870s or 1880s. Originally, their configuration likely resembled that of the six-over-six windows found on the second floor. Further evidence for their replacement can be found when examining the window muntins, which differentiate substantially from the original windows on the second floor. The Stickely house also displays larger two-over-two replacement windows (**fig.28**). The advantage of installing windows with larger panes of glass was two-fold; first, it allowed for increased light into the first floor rooms. Second, more windows increased ventilation during hot summer months. While window weights are often used to help keep sash windows open, they were never installed at the house. Rather, a more economical method using metal pins, inserted into corresponding holes in the window casing, was utilized to hold the windows

[158] Allen, *Uncommon Vernacular*, pg 217.
[159] 1850 United States Census, Schedule 1, Front Royal, pg 114.
[160] Compilation of the 1850 Warren County Census records.
[161] Chancery Suit, 1837, Shenandoah County; 1850 United States Census for Shenandoah County, District 58, Virginia, page 27A, image 58.
[162] Allen, *Uncommon Vernacular*, pg 217
[163] Lounsbury, *An Illustrated Glossary of Early Southern Architecture and Landscape*, pg. 92.
[164] Wilson, *Building Early America; Window Glass in America*, pg. 161-163.

open (**fig. 32**). Wooden shutters, likely louvered, were hung on metal pintles and offered some means of protection, as well as a way to block out sunlight while still allowing for a breeze. During better weather, the shutters would be held open by shutter dogs, likely cast iron.[165]

The door surround at the primary, west facing, entryway would have been the most elaborate and illustrates well the structure's Greek Revival influence. Comprised of a transom and two sidelights, the surround resembles Springdale's entryway, another Hite family property in nearby Frederick County (**fig. 33**). Divided by four vertical and three horizontal muntins, the transom spans across the entire entryway. The two sidelights are similar in composition, with three vertical and three horizontal muntins. The two exterior doorways off the rear of the structure were unadorned.

While no original roofing material remains on the Bowman-Hite house, wood shingles were the dominant roofing material for the area prior to the Civil War. Not until after the Civil War did metal roofs become widely available.[166] Supporting the use of wood shingle roofs in the region are the large number of wood shingle makers noted in both the 1850 and 1860 Federal Census records.[167] Such shingles were also used nearby as noted in Daniel Stickley's saw mill ledger for the manufacture of 6,260 wood shingles on September 7, 1852 for Isaac Bowman Jr., then owner of Mount Pleasant.[168] Slate, while also used in the area, would not have been used on the Bowman-Hite building, due to the cost of the material, as well as the roofing system.

While today the brick is painted white, evidence seems to indicate that when constructed the building was unpainted. Such evidence can be found in the presence of no discernible paint when examining exposed brick portions of the east wall, at one point covered by the 1880s frame addition. However, this does not discount the possibility that an original lime-wash may have been used and subsequently washed away prior to the addition. One 1863 map gives some clue to this second possibility as the structure is noted with a "wh" next to "Charles Hite".[169] The windows and door surrounds seem to have always been painted white.

Internally, the building uses load-bearing masonry walls for support and room divisions. Pine is used for the tongue & grove floorboards, floor joists, and sills. The only divergence from the use of pine is the common rafter system, which uses white oak. Carpenters from the region during the 1850s would have been familiar with the two types of wood, which at the time constituted a large amount of the area's timber resources.[170]

Since the 18th century, wood in the area was cut using reciprocating saws powered by the ample water power available. This included the Bowman saw mill (ca. 1793) on Cedar Creek, which at one point was owned by Charles and Rebecca Hite. Records from the Daniel Stickley Mill (originally the first Bowman's mill), located about a mile north along Cedar Creek, indicate the use of such saws in a January 5, 1851 entry which notes Charles Hite as purchasing milled wood: "Charles J. Hite to sawing 120 ft, 2 ½ in. plank

[165] Allen, *Uncommon Vernacular*, pg. 236.
[166] Allen, *Uncommon Vernacular*, pg. 208-209.
[167] 1850 Federal Census, Warren County; 1860 Federal Census, Warren County
[168] Daniel Stickley, "Account Book of Daniel Stickley, 1845-1856", Swem Library Special Collections, William & Mary.
[169] Hotchkiss, Sketch book of Jed Hotchkiss, pg 48.
[170] Daniel Stickley, "Account Book of Daniel Stickley, 1845-1856", Swem Library Special Collections, William & Mary; The book also notes other wood types used for specific purposes such as locust and walnut.

at $1.05, Jan. 5th, 51 ft., 2 ½ in. plank, at $.20, 61 ft scantling 4x6 at $.75, [total] $.45."[171] While it is not certain what Hite was building, or even why he used Stickley's Mill, which he did again in 1854 and 1866, even though his brother in-law owned the Bowman saw mill less than a mile away, these records do convey extensive use of sash sawn lumber in the area.[172]

Wood cut using this method exhibits distinct vertical marks, which are placed parallel to one another at regular intervals. Later in the 1840s and 1850s, with improved technology, a smaller blade was used, allowing for a finer cut (**fig. 25**). This new blade also left a series of more densely spaced "kerf" marks. During construction of the Bowman-Hite farmhouse, it was this later type of sash sawn lumber that was used by the carpenters, providing for consistent and dimensional lumber. However, the carpenters responsible for the wooden structural components also utilized newer circular-sawn lumber in the roof nailers as well as for the second floor wall-plate. This type of manufacturing method was used by 1850 in the Winchester vicinity, with an advertisement from the time noting, "…it gives entire satisfaction in every respect."[173] While the use of circular-sawn lumber is confirmed in the area by 1850, its widespread use was not adopted until after the Civil War.[174]

Structurally, the carpenters building the wooden internal support first placed a wooden sill on top of the stone foundation. This wooden sill provided a level surface on which the joists could rest as they were inserted into pockets within the one-and-a-half wythe brick wall (**fig.35**). Floorboards were then laid directly over the joists and fastened using cut nails. Where openings in the floors were required for either stairways or hearths, carpenters utilized trimmers and headers, which were for the most part joined with cut nails. However, the front parlor hearth uses a through tenon rather than cut nails. Joinery was only used elsewhere in the house for finish work, notably the cellar door frame and paneling on the front entryway. The joists of the second floor are set much the same way as the basement, with the brick wall stepping in a half wythe forming another ledge upon which the joists rest.

Laid atop the joist and forming the floor were wide, wooden boards, joined using a tongue and groove. Early carpeting is also noted in an 1861 inventory.[175] Physical evidence also exists in the stairwell that the floors, in some instances were painted to resemble carpeting.

However, the attic joists, rather than resting inside pockets, sit atop the wall. Because of their position, the ends of the joists are tapered to coincide with the pitch of the roof, a typical technique used by carpenters when dealing with brick corbelling at the cornice line. This feature also indicates that the current roof pitch of the structure has been maintained since its original construction date. Furthermore, the presence of un-tapered joists at the intersection with the rear ell confirms it as original (**fig.36**). Resting atop the attic joists are false plates upon which the common rafters are seated and skew nailed (**fig.34**). The use of the lighter, common rafter system indicates that the structure was likely covered with wood shingles rather than a heavy slate, which would require a much more substantial support system. The re-use, reconfiguration, and probable replacement of many of the nailers covering

[171] Daniel Stickley, "Account Book of Daniel Stickley, 1845-1856", Swem Library Special Collections, William & Mary.
[172] Daniel Stickley, "Valley Mills Day Book, Saw Mill Strasburg, 1853-1899", Swem Library Special Collections, William & Mary, pg 9.
[173] Advertisement. "Page's Improved Patent Portable Saw Mill and Steam Engine." The American Farmer 5.9 (Mar. 1850): 319-320
[174]1850 US Federal Census, Schedule 5, Warren County District 69, pg 3-4; 1870 US Federal Census, Schedule 5, Warren County Front Royal District, pg 1-9.
[175] Warren County Deed Book H, pg 16 (1861)

the rafters can also be clearly seen in the attic with both circular and sash saw marks visible. Additionally, the tight spacing of the nailers currently seen in the attic is not typically conducive for wood shingles as it fails to provide adequate ventilation, promoting rot and was likely reconfigured with the installation of a metal roof. Forming the apex of the roof structure is a ridge-board, more typical of an economical balloon frame structure from the later-19th century (**fig. 37**).[176] The rafters are all fastened to this board using cut nails.

The interior detailing and finishes, much like the construction methods, coincide with fashion during the 1850s and 1860s. Like many buildings from the period, emphasis in design and detail was placed on the more public rooms, such as the front foyer and parlor. These spaces were fashioned to project social standing and affluence and the Bowman-Hite house was no different.

One of the most prominent interior features found throughout the Bowman-Hite house, with the exception of the front parlor, are the six-and-a-half inch baseboards. This simple element is comprised of a single sash sawn board, approximately one inch thick, with the top quarter recessed an eighth of an inch, providing for some visual relief. The front parlor baseboards only differ slightly, with a three-quarter inch bead added to the top. This simple design component is also used for nearly all the original window and door surrounds. Unadorned square blocks at the top corners of each interior door and window surround, as well as plinth blocks at the base of the door surrounds can be found throughout the building and are original. These features, while chaste, still present a clear reference to the Greek Revival styling's of the time. The front parlor's door and widow surrounds, as one might expect, are more elaborate. Like the other door and window surrounds throughout the house, the front parlor windows incorporate inverted baseboards below the window sill as a decorative feature, however the sides and tops of the window and door surrounds are different. Rather than a single recessed element, a raised "v" has also been planed into the single board. The corners of the doors and windows are emphasized with distinct conical shaped patera. The overall effect is much more impressive than other rooms. However it is achieved with more or less the same base elements as previously described, conveying a sense of "economy", prevalent throughout the house (**fig. 38**).

The four mantles located in each room also convey this sense of economical Greek Revival design. Clearly vernacular in nature they only differ slightly from each other, with each bearing similarities to Greek Revival designs illustrated in Asher Benjamin's 1830 publication, *The Architect or Practical House Carpenter*.[177] The relationship to such design patterns is clearly illustrated in the presence of a quirk, or sharp return in the molding, typical of Greek Revival (**fig. 40**). The design of the Bowman-Hite mantles, while simple, was used extensively in Virginia, as an 1854 example from Braehead in Fredericksburg appears very similar. The stark appearance of the mantles is, however, quite different than the elaborate mantles found at nearby Mount Pleasant.

The interior two-paneled doors used at the Bowman-Hite house, like the mantles, fit with the Greek Revival style and original 1850s period of construction. Furthermore, the panels themselves are shallow-raised, without any "sticking", another poplar aesthetic during the time compared to earlier

[176] While the use of ridgeboards has existed since settlement times, its use in conjunction with the lighter common rafter system is somewhat curious and more in keeping with later, lighter, framing systems seen post Civil War. Post war repair, likely during the ca. 1876-1880s period, would also seem to fit with 1870s accounts that describe the farm as being in disrepair. Further investigation of the D. Stickley House's roofing system (1861) as well as structures at Capon Springs (W. VA) would shed further light on this area.
[177] Benjamin, Asher, "The Architect or Practical House Builder", (1830).

Mount Pleasant where the door panels are raised with "sticking".[178] Many of the doors at the Bowman-Hite house also retain their original hardware and hinges, as noted by the lack of previous lock mechanisms on the original doors. At the time, the use of butt hinges was becoming increasingly popular, as costs began to fall for iron production. These hinges replaced earlier "H", "HL" and strap hinges found at places like Fort Bowman. The original 1850s Russell and Erwin Company rim locks with mineral knobs used at the Bowman-Hite house were also different from nearby family structures, having just appeared on the market in the 1850s (**fig. 41**). These knobs and locks found extensive use, both prior to the war, as well as after, as less expensive substitutes for brass.[179]

Initial construction of the Bowman-Hite house incorporated two stairways, something not atypical for the period. The primary staircase was designed as an open-well type, with a landing situated along the far wall from the front entryway. From this landing the stair continued, a short flight, from the opposite side of the initial rise along the south wall. Adding light to the stairway was a single window placed on the east elevation just above the stairway landing (**fig. 47**). While decorative elements, such as stair brackets are missing, the square banisters, as well as the overshot, barrel newel post (**fig. 42**), directly reference Greek Revival design and are similar to Jefferson County, West Virginia examples from the 1840s and 1850s.[180] While falling out of fashion during the 1850s, the Bowman-Hite primary stairway also exhibits newel drops or pendants, similar to those found at Mount Pleasant.[181]

The secondary staircase located in the rear ell provided access from the dining room to a single, second floor bedchamber. While this steep and narrow staircase no longer exists, similar staircases in the area, such as the Stickley House, are enclosed with a series of wedge shaped steps at the bottom in order to orient in the proper direction. Evidence of a landing at the southwest corner of the room seems to verify at least the directional change of the stairs. No other details are currently known about this staircase, as the re-finishing of the wood floor has destroyed much of the evidence.

Further distinguishing the structure as antebellum are the various wall finishes. Plaster walls had by the 1850s replaced the earlier aesthetic of wood paneling found at Fort Bowman and wainscoting found at Mount Pleasant. However, as techniques for manufacturing the wood lath on which the plaster was laid had yet to be mechanized, the Bowman-Hite still uses a riven form typical of many antebellum structures throughout Virginia.

Applied to the plaster was paint, which in the majority of rooms appears to have been a dark grey with trim color varying significantly over time. Originally, Charles and Rebecca Hite used dark colors, especially a gold tone, which is prevalent on a majority of the original baseboards. However, the upstairs mantle, in the front bed chamber, shows evidence of faux graining. The other mantles in the house, while they do not exhibit faux graining, do exhibit darker paint schemes. Such paint colors would have been typical for the time and are seen in contemporary structures.[182] Further investigation into the chemical composition of the paint will assist in determination of original paint schemes as aging and oxidation often convey false color information.

---

[178] Allen, *Uncommon Vernacular*, pg 288-293; The term sticking is frequently used when describing moldings that have been planned and is often associated with wood paneling.
[179] Hennessy, *Pioneers in the Hardware Industry*, The Doorknob Collector, May 1986, No. 18, pg 1.; Eastwood, *A Potter's Delight*, The Doorknob Collector, May 1988, No. 29, pg 1-3.
[180] Allen, *Uncommon Vernacular*, pg 260-267.
[181] Allen, *Uncommon Vernacular*, pg 268.
[182] Spencer, *Forensic Analysis of the Bowman-Hite Farmhouse and Barn,* 2011

Wall paper was another finish material used in the Bowman-Hite house, with portions still found in the dining room. This original machine printed paper consisted of a shiny floral design popular during the 1850s (**fig. 44**).[183]

Gas lines, for lighting fixtures, were installed at the Bowman-Hite house sometime in the 19th century. As gas would not have been readily available so far into the countryside, the farm most likely had its own small manufacturing plant. Such gas plants can still be found in places like Ashland, Henry Clay's home in Lexington, Kentucky.

Period III (1872-1881):

In 1872, the building was auctioned to William D. Stickley for $8,000 in order to pay debts owed.[184] The appearance of the structure at this time would have been much the same as it was originally constructed in the 1850s.

Following the auction, William D. Stickley continues to rent the farm to Samuel M. Grove. The 1873 map of the Cedar Creek battlefield, drawn by Gillespie, verifies this as listing the occupant of the structure as Mark Grove (Samuel M. Grove).[185] At the time William D. Stickley owns the 397 +/- acres of the Bowman-Hite farm, he also owns a large amount of adjacent property to the north, across Cedar Creek, where he resides. At one time, this adjacent property was owned by George Bowman, Rebecca Hite's grandfather, and upon which the first Bowman mill was located, and still operated by Stickley at the time.[186]

Stickley's ownership of the land is short lived, as he sells the property just four years after the Chancery Suit in 1876 to John Pirkey for $5,200.[187] Under Pirkey's tenure, the rear, 1½-story frame portion of the Bowman-Hite farmhouse was added and the side porch extended. Additionally, the bank barn would likely have been constructed during this time, since the land tax values note a sharp increase from 1880 to 1881, and building values jump from $300 to $500.[188] This new construction at the Bowman-Hite property coincides with the period from 1876-1879, when Pirkey is also constructing a "good new frame dwelling house, stabling and other necessary improvements…" on the southern end of the Bowman-Hite farm adjacent to the Bowman Mill site.[189]

Physical as well as photographic evidence indicates that the frame addition was relatively simple in its design, and, as indicated by the large stone and pressed brick fireplace anchoring the east gable end,

---

[183] Frangiamore, *Wallpapers in Historic Preservation*, pg. 27-30.
[184] Warren County, Virginia, Clerks Office, Deed Book I, pg 335; Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880.
[185] Atlas 82:9; 85:33, 38, 99:2; Gillespie, LC #537: ``Battlefields of Fisher's Hill and Cedar Creek Virginia'' Prepared by Bvt. LT. Col. G. L. Gillespie, major of Engineers, USA, from surveys made under his directions, by order of Lt. Gen. P.H. Sheridan, etc., 1873, uncolored, Scale 1:12,000, 2 sheets, each 121x69cm, overall size 121x138cm; While the map is detailed there appear to be inconsistencies as the Bowman Mill is located on the north bank of Cedar Creek, east of Mount Pleasant, however no other source indicate this with later images and observations seeming to run contrary to this placement.
[186] Lake Atlas, Shenandoah County, Virginia 1885.
[187] Warren County, Virginia, Clerks Office, Deed Book K, pg 198.
[188] Warren County, Virginia, Clerks Office, Land Tax Records, 1876-1881.
[189] Shenandoah Herald, August 6, 1879, pg 1 col. 4.; Shenandoah Herald, November 5, 1879, pg 1 col. 5

was likely built to bring the kitchen back inside the main structure.[190] The exterior of the structure was clad in lapped horizontal wood siding and painted white, although it may originally have been left unpainted for some time after construction. The south elevation of the addition was protected by an extension of the existing porch, which stopped short of covering the brick cistern located at the southeast corner of the addition. One exterior door on this elevation provided for access to and from the kitchen and domestic yard. Attached to the north elevation was a small pent roof, which protected the bulkhead to the basement, as well as another exterior door. Three, full-size, first-floor windows allowed the small frame addition to be well lit, with two windows placed on the north elevation and one window on the south elevation. The upstairs of the addition was no more than a loft, with three small windows providing light and ventilation. Evidence of a staircase to the loft has not been found.

The techniques used for constructing the rear frame addition at the Bowman-Hite farmhouse differed greatly from the early-and-mid-19th century methods. Development of new technologies and manufacturing methods after the Civil War led to the proliferation of new construction techniques like balloon frame construction, which used circular-sawn lumber and wire nails. Whereas during the 1850s, circular-sawn lumber was still new, by the 1870s, this method had surpassed sash sawing in the region. The one-and-a-half story frame addition illustrates this well, as it is entirely constructed of circular sawn, dimensional lumber (**fig. 45**). Framing members in the new addition are also held together with wire nails, replacing earlier cut nails found in the original brick portion of the house. Such nails came to prominence in the 1870s and 1880s.[191] Additionally, the presence of a ledger board, notched into the one-and-a-half story studs, is a characteristic of true balloon frame construction, which began to take hold during the 1870s and into the 1880s. The brick used on the chimney also exhibits more modern, late-19th century characteristics, such as sharp edges, indicating the use of a machine press, a stark contrast to the hand pressed bricks found in the original portion of the house.

Despite these updated construction techniques, vestiges of more traditional construction techniques were still used. Sitting atop the continuous stone foundation is a large ground sill, which supports large tenoned corner posts, as well as the floor joists. These joists are lapped into the sill but otherwise unfastened, solely held in place by the weight of the structure. Down bracing, extending from the corner post to the ground sill is also present, indicating that while new technologies and techniques were being used to build the addition it was still a time of transition in the region.

The interior of the frame addition reflected its utilitarian use and was unadorned. Pine bead board, painted yellow, covered the interior wall. Wooden, tongue and groove flooring was laid overtop the floor joists and would have presented some protection from drafts that were no doubt prevalent during the winter months. Access to the original brick structure was created through a new doorway opened on the east gable wall and led directly to the dining room.

Aside from the new addition, updates were also made to the original portion of the structure during this period. Perhaps the largest alteration was the creation of a doorway to connect the two upstairs bed chambers. The presence of a four paneled door with a Chanthell Tool Co.rim lock and white porcelain knob dates to ca. 1870s.[192] Similar knobs and locks can be found on a number of doors throughout the building, including the new four paneled door to the frame addition. Other doorways were also upgraded throughout the house, including the rear side passage door, which led from the front foyer to

[190] Daniel Sutherland, "The Expansion of Everyday Life, 1860-1876", pg 40.
[191] Nelson, "Nail Chronology as an Aid to Dating Old Buildings", pp. 1-6.
[192] Eastwood, *Porcelain Doorknobs*, The Doorknob Collector, July 1989, No. 36, pg 2-3.

the side porch. Installed in this location was a half-glazed door typical of the period. The hardware associated with this door is also indicative of the time, with the brass oval escutcheon matching similar models from the 1870s. Butt hinges also appear to have been replaced on a number of doors with a more fanciful design indicative of the Victorian era.

However, like the Hite's, the Pirkey's appear to have run into financial problems, as noted in an August 8, 1879 advertisement for a public auction. The auction included their new frame dwelling house constructed to the south of the Bowman-Hite brick house, as well as 270 acres of the old Charlie Hite farm to secure debts owed to Philip Grove.[193] H.C. Wilson eventually purchases this land, and will remain in the vicinity for the remainder of the 19th century. This property acquired by H.C. Wilson, however, did not include the Bowman-Hite farmhouse, which appears to have remained with Pirkey until he officially sold it, along with 128 acres, to Abrams H. Kerns in 1886, for $2,800.[194] This particular land transfer between Pirkey and Kerns also mentions the brick house specifically, noting "the road leading to the yard, or near it, of the brick house now occupied by said Kerns or rather near the wall on said tract to be the line between Kerns & owners of remaining tract of the "Charley Heite" farm (in possession of H.C. Wilson)."[195]

Period IV (1881-1967):

While the formal transfer of the 128 acres occurred in 1886, Abraham Kerns appears to have been paying taxes on the land as early as 1881.[196] Furthermore, the 1880 census records John Pirkey as living in Shenandoah County, not Warren County, with his family.[197] The mention of Abraham Kerns already occupying the structure as noted in the deed of 1886 verifies that prior to the formal land transfer in 1886, Kerns was occupying the structure as a residence. The farm at the time of Kerns occupation consisted of the original brick house, rear frame addition, bank barn and likely a number of dependencies, including the old kitchen. The year 1881, apart from taking up residence in the Bowman-Hite farmhouse, also saw Abraham Kern marry Ella O. (unknown maiden name).[198] He and his wife Ella would also have their first and only child, Charles Grover Kerns, three years later on July 25, 1884.[199]

Unfortunately tragedy would strike the Kerns family on April 4, 1900 when at the age of 45 Abraham Kerns would accidently shoot himself on the farm.[200] While this event is tragic, the ensuing legal documents help paint a vivid picture of the Bowman-Hite farm at the turn of the 19th century. Included in the August 31, 1900 inventory were possessions associated with the house and their corresponding value; a safe ($5), a clock ($1), 6 split bottom chairs ($10.50), and one suit of furniture-walnut ($14).[201] Several other entries associated with the will and running from 1900-1907 note a number of small changes to the farm and house during that time, including the painting of the house by Charles Kern in

[193] Shenandoah Herald, August 6, 1879, pg 1 col. 4.
[194] Warren County, Virginia, Clerks Office, Deed Book Q, pg 271.
[195] Warren County, Virginia, Clerks Office, Deed Book Q, pg 271.
[196] Warren County Land Tax Books, 1881.
[197] 1880 Federal Census, Schedule 1, Davis township, Shenandoah County, VA, pg 345
[198] Primary source unknown, Peters and Kalbian, The Bowman-Hite Narrative History and Timeline (2010)
[199] Charles G. Kerns' birth date is confirmed by the 1906 inventory and settlement of his father's estate that notes he reached maturity July 25, 1905.
[200] Richmond Times Dispatch, April 6, 1900.
[201] Warren County Will Book G, pg 433 (1907)

1905, the installation of lightning rods on the barn in 1905 (still intact), and the running of wire fencing in 1901, 1904, and 1905.[202] Initial paint analysis suggests that the color Charles used was white.[203]

Despite the death of her husband, Ella and her son Charles would continue to live on the property for the rest of their lives. Charles would marry Mary Cornelia Kerns who was residing with both Ella and Charles in the house by 1920.[204] The three members of the Kerns family would continue to keep the farm relatively unchanged throughout the Great Depression.

Charles Kerns pre-deceased his mother, dying on October 29, 1941. A year prior he wrote his will naming his wife, Mary Kerns as the heir. He also notes that he had lived his entire life of the farm, a total of 57 years. The inventory of the property taken in January of 1942 still notes the presence of livestock on the farm, including a black heifer, a Roane Durham cow, a Guernsey cow, and a Roane Durham male.[205] Soon after the passing of Charles, Mary moved off the farm to nearby Middletown in Frederick County, Virginia, but still retained possession of the property until 1967.[206] When the property was sold, the structure had been electrified and some interior plumbing added. The only other major modification was the enclosure of the bulkhead under the north elevation pent roof.

Period V (1967-2003):

Lloyd and Ruth Whitham obtained the Bowman-Hite farm from Mary Kerns in 1967.[207] During their tenure the farmhouse would undergo extensive alterations, although the original brick structure would retain much of its integrity. These alterations, begun in 1971, included the concealment, and partial demolition, of the 1876-1880s rear frame addition within a larger two-story frame addition.[208] The rear garage was also added with architectural salvage, including turned posts, from the south porch, which was re-built as an enclosed two story component. Due to the addition, the brick chimney on the frame addition also was raised to provide adequate clearance above the rooftop. Additionally, the Greek Revival front porch was removed. In its place a broken ogee door surround was installed and a concrete block porch extending the width of the front elevation constructed. Concrete block was also used to construct a ventilation chimney on the north elevation of the house for the cellar furnace.

Aside from the major exterior alterations, the Whitham's also made a number of changes to the interior of the house. Within the new additions to the house bathrooms were added, as well as upgraded plumbing to the kitchen, still located on the first floor of the 1876-1880s frame addition. Electrical wiring was also upgraded in select locations, although knob and tube wiring still remained in places. The basement, now accessible via an interior staircase, received a poured concrete floor on which was placed a new furnace and forced air system. Corresponding ductwork was also installed, and necessitated the furring out of many of the interior walls, which ironically concealed much of the original wall paper, paint and plasterwork. While the original walls were covered, the trim work was salvaged and re-applied on the new, gypsum board walls (**fig. 46**).[209]

[202] Warren County Will Book G, pg 433 (1907)
[203] Spencer, Forensic Analysis of the Bowman-Hite Farmhouse and Barn, 2011
[204] 1870 U.S. Population Census, Schedule 1, Warren County, Virginia
[205] Warren County Clerks Office, Will Book L, pg 375; Warren County Clerks Office, Will Book L, pg 411, 440
[206] Warren County, Virginia Land Tax Records, 1948.
[207] Warren County, Virginia Deed Book 157, pg 393-394 (1967)
[208] Reconnaissance Level Survey, Virginia Department of Historic Resources, "Whithaven" [Hite-Bowman House] (DHR# 093-0138)
[209] More information on plumbing and electrical wiring necessary

Mantles were also updated with marble veneers during this period. The hearths were also raised downstairs and covered upstairs with a thin marble veneer. However, with the exception of the plinth blocks on the downstairs mantles, the originals still remain relatively intact. The 1876-1880s, frame addition fireplace was also concealed with a modern brick veneer and, like other first floor hearths, this hearth was also raised.

Another large interior alteration was the removal of the stair in the dining room area. However, the manner in which the stair was removed has left well defined "ghosts" of the stringers, allowing for accurate interpretation as to the angle of incline. Plywood was also used to cover the stairwell opening in the second floor, confirming the removal as a Whitham period alteration.

Aside from the removal of stairs, a number of original windows in the structure were converted to door openings or completely concealed due to the encapsulating frame addition. This included the conversion of the primary stair window on the east elevation, as well as one of the second floor windows on the south elevation to doorways leading onto the second floor of the new enclosed porch. Another window on the brick ell east elevation was concealed.

Smaller alterations were also made throughout the house, including the replacement of some original hardware with modern brass knobs, installation of drop ceilings, creation of closets in the west second floor bedchamber, replacement of the sidelight and transom glass, as well as the removal of the rear portion of the muntins and the installation of built-in shelves in the front parlor.

	Germanic Building Characteristics (18th century)	**Joist Hite Tavern and Home (ca. 1730s-40s)**	**Fort Bowman (ca. 1753)**	**Mount Pleasant (1812-13)**	**Long Meadows (1848)**	**Bowman-Hite (ca. 1851-52)**
Form	Flurküchenhaus	Flurküchenhaus	Central passage	Central passage	Central passage	Side passage
Fenestration (symmetrical/ asymmetrical)	Asymmetrical	Asymmetrical	Symmetrical	Symmetrical	Symmetrical	Symmetrical (2/3rds)
Kitchen (detached/ attached)	Attached	Attached	Attached	Semi-detached	Semi-detached	Detached
Primary Building Material (Wood/Stone/ Brick)	Wood/Stone	Stone	Stone	Brick	Brick	Brick
Roof Structure	Complex	N/A	Complex, Principal and Common Rafters	N/A	N/A	Common Rafters with ridge board
Roof "kick" (yes/no)	Yes	N/A	Yes	No	No	No
Interior Detailing (plain/ornate)	Plain	N/A	Plain	Ornate	Ornate	Plain

Table 1: Table showing a comparison of certain features of Bowman and Hite family buildings as they relate to Germanic building traditions from the 1730s-1850s.

Figure 10: Undated image (likely late-19th century) of the Joist Hite house (ca. 1730-40) and tavern located near Springdale in Frederick County, Virginia. Note the asymmetrical chimney stack, below which can be seen the large open hearth. The "ghost" of stair risers can also be seen on the extreme right of the structure. (Handley Regional Library Collection)

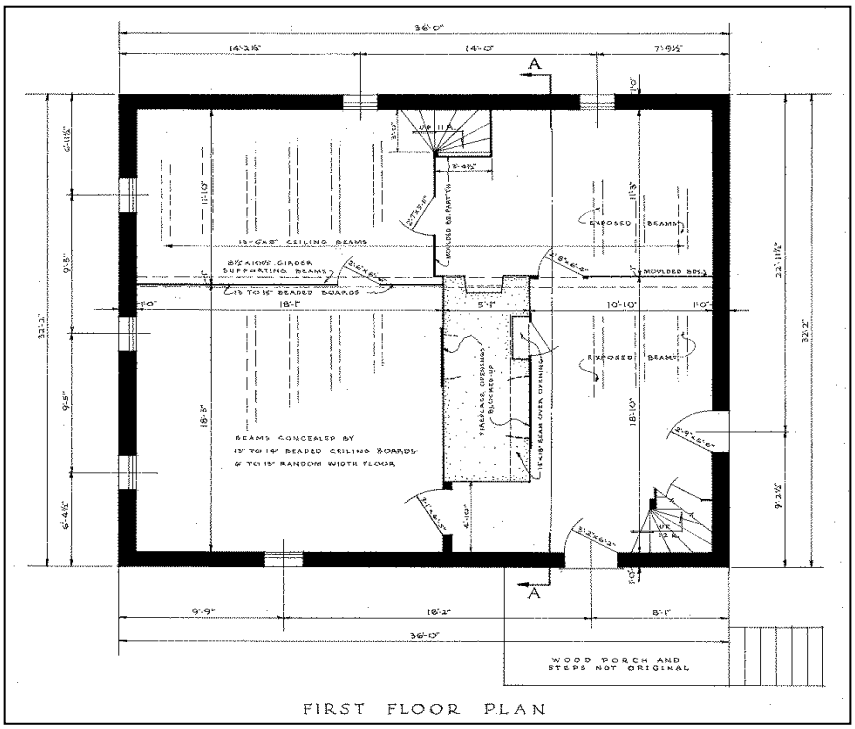


Figure 11: First floor plan of Fort Egypt (ca 1750s) in Page County, Virginia following the Flurküchenhaus plan. Note the smaller Küche on the right side of the structure and the larger Stube on the left separated by the asymmetrical interior fireplace. (Historic American Building Survey, National Park Service, John Columbus & Tarquin Rachelle, VA-200, 1940)

Figure 12: Fort Bowman or Harmony Hall (ca. 1753) built by George Bowman. The roof "kick" can be made out near the cornice line. (Photograph by Michael Spencer, 2011)

Figure 13: The stube at Fort Bowman showing the smaller fireplace, wood paneling and exposed joists and summer beam. (Photograph by Michael Spencer, 2011)

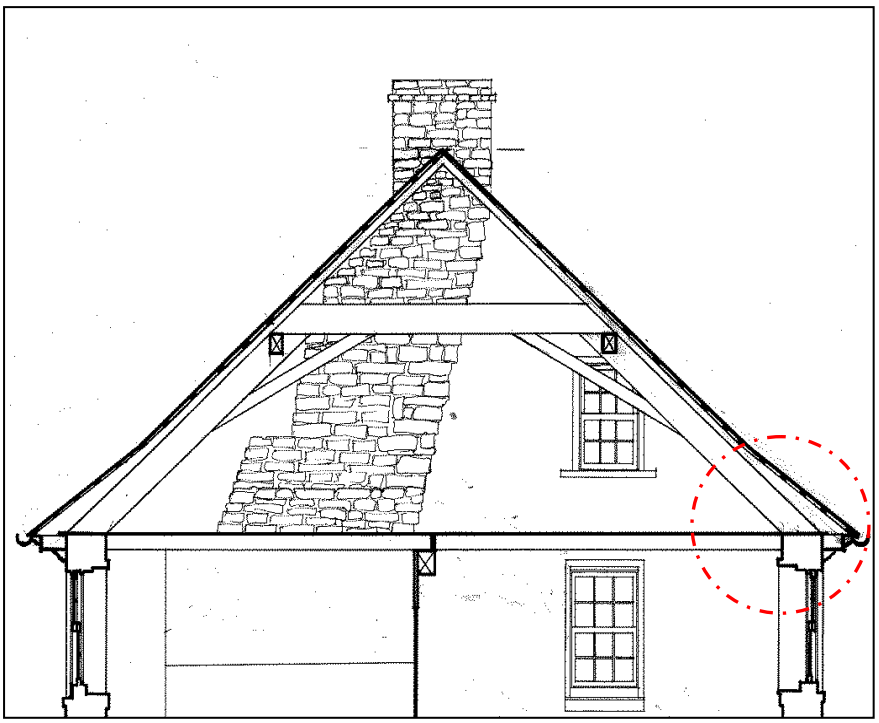


Figure 14: Section of Fort Bowman showing the roof kick (circled) as well as the truss system. (Historic American Building Survey, National Park Service, Art Crook, VA-909)

Figure 15: Attic room at Fort Bowman showing the complex joinery as well as principal and common rafters used for the roof system. Such roof complexity would greatly diminish over subsequent generations. (Photograph by Michael Spencer, 2011)

Figure 16: The large hearth in the küche room at Fort Bowman. (Photograph by Michael Spencer, 2011)

Figure 17: The wood paneling located in the central hall at Fort Bowman. The door on the right leads to the basement. Note the exposed members at the top of the photograph. (Photograph by Michael Spencer, 2011)

Figure 18: The left image shows the small wall niche or "pine hole" at Fort Bowman (ca. 1753) whereas the right image shows a similar feature at Mount Pleasant (1812-1813). It has been surmised that these were used to burn certain material for lighting purposes. (Photographs by Michael Spencer, 2011)

Figure 19: West facing elevation at Mount Pleasant. Built by Isaac Bowman, son of George Bowman, in 1812-13, the house exhibits Federal style design aesthetics rather than Germanic traditions used in construction just a generation prior at Fort Bowman. The stone kitchen wing is on the right, obscured by the enclosed porch. (Photograph by Michael Spencer, 2011)

Figure 20: The above image is the fireplace in the stone wing at Mount Pleasant. The size of the hearth is similar in many respects to those found at Fort Bowman. (Photograph by Michael Spencer, 2011)

Figure 21: The image to the left shows the remnants of a red wash applied to the brick at Mount Pleasant, as well as a thin painted white line known as "penciling." This technique was used during the 19th century to provide additional visual affect to brick structures, especially those which may have had poor brickwork. (Photograph by Michael Spencer, 2011)

Figure 22: Dutch elbow lock, likely made locally at Mount Pleasant. These locks were used until the 1850s in the region and operated by using a downward force on the handle rather than twisting a knob. (Photograph by Michael Spencer, 2011)

Figure 23: Front, west elevation of Long Meadows (1848) which replaced the earlier Traveler's Rest (ca. 1740s). This structure utilizes elements of both Federal and Greek Revival styles. The structure also incorporates re-used items, such as beaded joists, possibly from the earlier structure. (Photograph by Michael Spencer, 2011)

Figure 24: The image on the left is a double through tenon secured with a tree nail. This image was taken at Long Meadows, where a basement joist intersects with the stair trimmer. (Photograph by Michael Spencer, 2011)

Figure 25: The image below shows the underside of the floor at Long Meadows. Note the different size kerf marks created by a reciprocating saw. The larger marks are indicative of early-19th century saw mills, whereas the smaller marks are associated with mid-19th century saw mills. Early bridging can also be seen, as well as plaster ghosting. (Photograph by Michael Spencer, 2011)

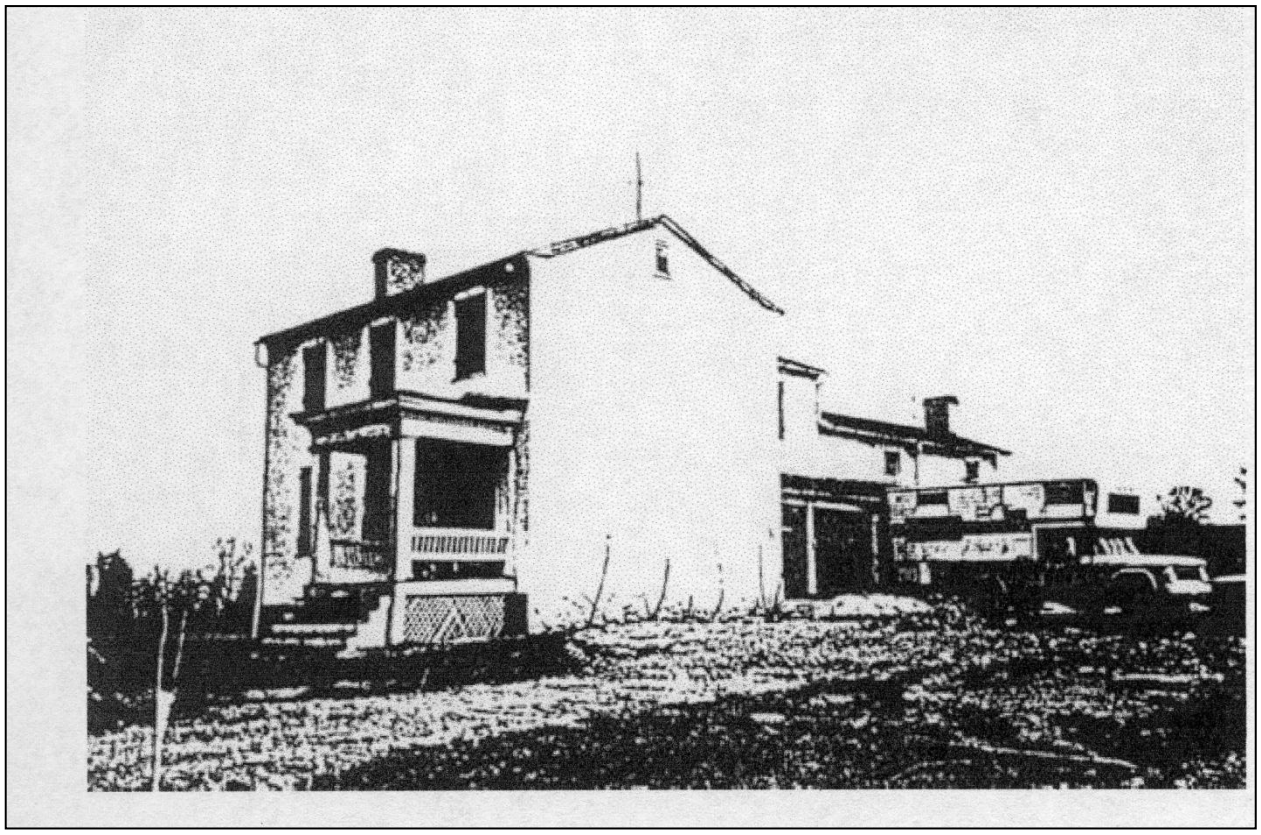


Figure 26: Both images show the southwest corner of the Bowman-Hite farmhouse. The top image shows the building in 2011, whereas the bottom image is from ca. 1971, shortly after the Whitham's purchased the property. Note the presence of the Greek Revival front porch, as well as the side porch and rear frame addition in the lower image. (Top photograph by Michael Spencer, 2011; Bottom photograph by unknown photographer, Department of Historic Resources, 1971)

Figure 27: Image of the Bowman-Hite house front elevation showing the 1:5 common bond used in the construction of the brick walls. (Photograph by Michael Spencer, 2011)

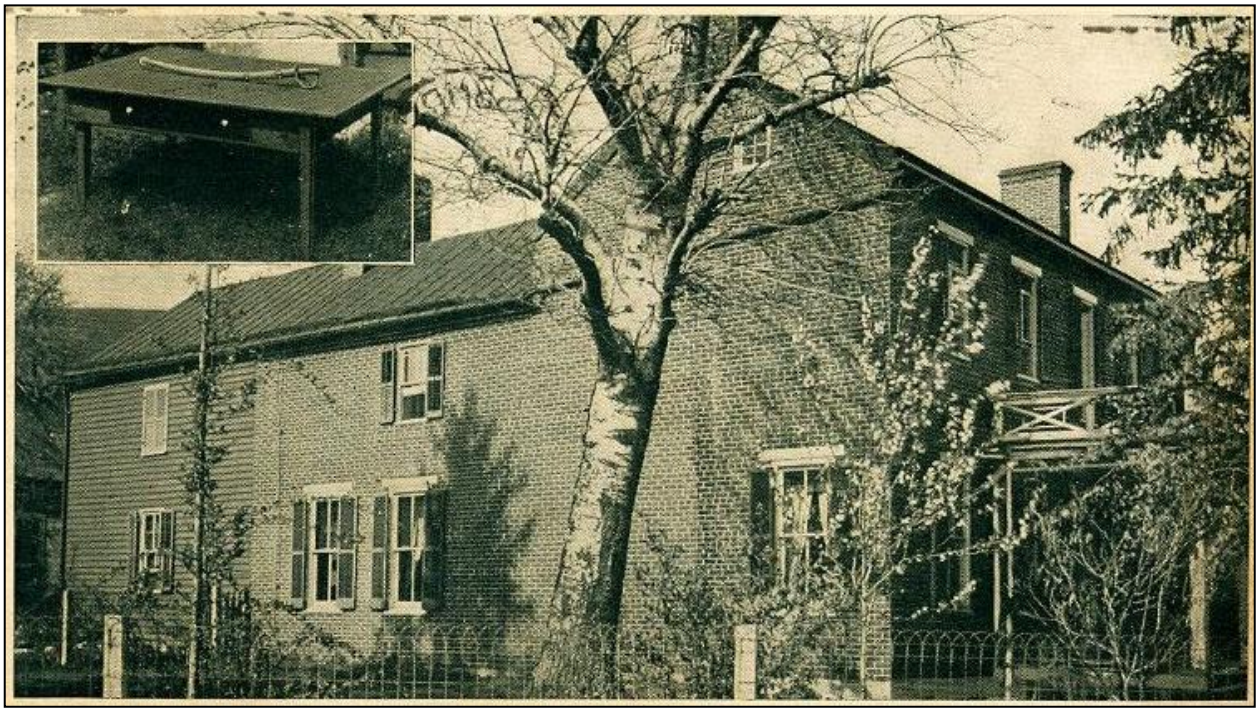


Figure 28: Early-20th century postcard of the Stickley house located about a mile north of the Bowman-Hite farm along both the Valley Pike and Cedar Creek. The structure was first built in 1859 (burned the same year and then re-built in 1860), and shares similarities with the Bowman-Hite house, including the floor plan, use of 1:5 common bond, and the large glass panes used for the windows. (Strasburg Museum Postcard Collection)

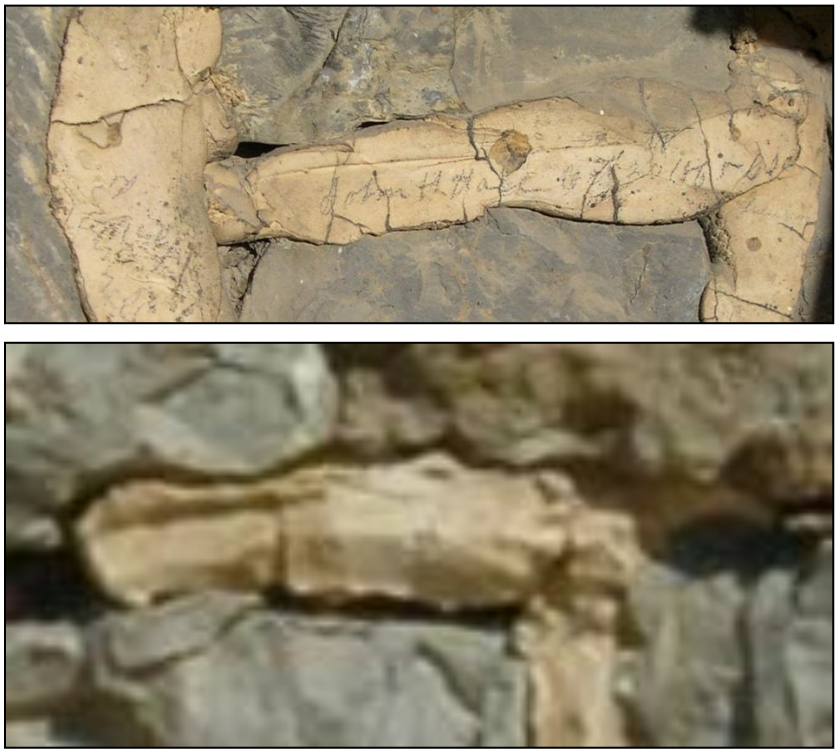


Figure 29: The top left image shows the mortar joint on Mount Pleasants stone kitchen wing, complete with Civil war graffiti dating to 1865. Below left is an image of a similar "V" mortar joint used at the Bowman-Hite house on its stone foundation. (Photograph by Michael Spencer, 2011)

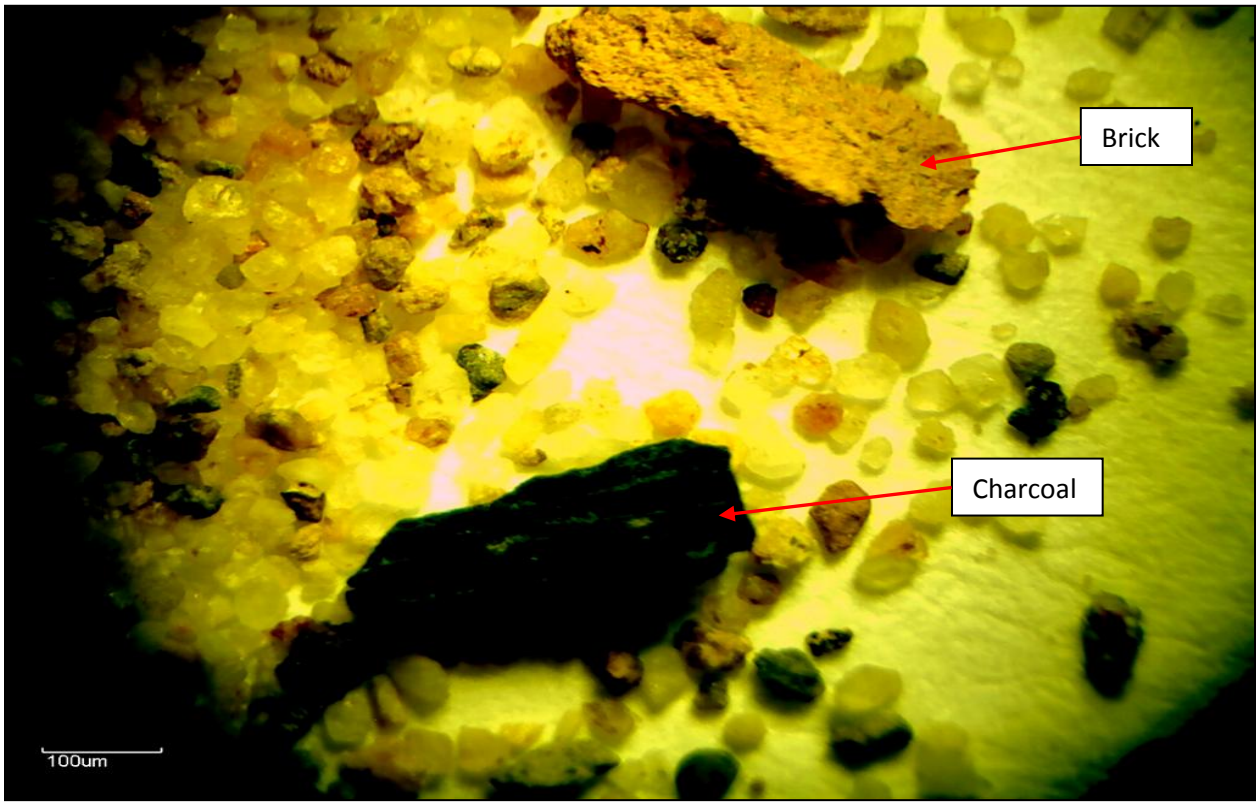


Figure 30: The image above shows the contents of the Bowman-Hite mortar after acid digestion. Note the presence of brick (top of image) and charcoal (bottom) intermixed with the sand. Such inclusions indicate rudimentary lime burning operations. (Photograph by Michael Spencer, 2011)

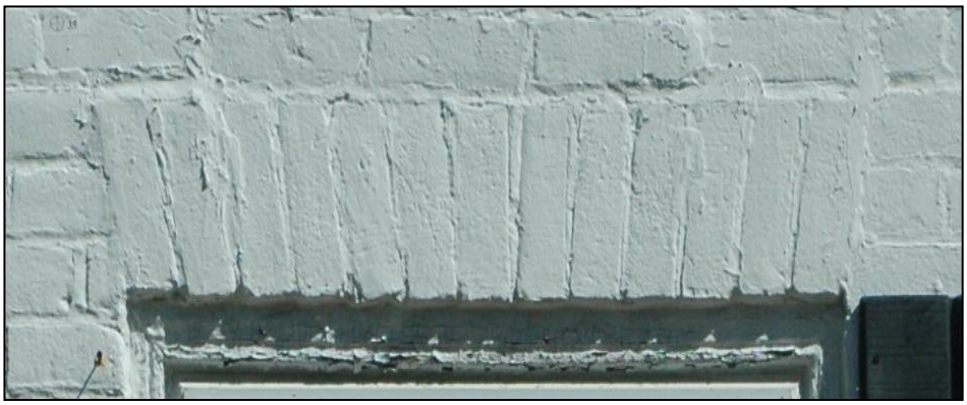


Figure 31: The top image shows the segmental arch used at Fort Bowman (ca. 1753), the second image from the top shows the stone splayed jack arch with keystone used at Mount Pleasant (1812-1813), the second from the bottom image shows the staggered brick splayed jack arch at Long Meadows (1848) and the bottom image shows the splayed jack arch at the Bowman-Hite house. (Photographs by Michael Spencer, 2011)

Figure 32: The above image is of the pins used to hold the Bowman-Hite windows open in lieu of counter weights. (Photograph by Michael Spencer, 2011)

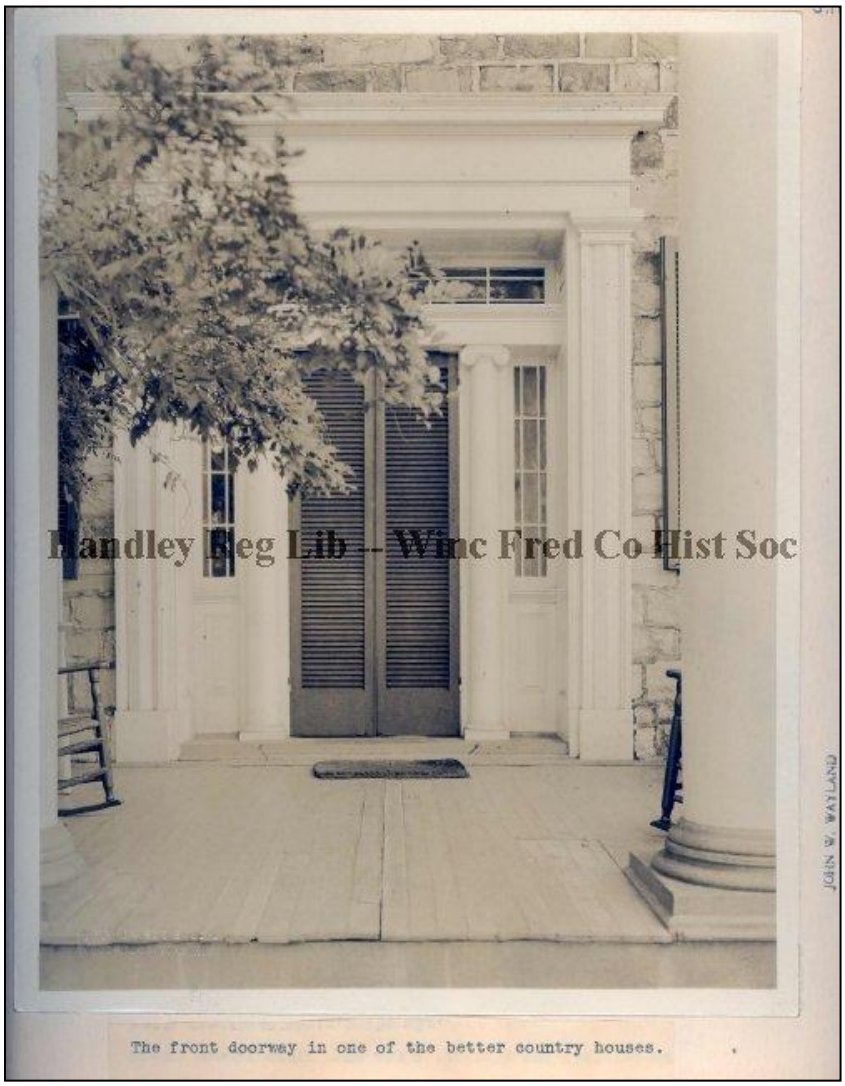


Figure 33: The front door surround to Springdale in Frederick County, Virginia. While added during the mid-19th century, this Greek Revival surround is similar in many respects to the less ornate example at the Bowman-Hite house, especially the sidelights and transom. (Photograph from the Handley Regional Library, early 20th century)

Figure 34: Attic image showing the common rafters resting on a false-plate placed on top of the attic joists. Note also the nailers, which have clearly defined circular saw marks. (Photograph by Michael Spencer, 2011)

Figure 35: Basement image at the Bowman-Hite house showing the wood plate resting on the stone foundation. The brick walls are placed on top, with pockets inserted into the walls for the joists to rest. (Photograph by Michael Spencer, 2011)

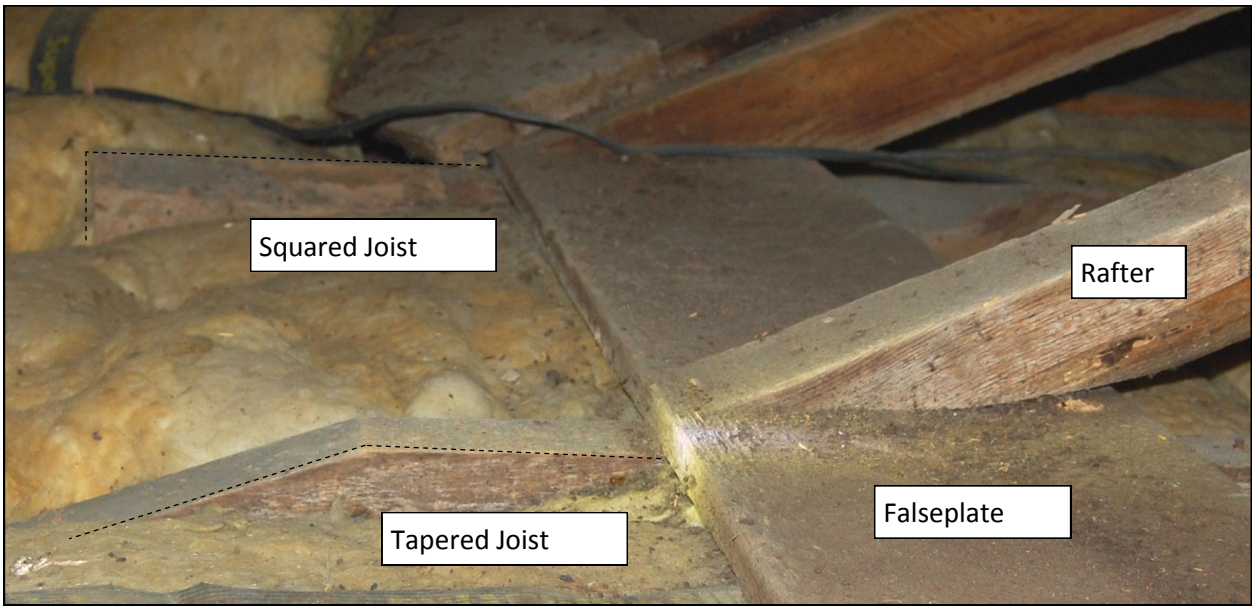


Figure 36: Bowman-Hite attic image showing the tapered joists typically used on top of corbelling. The taper also indicates original roof slope. The square joist in the background was never tapered due to its concealment under the rear ell. The rafters are seated on the falseplate and are nailed to it with cut nails. (Photograph by Michael Spencer, 2011)

Figure 37: Bowman-Hite's common rafter system with ridgeboard, something typically found in later-19th century balloon frame structures. This system may have replaced the original roof during the ca. 1876-1880s alterations although this cannot be entirely confirmed. (Photograph by Michael Spencer, 2011)

Figure 38: The top left image shows the more vernacular door surround present at the Bowman-Hite house, as well as the Greek Revival two panel doors. The right image is of a front parlor door. Note the elaboration on the door surround as well as the baseboard. The patera are also more intricately detailed. (Photographs by Michael Spencer, 2011)

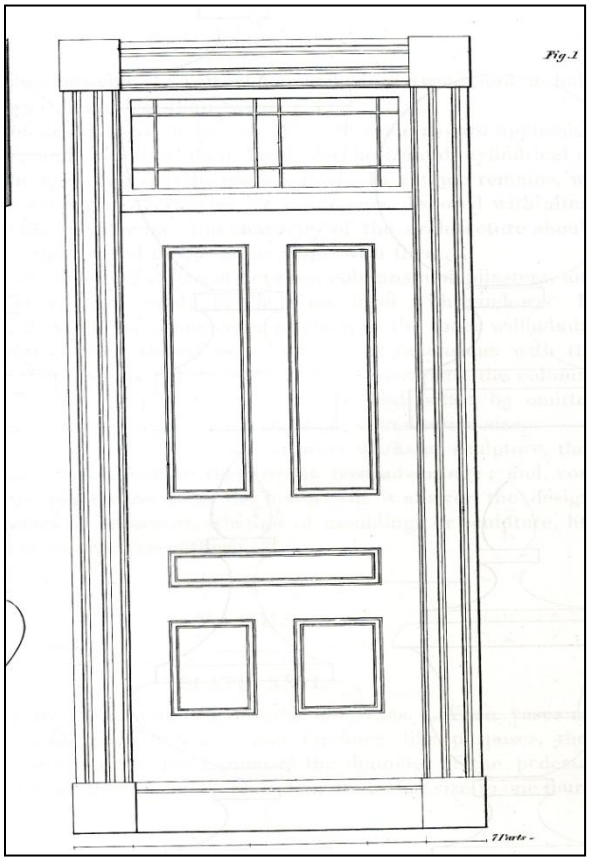


Figure 39: Image taken from Asher Benjamin's 1830 *The Architect or Practical House Carpenter* book. Note the similarities to what is used at the Bowman-Hite house.

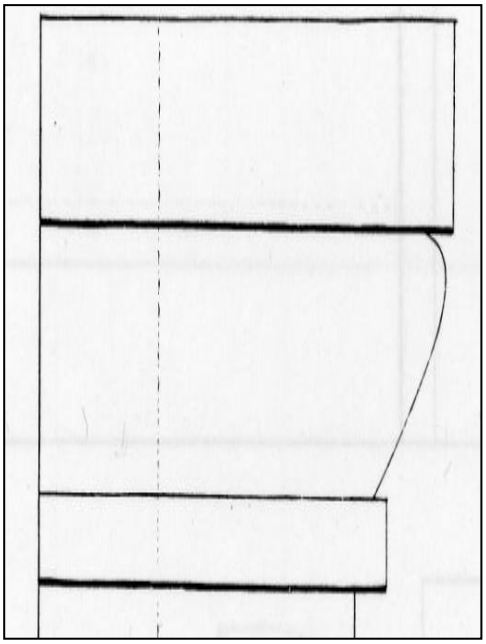


Figure 40: The left image is taken from Asher Benjamin's 1830 *The Architect or Practical House Carpenter* book and is of a mantle molding profile. The right image is a similar molding found at the Bowman-Hite house. (right image by Michael Spencer, 2011)

Figure 41: Original rim lock at the Bowman-Hite house. Developed in the 1850s, these were a popular and cheaper alternative to brass. The mineral knob also dates to the 1850s. (Photograph by Michael Spencer, 2011)

Figure 42: The large barrel newel post at the Bowman-Hite house, complete with overshot rail. This design aesthetic was popular during the 1850s. (Photograph by Michael Spencer, 2011)

Figure 43: Image showing the "ghost" marks left by the rear stair in the dining room. Note the trimmer with new joists now nailed to it. The plaster also indicates the presence of a previous stringer to support the stairs. (Photograph by Michael Spencer, 2011)

Figure 44: Fragment of wallpaper found beneath subsequent layers. Such floral patterns and colorations were popular during the mid-19th century. (Photograph by Michael Spencer, 2011)

Figure 45: The ledger board, a hallmark of balloon frame construction, as seen on the rear frame addition (ca. 1876-1880s). Note how the ledger board is "let" into the stud rather than simply nailed. Note also the circular saw marks on the studs. (Photograph by Michael Spencer, 2011)

Figure 46: When the interior walls at the Bowman-Hite house were furred out for installation of the HVAC ductwork, the window and door casings were simply reapplied to the new surface, as noted by the ghost marks left behind in the original plaster work. (Photograph by Michael Spencer, 2011)

Figure 47: While currently a door, this space used to be a window, which allowed light into the front foyer and primary staircase. The original framing for the window is located above the doorway, as indicated by the header. The casing was adapted to the new use. (Photograph by Michael Spencer, 2011)

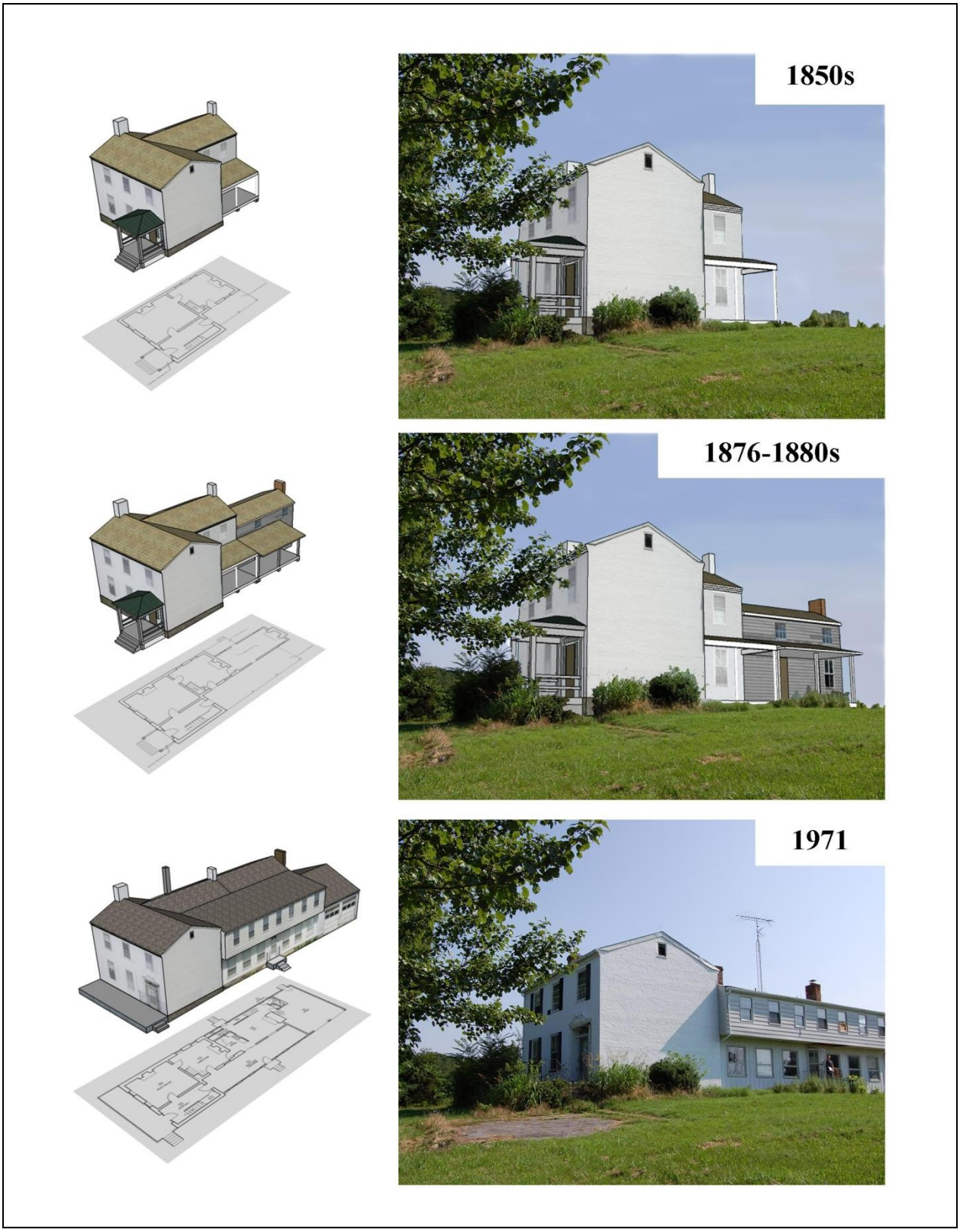


Figure 48: The development of the Bowman-Hite farmhouse from the 1850s until 1971. (Models created by Michael Spencer, 2011; Plan drawings by Brian Townes, 2010)

Physical Description

Physical Description:

By Bryan Townes
Edited by M. Spencer for inclusion in HSR Report

Executive Summary:
The vernacular, Bowman-Hite farmhouse, with Greek Revival elements, is located in rural, Warren County, Virginia on Bowman's Mill Road approximately two miles east of Strasburg, Virginia. Situated on top of a hill that gently slopes west towards Cedar Creek, the farmstead was constructed during the 1850s by Charles and Rebecca Hite, and once was part of a larger 393+/- acre farm. Since 2003 the property has been reduced to 8 acres, currently owned by the Department of the Interior (DOI). The surrounding 134 acres is owned by the Shenandoah Valley Battlefields Trust and remains in agricultural use, maintaining the bucolic feeling, association and setting of the historic Bowman-Hite farmstead.

General Description:
Contained within the DOI acreage is a complete farmstead consisting of 8 buildings, structures, and sites. Of these eight resources, seven are considered to be contributing to the farmhouse's two periods of significance, 1864, associated with the Battle of Cedar Creek, and 1881–1942, associated with the property's contribution to understanding agriculture in Warren County during Reconstruction and growth (1865-1914). The farm's driveway crosses a small stream and follows the historic course of an antebellum roadway that passed through the property until the late-19th century. The most imposing of the contributing resources is the large, timber-framed, ca. 1881 Standard Pennsylvania Bank Barn, located southeast of the driveway and encountered immediately upon entering the property. South of the barn is the livestock yard with adjacent, frame, cow-shed built during the early–mid 20th century. Further up the drive, towards the farmhouse, is the non-contributing, late-20th century corrugated metal shed. The 1850s farmhouse itself is situated at the end of the current driveway. While a number of additions have been made to the original brick farmhouse, the building still retains much of its integrity. Northeast of the house are two, smaller contributing resources. The first is a square, late-19th century, frame smokehouse covered in weatherboard siding, the other is a frame, mid-20th century chicken coop. Southeast of the house, approximately 100 yards away, is a, larger, mid-20th century, rectangular, frame chicken coop, resting on a pier foundation. Immediately south of this coop and east of the bank barn is a spring. Despite much use over the decades, the extant, contributing resources, remain in fair condition and retain a relatively high level of the seven aspects of integrity.

The primary resource, within the Charlie Hite farmstead is the Bowman-Hite house. This single-family dwelling is a side passage, two-story, three-bay, single-pile, cross-gabled, brick structure with a rear ell. Originally built during the 1850s, the white building has been added too over the course of its approximately 160 years in existence. The primary façade originally faced west towards Cedar Creek and also Rebecca Hite's family home of Mount Pleasant, approximately 1 mile away in the same direction. However, a non-historic, 1970s rear frame addition, clad with aluminum siding, re-oriented the structure to face towards the driveway and current path of Bowman's Mill Road. This addition also encapsulated an earlier ca. 1876-1880s one-and-a-half story addition. As it currently stands, the house is in relatively good condition with much of its integrity from both the 1864 and 1881-1942 periods of significance intact.

Materials:
The house's exterior brick walls are laid in a 1:5 Common Bond, where the sixth course is the header course. The house's windows and door openings are placed under brick jack arches in lieu of the straight

wood or stone lintels that are frequently seen in Greek Revival residences. Interior brick end chimneys rise above the north and east gables of the original portion of the house. The later frame rear ell was constructed with an exterior end chimney at the eastern end of the structure. Although the base of the chimney is fashioned with stone, a brick stack is placed above the stone portion. The narrower brick stack transitions to the wide stone base through the use of stepped brick courses.

The original brick portion of the Farmhouse is positioned on random ashlar limestone foundations. A small cellar is positioned under the east room of the original portion of the house and is delineated by the surrounding stone foundation walls, which are painted.

The brick and stone masonry structure of the original portion of the house supports a range of wood framing members and details. Wood joists are used to support the wood floors of the house's first and second levels, as well as the plaster ceilings of the brick portion's first and second floors. Wood rafters form the brick portion's intersecting gable roofs, and wood nailers provide sheathing for the roof. The stone foundation of the house's frame ell provides the base for the ell's wood frame walls, which originally stood one and a half stories in height and supported a moderately-pitched gable roof.

Elements

The construction and design of the Farmhouse utilize a number of distinct elements that work to convey the building's specific historic character. The original brick portion of the house is defined by wood sash windows that are aligned vertically on each elevation. The original six-over-six wood sash windows at the first floor rooms appear to have been removed in the course of the 1870's renovations and newer, more stylish two-over-two light sash windows were installed. These new window sash units maintain the single-hung characteristic of the earlier original windows.

The original formal entrance door for the Bowman-Hite Farmhouse was located on the west elevation and was distinguished through the use of flanking sidelights and a wide transom that extends across the opening. Despite several modern alterations, the main entrance holds a significant degree of original material. The original doors in the brick portion of the house typify those that are often found in Greek Revival architecture. The door units are wood, with two long vertical panels set side-by-side. The renovations that altered the house in the 1870's introduced two additional door openings in the original brick portion. Two four-panel doors were added to occupy these new door openings at the first and second floors.

The rooms in the house's original brick portion are floored with wood boards in various types of finishes and conditions. The boards are laid in the east-west direction in the first and second floor stairhalls, the dining room, and the east bedroom above. The floorboards are oriented in the north-south direction in the front parlor and the west bedroom. The first floor level of the house's frame ell addition retains a fragment of the structure's wood flooring that corresponds with the original footprint of the frame ell. The surviving floorboards at the remnant of the frame rear ell do not appear to retain a visible finish.

The original brick portion of the houses utilizes door and window trim with two distinct profiles. Both styles of the woodwork maintain the use of corner blocks, which is a typical component of the Greek Revival style and also allowed the trim in this period to be installed without the time-consuming use of mitred joints between the side trim and head trim. The door and window trim that finishes openings in the front parlor is the most detailed in the house and corresponds to the likely use of this room as the primary space for receiving and entertaining guests. Moulded pilaster trim is used in this room, and is

joined by incised bulls-eye corner blocks. The remainder of the original brick portion of the house is finished with plain wood trim and blind corner blocks.

The junctions between the walls and floors in the original portion of the house are finished with simple wood baseboards, except in the front parlor. There the baseboards employ additional detail with a wide fillet capped by a half-round.

The original brick portion of the house maintains four wood-burning fireplaces, one in each of the four main rooms. The mantles are rendered in a typical Greek Revival style pattern.

The stairway that is located in the Bowman-Hite stair-hall is relatively simple in its overall design, yet illustrates the typical Greek Revival style in its straight runs and clean, concise detail. Two square balusters are set in mortises on each tread, and the finely finished handrail is detailed with a series of ramps (a distinct, concave curve present where the wood handrail transitions from the stair slope to the horizontal landing railing). The handrail is supported by a series of turned-wood newel posts, which utilize a basic profile often seen in Greek Revival style residences.

The interior finished surfaces of the original house's walls and ceilings are composed of plaster, which is typical of the period of the house's construction. Plaster and lath is used on the rooms' ceilings and, although damaged, appears to be largely original material.

Design

The Bowman-Hite Farmhouse employs a number of design characteristics that define the structure as an important historic architectural resource. The appearance of the Bowman-Hite Farmhouse as a formal, style-specific structure both sets it apart from its earlier neighbors and unites it with other prominent dwellings in the vicinity.

The Greek Revival inspired, side passage, brick farmhouse that Charles and Rebecca Hite built in the 1850s was a popular type in the region during the first quarter of the 19th century, before it gradually faded out of fashion after the Civil War. The side passage, also called a foyer or hall, would have helped separate and define the interior spaces of the structure, considered desirable in the antebellum south, and in many cases served as a room in its own right. Such a design not only provided the necessary separation of spaces on a budget, but also allowed for expansion to a more formal center hall plan if necessary. A front parlor and dining room compose the other two rooms on the first floor of the original house.

The plan of the second floor mimics that of the first. Two large bedrooms, both of which were originally outfitted with shallow closets on each side of the rooms' fireplaces, occupy the floor together with a stair-hall.

The dining room's west wall holds physical evidence of a secondary stair that at one time provided the sole means of access to the east bedroom on the second floor. The secondary stair has been removed, but the visible line of the stringer in the wall plaster, and the bare brick that was concealed by the stringer, indicates that this stair was an original feature and was not added later.

Architectural Style

The use of the Greek Revival style at the Bowman-Hite Farmhouse was expressed in several ways. The most prominent Greek Revival feature of the house's exterior took the form of a small, square entrance

porch (visible in historic photographs) that sheltered the house's main west entrance. The fireplace mantles in each of the house's original four rooms are wood and utilize typical Greek Revival designs. The mantles are characterized by two square, slightly tapered pilasters that rise to support a wide, plain fascia. The simple design and straight runs of the house's staircase are typical of the Greek Revival style and stand in contrast to the curves and delicate carvings that characterized staircases in prominent houses of the earlier Federal period.

Patterns of Evolution

Like ownership and land tenure, the building's development and use can likewise be categorized into five periods with each period reflecting not only building development but also technological and aesthetic changes within the broader region;

VI. 1734-1843 George and Isaac Bowman
VII. 1843-1872 Charles J. Hite and Rebecca Bowman
VIII. 1872-1881 William Stickley and John Pirkey
IX. 1881-1967 Kerns Family
X. 1967-2003 Whitham Family

Exterior Elevations

West Elevation

The west elevation, originally the primary façade, consists of three bays, two stories in height, and topped by a side-gable roof. The house is set on a continuous, mortared, rough-cut, irregular coursed, limestone foundation. Exterior walls of the house are brick, painted white, and laid in a 1:5 Common Bond. Recently, portions of the foundation and wall have been heavily re-pointed due to mortar loss caused by splashback of water. Brick corbelling can be seen at the top of the wall where the roof begins.

The focal element of the west elevation is the original side passage, front entrance, located on the southern bay. Although the six-paneled door is a modern replacement, portions of the door surround, including the sidelights and transom are original. The rectangular, full transom light is comprised of 3 horizontal muntins and 4 vertical muntins. The center ribbon of glass panes created by this muntin configuration is slight larger than those above and below. The sidelights of the entryway are divided in a similar fashion, with three vertical muntins and three horizontal muntins. Below each sidelight is a raised wood panel. Originally, a small, one-story, one-bay, raised porch would have provided shelter for those entering the house, however in the 1970s, this was removed, and a concrete porch, spanning the entire façade, was installed. As of 2012, this porch had also been removed. The last vestige of the 1970s alteration is the broken ogee pediment with decorative urn. The entire door surround, with the exception of the broken ogee pediment, is similar to that found at nearby Springdale, in Frederick County, Virginia. Located directly above the entryway is an original, six-over-six, single-hung wood window with later, ca. 1970s, fixed, faux wood paneled, black shutters. The wood sill of the window is in poor condition.

The other two bays of the west elevation are comprised of four windows, two on the first floor, and two, directly above, on the second floor. While the wood window casings and trim on the first floor are original, the two-over-two configuration is a later, ca. 1876-1880s alteration. The second floor, single-hung, six-over-six, wood windows, are however, original to the house. Like the window above the entryway, the wood window sills are in poor condition. Splayed brick jack arches are positioned above each window with faux wood, black paneled shutters, on either side.

West Elevation Character Defining Features:

- 1:5 Common bond brick walls
- Corbelled brick cornice
- 2-over-2 and 6-over-6 wood sash windows
- Stone foundation walls
- Entrance door assembly: sidelights, transom, wood frame, sidelight panels, fragments of wood wall trim.

Figure 49: The west elevation of the Bowman-Hite farmhouse dating from the 1850s. Note the replacement two-over-two windows on the first floor compared with the original six-over-six windows on the second. The broken ogee door surround is a later-20th century addition.

Figure 50: A close-up of an original 1850s six-over-six window. Also seen is the brick corbelling, which, by the 1850s, had begun to wane in popularity. Below the window are ghost marks from the 1850s porch roof.

South Elevation

The south elevation is dominated by the ca. 1970s, frame, two-story, seven-bay, rear ell addition which is an extension of the original, two-story, brick ell as well as an enlargement of the south porch. A contemporary, one-story, two-bay, garage further extends the structure to the east. Located on the west side of the elevation is the gable end of the original brick house set atop a continuous, irregular-course, rough-cut, limestone foundation. Placed within the gable is a single louvered attic vent. The 1:5 Common Bond brick pattern is clearly evident.

During the 1970s, the south elevation became the primary façade with an entryway located in the middle of the seven-bay, central addition. Set atop a continuous, raised, cinderblock foundation, the first floor of the addition is slightly recessed from the gable end of the original brick house. This floor is clad in vertical, board-and-batten, aluminum siding. The second floor of the addition is cantilevered over the first floor providing for a shallow overhang. Unlike the first floor the aluminum siding is horizontal.

Fenestration on this portion of the south elevation is symmetrical, with a centrally placed doorway. Serviced by four concrete steps with a black metal railing, and a cinder block stoop, the entryway has a modern, four-paneled, two-light, door. Above the door is a wood sign with black lettering reading "Whithaven". Three modern, one-over-one, double-hung windows, are placed on either side of the doorway. Located above each of these seven openings, on the second floor, are seven, six-over-six, double-hung, windows. Above these windows is a projecting eave which intersects the original brick house well below the corbelling. A modern, asphalt shingle roof, slopes gently back, to the earlier gable roof of the brick ell.

The two-bay, side-gabled, garage is characterized by the two, fifteen paneled, garage doors. Three of the panels within each door are glass providing some light into the garage area. Where the doors are placed, the continuous cinder block foundation is broken. Siding on the garage is a continuation of the vertical, board-and-batten, aluminum siding already noted.

South Elevation Character Defining Features:

- 1:5 Common bond brick walls
- Corbelled brick cornice (partially concealed by the modern addition)
- Stone foundation walls
- Wood rakeboards (concealed by modern metal cladding)

Figure 51: Pictured is the south elevation of the 1850s brick farmhouse. On the right is the later, ca. 1971 Whitham era addition which enclosed the 1876-1880s, John Pirkey frame addition.

East Elevation

The east elevation is largely comprised of the gable end of the 1970s, one-story, two-bay, garage addition. Set atop a continuous cinder block foundation, the east elevation of the frame addition is covered with horizontal aluminum siding. Two, six-over-six, double-hung, windows are placed within the wall with the peak of the west to east gable roof creating a bilateral symmetry.

Recessed behind the east elevation of the garage, is the east elevation of the 1970s, rear ell, two-story addition. The northern portion of the east elevation is an extension of the original, single-bay, rear brick ell and is capped with a steeply pitched gable roof clad in asphalt shingles. The southern portion of this elevation is the enclosed porch addition with a low sloped shed roof, also with asphalt shingles and similar in form to an extended secondary porch roof. Set within the elevations second floor are two, paired, six-over-six, double-hung, windows. An exterior end, brick chimney, from the now encased, ca. 1876-1880s, rear frame addition, rises above the roof just south of the peak. Because the earlier addition was only one-and-a-half stories in height, a brick change is clearly evident on the chimney when it was raised to accommodate the 1970s addition. Like the garage this frame addition is clad within horizontal aluminum siding.

East Elevation Character Defining Features:

- Corbelled brick cornice (partially concealed by the modern addition)
- Brick chimney stacks positioned at the original brick portion of the house
- 1:5 Common bond brick walls

Figure 52: The east elevation as it appeared in 2010. Note the metal tower, now removed.

Figure 53: This close-up of the east elevation chimney shows the two construction phases. The first was during the construction of the 1876-1880s rear frame addition. However, during the Whitham era, when a full second story was added (ca. 1971), the chimney was raised.

North Elevation

The seven-bay, north elevation, is broken into two three distinct components. On the east end of the elevation is the one-story, three-bay, side-gable garage. Comprising the center of the elevation is the two-story, one-bay, side-gable frame addition. The west end of the elevation is the original house, with the brick gable end visible as well as the rear, two-story, two-bay, brick ell.

Situated atop a continuous, raised, rough-cut, irregular-coursed, limestone foundation, the 1:5 Common Bond brick gable end wall of the original house is unadorned. A single interior end chimney bisects the gable and creates a broken rake. Brick corbelling is apparent near the top of the chimney.

Projecting from the gable end is the two-story, brick ell which displays the same raised limestone foundation and brick bond as previously noted. Set within the two-bay ell are five windows, two on the first floor, two on the second and one in the basement. The first floor windows are two-over-two, single-hung, wood windows, likely replaced during the ca. 1876-1880s renovations. Directly above these two windows are six-over-six, single-hung, wood windows, original to the house. The window trim for all four windows is original and shows evidence of wooden shutters. Placed above each of these window openings is a splayed jack arch, all of which appear in relatively good condition. Centered below the four, first and second floor windows, is a basement window set within the limestone foundation. Only the opening and window casing remain intact but appear to be original to the house. During the 1970s additions and renovations this window was covered partially with a cinder block vent stack which aided in its deterioration. This stack has since been removed. Brick corbelling can be seen at the intersection with the asphalt shingle roof. Projecting from this roof is an interior brick chimney, which originally would have been an interior end chimney on the brick ell. Like the other interior end chimney, the top is corbelled.

The center portion of the north elevation is a 1970s, two-story, one-bay, aluminum clad, frame continuation of the original brick ell. Not only does the wall material change between this addition and the original house, but the foundation changes from limestone to a continuous, raised, cinderblock foundation. Set within the elevation, is a single, first floor entryway, accessed via a set of four cinderblock steps with a black iron railing and a cinderblock stoop. The door is half-glazed with the top half divided into nine lights. A metal storm door, with faux wood diagonal rails and triangular panels, protects the door. Located above the entryway, on the second floor are three windows. These asymmetrically placed windows consist of one small, one-over-one, double –hung, bathroom window as well as a set of paired, six-over-six, double-hung windows. There is a slightly projecting eave at the top of the wall that aligns well with the brick corbelling on the original house.

The one-story, three-bay garage is situated on the far, eastern end of the north elevation. Similar to the 1970s, two-story addition previously described, the garage also has a cinderblock foundation and horizontal aluminum siding. One wood slab or flush door, with dog door, on the far eastern side of the garage provides access to the interior. Two poured concrete steps, with metal pipe railings on either side lead to the doorway. West of the doorway are two one-over-one, double-hung windows.

North Elevation Character Defining Features:

- 1:5 Common bond brick walls
- Corbelled brick cornice
- 2-over-2 and 6-over-6 wood sash windows (at the original brick portion of the house)

- Stone foundation walls
- Brick chimney stack above the north elevation's western gable
- Wood rakeboards (concealed by modern metal cladding)

Figure 54: The northwest perspective of the Bowman-Hite farmhouse after the removal of the cinder block front porch. The rear brick ell, original to the 1850s portion of the structure can be seen, as well as the later Whitham era addition.

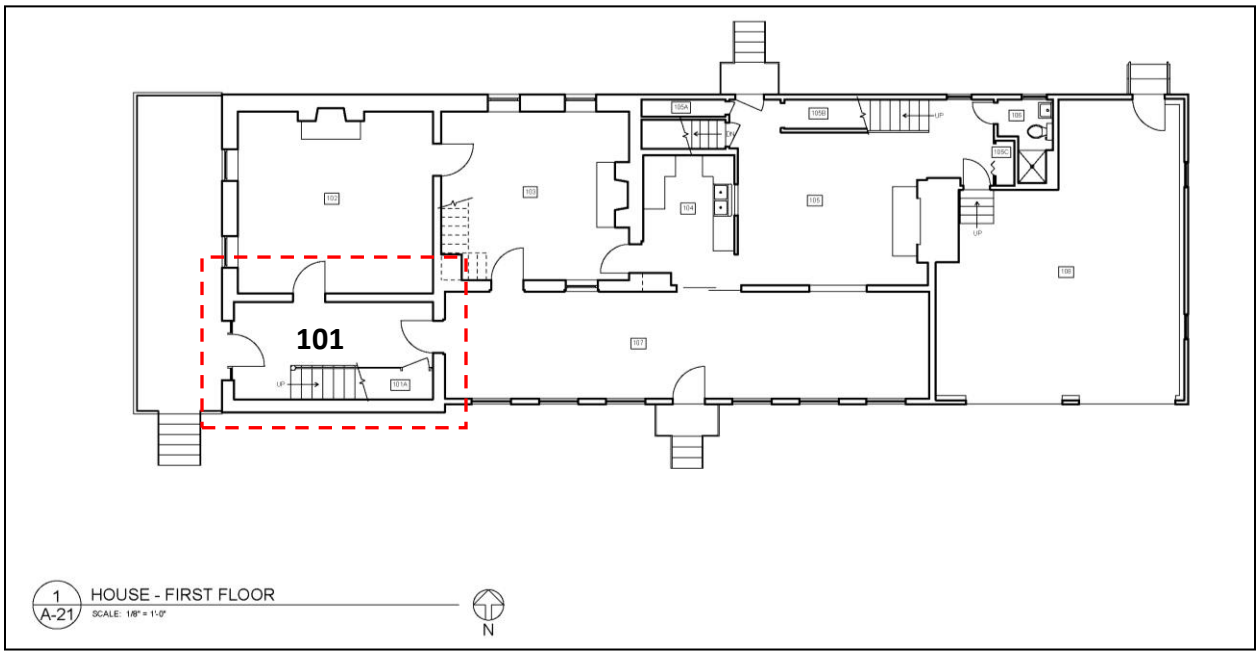
Figure 55: The north chimney stack clearly shows a lack of white paint. However, an early 1863 map indicates a "wh", possibly alluding to the current white color at the time of the battle. Note the iron banding, as well as the brick corbelling. The broken rake is also apparent and is typical of the region. (Spencer, 2012)

Interior*:*

First Floor

The original portion of the house's first floor consists of the stair hall, the parlor, and the dining room. Configuration of these rooms resulted in an "L" shaped plan that was oriented with the formal entrance door facing to the west. Additional exterior doors were positioned at the east end of the stair hall and at the south side of the dining room which originally would have led to an exterior porch situated along the south elevation. This door would have also provided direct access from the dining room to the kitchen structure on the south side of the house. Later, ca. 1876-1880s, the rear ell was extended with a two-story, frame addition that re-incorporated the kitchen into the main house. Further expansion in the 1970's resulted in the enlargement of the rear kitchen and a partial conversion of the space into a family room. The exterior, south porch was also enclosed creating a sun room. Other first floor rooms were added as well including a bathroom, closets, a stairwell and the garage.

Room 101 – Stair hall



Floor

Modern pine flooring is laid in the east west direction. The boards are marked by numerous knots and imperfections, and the finish is worn. Wood thresholds are placed at the front door, the front parlor door, and the rear door. The flooring continues under the stairway and is visible in the stair closet. The floorboards are various widths: 6 ¾", 6", 5 ¾", etc. The boards appear to be tongue and groove construction; countersunk and filled nailheads are visible at the butt joints of the boards. One single HVAC supply register is cut-in at the northern end of the floor.

Walls

All walls are plaster applied on brick masonry. Extensive amounts of paint are peeling and flaking, but most of the plaster appears to be sound. Modern gypsum board has been installed on the brick walls at the interior of the stair closet (this gypsum board was removed in the course of investigative demolition). An area of exposed brick at the south wall under the stair (visible in the stair closet) suggests that the area under the stair was not finished as a closet originally. Moisture damage is visible at the plaster on the west wall, north of the door opening. A crack in the plaster is visible above the west corner of the front parlor door opening.

The stair stringer wall is formed by a series of horizontal flush boards. The boards appear to be pine and are tongue and groove. The board widths vary, and include boards that are 9 ½" wide and those that are 7" wide. The boards maintain a tight fit and the seams are not marked by gaps.

A surface-mounted conduit and a surface-mounted switchbox for the lights are positioned on the west wall.

Ceiling

The ceiling consists of plaster on wood lath. The plaster is characterized by a textured finish - it is unknown if the textured finish is part of a whole-scale plaster replacement, or if it was added as a skim coat over the original plaster, perhaps as a means of concealing cracks. The plaster that is used at the ceiling under the stair landing has a flat finish and is marked by several hairline cracks. The hall ceiling is in generally fair condition, but holds some hairline cracks. Modern surface mounted conduit is mounted to the ceiling and feeds a modern pendant light at the western end.

Woodwork - includes baseboards, doors and door trim, and the staircase

Baseboard: The baseboard is 6 ½" high and is detailed by a stepped-back cap. The base appears to be a one-piece baseboard. The baseboard is painted and extends around the perimeter of the room, as well as following the slope of the stair up the south wall. A single turned-wood doorstop is placed on the baseboard on the north wall. The baseboard at the stair stringer wall holds a tapered cap and may be a two-piece unit; this design is unique to the stringer wall and is not represented elsewhere in the house.

Door Trim: The door trim is similar at all of the doors in the hall, with the exception being the door under the stairs that provides access to the stair closet. The door trim is 5 ¼" wide (varies by ⅛" +/- in most areas) with a 1 3/8" reveal band around the door openings. The door trim is placed on 6 ½" high plinth blocks and is detailed with plain (blind) corner blocks at the upper corners of the doors. The door trim is flat, and all trim elements are painted. The door to the stair closet is trimmed with plain flat boards (4 ½" +/- wide) that are visually part of the stair's stringer wall trim design.

Doors: The three major access doors in the hall are detailed by wide wood thresholds. The edges of the thresholds are beveled.

The hall's front door is located on the west wall and is part of an arrangement with sidelights and a transom light. The sidelights are positioned above raised panels, which display wood pegs used at the joints of the stiles and rails of the panels' frames. The joints are marked by separation of the seams, and water damage and wood deterioration is evident at the bases of the sidelight panels on the bottom rails. The sidelights and transom light are largely modern installations and consist of a single sheet of glass mounted behind wood muntins at the house's exterior. Wood dowels are visible at the joints of the transom frame. The glass at the transom is cracked, and some separation in the joints of the transom frame is visible. Modern Plexiglas panels have been installed over the exterior surfaces of the sidelights and transom. The door unit is a modern six panel wood unit with brass hinges and a modern doorknob. A modern metal doorknocker is positioned on the door's exterior surface. The door is hinged on its south edge; the door frame exhibits two previous hinge mortises that have been patched. A repair patch is visible below the existing latch mortise on the north side of the frame.

The exterior surfaces of the front door and sidelight/transom assembly are marked by excessive paint loss, and the wood of the door threshold is severely deteriorated. A modern aluminum storm door with a screen panel is placed at the exterior.

The hall's rear door is placed under the stair landing and originally provided access to the exterior. The door unit appears to be a late 19th century replacement and may have been installed during renovations that also replaced the original first floor windows with the existing two-over-two sash

windows. The door unit is wood, and holds a large glass light in the upper portion. The lower portion of the door is detailed with two vertical panels. The door is hung on two brass ball-tipped hinges and is fitted with metal knobs and metal escutcheon plates. The door is hinged at the north side, and the frame exhibits two previous hinge mortises that have been filled. There is some separation at the seams in the door, but its overall condition is good. Evidence of a stained and varnished finish is visible under the door's existing paint. The wood frame at the door's deep east reveal is detailed by a beaded edge. A one brick, splayed brick arch tops the door opening; an area of mortar loss is visible at the south side.

The closet under the stair is accessed by a single door, composed of horizontal boards and hinged on the south side. An approximately 6-inch wide board finishes off the door frame on this same side and provides anchorage for the door's two butt hinges. These hinges are fastened to this board with eight screws each. There is no such trim board on the doors north side. Instead the door terminated directly into the wall. Beveled trim placed along the outside of the door provides some additional decoration and matches the trim used on the staircase. Below the door, on either side, as what appear to be small blocks, giving the appearance of plinths found on door surrounds throughout the rest of the house. A single faceted-glass cabinet knob is used for the closet door knob, and there is no latching device visible. The vertical batten is 12" wide, and holds circular saw marks and a wane along one side.

Staircase: The stairway rises along the hall's south wall to a landing, where it turns and ascends along the north wall to the second floor. The initial flight holds twelve risers, and the upper flight holds three. The treads are 12" deep with a shallow nosing (approximately ⅝"), and the risers are 8" high. Two square balusters are set in mortises on each tread, and the ramped wood handrail has a rounded top and flat bottom in cross-section. Turned wood newel posts support the handrail and utilize a profile often seen in Greek Revival residences, but which are given individuality through their unorthodox attenuated proportions. The newel posts that are positioned at the landing and at the second floor level are finished with decorative drops at the base. The handrails and newel posts are stained and varnished, while the treads and risers are painted. The lower two treads on the stair's initial flight are not painted. The stair landing fascia is plain but holds some simple wood trim pieces. The stair railing at the second level is terminated at the hall's north wall, with a plain rectangular wood half-post with a pilaster cap. Various infilled areas at the connections in the lengths of the stair railing may conceal metal screws, as one screw head is visible at the top section of the stair railing.

The wood floor of the stair landing is detailed with a painted border with radius corners. The underside of the stair (visible in the stair closet) is unfinished. The visible stair stringers are characterized by circular saw marks, and the stair assembly appears to use cut nails.

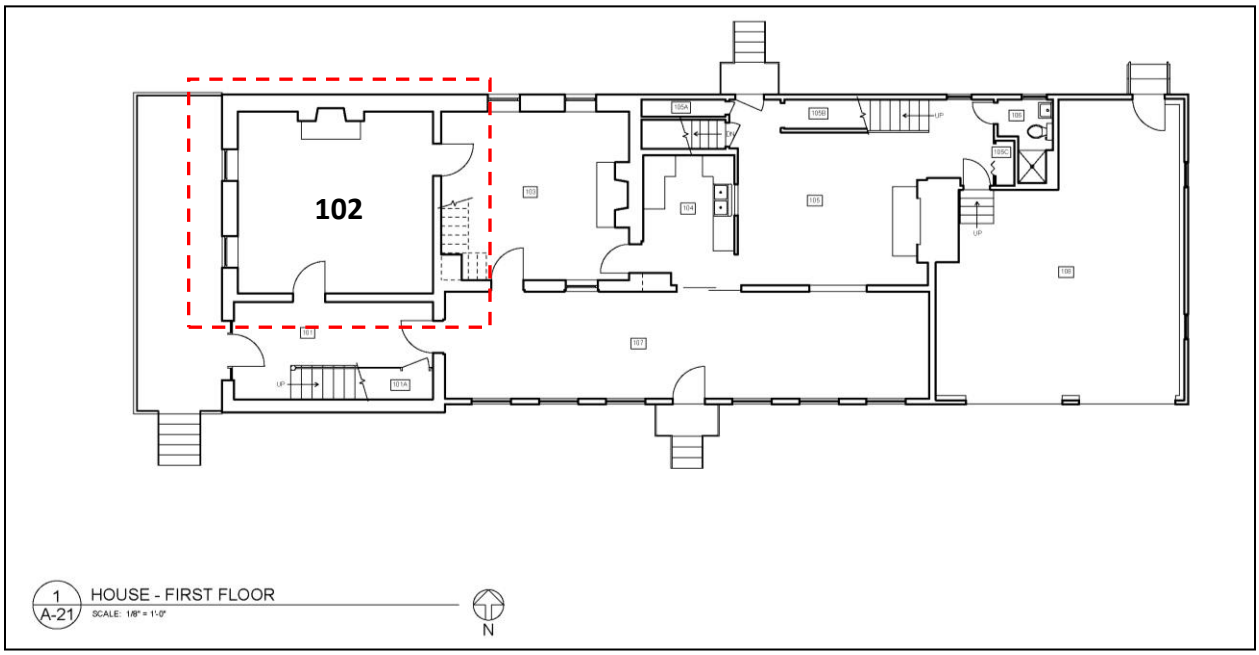
Room 101 - Stair Hall Character Defining Features:

- Wood floor
- Plaster walls and ceiling
- Wood stair stringer wall
- Baseboards
- Door trim
- East door and hardware
- Staircase closet door and hardware
- Staircase and railings
- Entrance door assembly: sidelights, transom, wood door trim, sidelight panels

Figure 56: The front entry hall and primary stair with overshot rail and barrel newel post. The door towards the rear is a later 1870s-1880s update, but the opening is original to the 1850s.

Figure 57: The front entry of the Bowman-Hite farmhouse. The door is a later 20th century replacement, but much of the interior surround, including the sidelights and transom, are original.

Room 102 - Front Parlor



Floor

The floor is composed of modern pine boards, which are laid in the north-south direction. The boards range in widths between 5 ½" and 4 ½", and are characterized by numerous knots and other imperfections. The boards are given a light finish, which is in fair condition, and displays some evidence of wear, scuff marks, and scratches. The floor boards in front of the fireplace hearth and near the room's west wall exhibit a slight degree of cupping. A modern HVAC supply vent is cut in the floor at the west side of the room.

Walls

The south and east walls of the room are composed of plaster on masonry. The north and west walls consist of modern gypsum board on 2x4 wood furring, which has been applied over the original plaster-on-masonry walls. The chimney breast on the north wall is plaster on masonry.

North wall - the north wall is characterized by the fireplace, which is centered on the wall. The fireplace and chimneybreast are flanked by modern wood shelving units. A painted metal cover is placed to seal the stovepipe hole in the chimneybreast. Paint is flaking and peeling at the upper portions of the chimneybreast.

South wall - the plaster on masonry south wall exhibits diagonal cracks above the corners of the door to the stairhall. Some paint loss is evident along the upper portion of the wall at the west corner. Lengths of surface mounted conduit are placed along the wall and feed a surface-mounted outlet box and light switch box.

East wall - hairline cracks are visible in the plaster of the east wall above the door to the dining room. Slight paint delamination and flaking is evident as well. A vertical hairline crack is visible above the baseboard at the south end of the wall. Surface mounted conduit, outlet boxes, and light switch boxes are present on the wall.

West wall - the gypsum board surface of the furred-out west wall is in fair shape, with some peeling of the drywall tape visible at the wall's junction with the plaster south wall. A single recessed outlet is positioned near the center of the wall.

Ceiling

The ceiling is composed of plaster on wood lath. The plaster has been given a slight knock-down texture, which may have been applied to the original plaster in order to conceal cracks; alternatively, the plaster finish may not be original and may have been installed as part of one of the house's renovations. There is no central ceiling light fixture, but a patch is evident at the center of the ceiling where one may have been located. The ceiling is marked by several hairline cracks, but appears to be in good condition.

Woodwork - includes baseboards, doors and door trim, windows and window trim, and the fireplace mantle

Baseboard: The baseboard is roughly 8 ½" high and is detailed by a bead at the top. The base appears to be a two-piece baseboard and is painted. The baseboard extends around the perimeter of the room and exhibits several cuts in its lengths: one cut is placed at the north end of the west wall, and one is located at the southwest corner. Sections of the base have been cut-out at these locations and replaced with non-matching lengths of base. It appears that the original base was removed and then reinstalled on the new furred out wall at the room's west side. A single turned-wood doorstop is placed on the baseboard on the south wall.

Door Trim: the door trim is consistent throughout the front parlor. Moulded casing is used and is joined by patera at the corners. The door trim is 7" wide and is positioned on plain plinth blocks, which are the same height as the baseboards. Wood thresholds with beveled edges are placed at each door opening. The door trim is sharp and crisp, with a decidedly "new" appearance. There do not appear to be many paint layers on the trim pieces.

Doors: doors are placed on the south and east walls, and provide access to the stair hall and dining room, respectively. The doors are wood and utilize a typical Greek Revival panel pattern where two vertical raised panels are positioned side by side. Mortise and tenon joints are visible at the doors' stiles and rails and are secured through the use of wood dowels. Both door units are currently painted, but the door trim that is visible under the missing lock receiver at the dining room door displays evidence of wood stain or a wood- grained finish. Both doors are hung on button-tip hinges and are fitted with surface-mounted rim locks and porcelain knobs. The hinge locations on each door appear to be original. The door at the dining room exhibits a series of vertical scratches at the lock stile, similar to what one would see on an exterior door where a pet scratches to be allowed inside (this scratching pattern is visible on the dining room's south door, which originally provided access to the outside). The wear pattern may indicate that this door was originally used as an exterior door, and may have been removed from the house's original front door opening.

Fireplace mantle/fireplace: the firebox is accented by a typical Greek Revival style wood mantle. The mantle composition consists of two plain tapered pilasters that rise to support a wide, single board fascia. A single wide mantle shelf is placed at the top. The fireplace is accented by a modern raised marble hearth and matching marble fireplace surround. The fireplace is sized appropriately as a wood burning fireplace, rather than coal-burning. The bricks of the interior of the firebox are severely deteriorated.

Windows and Window Trim: two windows are placed on the room's west wall and consist of two-over-two wood sash units. The windows appear to be single hung units (with the upper sash fixed in place while the lower sash is operable), as the windows lack any pulley and weight mechanisms. The window units are set in deep reveals, due to the west wall being furred-out with modern framing and gypsum board. Wood trim pieces have been added at the reveals to accommodate the new depth. The window trim is formed by moulded casing that is joined by patera at the corners. A length of wood trim forms the window apron under the wood sill. The window trim is 7" wide and is painted; however, the trim appears to be very crisp and sharp, and does not appear to hold many paint layers. A modern wood louver and vent screen assembly has been installed at the south window opening.

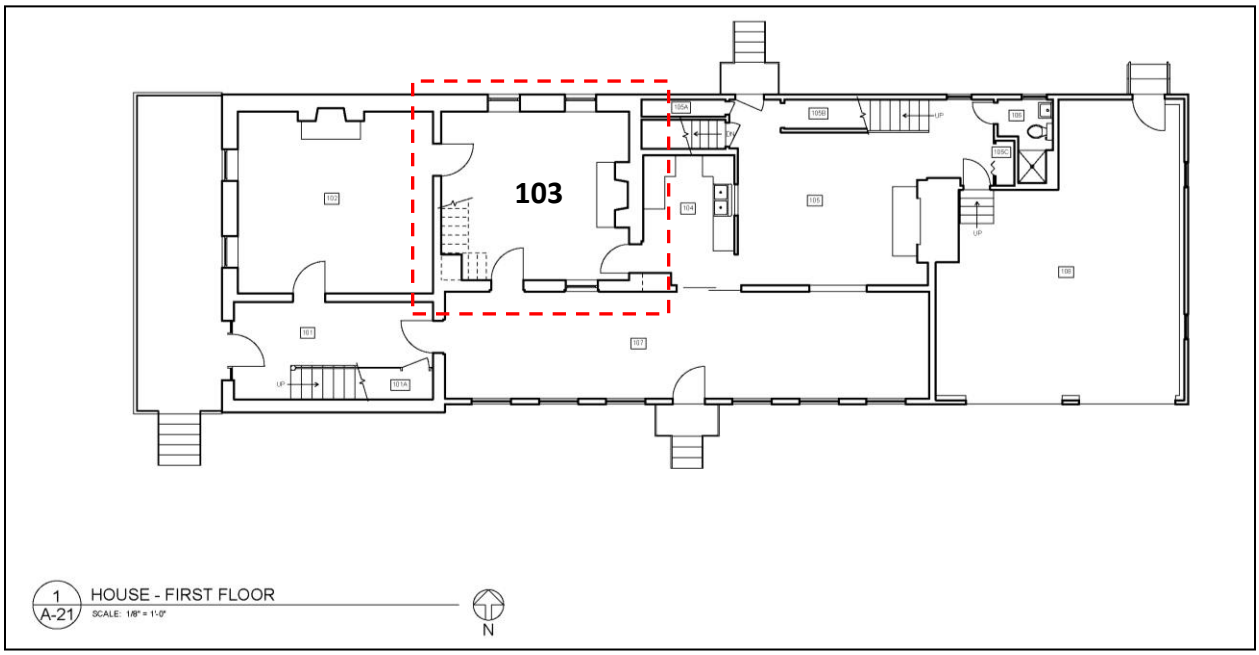
Room 102 - Front Parlor Character Defining Features:

- Wood floor
- Plaster walls and ceiling
- Baseboards
- Door trim and window trim
- Doors and hardware
- 2-over-2 wood sash windows
- Fireplace and fireplace mantle

Figure 58: The image above is of the first floor parlor and shows the 1850s mantle. Later, during the Whitham era, the raised hearth was installed and marble veneers applied.

Figure 59: The patera and decorative casings found in the front parlor are found nowhere else in the house.

Room 103 - Dining Room



Floor

The floor of the dining room is formed by lengths of pine boards, which are laid in the east-west direction. The boards are characterized by numerous knots and a light finish. Extensive surface damage is visible, presumably from termite infestation. Wide gaps between certain boards appear to be patched with caulking or similar filler. The floor surface and structure slopes downward slightly in front of the fireplace's raised hearth at the east side, and has sustained damage in the area in front of the hearth. Gaps between the boards are visible at the room's southern end, adjacent to the door to the south. Two HVAC supply registers have been installed at the north and south sides of the floor, and a return grille was placed at the southwest corner, adjacent to a corner duct chase. The modern duct chase was removed in the course of investigative demolition.

Walls

The room's south, east, and west walls are composed of plaster on brick masonry. The north wall has been furred out with modern 2x4 framing and gypsum board; the original plaster on brick finish survives under the modern framing. A modern duct chase, framed with 2x4 wood and gypsum board, was located at the southwest corner. The duct chase was removed in the course of investigations. All walls are covered with modern wallpaper.

North: the north wall has been furred out with modern 2x4 wood framing and gypsum board. The gypsum board cladding stops short of the ceiling, due to the presence of a (now removed) modern suspended ceiling. The wall is marked by water stains and holds a single recessed electrical outlet.

South: the south wall is marked by water stains along the seams of the wallpaper. Surface mounted conduit and a surface-mounted outlet box are present on the wall.

East: the east wall holds the fireplace and the chimneybreast. Plaster damage is evident above the wall's south door, which leads to the existing kitchen. A significant portion of the wall at the northern side is concealed by modern wood cabinets and shelving. A stovepipe hole in the chimneybreast is covered by a metal plate. Water stains are visible at the seams of the wallpaper, and surface-mounted conduit, outlet boxes, and light switch boxes are present on the wall.

West: the west wall holds evidence of a secondary stair that provided access to the east bedroom on the second floor. The stair has been removed, but evidence of the exposed brick wall where the stair stringer was positioned indicates that this stair was an original feature, and was not added later. The stair descended to the south to a small landing, where it turned to the east and continued its descent. An area of missing plaster on the south wall suggests that the stair was enclosed, with the underside of the stair being plastered. A single angled plaster lath remains at the ceiling level to validate the plastering of the stair's underside. Areas of painted plaster visible at the south and west walls further suggest that the stairs were enclosed. Lengths of surface-mounted conduit and a light switch box are present on the wall. A thermostat was mounted on the north wall of the modern duct chase, which was removed in the course of investigations.

Ceiling

The ceiling is composed of plaster on wood lath, and is covered with patterned ceiling paper. Ends of the wood lath are clearly visible along the edge of the infilled stairwell at the west side of the ceiling. The wood lath that is visible appears to be riven lath. A segment of painted plaster at the room's southwest corner is dislodged and is in danger of failure. Significant plaster cracks are visible and extend from the northeast corner of the infilled stairwell to the north wall. The stairwell has been infilled with modern wood joists and a sheet of plywood. There is no finished ceiling material at the infilled stairway, indicating that the stair survived until the modern suspended ceiling was installed. Water stains are visible on the ceiling paper, and the ceiling is marked by numerous wires and attachments for the missing suspended ceiling grid. A junction box for a ceiling fixture is located at the center of the ceiling; the existing modern chandelier fixture is wired to a length of cord that is stapled to the ceiling.

Woodwork - includes baseboards, doors and door trim, windows and window trim, and the fireplace mantle

Baseboards: the baseboard in the dining room is a one-piece base unit detailed by a stepped cap. The base is 6" high and extends around the room in the visible areas - the northern portion of the east wall is concealed by modern cabinetry. The base is painted.

Door Trim: the trim at the south and west doors consist of plain trim bands joined by blind corner blocks. The trim is set on plinth blocks that are the same height as the baseboards (6" tall), and the trim is 6" wide; one of the plinth blocks at the south door is cracked. The south door is bordered by a band of beaded brick mould at the exterior of the opening. The door opening is capped by a splayed brick jack arch. The door to the kitchen at the east side of the room is set in plain trim with no corner blocks; instead, the trim is mitered at the corners. The trim extends to the floor without plinth blocks. Similarly, the trim at this door is 6" wide also. The east and west doors are given wood thresholds with beveled edges, and all door trim is painted. There do not appear to be significant paint layers on the door trim.

Doors: the south door is a typical two-panel Greek Revival style door where two long vertical panels are set side-by-side. Mortise and tenon stiles and rails border the raised panels, and are connected with visible dowels. Some separation at the seams of the door has occurred. The door is mounted on button-tip hinges that are set in their original mortises and are marked by rust. Additional hardware consists of a surface-mounted rim lock with porcelain knobs and a surface-mounted receiver. A modern deadbolt is present on the door as well. The door is hinged at the east side, and the lock stile is marked by deep vertical scratches, as would be left by an animal scratching at the door. The lower portion of the adjacent exterior reveal and brick mould is similarly marked. The east door provides access to the kitchen and consists of a four-panel wood unit. The door is fitted with hinges in their original mortises and a surface mounted rim lock with porcelain knobs and a surface-mounted receiver. The panels in the door are raised, and there is some separation visible in the seams of the door's stiles and rails.

Windows and Trim: two windows are positioned on the dining room's north wall, and one is located on the south wall. Each window is a two-over-two wood sash unit, and the windows appear to be single hung with the top sash fixed, as there are no pulleys and weights visible. The muntin design of the dining room windows differs from that of the front parlor windows, in that the dining room muntins are ⅞" wide at the interior, compared to the 1 ¼" wide muntins in the parlor. The windows are framed with plain trim joined by blind corner blocks; the trim measures 6" wide and includes a band of plain apron trim below the window sills. The south window utilizes deep reveals and plain reveal boards; the reveals at the north windows have been increased in depth due to the furring out of the north wall. The north window reveals have been augmented with new trim to accommodate the increased depth. A modern wood louvered vent and screen panel has been installed at the northeast window for ventilation. Both of the north windows are fitted with modern exterior aluminum storm windows. The glass at the northwest storm window is cracked.

The exterior brickmould woodwork at the south window is distinguished by a beaded edge. Mortises for the window's now-missing shutter hinges remain visible in the brickmould, and a metal shutter catch is present on the window's exterior sill. The trim and window sill of the south window are in excellent condition.

Fireplace mantle/fireplace: the fireplace is positioned at the east side of the room and is framed by a typical Greek Revival style wood mantle. The mantle is very wide and utilizes a tapered pilaster at each end, which rise to support a wide board fascia. The mantle fascia is capped by a broad mantle shelf, which is formed by a single thick board. The fireplace is fronted by a new raised hearth, which is finished with marble to match the modern marble fireplace surround. The floor of the firebox has been built-up to be equal with the new height of the hearth; the firebox appears to be in fair shape, and the flue has been sealed with insulation, some of which is failing and falling into the firebox. The wood mantle is painted.

Room 103 - Dining Room Character Defining Features

- Wood floor
- Plaster walls and ceiling
- Baseboards
- Door trim and window trim
- Doors and hardware
- 2-over-2 wood sash windows
- Fireplace and fireplace mantle

Figure 60: The image above is of the east wall of the first floor dining room. The mantle is original to the 1850s, however the raised hearth and cabinetry are later Whitham era additions.

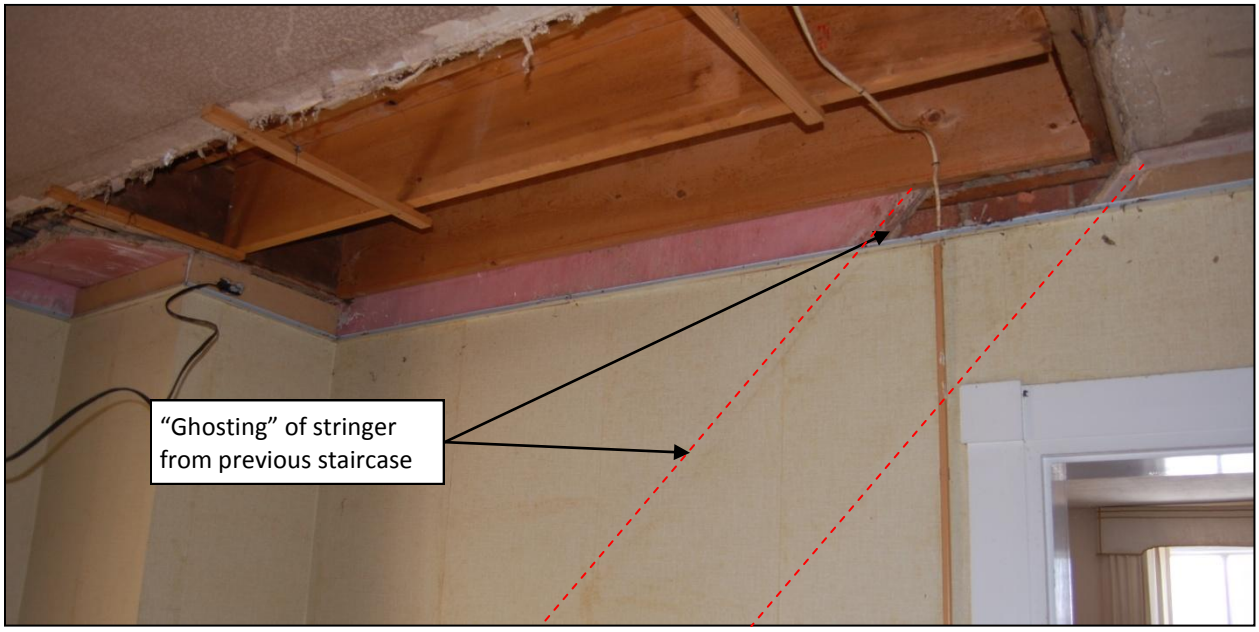
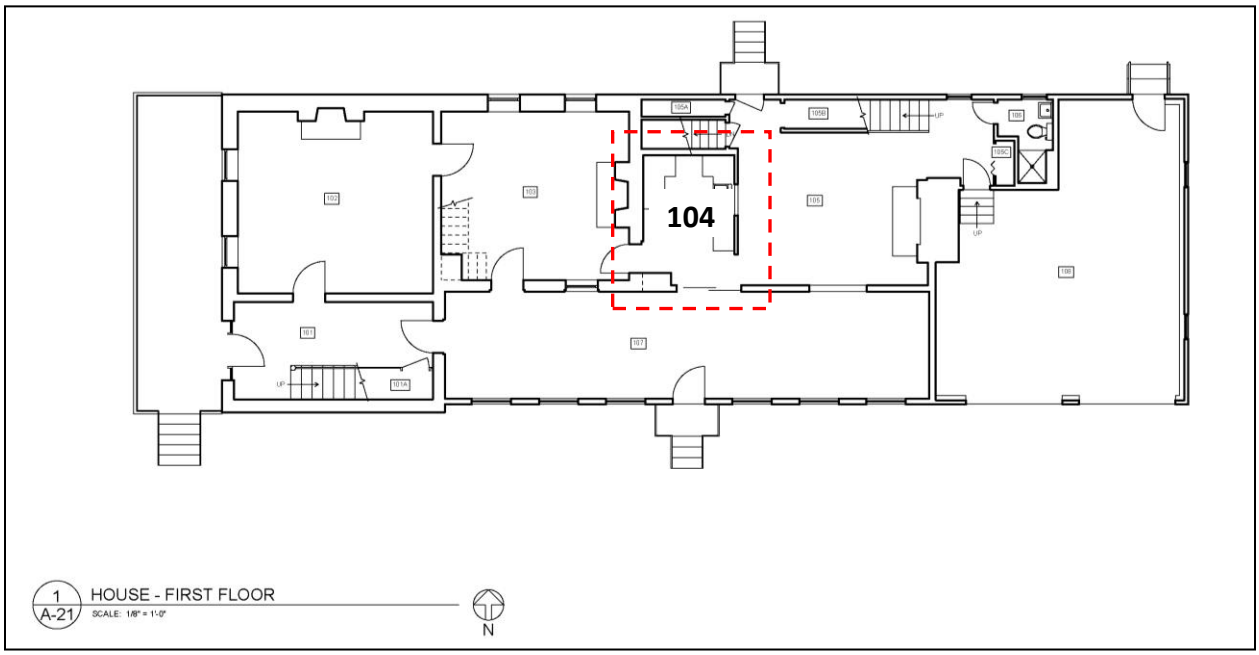


Figure 61: Concealed by a dropped ceiling for years the secondary staircase "ghost", original to the 1850s structure, can be seen in the image. The header as well as ghost marks for the stringer and landing (not shown) still exist providing a good idea of pitch and direction.

Figure 62: The image above shows markings in the original plaster left behind when the window casings were removed and the wall furred out. Corresponding nail holes, as well as shape and size, confirm the existing window casings as the originals.

Room 104 – Kitchen



Floor

The floor of the kitchen is composed of modern sheet vinyl, which is in poor condition. The sheet vinyl appears to be laid over a plywood subfloor, which was installed throughout the frame ell over the original wood floor.

Walls

Modern gypsum board is used to clad the walls of the kitchen. The north and south walls consist of gypsum board that has been installed over the frame ell's original beaded-edge wall board cladding. This material has been revealed in the partially-removed modern duct chase at the room's southwest corner. The original wall boards are installed horizontally. The room's east wall consists of gypsum board over modern framing, while the west wall is composed of gypsum board that has been installed on wood furring strips. The furring strips have been installed over a historic plaster finish, which was placed over the house's original brick exterior east wall when the frame ell was constructed. The room's board wall finish transitioned to the west wall's plaster finish with a strip of quarter round wood moulding.

Electrical outlets and light switches are present on the east and west walls, and an HVAC supply grille is placed on the north wall of the duct chase.

Ceiling

The modern suspended ceiling in the room has been removed, exposing a surviving fragment of the original ceiling finish. Tongue and groove beaded-edge ceiling boards are used to clad the room's ceiling; the boards are 2 ½" wide and are laid in the east-west direction. Lengths of wiring and electric cable are

mounted on the surface of the ceiling. Light fixtures consist of modern fluorescent lights, which were covered by the suspended ceiling's system of translucent panels. A gypsum board soffit extends around the perimeter of the room's ceiling.

Woodwork - includes baseboards, door trim, and cabinets.

Baseboards: Modern ranch-style wood base is present at the room's duct chase at the southwest corner. Modern architrave wood trim is used at the sliding glass doors on the south wall and at the pass-through opening on the east wall. Plain wood trim and wood reveals are used at the west door that allows access to the dining room. Modern wood cabinets with laminate countertops are present in the room.

Plumbing Fixtures

A modern stainless steel sink is located on the east side of the room; an under counter dishwasher is placed adjacent to the sink.

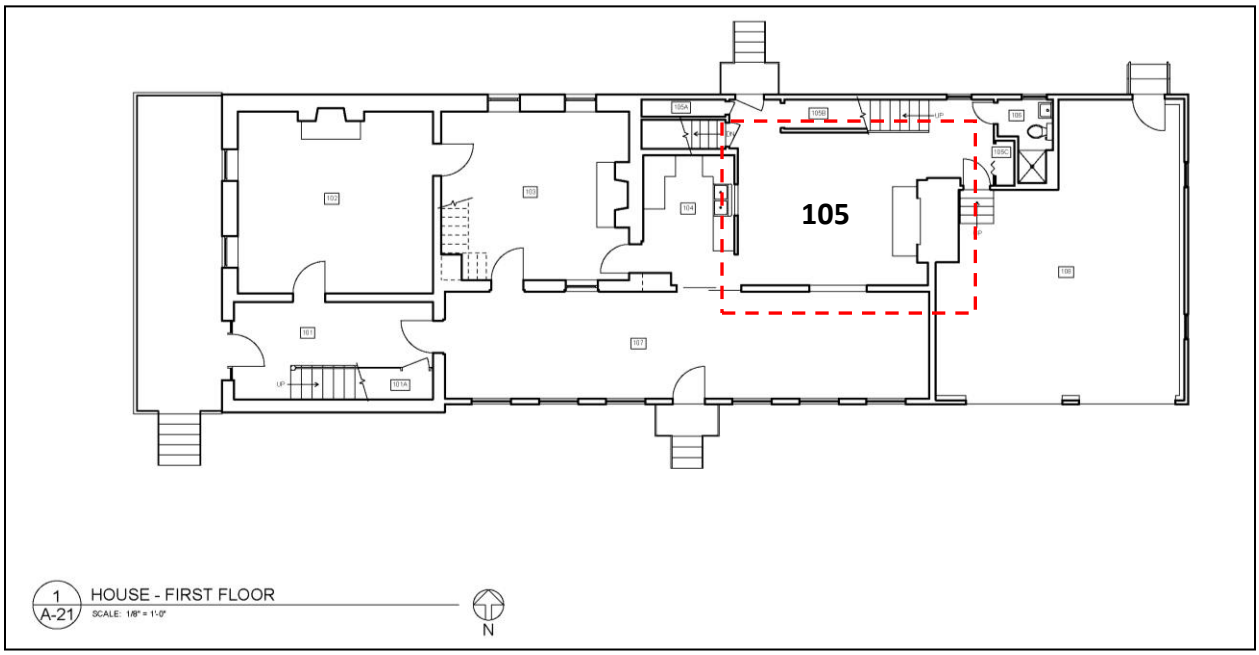
Room 104 - Kitchen Character Defining Features

- 1870s-80s horizontal wall boards and ceiling
- 1870s-80s Wood flooring
- Wall plaster finish

Figure 63: The north wall of the now encapsulated 1876-1880s frame addition. Originally this kitchen window would have looked outside. Note the yellow horizontal boards as well as the boards used to clad the ceiling.

Figure 64: Found beneath removed ductwork, the original horizontal bead board is in good condition and maintains its yellow paint color.

Room 105 – Den



Floor

The flooring consists of modern sheet vinyl, which is laid over two layers of plywood subfloor. The plywood has been placed over the original wood floor in the portion of the room that remains from the historic frame ell footprint. This area corresponds to approximately 75% of the floor area. The original wood flooring is laid in the east-west direction and consists of tongue and groove boards that vary between 3 ½" and 4" in width. The floor boards do not appear to retain a finish. An area of modern square ceramic tiles are laid over the sheet vinyl at the west side of the room's fireplace. Remnants of deteriorated carpet padding are present throughout the room on the surface of the sheet vinyl. A series of modern HVAC floor grilles are present at the north and south sides of the room.

Walls

Modern plywood paneling is present on all of the walls. The paneling at the south wall and at a portion of the east wall is applied over the original framing of the rear frame ell. The north and east walls are composed of paneling and modern wood framing. Modern crown moulding is used at the paneled walls. Electrical outlets are present on all of the walls, and an HVAC grille is positioned on the west wall.

The walls of the room's east closet are composed of modern gypsum board.

A section of modern paneling has been removed at the room's southeast corner, exposing a surviving fragment of the original wood wall framing of the frame ell. The revealed framing is circular-sawn and is reinforced by an angled downbrace at the corner. The wood studs are 4"x1 ¾" in size.

Ceiling

The ceiling of the den and the east closet is composed of modern gypsum board, which is painted. A crack between seams of the gypsum board sheets is evident at the center of the room. A central ceiling fan/light combination fixture is present.

Woodwork - includes baseboards, doors and door trim, windows and window trim, and stairs.

Baseboards: Modern ranch-style wood base is present around the perimeter of the room. The base is 3 ½" high. A modern two-part base with cap is located at the stair stringer wall. The two-part base is 4" in height.

Doors and door trim: The doors are uniformly trimmed with modern architrave wood trim. Doors on the west wall consist of a wood six-panel unit at the basement stairs and a narrow flush wood door at the room's west closet. Both doors are painted and have been severely stained. Metal hardware is present at both door units. The north wall holds a wood and glass exterior door; the door consists of a nine pane, true-divided light window that is placed over three wood panels in the lower portion. A metal storm door is placed at the exterior of the door opening, and the door is secured by metal hardware. A plastic laminate accordion-style door is located at the closet under the staircase. A six-panel wood door is placed at the east wall and provides access to the bathroom; a similar six-panel door is placed on the south wall and provides access to the garage. The room's east closet is closed by a plastic laminate accordion-style door. The door to the garage is stained, scratched, and chipped.

Stair: The modern stair in the den was installed in the course of the 1971 renovation. The stair rises to the second floor along the room's north wall and is characterized by tapered round balusters and a moulded handrail. The handrail is anchored by a turned wood newel post, and a wood handrail is placed along the north wall on metal brackets. The stair components are stained and varnished. Carpet pads and nailing strips are secured to each of the steps; the carpeting has been removed. Thin plywood cutouts are used as decorative brackets along the stair stringer; like the balusters and handrail, the brackets are stained and varnished. A small wood access door is placed at the stair's stinger wall and provides access to the closet under the stairway.

Fireplace

The fireplace is located at the east side of the room and lacks a mantle or a mantle shelf. The fireplace is composed of brick that has been heavily painted and is fronted by a raised hearth. The opening of the firebox is large and measures 4'-4 ½" W x 2'-11" H. A steel lintel is used to support the bricks at the head of the firebox opening, and the firebox may be lined with modern firebrick. Firebrick is visible at the sides of the firebox opening. The hearth is composed of brick pavers that are raised on unpainted bricks, which appear to be a mixture of modern brick and older, salvaged brick. The surface of the hearth is raised 1'-3 ⅝" above the floor and is situated above a storage cabinet. Two small wood doors provide access to the storage area under the hearth. The brick pavers of the hearth are in fair shape, but the mortar is cracked and loose. The opening of the firebox is sealed with a sheet metal panel, which has been outfitted with a stovepipe hole. Plastic sheeting has been used to seal the stovepipe opening.

The exterior chimney that serves the den fireplace is composed a combination of brick and limestone. The lower portion of the chimney is formed by stone blocks set in regular courses in an ashlar pattern. The stone blocks average 4 ½" to 5" in height. The brick portion of the chimney begins approximately 6'-

9 ½" above the garage floor slab and rises in pyramid-fashion to the chimney's brick stack. The brick holds some remnants of paint, and the stone portion of the chimney has been extensively re-pointed.

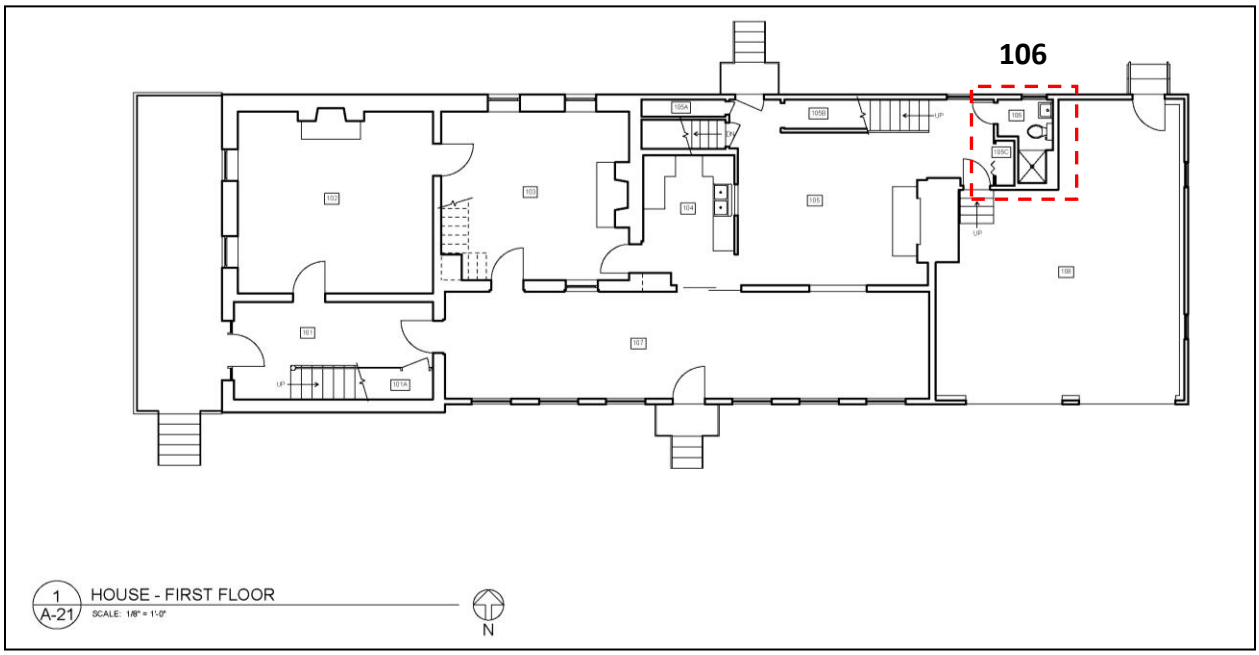
Room 105 - Den Character Defining Features

- 1870s-80s Wood flooring
- 1870s-80s Chimney (veneered)

Figure 65: The above image shows the northeast corner of the 1876-1880s frame addition. The foundation and large wood sill can be clearly delineated as can the mortise for the, now missing, corner post.

Figure 66: The southeast corner of the rear frame addition, showing components of the balloon frame construction. Despite this new technique, staggered down bracing is still used, as are larger corner posts, rather than "ganged" studs.

Room 106 - First Floor Bathroom



Floor

The floor is composed of modern sheet vinyl, which is loose and in poor condition.

Walls

The walls of the bathroom are modern gypsum board in poor condition. An electric heater is located on the north wall.

Ceiling

Modern gypsum board is used to clad the room's low ceiling.

Woodwork - includes baseboards, doors and door trim, windows and window trim

Modern ranch style base is used throughout the room; the base is 3 ½" high and is painted. A door opening is placed in the west wall and is finished with modern architrave trim. A modern double hung wood sash window is placed on the room's north wall. The window utilizes insulated glass and was originally fitted with interior grilles to give the appearance of a 6-over-6 window; the grilles have been removed. An exterior screen is placed at the window in lieu of a storm window unit. Modern architrave trim is used to finish the opening, and the window sash utilizes a metal sash lock at the meeting rail and a metal sash lift at the bottom rail of the lower sash.

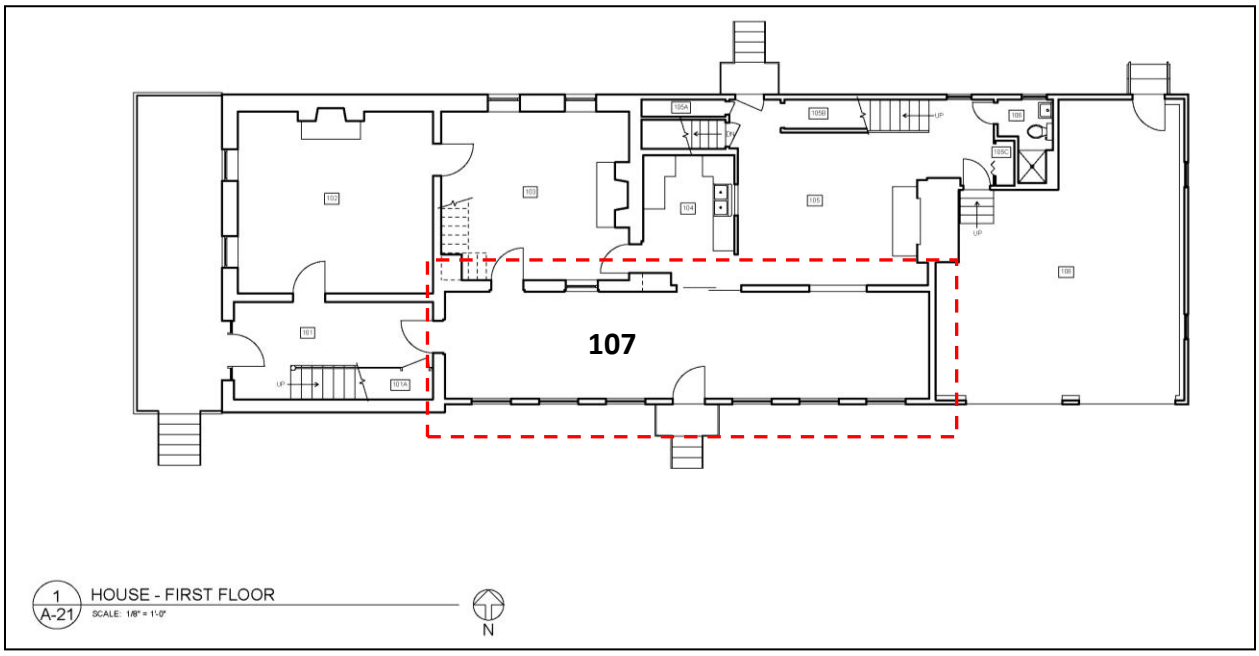
Plumbing Fixtures

A modern lavatory with a wood cabinet vanity is placed on the west wall. A floor-mounted toilet and a prefabricated shower unit with metal handrails are located in the room. A surface-mounted metal medicine cabinet with an integral soffit light is placed above the lavatory.

Room 106 - First Floor Bathroom Character Defining Features

- None

Room 107 - First Floor Long Room



Floor

The floor of the first floor long room consists of one layer of particle board that is laid over a layer of plywood. Residue from the deteriorated carpet padding remains from the wall-to-wall carpeting, which has been removed. Lengths of carpet tack strips are present around the floor's perimeter. A section of plywood and particle board has been removed near the center of the room for the crawl space investigation.

Walls

South - the south wall is formed by modern gypsum board. Cracks in the gypsum board are visible above the exterior door, as well as above and below each of the windows along the wall's length. Electrical outlets and light switch plates are present along the wall.

East - the east wall is clad with modern gypsum board. Separation is evident at the south corner where the wall joints the long south wall. A degree of separation at the ceiling joint is also evident. Electrical outlets are present on the wall.

West - the west wall consists of painted brick. This is an original exterior wall of the original brick portion of the house. The wall is laid in what appears to be 1:5 Common Bond. The brick is heavily painted and exhibits extensive mortar repair and poor re-pointing. An original door opening in the wall provides access to the east end of the stair-hall. Cracks extend through the mortar joints from the corners of the door head. A section of mortar is missing at the south side of the door's brick jack arch. Additional cracks are visible around the door's brick mould. Surface-mounted conduit and a light switch box are mounted at the south side of the door opening.

North - the north wall is composed of two sections: the western portion of the wall is brick, and is formed by an original exterior wall of the house's original brick structure. The eastern portion of the wall is clad with modern gypsum board over the siding of the 1870's frame rear ell.

The brick portion of the north wall is composed of painted bricks laid in 1:5 Common Bond. An original door opening and window opening are present on the wall and serve the house's original dining room. The brick wall exhibits extensive areas of mortar repair and poor re-pointing. The loss of mortar is evident between the brick mould at the door opening and the surrounding bricks. Cracks have formed at the joints between the brick mould and the bricks at the adjacent window as well.

The eastern portion of the north wall is clad with gypsum board that has been installed over the surviving fragments of the clapboard siding of the frame rear ell. The gypsum board is placed on furring strips that have been nailed over the painted siding, and portions of the gypsum board have been removed to expose the siding and remnants of window openings beneath. The original siding is beveled and maintains a 4 ½" exposure. The overall width of the siding boards is 5 ⅜", and the thickness ranges from ½" at the base to ⅜" at the top. A length of 5 ¼" corner trim was installed to form the connection between the frame rear ell and the brick portion of the house. The wood siding has been cut to accommodate outlet boxes along the long porch. The reverse-side of the siding shows it to be very regularly-cut and machined product. The framing of the rear ell holds visible circular saw marks and is secured with round-headed machined nails. The construction techniques of the framing and siding indicate that the frame rear ell does not pre-date the brick portion of the house.

Vertical cracks are visible in the gypsum board above the modern door and pass-through window in the eastern portion of the north wall.

Ceiling

The ceiling is composed of modern gypsum board. The material is damaged and exhibits extensive separation and cracking at the seams and joints. Two modern recessed lighting fixtures are placed in the ceiling, as well as a single surface-mounted fixture.

The ceiling slopes distinctly from the north side of the room down to the south side.

Woodwork - includes baseboards, doors and door trim, windows and window trim

Baseboards: the baseboard in the first floor long room is a modern one-piece base unit that is 3 ½" high. The base is painted.

Door Trim: the long porch holds two modern door openings, one at the north wall and one at the south. Both openings are trimmed with modern architrave wood trim, which is painted. Two historic door openings are present at the long porch, one on the brick west wall and one on the brick portion of the north wall. These doors are trimmed with brick mould and the trim is described in the stairhall (Room 101) and dining room (Room 103) surveys.

Doors: A set of modern patio sliding doors is present at the north wall. The doors are characterized by metal frames with single-thickness glass. The room's south door is an exterior door and consists of a modern wood six-panel door unit. Panes of single-thickness glass are set in the top two panels, and a modern metal storm door is placed at the exterior. The door is outfitted with modern hardware.

The doors at the historic door openings are described in their respective room surveys (Room 101 - Stairhall, Room 103 - Dining Room).

Window Trim: a line of six modern windows extend along the room's south wall. Each window is framed by modern architrave trim, which is painted. A modern sliding window is placed on the eastern portion of the north wall; this window is similarly framed with modern architrave trim. A historic sash window is placed on the north wall's western portion; the brick mould around this window is described in the dining room (Room 103) survey.

The eastern portion of the north wall holds the remnants of a window opening that originally served the frame rear ell. This window opening was removed and concealed when the house was renovated in the 1970's, but the opening and fragments of trim remain in place. The exterior sill was partially removed to facilitate the installation of the furring strips and modern gypsum board. The exterior trim at the window's east side is intact and is detailed by a narrow beaded edge at the window opening. A wood drip edge at the window head trim was also removed when the furring strips were installed. There is no evidence of shutter mortises or hardware at the surviving window trim. The details of the stops at the window reveal indicate that the opening originally held a single-hung sash window, where the upper sash was fixed in-place and the lower sash was operable.

Windows: six modern windows are placed along the south wall of the long porch. These windows utilize a fixed top sash and a functional awning-style lower sash. The windows are wood sash units with double-pane insulated glass; the awning sash is operated by sill-mounted cranks, two of which are missing. The awning sashes were originally outfitted with interior screens; two of the screens remain in-place. A modern louvered vent with metal screen has been installed in place of the lower sash at the window immediately to the east of the south door. The window sash that was removed for the vent installation has been retained and is stored in the room. A historic 2-over-2 wood sash window is positioned at the western end of the north wall. This window is described in the survey of the dining room (Room 103).

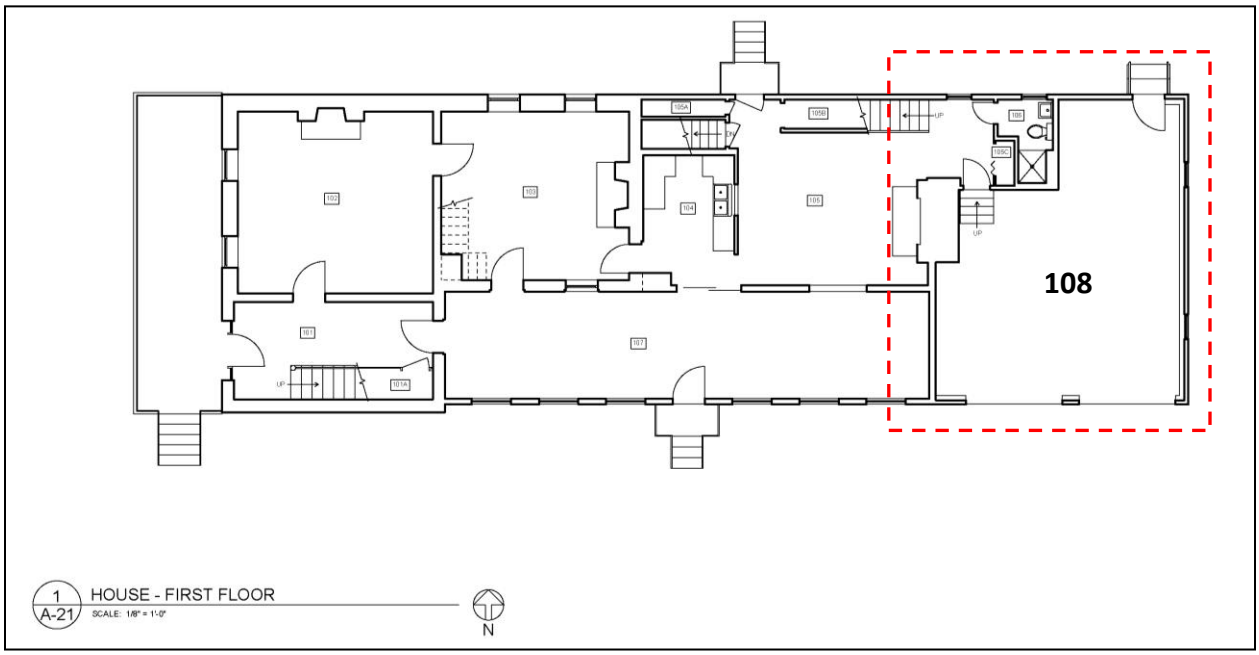
Room 107 - First Floor Long Room Character Defining Features:

- Brick walls (located at the north and west sides)
- West door (to Room 101 - Stair Hall)
- North door (to Room 103 - Dining Room)
- two-over-two wood sash window (at the north wall)

Figure 67: A view of the east brick wall of the original 1850s portion of the farmhouse. The window and door on the right lead to the rear ell dining room. Originally, this area would have been covered by a long porch. Ghosting still remains to the left of the doorway, indicating the location of posts.

Figure 68: The image shows the southeast corner of the frame addition from what would have been the exterior porch. Note the presence of the window frame. In the foreground is salvage recovered from under the cinder block front porch, now demolished.

Room 108 – Garage



The garage is located at the house's eastern end, and was constructed as an addition on the east side of the frame rear wing.

Floor

The garage floor consists of a smooth-finished concrete slab. The floor slopes to a drain that is placed in the center of the west side's vehicle bay. The slab was poured without the benefit of expansion joints, and numerous cracks have formed throughout the space. Several areas of rough-finished concrete suggest that some repairs have been made in the floor.

Walls

The walls of the garage are formed by wood framing and sheathing boards. The walls on the north, south, and east sides are characterized by exposed wood framing. The walls that frame and enclose the first floor bathroom and the adjacent closet consist of wood framing that is concealed by sheathing boards. The west wall preserves a section of the frame ell's wood clapboard siding. The wall's original corner board is visible at the south end of the wall fragment, and the painted wood clapboards are weathered. Several of the wood boards are cracked along their lengths. The west wall of the garage is also defined by the stone and brick chimney that originally was positioned at the exterior wall of the frame rear wing. The chimney is constructed of regularly-cut limestone blocks at the base, and then transitions to a rectangular brick chimneystack at the top. Rows of brick laid in a tapering stepped pyramid shape create the transition between the stone base and the smaller brick stack. The bricks retain some remnants of their earlier white painted finish. A portion of the frame rear wing's stone foundation wall is also visible at the west side of the garage. The limestone foundation blocks are roughly rectangular in shape.

The wood framing and sheathing that forms the walls of the garage are set on a base of concrete blocks. The concrete block base extends around the north, south, and east sides, as well as part of the west side of the room. The concrete block base is interrupted at the portion of the west wall that holds the historic stone foundation wall and chimney.

The house's main breaker panel is mounted on the studs of the east wall. Electrical outlets are placed at the east and west walls, and light switch-plates are positioned on the north side of the room.

Ceiling

There is no ceiling in the garage. The room's overhead joists and rafters, structured as a truss system, are visible. Two keyless light fixtures are mounted on the ceiling joists.

Woodwork - includes doors and door trim, windows and window trim, and wood shelves

Doors: two overhead rolling garage doors are located at the room's south wall. The doors are sectioned and are mounted on overhead tracks. Three glass windows are set in a row near the top of the doors, and the doors are divided into twelve panels. The west door is wracked in its opening, and the east door is marked by a broken panel.

A single flush wood door is positioned on the garage's north wall. A pet opening has been cut in the base of the door, and the door unit is secured with metal hardware and a metal barrel bolt. There is no interior trim.

Windows: two double hung wood sash windows are placed in the garage's east wall. The windows are characterized by interior grilles that simulate 6-over-6 divided light sashes. The windows utilize insulated glass panes, and are fitted with sash locks and sash lifts. The interior faces of the sash are not painted, and there is no interior trim.

Wood Shelves: two modern work tables have been constructed at the north and east sides of the garage. The tables include board tops and an intermediate wood shelf. The supports for the work tables are formed by segments of the house's historic south porch posts. The porch post segments retain their white painted finish, and are distinguished by chamfered edges. A high shelf is located along the garage's west wall. This wood shelf is supported by two full-height porch posts. These posts are notched at the top where they would have received the porch's ledger board. The posts are actually half-posts, and were positioned at the transitions between the porch and the walls of the house. One post retains ghost marks on the reverse (flat) side that indicate that it was placed against the siding at the wall of the house's frame rear wing. The other posts lack such marks, suggesting that it was positioned against the house's brick wall. Both posts are detailed by chamfered edges with diamond-shaped decorative elements at the tops of the chamfers.

Plumbing

A utility sink is mounted on the east wall, where it uses plumbing lines that also serve the first floor bathroom.

Room 108 - Garage Character Defining Features:

- 1876-1880s Exterior siding
- Re-used porch posts

Figure 69: The image above shows the large stone and brick, exterior end chimney, of the 1876-1880s frame addition, now concealed by the ca. 1971 garage.

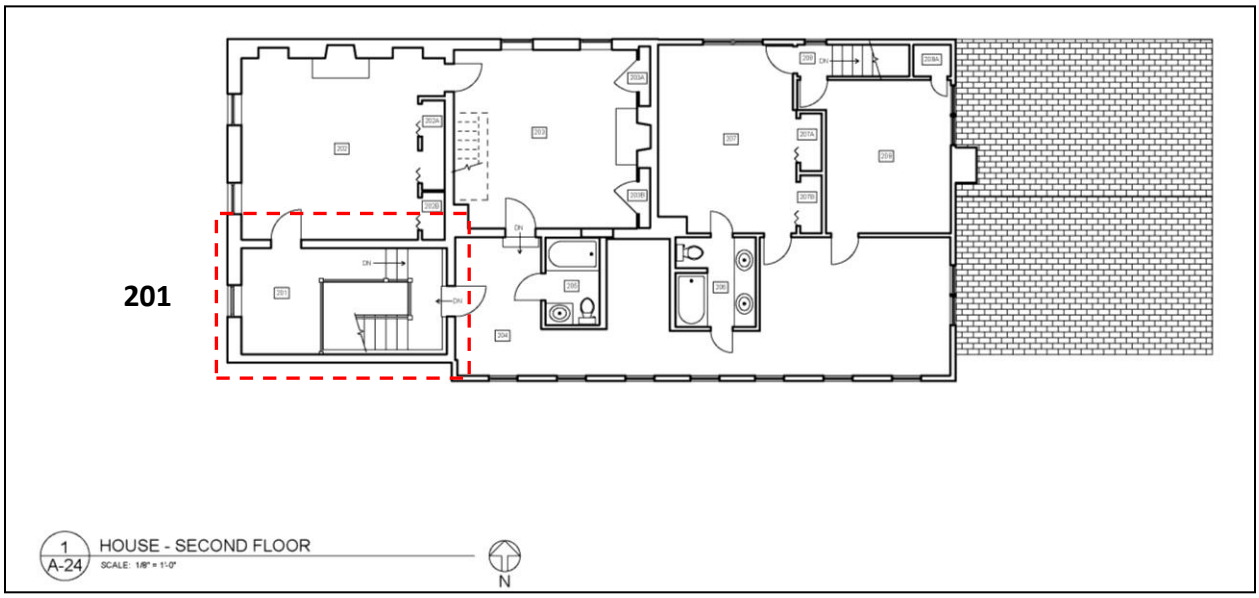
Interior - Second Floor

The second floor of the house reflects the layout of the first floor to a large degree. Two bedrooms are located above the parlor and dining room in the original house and are accessible via the original staircase. Initially separate, and accessed via two staircases, the bedrooms were connected sometime during the ca. 1876-1880s renovations. The second original staircase, connecting the first floor dining room and rear second floor bedroom, was removed during the 1970s.

When the ca. 1876-1880s, rear frame kitchen was added, the loft space above was separated from the original brick structure and was likely accessed by a ladder or set of steep stairs from the kitchen. Not until the 1970s addition was this loft space transformed into a full height bedroom connected to the main house by the encapsulation, and raising, of the one-story, south porch as well as the installation of a rear stairwell. In addition to the encapsulated porch serving as a hallway it also provided space for a laundry room and two bathrooms. Another bedroom was also added to the second floor at the far eastern end of the house.

While the second floor addition provided more space, the floor heights failed to match the original. This resulted in a series of steps from the second floor of the original brick ell down to the encapsulated second floor porch. Another access point to the encapsulated second floor porch was inserted by converting the original stairwell landing window into a door opening with a single step up.

Room 201 - Second Floor Stair hall



Floor

The floor of the second floor stair hall is formed by lengths of tongue and groove boards, which are laid in the north-south direction. The boards are characterized by various widths, ranging from 4 ¼" to 5" wide. The floor retains a painted border with radius corners that extends around the space. Residue from the deteriorated carpet padding remains from the previous wall-to-wall carpeting, and lengths of carpet tack strips are present around the floor's perimeter.

The intermediate stair landing utilizes a floor of tongue and groove boards laid in the north-south direction. A plain painted border with radius corners is present at the landing. The landing's floorboards exhibit some separation in the seams between the boards, and one board is cracked along its length.

Walls

The walls at the second floor stair hall consist of plaster on masonry at the north, south, and east walls. The west wall surface is formed by modern gypsum board that has been installed over 2 x 4 wood framing; the original plaster on brick finish survives under the modern framing. A decorative stencil design is visible under a later layer of paint on the three visible plaster walls. The stencil is placed high on the wall near the ceiling.

The transition point between the thick brick walls of the first floor and the thinner brick walls of the second floor is visible at the stair landing. The transition point is trimmed with wood trim to match the woodwork around the stairwell opening. The trim band was cut on the east wall when an original window was extended and converted to a door opening.

North: the plaster of the north wall exhibits small hairline cracks above the door opening to the west bedroom, and an area of damaged plaster and paint is visible high at the northwest corner. An HVAC supply vent has been cut into the wall at the northeast corner.

South: the plaster is marked by extensive hairline cracks, and paint is peeling above the metal track that was installed as part of the suspended ceiling system, which has been removed.

East: a crack in the plaster above the northeast corner of the door opening is visible, and the paint above the metal suspended ceiling track is peeling. Modern wiring has been strung through a hole in the upper portion of the wall, and the wall holds lengths of surface-mounted conduit and a surface-mounted light switch box.

West: the drywall tape at the north and south corners of the west wall is peeling. A recessed outlet and light switch are present on the wall.

Ceiling

The ceiling of the second floor stair hall is formed by plaster on wood lath. The plaster exhibits extensive cracking and areas of past repair; the ceiling surface shows a definite deflection downward toward the center of the room. A suspended ceiling was present in the stair-hall and was removed in the course of investigations. Numerous wire attachments for the suspended ceiling grid remain mounted to the ceiling. A modern ceiling-mounted fluorescent light fixture is present.

Woodwork - includes baseboards, doors and door trim, windows and window trim, and the stair railings

Baseboards: the baseboard in the second floor stair-hall is a one-piece base unit detailed by a stepped cap. The base is 6" high and extends around the room. The western portion of the baseboard was removed and reinstalled when the wall was furred out with modern framing and gypsum board. The baseboard extends around the stair landing and utilizes a radius top to transition to the angled base that follows the angle of the stairs at the top and bottom of the stair flights. The base is painted.

Door Trim: doors are located on the north wall and on the east wall of the second floor stair-hall. The trim at the north door is plain and is joined by blind corner blocks, which project out slightly past the edges of the trim boards. The trim is 6 ½" wide, and sits on plain plinth blocks, which are the same height as the baseboards. The door opening is finished with a wide board threshold that has been damaged by a wide crack that extends across its length. The east door is placed at an opening that was originally the stair landing window. This opening was extended to door height as part of the house's extensive renovations in the 1970's. The opening is finished at the hall side (the west side) by plain wood trim that is 6 ½" wide and utilizes blind corner blocks. The corner blocks do not extend past the trim edges on the sides, but extend past at the top surface of the door's head trim. Horizontal seams in the door trim indicate where it was extended down to accommodate the new door opening. A modern wood threshold is placed to floor the door opening. The opposite side of the door opening (the east side) is finished with modern wood trim that is 5 ½" wide, with no reveal. Blind corner blocks are positioned over the mitered joints at the upper corners of the opening.

Doors: the north door is a typical Greek Revival style wood door with two full-length vertical panels set side-by-side. Mortise and tenon joints secure the door's stiles and rails and surround the raised panels. One decorative patterned hinge is placed at the base of the door's frame, while a metal strap hinge is

used at the upper hinge location. A surface-mounted rim lock is positioned on the door's west face, and is placed above a patch where an earlier knob was located. The rim lock receiver is placed on the door trim, above the vacant mortise for a previous rim lock. A derelict hinge is mortised into the trim below the existing strap hinge. The door at the east wall of the stair-hall is a typical Greek Revival style door with two full-length vertical panels set side-by-side. Mortise and tenon joints secure the door's stiles and rails around the raised panels. The door's bottom rail has been cut down to fit the door to the opening. This door was originally located at one of the closets that flank the fireplace in the west bedroom (Room 202). The door retains its original hinges in the original mortises, but holds a new door knob and receiver.

Windows and Trim: a single window is positioned on the stair-hall's west wall. The window is a six-over-six wood sash unit, and the window appears to be single hung with the top sash fixed, as there are no pulleys and weights visible. The window muntins are ⅝", wide and the sash units hold old glass with imperfections. The window sash frames are secured by mortise and tenon joints at the corners, and the dowels that anchor these joints are visible. The windows are framed with plain trim joined by blind corner blocks; the trim measures 5 ½" wide and includes a band of plain apron trim below the window sill. The window utilizes deep reveals and plain reveal boards; the reveals and sill at the window have been increased in depth due to the furring-out of the west wall. The window is fitted with a modern exterior aluminum storm window. The exterior glazing at the window sash is in poor condition, and one glass pane is cracked.

Stair Railing: the staircase and stairwell are edged by wood railings supported on plain square balusters and turned wood newel posts. The stair railing is ramped and follows the turnings and slopes of the stair in an unbroken line. The top of the handrail is curved in cross-section, and the bottom of the railing is flattened to receive the square stair balusters. A half-post with a pilaster cap is placed at the south wall to receive the stair balustrade. The railing's handrail and the main portions of the newel posts are unpainted; the balusters, the bases of the newels, and the wall half-post are painted.

Room 201 - Second Floor Stair Hall Character Defining Features:

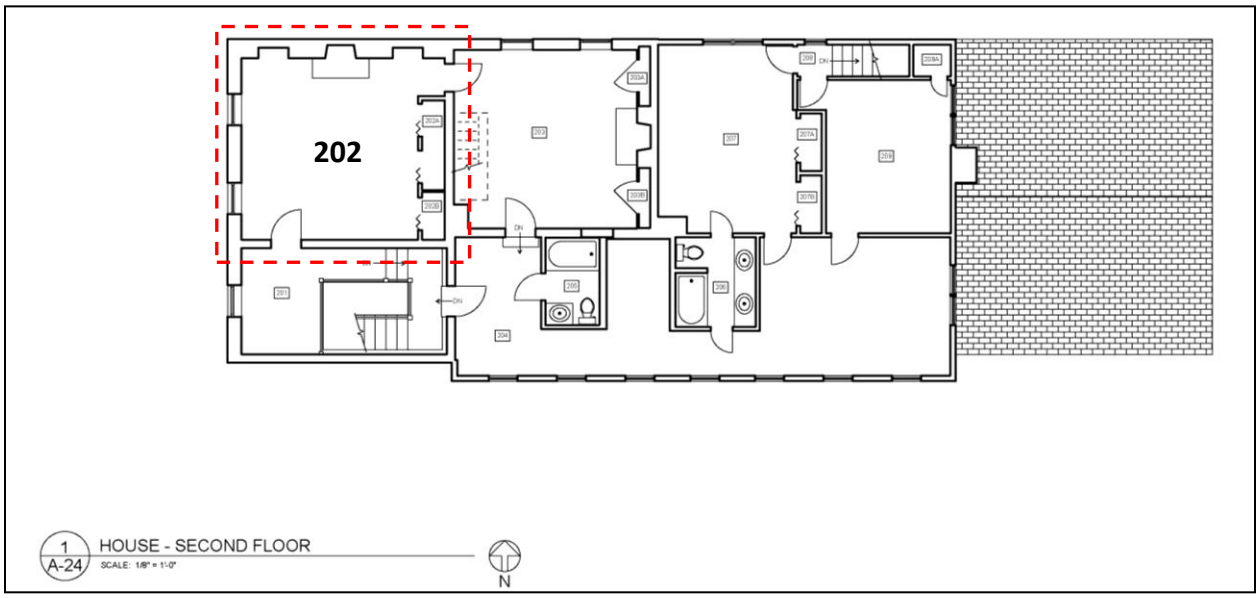
- Wood floor (including the wood floor's painted borders)
- Plaster walls and ceiling
- Baseboards
- Doors and hardware
- Door trim
- six-over-six wood sash window
- Window trim
- Staircase and railings

Figure 70: Stenciling was found under the front entry halls dropped ceiling and beneath flaking layers of paint. Further investigation will need to be done to determine whether this is original to the structure.

Figure 71: Above is an image showing the stairwell landing with the painted floor. When examined closely the painting resembles fibers seen in ingrained carpets of the time. Such a technique was still used during the 1850s. Also of note is the wood trimmed setback of the brick wall as it transitions from five withes to three.

Figure 72: When the Whitham's added the second floor rooms to the south porch they converted the east facing stairwell window into a door. However, the header is still evident and the trim is original, just moved.

Room 202 - West Bedroom



Floor

The floor of the west bedroom is formed by wood boards, which are laid in the north-south direction. Although it is thought that the boards are tongue and groove, each board is surface-nailed along the lines of the floor joists below. The boards are characterized by various widths, ranging from 6" to 7" wide. There is no visible finish on the boards, which retain significant residue from deteriorated carpet padding. Modern carpet tack strips are located around the floor's perimeter. The boards are marked by slight cupping, raised grain, and some areas of wear. Machined nail heads are visible at the butt ends of a number of the boards.

Walls

The north, south, and east walls are finished with plaster on the underlying brick masonry. The plaster finish is approximately ¾" thick. The west wall is finished with modern gypsum board that has been installed on 2x4 wood framing to create a cavity for the installation of insulation and wiring.

North: the north wall is characterized by the plaster on masonry chimneybreast and two built-in shelving units on each side of the fireplace. A stovepipe hole and metal cover are located at the center of the chimneybreast. A number of hairline cracks are present in the plaster over the mantle. The modern wood shelving systems have been installed in historic closets that originally flanked the chimneybreast. The shelving units are outfitted with plywood backing and wood shelves. Areas of paint loss are visible at the top of the north wall, and one electric outlet is located on the wall.

South: the south wall is marked by numerous hairline cracks above the door opening; these are manifested primarily as diagonal cracks that extend from the corners of the door opening. A vertical crack is evident along the trim at the door's west side. Surface-mounted conduit and two outlet boxes are present on the wall surface.

East: a line of modern closets have been built-out along the east wall. The wall behind the closets retains its historic plaster on masonry finish. The closet enclosures are constructed of modern 2x4 framing and gypsum board. A penetration for an HVAC duct is located at the south end of the wall, and lengths of furring strips are positioned on the wall to support the modern shelves.

West: the west wall consists of modern gypsum board over 2x4 wood framing. The original plaster on masonry wall exists behind the modern furred-out wall structure. Modern fiberglass batt insulation has been inserted in the cavities between the 2x4 framing. Modern ductwork, wiring, and electrical outlets are similarly housed in the space created by the furred-out wall. The upper portion of the gypsum board along the west wall is unfinished and was originally concealed by the now-missing suspended ceiling system. A portion of the modern gypsum board has been removed in the course of investigative demolition of modern finishes.

Ceiling

The ceiling of the west bedroom is composed of plaster on wood lath. The plaster exhibits extensive cracking and areas of past repair, and the ceiling surface shows a definite deflection downward at the center of the room. A modern suspended ceiling system was present in the west bedroom, and has been removed. Numerous wire attachments for the suspended ceiling grid remain mounted to the ceiling. A gas pipe is visible at the center of the ceiling, and is surrounded by the faint ghost of a circular ceiling plate. The gas was likely supplied by an on-site plant during the 19th century. Significant cracks are evident in the northwest corner of the ceiling. A very large crack and an area of water damage is visible at the northeast corner. A small attic access hatch is present at the south side of the ceiling, adjacent to the room's south wall. The overall ceiling condition is poor, and the material appears to be extremely fragile.

Woodwork - includes baseboards, doors and door trim, windows and window trim, and the fireplace mantle.

Baseboards: the baseboard in the west bedroom is a one-piece base unit detailed by a stepped cap. The base is 5 ½" high and extends around the room - the original wood base on the east wall is visible at the interior of the modern closets. Modern narrow base trim is used at the new walls that frame the closet doors. The baseboard on the furred-out west wall appears to be original; the base at the original plaster wall was removed when the wall was furred out, and this base appears to have been reinstalled on the face of the furred-out wall. The original base is affixed directly to the brick wall, and the plaster runs to the top of the baseboard. The base throughout the room is painted, and a turned wood doorstop is visible on the baseboard at the south wall.

Door Trim: doors are located on the south wall and on the east wall. The trim at the south door is plain, and is joined by blind corner blocks. The trim is 5 ½" wide and sits on plain plinth blocks, which are the same height as the 5 ½" high baseboards. The south door opening is finished with a board threshold, 1'-½" wide, that has been damaged by a wide crack that extends across its length. The trim at the room's east door frames the opening to the east bedroom (Room 203) and is formed by plain 5 ½" wide trim boards. The door trim extends to the floor without plinth blocks and is joined by blind corner blocks (the south corner block is missing). A board threshold spans the opening and measures 1'- ⅜" wide; narrow bands of wood moulding are placed to bevel each side of the threshold, bringing the total width to 1'-3 ¼" wide.

The modern shelving units at the east and west sides of the fireplace have been inserted in the room's original shallow closets. The door openings of the closets are framed in original wood trim, which remains in place. The plain wood trim is 5 ½" wide and is placed on plain plinth blocks that are the same height as the flanking baseboards. The upper corners of the trim are finished with corner blocks. Bands of modern moulding edge the shelving units and conceal any hinge marks or hardware ghosts that may be retained by the wood trim.

The doors at the east wall's modern closets are framed in modern architrave trim. All door trim throughout the room is painted.

Doors: the south door is a Greek Revival style wood door composed of two vertical panels that are framed by stiles and rails. The panels are raised, and the stiles and rails are connected by mortise and tenon joints that are secured with wood dowels. The door measures 2'-11 ¾" W x 6'-9" H x 1 ¼" TH. A metal rim lock, ca. 1870s, with round, stripped, mineral knobs, is placed on the door and measures 3 ¼" W x 4" H. A distinct ghost of a previous rim lock is evident on the door below the existing lock. The previous lock measured 5 ¾" W x 4" H. A rim lock receiver is placed on the trim, positioned above a patch that indicates the placement of the previous lock's receiver. The holes in the door that served the previous knob and keyhole location have been filled. One decorative patterned butt hinge is located at the lower portion of the door, and a surface-mounted strap hinge is located at the top. A derelict hinge and hinge mortise are located below the existing strap hinge.

The east door is a four panel unit with two large upper panels and two smaller lower panels. The panels are raised, and the door's stiles and rails are secured by mortise and tenon joints. The door measures 2'-6 ⅜" W x 6'-6" H x 1 ⅜" TH. Original hinges are present at the door and the trim, and there is no evidence of alteration or changes to these hinges or to the hinge mortises. A rim lock with two white porcelain knobs and a surface-mounted lock receiver complete the hardware. The rim lock measures 3 ¼" W x 3 ¾" H.

The series of modern closets along the east wall are closed by modern accordion-style doors.

Windows and Trim: two windows are positioned in the bedroom's west wall. The windows are six-over-six wood sash units, and the windows appear to be single hung, with the top sash fixed and the lower sash operable, as there are no pulleys and weights visible. The south window is characterized by beveled muntins that are 5/8" wide, and the muntin profile matches that used at the stair-hall window. Dowels are visible at the corners of the sash and at the point where the vertical muntins join the meeting rail of the lower sash; the tops of the muntins are visible along the top of the meeting rail, indicating the mortised joinery of the sash. There is no visible joinery at the sashes of the northern window, and the muntins utilize an ovolo profile.

Extensive water damage is evident at the bottom rails of both lower sashes, and the exterior glazing is deteriorated. A broken pane is present at the lower sash of the south window. The exterior wood sills at both windows are severely rotted. A modern wood louvered vent with metal screen has been installed at the lower sash of the northern window.

The windows of the west bedroom are framed with plain trim joined by blind corner blocks; the trim measures 5 ½" wide and includes a band of plain apron trim below the window sills. The windows utilize

deep reveals and plain reveal boards; the reveals and sills have been increased in depth due to the furred-out condition of the west wall.

Fireplace mantle/fireplace: the fireplace is positioned at the north side of the room and is framed by a typical Greek Revival style wood mantle. The mantle is wide and utilizes a tapered pilaster at each end, which rise to support a plain fascia. A single, wide wood board is used for the mantle fascia and is capped by a broad mantleshelf. The fireplace is fronted by a hearth at floor level, which is finished with a marble slab to match the modern marble fireplace surround. The firebox exhibits some damage in the form of cracked and broken bricks. A cast iron lintel supports the top of the firebox opening. The wood mantle is painted, although it exhibits relatively few layers of paint - details remain sharp and crisp, suggesting that the mantle may have existed for some time without repainting or refinishing.

The fireplace's original brick hearth is visible below the existing marble hearth slab. While the marble hearth is centered at the fireplace opening, the brick hearth extends past the marble hearth approximately 5 ½" on the east side. The existing baseboard is cut to conform to the edge of the underlying brick hearth.

Room 202 - West Bedroom Character Defining Features:

- Wood floor
- Plaster walls and ceiling
- Baseboards
- South door and door hardware
- East door and door hardware
- Door trim at the south door, east door, and at the original closet door openings
- six-over-six wood sash windows
- Window trim
- Fireplace and mantle
- Brick hearth (visible under the modern marble slab hearth)

Figure 73: The west, second floor bedroom is shown above with inset bookshelves. While the insets are original, they may have been closets rather than bookshelves. The mantle is original to the 1850s, although the marble veneers were added later and are attached with adhesive.

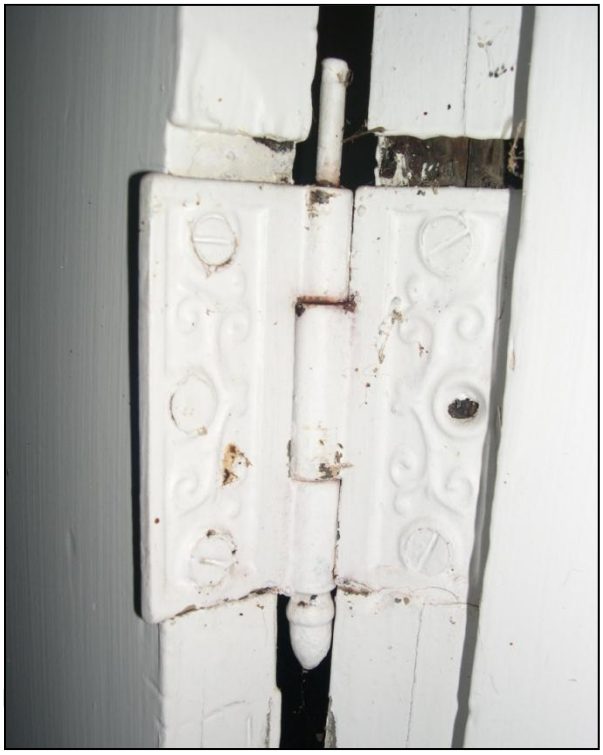
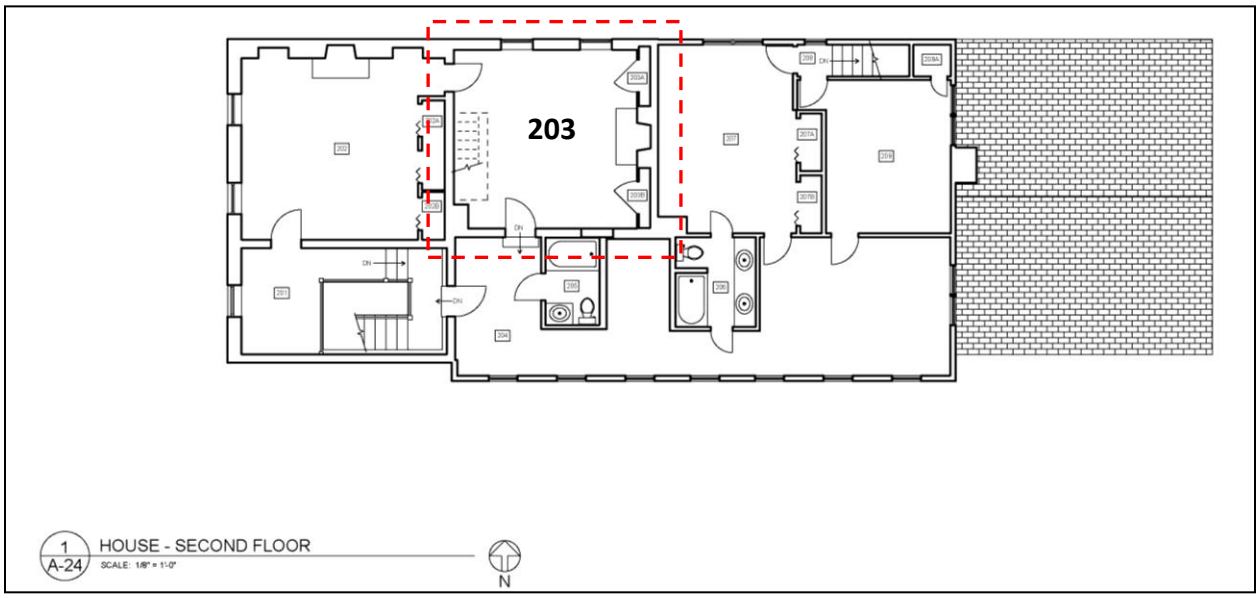


Figure 74: Also found in the west second floor bedroom is this decorative butt hinge. Typical of the 1870s and 80s this hinge was a later replacement, confirmed by the ghost markings above showing a previous hinge.

Room 203 - East Bedroom



Floor

The floor of the east bedroom is formed by lengths of boards, which are laid in the north-south direction. Although it is thought that the boards are tongue and groove, the boards are surface-nailed along the lines of the floor joists below. The boards are characterized by various widths, ranging from 5" to 8" wide. There is no visible finish on the boards in the central portion of the room, yet the room's perimeter retains some evident of finish. This remnant finish may be stain or paint. The floor boards retain significant residue from deteriorated carpet padding, which has been removed. Modern carpet tack strips are located around the floor's perimeter. The boards are marked by slight cupping, raised grain, and some areas of wear.

The west side of the floor holds a plywood infill panel that marks the location of the stairwell for the house's original secondary staircase. The floorboards that edge the infilled stairwell show no sign of baluster or railing attachments; however, a nosing piece could have been used to anchor the railing, and this feature could have been removed when the stair was taken out.

Walls

The south, west, and east walls are finished with plaster on the underlying brick masonry. The plaster finish is approximately ¾" thick. The north wall is finished with modern gypsum board that has been installed on 2x4 wood framing to create a cavity for the installation of insulation, wiring, and ductwork.

North: the north wall is furred out and is characterized by the use of gypsum board on modern wood framing. This finish has been installed over the wall's original plaster coating. The upper portion of the wall is unfinished, due to its having been concealed by a suspended ceiling system that has been removed. The wall holds one supply grille for the HVAC system and two outlets.

South: the south wall is a plaster on masonry wall and was originally the interior face of an exterior wall. The western end of the wall is concealed by a modern duct chase, formed by gypsum board on modern 2x4 wood framing. Portions of the modern chase have been removed for investigations. A line of metal trim is present along the upper portion of the wall and was installed as part of the room's modern suspended ceiling system, which has been removed. Vertical cracks are visible above the wall's window and door openings, and a hole was opened in the wall to allow for the passage of modern wiring. The wall is marked by extensive peeling and flaking paint. The modern chase holds one HVAC supply grille on the east side and an electric outlet on the north side.

East: the east wall is highlighted by the room's fireplace and flanking closets. The closets are built-in and appear to be original features of the room. The fireplace chimneybreast is plaster on masonry, which is finished flush with the closet walls on each side. The closet walls are formed by wood boards set vertically and finished with a skim coat of plaster. The boards are wide (12") and are unfinished at the interior surfaces. The side walls and ceilings of the closets are finished with painted wood boards; the boards that form the closet's side walls are set vertically. The north closet walls are marked with ghosts that indicate a series of shelves; the south closet lacks these marks. Interestingly, the closet door openings are not placed quite symmetrically on each side of the fireplace.

The plaster at the east wall's chimneybreast is marked by peeling paint and evidence of water stains along the upper portion. A hole has been created in the board wall of the closet at the south side of the chimneybreast to allow for the passage of wiring.

West: the west wall is finished with plaster on brick. The southern portion of the wall is concealed by the modern gypsum board chase that is located at the southwest corner of the room. A line of metal trim is placed at the upper portion of the wall as part of the now-removed suspended ceiling system. A series of nail holes and marks is evident above the metal trim line, and may have been installed to anchor a missing electrical line. The paint at the upper reaches of the wall is peeling and flaking. Surface-mounted conduit and a surface-mounted light switch box are present on the west wall.

Ceiling

The ceiling of the east bedroom is composed of plaster on wood lath. The plaster exhibits extensive cracking and areas of past repair that attempted to correct severe water damage. A large section of repair is visible adjacent to the chimneybreast at the east side. The ceiling surface shows a definite deflection downward at the center of the room. A modern suspended ceiling system was present in the west bedroom and has been removed. Numerous wire attachments for the suspended ceiling grid remain mounted to the plaster ceiling. A gas pipe is visible at the west side of the ceiling, adjacent to the west wall. The pipe has been cut-off just below the ceiling level, and a corresponding cut-off pipe is visible at the floor level, directly below the ceiling pipe fragment. As noted before the piping likely corresponds to a 19th century, on-site gas plant.

Woodwork - includes baseboards, doors and door trim, windows and window trim, and the fireplace mantle.

Baseboards: the baseboard in the east bedroom is a one-piece base unit detailed by a stepped cap. The base is 5 ½" high and extends around the room. The baseboard on the furred-out north wall appears to be original; the base at the north wall is a full 1" thick and appears to have been reinstalled on the face of the furred-out gypsum board wall. The original baseboards are affixed directly to the brick walls, and

the plaster runs to the top of the baseboard. The western edge of the north wall's base is mitered to join with the section of base on the west wall. However, the base simply meets at a butt joint at the eastern end of the wall. The two closets that flank the fireplace on the east wall are finished with a plain base at the interior. This base is 4 ½" high and 1" thick. The base throughout the room is painted.

Door Trim: doors are located on the south, east, and west walls. The trim and door at the west wall are included in the survey for the west bedroom (Room 202). The trim at the two east closet doors is plain and is joined by blind corner blocks. The trim is 5 ½" wide and sits on plain plinth blocks, which are the same height as the 5 ½" high baseboards. There is no trim at the interior faces of the door openings; the stops for the closet doors are formed by the board walls, which extend past the door trim. The closet door trim is mortised to receive now-missing rim lock receivers. The trim at the room's south door is partially original; this opening was formerly a window, and utilizes original trim at the head and sides, with new trim added to extend the side trim to the floor. The seams in the trim are clearly visible, and no plinth blocks are used at this door opening. The modern door frame and stops have been simply inserted in the former window opening. The exterior face of the door opening is finished with plain modern trim that is 5 ½" wide; there are no corner blocks. A set of modern steps and modern wood and metal handrails are present at the exterior of the door opening.

Doors: the closet doors are typical Greek Revival style wood doors composed of two vertical panels framed by stiles and rails. The panels are raised, and the stiles and rails are secured by mortise and tenon joints with wood dowels. The north closet door measures 2'-11 ¾" W x 6'-10" H x 1" TH. The south closet door measures 3'-0" W x 6'-9 ¾" H x 1" TH. Wood thresholds are placed at each door, measuring 3 ¾" wide. The doors presently function without latching hardware and are outfitted with modern wood cabinet knobs. Mortises in the door stiles indicate where now-missing rim locks were present, and correspond to mortises in the trim that held rim lock receivers. Two 5-knuckle hinges are used at each door unit.

The room's south door appears to be a salvaged door that was originally placed at one of the west bedroom's original north wall closets. The door is a typical Greek Revival style wood door composed of two vertical panels framed by stiles and rails. The panels are raised, and the stiles and rails are secured by mortise and tenon joints with wood dowels. The door's bottom rail and the side stiles have been visibly cut to allow the door to fit the opening. The door (as altered) measures 2'-9" W x 6'-3 ¼" H x 1" TH, and is hung on two 5-knuckle hinges that appear to be original. A remnant portion of the mortise that held the door's original rim lock on the lock stile is visible. A portion of the mortise was cut away when the lock stile was trimmed to fit the existing opening.

Windows and Trim: two windows are positioned in the bedroom's north wall, and one window opening is located on the south wall. The windows at the north wall are six-over-six wood sash units, and the windows appear to be single hung, with the top sash fixed and the bottom sash operable, as there are no pulleys and weights visible. Both of the north windows appear to retain their original sashes. The window muntins are ⅝" wide, and the muntin profile is beveled. Dowels are visible at the corners of the sash and at the point where the vertical muntins join the meeting rail of the lower sash. The tops of the muntins are visible along the top of the lower sash's meeting rail at the eastern window. The top of the sash at the western window is not visible, due to the installation of a modern louvered wood vent and metal screen. The lower sash of the western window is raised to accommodate the vent. Both lower sash units retain metal latches at the sides of the sash. One cracked pane is visible at the western window, and the metal shutter catch for the eastern window is visible on the exterior sill. Modern metal storm window units have been installed at the exterior of both windows.

The sash units at the south window have been removed, and a modern glass and wood cabinet has been installed in the opening. The cabinet has a peaked wood shingle "roof", and projects into the room. This window was closed due to the construction of the second floor addition to the south, and the subsequent location of a modern bathroom to the south of the original window opening. The window head is visible above the suspended ceiling of the adjacent bathroom, indicating that the exterior brick opening of the window survives beneath the modern wall framing and gypsum board cladding.

The windows of the east bedroom are framed with plain trim joined by blind corner blocks; the trim measures 5 ½" wide and includes a band of plain apron trim below the window sills. Corner blocks are flush with the trim edges at the north windows, while they project a bit beyond the trim at the south window. The north windows utilize deep reveals and plain reveal boards; these reveals and sills have been increased in depth due to the furring-out of the north wall.

Fireplace mantle/fireplace: the fireplace is positioned at the east side of the room and is framed by a typical Greek Revival style wood mantle. The mantle utilizes a tapered pilaster at each end, which rise to support a plain fascia. A single, wide wood board is used for the mantle fascia and is capped by a the broad mantle shelf. The fireplace is fronted by a hearth at floor level, which is finished with a marble slab to match the modern marble fireplace surround. Bands of modern trim have been applied to the fireplace mantle to edge the marble surround. The firebox exhibits some slight damage in the form of cracked and broken bricks, and the flue has been sealed with batt insulation. A cast iron lintel supports the top of the firebox opening. The wood mantle is painted, although it exhibits relatively few layers of paint - details remain sharp and crisp, suggesting that the mantle may have existed for some time without repainting or refinishing. The bases of the mantle pilasters appear to have been cut to allow for placement of the modern marble hearth.

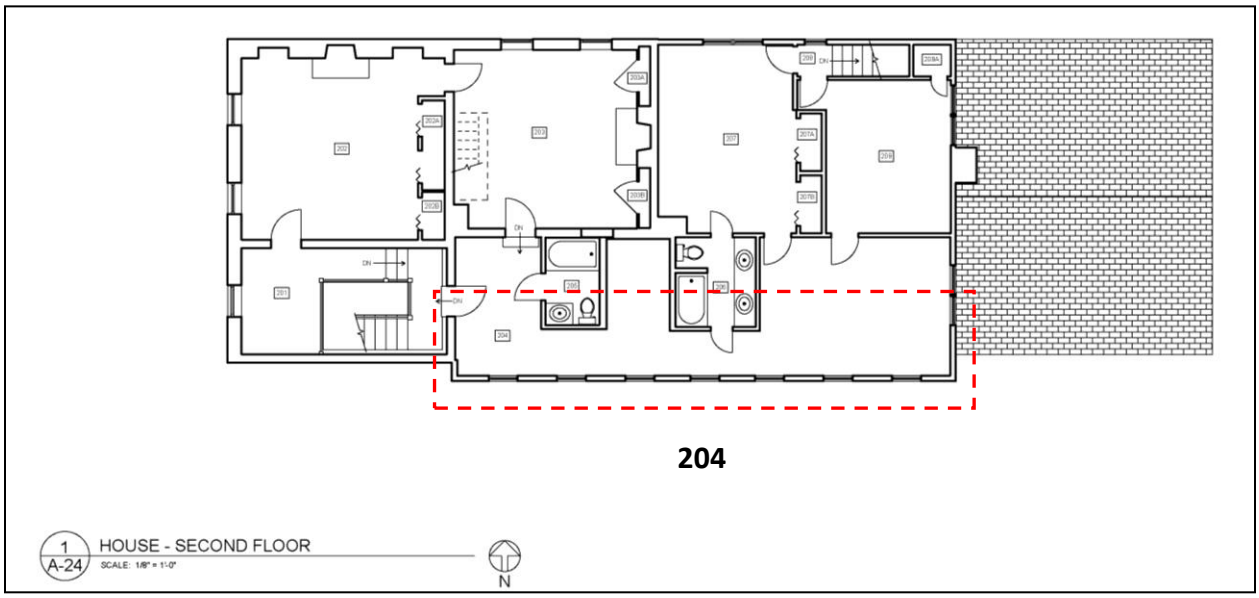
The fireplace's original brick hearth is visible below the existing marble hearth slab. While the marble hearth is centered at the fireplace opening, the brick hearth extends past the marble hearth approximately 6 ¼" on the north side. The bricks at the back and sides of the firebox have been painted, while the bricks at the bottom of the firebox remain unpainted.

Room 203 - East Bedroom Character Defining Features

- Wood floor
- Plaster walls and ceiling
- Baseboards
- Doors and door hardware
- Door trim
- six-over-six wood sash windows
- Window trim
- Fireplace and mantle
- Brick hearth (visible under modern marble slab)

Figure 75: The top image shows the east wall of the second floor's east bedroom. The mantle, like the one in the other bedroom, is original, although marble veneers have also been added. Note the flanking closets. The lower left image shows original baseboards concealed by ductwork, still complete with early gold colored paint. The lower right image shows the ghosting of the secondary staircase on the second floor.

Room 204 – Hall



The hall on the second floor consists of space at the south side of the modern rear addition. The room is located over the location of a previous single-story porch, which was removed during the 1971 renovations that resulted in the expansion of the frame rear ell. The hall provides access to the west bathroom, the laundry area, and the east bathroom.

Floor

The floor consists of modern particle board sheeting that has been laid over plywood subfloor. The sheeting retains fragments of deteriorated carpet padding and nailing strips. The carpeting has been removed. The subfloor surface is severely damaged and deteriorated in an area adjacent to the south wall due to water infiltration. Water stains are evident along the length of the room, and the floor is characterized by a distinct slope down to the south.

Walls

The north and west walls are characterized by exposed brickwork that is part of the house's original brick exterior walls. Both walls are heavily painted and show evidence of heavy repair and re-pointing. A portion of the west wall consists of modern gypsum board, while the east and south walls are gypsum board on modern wood framing.

The south wall has been severely damaged due to progressive water infiltration. The gypsum board is marked with mold growth and is cracking at the seams. Vertical cracks have formed in the gypsum board under the series of south windows.

Ceiling

The ceiling features a distinct slope to the south along the southern side. The surface is clad with gypsum board. The gypsum board is severely damaged and partially missing at the room's southwest corner due to water infiltration from a roof leak. The roof structure and decking have also been significantly damaged in this area. Tape is peeling at the seams of the gypsum board.

Woodwork - includes baseboards, doors and door trim, windows and window trim.

Baseboards: the baseboard consists of modern ranch base that measures 3 ½" in height. The base throughout the room is painted, but is marred by accumulations of dirt.

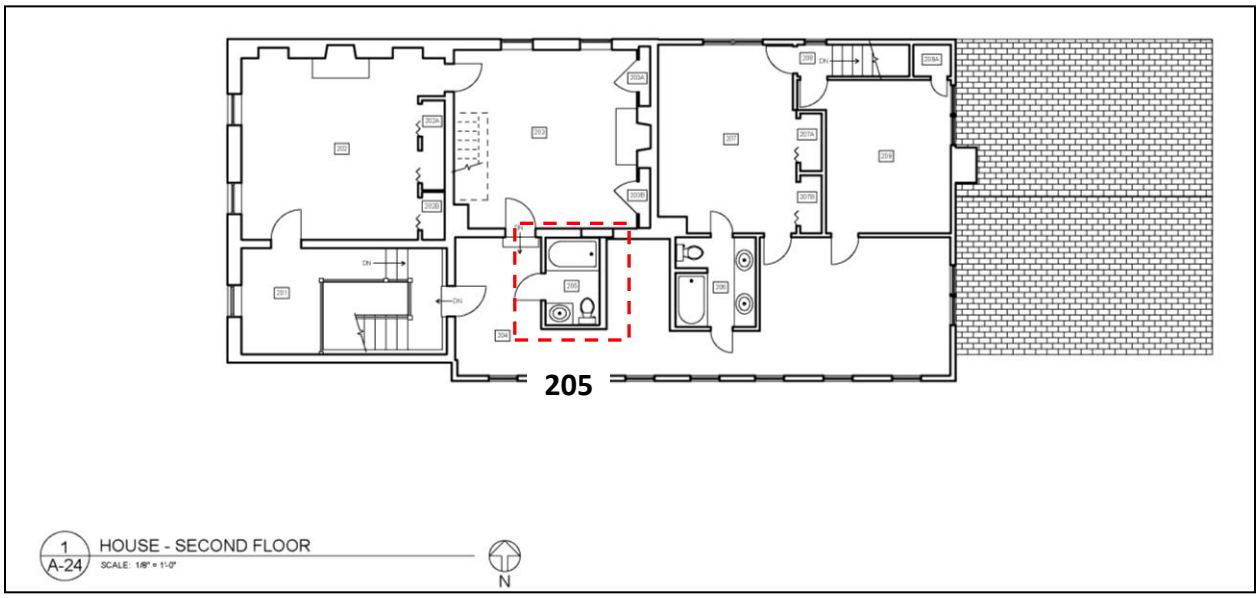
Doors and Door Trim: Plain board trim is used at the north door to the east bedroom and at the west door to the second floor stair-hall. The doors that stand in these openings are described in their respective rooms.

Windows and Trim: modern architrave trim is used at the room's south window. The modern window utilizes double hung wood sash with insulated glass. The sash units hold interior grilles that simulate the appearance of 6-over-6 sash. A sash lock at the meeting rails and sash lifts at the lower sash complete the hardware.

Room 204 - Hall Character Defining Features:

- Common Bond brick walls at the north and west sides
- Doors (two-panel Greek Revival units)

Room 205 - West Bathroom



Floor

The floor is composed of modern sheet vinyl, which is dirty and is in poor condition.

Walls

The south, east, and west walls are composed of gypsum board on modern framing. The north wall consists of gypsum board over wood framing or furring strips, which is placed over the house's original south brick exterior wall. An original window opening exists beneath the modern gypsum board and framing. Pockets for the original porch rafters can also be seen. Light control switches and outlets are located on the west wall.

Ceiling

The ceiling of the west bathroom was originally composed of modern ceiling tiles in a suspended ceiling grid. The tiles have been largely removed in the course of investigative demolitions. A central fan and light combination fixture is mounted in the suspended ceiling system, as well as an HVAC supply grille.

Woodwork - includes baseboards, doors and door trim, windows and window trim.

Baseboard: modern ranch base is used around the perimeter of the room, and is painted.

Door and Door Trim: a modern six-panel wood door is located on the room's west wall and is trimmed with modern architrave trim. The door utilizes metal hardware.

A modern wood vanity cabinet is located on the south wall, with a surface-mounted medicine cabinet with integral valance light.

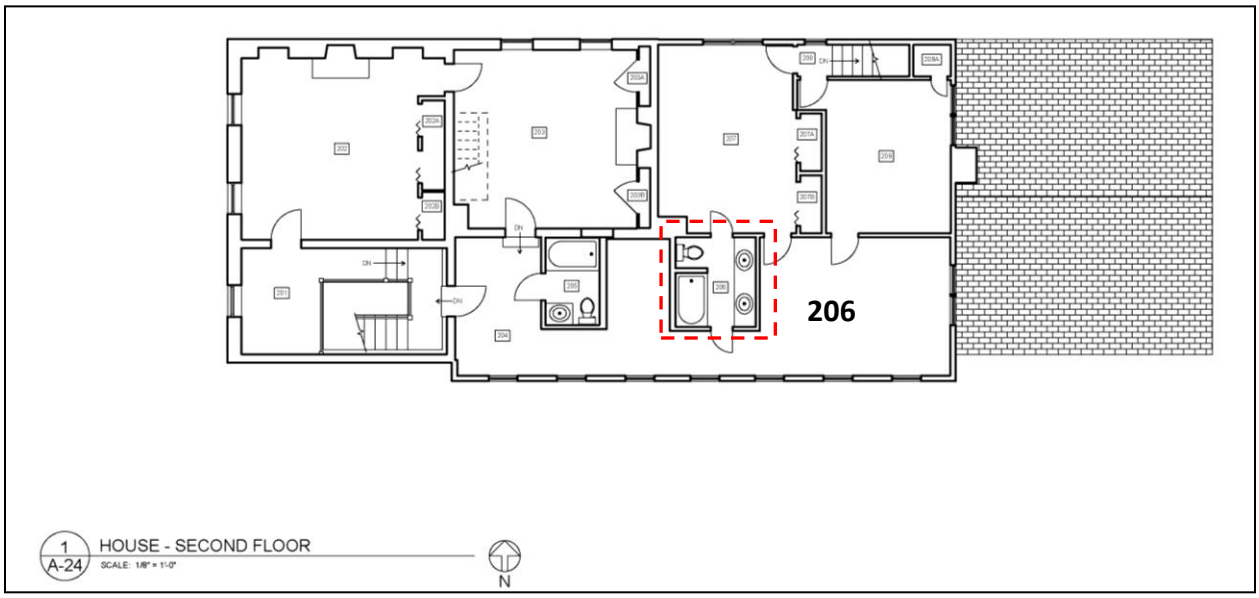
Plumbing Fixtures

A fiberglass bathtub/shower combination unit is located on the north side of the room. A toilet and lavatory are located at the south side of the room.

Room 205 - West Bathroom Character Defining Features:

- Exterior brick wall
- Porch rafter pockets
- Original window opening

Room 206 - East Bathroom



Floor

The floor is composed of modern sheet vinyl, which is loose and is in poor condition.

Walls

The north, south, east, and west walls are composed of gypsum board on modern framing. Wallpaper is used on all of the walls. Light control switches and outlets are located throughout the room.

Ceiling

A modern suspended ceiling system formed the ceiling in the bathroom. The ceiling finish has been removed in the course of investigative demolitions. Modern ceiling joists and roof rafters are visible.

Woodwork - includes baseboards, doors and door trim, windows and window trim.

Baseboard: modern ranch base is used around the perimeter of the room, and is painted.

Doors and Door Trim: modern six-panel wood doors are located on the room's north wall and on the south wall. The doors are painted and are trimmed with modern architrave trim; the head trim at the south door is missing, due to the former placement of the suspended ceiling. The doors utilize metal hardware.

A modern wood vanity cabinet is located on the east wall, with wall cabinets above and a valance light over the central mirror.

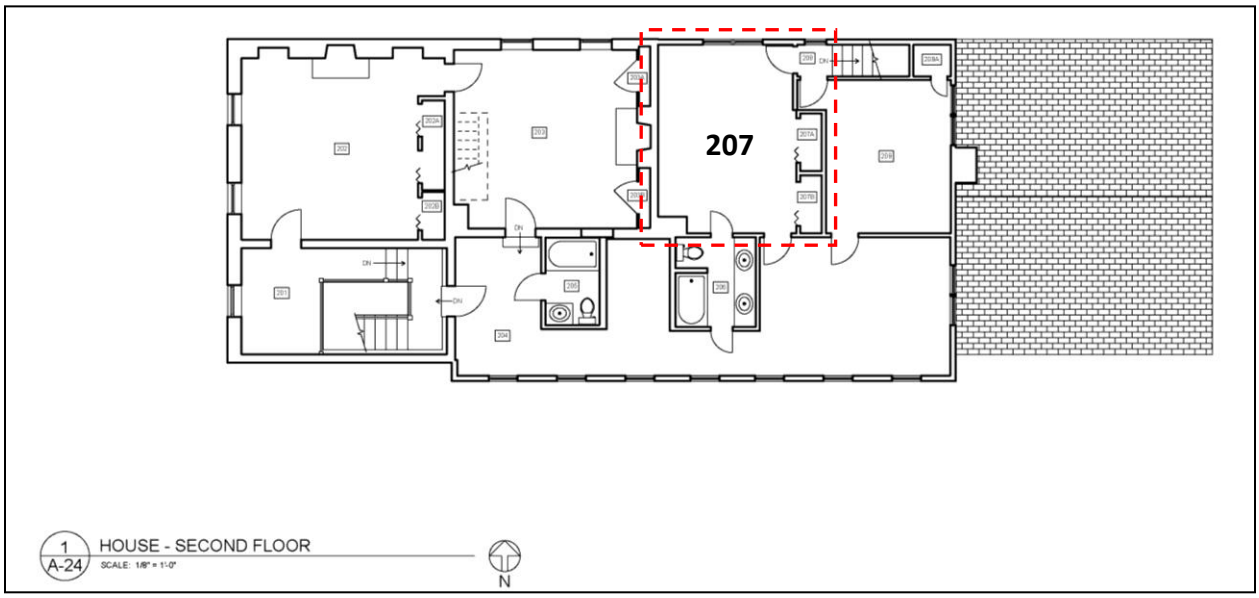
Plumbing Fixtures

A fiberglass bathtub/shower combination unit is located on the west side of the room. A toilet is positioned at the northwest corner, and the lavatory is located at the east side of the room.

Room 206 - East Bathroom Character Defining Features:

- None

Room 207 - Ell West Bedroom



Floor

The floor is composed of a modern plywood subfloor with remnants of deteriorated carpet padding and carpet nailing strips. The room's wall-to-wall carpeting has been removed.

Walls

The north, south, and east walls are composed of gypsum board on wood framing.

South Wall: the south wall retains remnants of the original frame ell's south exterior wall framing. This framing has been augmented with new framing members. The rear ell's original wood corner post is visible through a duct chase that has been opened in the room's southwest corner. The corner post and adjacent wood stud correspond in height to the placement of the low second-floor knee wall that is visible in historic photographs of the frame rear ell. The framing members appear to be circular-sawn.

West wall: the west wall of the room is formed by the east exterior wall of the original brick portion of the house. The bricks are exposed on this wall and have been heavily painted. The brick is laid in 1:7 Common Bond. However, this brick bond pattern is only present on the north and south ends of the wall: the area at the center of the wall, which corresponds to the location of the house's east chimney, is laid in plain running bond with no header courses. The change in brick coursing is likely due to the placement of the east chimney stack and flue; the wall at the central point may only be one wythe thick, negating the possibility to use headers in this portion of the wall. A large crack extends through the center of the wall and passes through mortar joints and through brick units. The crack is suggestive of the center of the wall being a weak point in the brick structure. The modern duct chase at the southwest corner of the room, which is constructed of gypsum board on modern wood framing, has been partially removed to allow for the investigation of the rear ell's framing. A portion of the original east elevation's exterior wall is visible in the duct chase. The visible brick is unpainted, indicating that the house was not

painted until after the construction of the rear frame ell in the 1870's. The roofline of the original frame ell is visible in this duct chase, and the ghost of the ell's roofline is visible along the room's east wall. A heavy cast iron pintel has been inserted in the brick near the center of the west wall. The use of the pintel remains undetermined at this time.

East wall: the east wall holds a series of modern built-in closets. The closet walls are similarly formed of gypsum board and modern framing.

Electrical outlets and switchplates are located throughout the room; however, none are present on the west wall.

Ceiling

The ceiling finish consists of modern gypsum board, which has been painted. The existing ceiling is considerably higher than the frame ell's original ceiling height, as evidenced by the roofline profile that is visible in the duct chase. Therefore, there is no original finish or framing material at the room's ceiling. A portion of the gypsum board has been removed at the north side to allow for attic inspection.

Woodwork - includes baseboards, doors and door trim, windows and window trim.

Baseboard: modern ranch base is used around the perimeter of the room, and is painted. The baseboard extends around the inside walls of the closets as well.

Doors and Door Trim: three doors provide access into the room from adjacent spaces. The doors on the east and south walls are modern six panel wood units with modern architrave trim. The doors utilize metal hardware, and are painted. The painted surfaces have become dirty over time. The two closets on the east side of the room are accessed through plastic laminate accordion doors. These closet door openings are trimmed with architrave trim.

Windows and Window Trim: a pair of windows is placed on the room's north wall. The windows are modern double hung wood sash units with insulated glass panes. The windows are one-over-one units, but originally made use of interior-applied grilles to simulate a six-over-six lite pattern. Metal sash locks are placed at the meeting rails, and metal sash lifts are located at the bottom rails of the lower sashes. There are no exterior storm windows, but a screen panel is placed at the room's west window. The screen at the east window is missing, and this window's lower sash has been raised to allow for the placement of a louvered wood vent and screen in the opening. The windows are bordered by modern architrave trim.

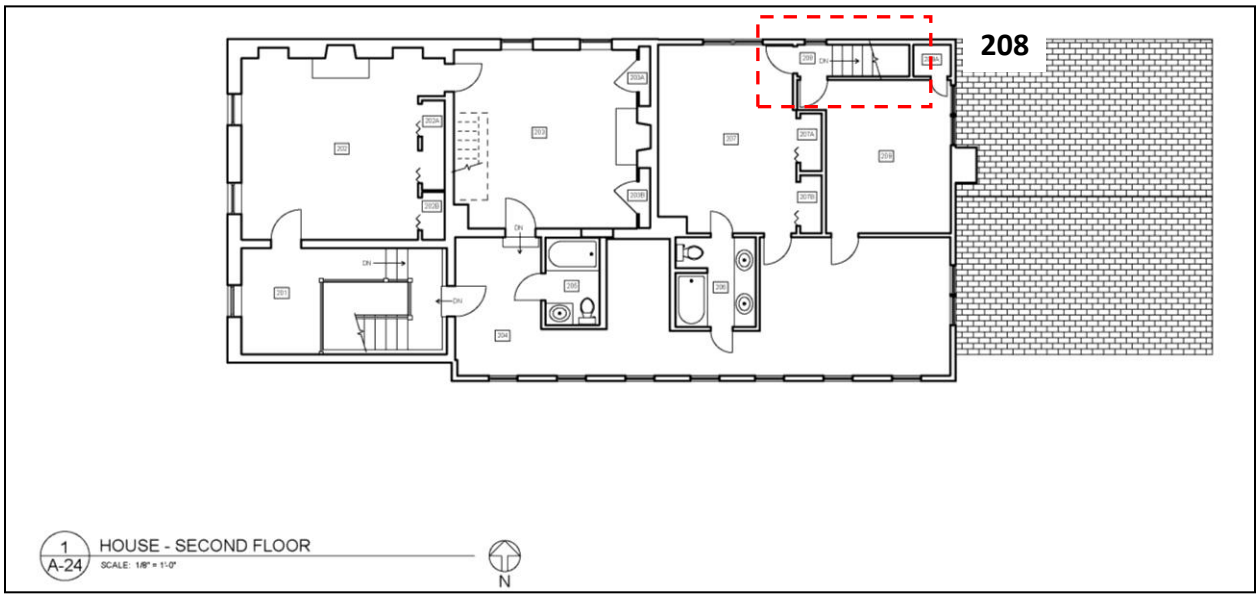
Room 207 - Ell West Bedroom Character Defining Features:

- 1:7 Common Bond brick wall at the west side

Figure 76: Pictured above is the exterior east wall of the original 1850's brick ell. The area concealed by ductwork shows the original roof pitch of the 1876-1880s frame addition, and assisted in dating whitewashing campaigns.

Figure 77: Concealed in the same ductwork was a corner post from the 1876-1880s rear frame addition.

Room 208 - Hall Landing



The hall landing is located at the head of the stairway at the second floor of the frame rear ell.

Floor

The floor consists of plywood decking with fragments of deteriorated carpet padding and nailing strips. The wall-to-wall carpeting has been removed.

Walls

The north, south, east, and west walls are clad with modern paneling. A light switch-plate is located on the west wall.

Ceiling

The ceiling is clad with gypsum board. a surface mounted light fixture is positioned above the stair.

Woodwork - includes baseboards, crown moulding, doors and door trim, windows and window trim.

Baseboard: modern two-part wood base is used around the perimeter of the space, and is stained and varnished.

Crown moulding is used at the juncture between the paneled walls and the gypsum board ceiling.

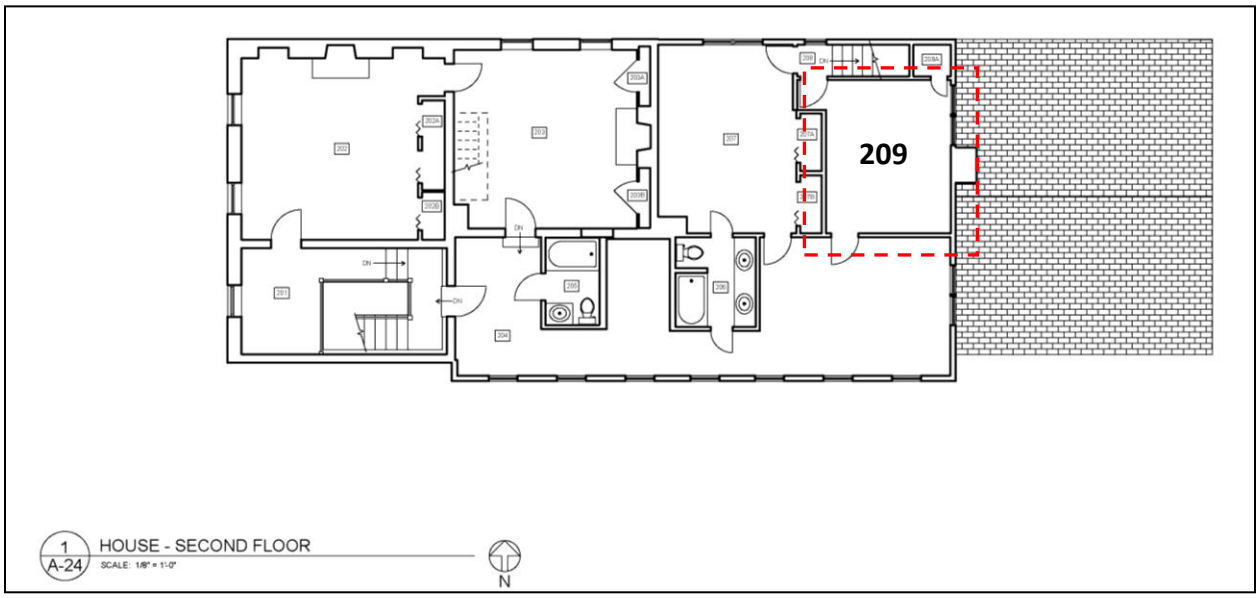
Doors and Door Trim: two doors are located at the hall landing; the western door provides access to the ell west bedroom (Room 207), and the southern door serves the ell east bedroom (Room 209). Both doors are trimmed with modern architrave trim and are painted. The finish of the doors and trim is severely stained.

Windows and Window Trim: a single window is placed on the room's north wall. The window is a modern double hung wood sash unit with insulated glass panes. The window is a one-over-one units, but originally made use of interior-applied grilles to simulate a six-over-six light pattern. A metal sash lock is placed at the meeting rail, and a metal sash lift is located at the bottom rail of the lower sash. There is no exterior storm window. The window's lower sash has been raised to allow for the placement of a louvered wood vent and screen in the opening. The window is bordered by modern architrave trim.

Room 208 - Hall Landing Character Defining Features

- None

Room 209 - Ell East Bedroom



Floor

The floor in the ell east bedroom consists of modern plywood subfloor. Deteriorated carpet padding and carpet nailing strips are present on the plywood; the room's wall-to-wall carpeting has been removed.

Walls

The walls of the room are modern gypsum board. A separation in the vertical seam under the east windows is visible. Electrical outlets and light switchplates are located throughout the room.

Ceiling

The ceiling is composed of modern gypsum board. An unfinished attic access hatch is located at the east side of the ceiling. An HVAC supply grille is positioned in the ceiling, and is marred by a rusted finish.

Woodwork - includes baseboards, doors and door trim, windows and window trim.

Baseboard: modern ranch base is used around the perimeter of the space and is painted.

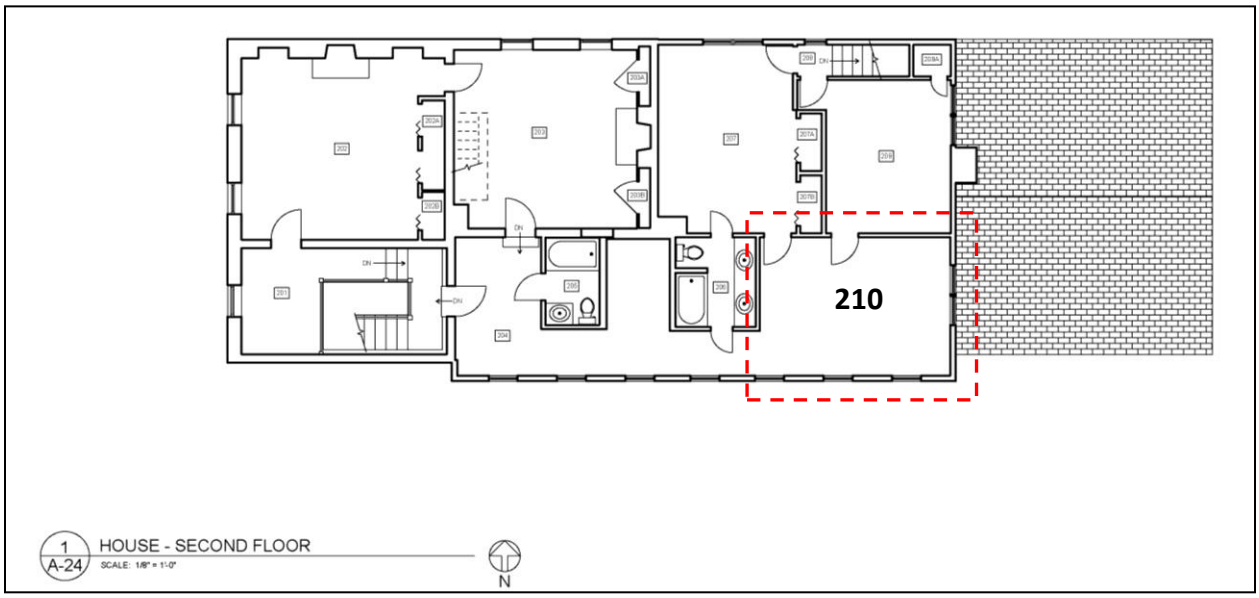
Doors and Door Trim: three doors are located in the room; two are located on the north wall, and one is located on the south wall. The north door provides access to the hall landing (Room 208), while the north door at the east end of the wall is placed at the room's closet. The south door is placed to provide access to the southeast room (Room 210). The doors are modern six-panel wood units with metal hardware. The doors are painted, and the finish is severely stained. The door trim is composed of modern architrave trim.

Windows and Window Trim: a pair of windows is placed on the room's east wall. The windows are modern double hung wood sash units with insulated glass panes. The windows are one-over-one units, but make use of interior-applied grilles to simulate a six-over-six light pattern. The grille at the top sash of the north window is missing. Metal sash locks are placed at the meeting rails, and metal sash lifts are located at the bottom rails of the lower sashes. There are no exterior storm windows, but a screen panel is placed at the room's southern window. The south window's lower sash has been raised to allow for the placement of a louvered wood vent and screen in the opening. The windows are bordered by modern architrave trim.

Room 209 - Ell East Bedroom Character Defining Features:

- None

Room 210 - Southeast Room



The southeast room is placed at the southeast corner of the second floor and is a continuation of the space that began as the second floor hall at the western end of the rear addition. The southeast room is not separated from the second floor hall by a partition wall or door opening, but is a substantial space with the character of a distinct room.

Floor

Sheets of particle board are used to form the floor of the southeast room. The particle board holds residue of deteriorated carpet padding and carpet nailing strips. The wall-to-wall carpet that was in the room has been removed.

Walls

The walls are formed by gypsum board on modern wood framing. The tape at the seams of the drywall is peeling, especially at the southeast corner. Vertical cracks in the gypsum board are visible above and below the room's east and south windows. Electrical outlets and light switch plates are located around the perimeter of the room, and an HVAC grille is positioned on the north wall.

Ceiling

The ceiling of the southeast room is gypsum board, and is sloped along the room's south side. The tape at the seams of the ceiling is peeling, and is especially evident at the corners. An area of significant water damage is evident at the eastern end of the ceiling. The gypsum board around the areas of water damage is marked by extensive mold growth. A hole was cut in the gypsum board at the eastern end of the room as part of the structural and evolution investigations.

Woodwork - includes baseboards, doors and door trim, windows and window trim

Baseboard: modern ranch base is used at the walls that define the southeast room. The base is painted.

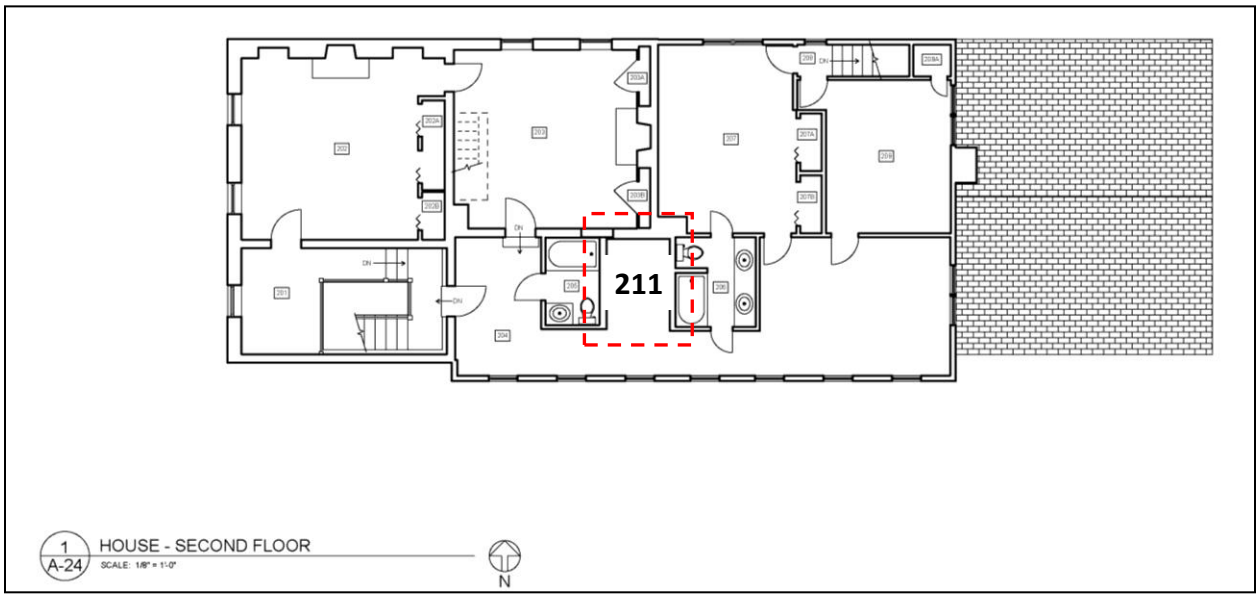
Doors and Door Trim: Doors at the north walls of the room provide access to the ell west bedroom (Room 207), the ell east bedroom (Room 209), and the east bathroom (Room 206). The doors are modern wood six-panel units and are outfitted with modern metal hardware. The door openings are finished with modern architrave trim and wood thresholds.

Windows and Window Trim: modern double hung wood sash windows are present throughout the southeast room: two on the east wall and six on the south wall. The two windows on the east wall are set as a pair and are trimmed together. The windows utilize insulated glass panes and are characterized by interior grilles that simulate 6-over-6 divided light sash; several of the grille bars are broken. Exterior screens are present at all of the windows except one of the south windows. Modern wood louvered vents have been installed in one of the east windows and in one of the south windows to provide air circulation.

Room 210 - Southeast Room Character Defining Features:

- None

Room 211 - Laundry Room



Floor

The floor is composed of modern sheet vinyl, which is in very poor condition.

Walls

The room is open to the second floor's southeast room (room #210) at the south side; therefore, there is no south wall. The east and west walls are formed by gypsum board on modern wood framing. The north wall consists of gypsum board on modern wood framing strips, which has been installed over the original south exterior brick wall of the house. Portions of the wall cladding have been removed in the course of investigative demolitions. The visible brick that has been exposed has been painted. Also exposed during selective demolition was a portion of an original window also seen in the west bathroom (room #205). Pockets for the original side porch rafters were also uncovered during this investigation. Wood shelving is positioned on the east wall, and the dryer vent intake is located at the west wall. The dryer vent travels down to the first level, but its outlet is not apparent. The west wall also holds the light switch plate and the dedicated dryer outlet. The room's gypsum board wall finishes have been clad with wallpaper.

Ceiling

The modern suspended ceiling system of the laundry room has been removed in the course of investigative demolitions, and the modern ceiling joists are exposed. A fluorescent light and HVAC supply outlet are present at ceiling level and are anchored at the room's ceiling joists.

Plumbing Fixtures

A laundry sink is located at the west side of the room. Washer and dryer hook-ups are similarly present at the west wall, as is an access door for the in-wall plumbing of the west bathroom (Room 205).

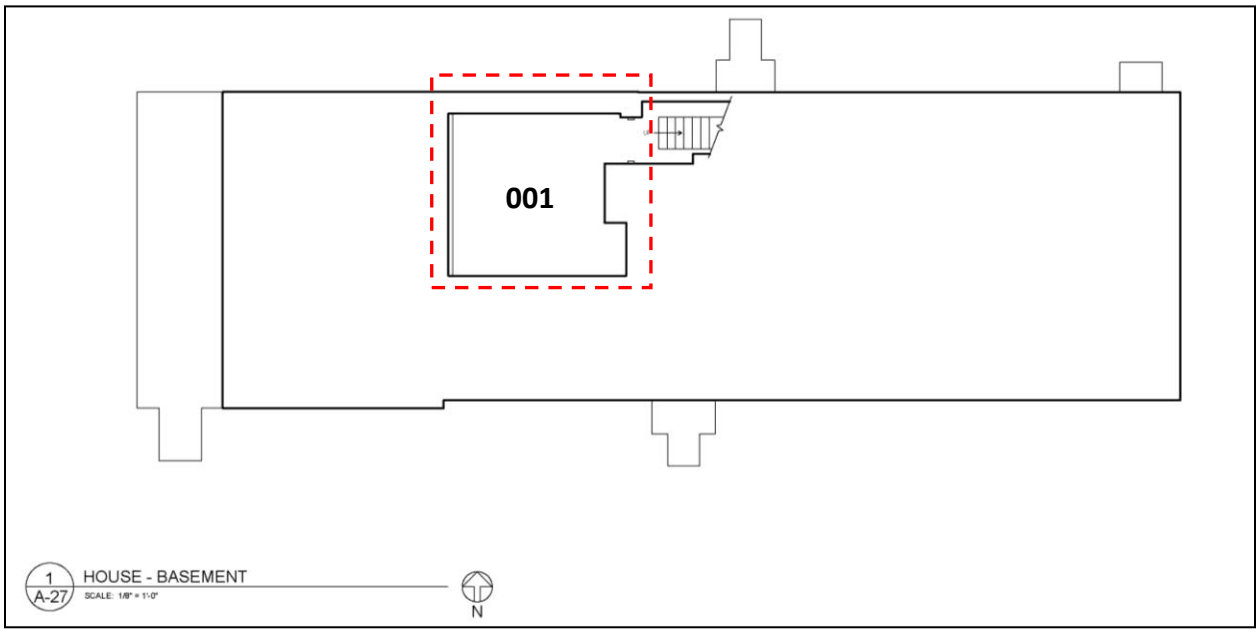
Room 211 - Laundry Room Character Defining Features:

- Original exterior brick wall
- Original window casing and opening
- Pockets for side porch rafters

Figure 78: The laundry room, above, shows the southeast corner of the 1850s brick ell. Also of note are areas of discoloration indicating possible downspout attachments. Barely visible to the left of the image, along the brick wall is a concealed window.

Figure 79: A close-up of the window noted above showing the intact wood window sill, complete with drip edge.

Room 001 - Cellar / Crawl Space



The cellar is positioned beneath the northeast corner of the original portion of the house and is located directly below the dining room (Room 203). The space was originally accessed by way of an exterior entrance on the east side, which has been covered and enclosed by the modern frame rear wing addition. The cellar space includes the stone mass that supports the house's original east chimney above. The interior brick partition walls of the house's original portion rest on stone foundations. These foundations define two separate crawl spaces, which originally were not interconnected. The installation of the modern HVAC system and related ductwork resulted in openings being cut between the crawl spaces and the adjacent cellar. The crawl spaces are, by nature, unfinished.

Floor

The cellar is floored with a concrete slab. Water infiltration from the surrounding walls frequently allows water to pool on the floor.

Walls

The north, south, east, and west walls are composed of stone foundations that transition to brick above. The masonry walls are covered with paint, and show some evidence of spalling brick and deteriorating mortar. Openings have been inserted in the brick portions of the walls to allow for the passage of modern ductwork.

Ceiling

The ceiling of the cellar is formed by the overhead floor joists and the undersides of the original wood flooring at the first floor. The joists appear to be sawn rather than hewn.

Woodwork

The sole elements of woodwork/trimwork to be found in the basement occur at the original exterior door opening that is located at the bottom of the modern stairs. The wood door frame that is positioned in the opening appears to be original and is characterized by heavy dowels that are visible at the upper corners.

The cellar is accessed by a flight of modern wood stairs with open risers. The stairs descend to the cellar from the modern den (Room 105) above.

Mechanical

A hot water heater, water softener unit, and furnace are located in the cellar. All units appear to be past their normal life span and are marked with rust and water stains.

Room 001 - Cellar Character Defining Features:

- Limestone and brick walls
- Overhead wood joists and main level wood flooring
- Door frame at the base of the cellar stairs

Figure 80: Located in the cellar, this image shows the trimmers used to support the brick hearth in the first floor parlor. Note the through tenon. The other hearth support in the basement is butt nailed together, indicating possible alterations.

Figure 81: The northwest corner of the cellar after removal of the furnace and other HVAC equipment. The north window can be clearly seen, as can the stepping out of the foundation wall.

Character Defining features (Material Integrity)

Character Defining Features (Material Integrity)

By Bryan Townes
Edited by M. Spencer for inclusion in HSR Report

The Bowman-Hite Farmhouse stands as an evolved structure that was initially constructed as a relatively simple two-story, L-shaped brick structure in the Greek Revival style. The structure was capped by intersecting gable roofs accented by two brick chimneys. The western portion of the house's "L" shape is composed of a stairhall and an adjoining northern room on both floors. The eastern portion of the "L" holds a single room on both levels, both of which were originally lit and ventilated by windows and doors on the north and south elevations. A small cellar is positioned beneath the eastern portion of the "L" and is defined by the stone foundation walls. This cellar originally utilized an exterior entrance on the east side of the house as the sole access point.

Subsequent additions and alterations have greatly increased the usable square footage of the house; despite the expansion, the features and finishes of the original brick portion of the house are largely intact. A small frame addition was constructed at the eastern end of the brick “L” to provide additional rooms. This frame ell was visually and physically joined to the original brick structure through the use of a long, single story porch along the south elevation that extended along the brick house as well. Originally, the frame ell was one and a half stories in height and consequently the frame ell was visually subordinate to the original portion of the house. A modern series of additions in the late 20th century served to create additional space at the second floor of the frame ell. The ridge height of the frame ell's roof was raised to match the height of the gable roof ridge of the original brick portion. Enclosed and conditioned space was provided at the location of the first floor's long south porch and at a new long room above the former porch on the second floor. The use of aluminum and vinyl siding on the exterior surfaces of the modern additions preserves the visual distinction between the original brick portion of the house and the modern construction.

The materials, elements, and design that comprise the architectural fabric of the house's original brick portion work to establish the structure's distinct and significant historic character.

Materials

Brick

The original portion of the farmhouse is characterized by brick exterior and interior walls that are set on stone foundations. The exterior walls have been painted, while the interior partition walls are clad with a plaster finish. The interior's plaster finish appears to be original, although the plaster has been repaired many times, especially on the second floor ceilings. The use of brick as a dominant construction material at the time that the house was built was distinctive, as it indicated a level of wealth and status that set the house apart from the small, vernacular dwellings of wood and stone construction that predominated on the lesser farms of the area and throughout rural Virginia at the time.

The house's exterior brick walls are laid in six course Common Bond, where the sixth course is the header course. On occasion this brick bond pattern will diverge to a 1:7 or 1:9 Common Bond. This brick pattern remains consistent on all of the house's exterior elevations; the walls rise to a corbelled brick cornice on the east and west elevations of the western portion, and on the north and south elevations of the eastern portion. The house's windows and door openings are placed under splayed brick jack arches. A significant percentage of the house's jack arches display extensive repairs and some degree of continued settling. The brick walls of the house are covered by thick applications of white paint, which is starting to show some wear and areas of peeling. The house's red brick exterior was originally unpainted. The original, unpainted state of the house's brick exterior walls is verified by a portion of brick that was concealed by a later addition. The brick walls do not appear to have been accented with penciled mortar joints.

Interior brick end chimneys rise above the north and east gables of the original portion of the house. The chimneys are detailed with simple corbelled caps and exhibit eroded and deteriorated mortar joints. The chimneys appear to be capped, and the exposed stack of the east chimney has been reinforced through the use of steel angles and bars. The interior placement of the chimneys is typical of the Greek Revival style, where the suppression of the chimneys by placing them within the exterior walls was desired to create simple, clean profiles. Additionally, the placement of interior end chimneys maximized the warmth that was retained within the house's interior. The floor space that the interior chimneys and fireplaces occupied was not a factor due to the generous size of the original rooms in the Bowman-Hite Farmhouse.

The later frame rear ell was constructed with an exterior end chimney at the eastern end of the structure. Although the base of the chimney is fashioned with stone, a brick stack is placed above. The narrower brick stack transitions to the wide stone base through the use of stepped brick courses. The brick retains traces of white paint or whitewash where it has been protected under the enclosure of the modern garage roof. The original brick portion of the chimney utilizes units that are identifiable as hard-fired, pressed brick, typical of the late 1870's. The upper portion of the ell's chimney was extended in the course of the modern alterations that raised the roof height of the frame ell and thereby necessitated a taller chimney stack. The transition between the modern and original portion of the stack is clearly visible from the exterior. The mortar joints in the upper portion of the chimney are eroded and deteriorated.

Figure 82: The Bowman-Hite farmhouse (above) was constructed in the 1850s in the Greek Revival style. The image shows the northwest perspective. Note the removed front porch as well as the unpainted portion of the brick chimney.

Figure 83: Added ca. 1876-1880s, the wood frame addition was used as an interior kitchen and therefore required a fireplace. Built with the stone foundation, the frame addition fireplace (left) is now encapsulated by the modern garage addition.

Stone

The original brick portion of the Farmhouse is positioned on a rough-cut, irregular coursed, limestone foundation. The use of a stone foundation indicates the persistence of local traditions in stone construction, as well as a likely preference for practicality over style, where stone foundations would be much more durable and more weather-resistant than the style-conscious brick foundations. A small cellar is positioned under the east room of the original portion of the house and is delineated by the surrounding stone foundation walls, which are painted. The house's limestone foundation walls have been heavily re-pointed on the exterior, but appear to be in fair condition. The stone walls extend in a unbroken line across the brick portion's north elevation, indicating that the original brick section of the house was built as a single unit and is not the result of a phased building plan, as the original floor plan and the use of two original staircases might suggest.

The original brick portion of the house was enlarged through the addition of a frame ell extension in the mid-late 1870’s. The frame addition was constructed on stone foundation walls that have now been encapsulated behind modern concrete block foundations of later construction. The ell's foundation stones are limestone, and are more regularly-cut than the foundation stones used in the original portion of the house. A large exterior end chimney was constructed at the east end as part of the frame ell addition. The base of this chimney is formed by long, rectangular limestone blocks of a uniform and consistent height. The chimney stones are more regular and finished than the stones used for the frame ell's foundation walls.

Figure 84: The rough-cut, irregular coursed limestone walls of the original 1850s portion of the structure can be clearly seen where the front (west elevation) porch used to exist. Few tool marks exist on the surface of the stones indicating the use of a pitching chisel. This tool uses natural bedding planes to cleave off portions of the stone, leaving behind a smooth surface.

Figure 85: This image was taken under the current south enclosed porch added in 1971, during the Whitham's tenure. Shown is the 1876-1880s, frame addition, stone foundation wall, with the extent of the 1876-1880s south porch indicated by the grey paint line.

Wood

The brick and stone masonry structure of the original portion of the house supports a range of wood framing members and details. The wood floors of the house are positioned on wood joists, which are sawn rather than hewn. The preponderance of sawmills in the area at the time of the house's initial construction rendered sawn lumber relatively cheap and easy to procure. The regularity provided by these dimensioned framing members shortened construction times and reduced the amount of labor needed to raise a house. Wood joists are used to support the wood floors of the house's first and second levels, as well as the plaster ceilings of the brick portion's first and second floors. Common wood rafters, joined at a ridgeboard, form the brick portion's intersecting gable roofs, and wood nailers provide sheathing for the roof. The wood flooring in the original portion of the house, although composed of boards in varying widths, is relatively consistent in size and appears to have been produced in a mill. The wood floors at the first floor level of the house have been recently sanded and refinished; the boards at the stair landing and throughout the second floor of the original brick portion retain their historic, although not necessarily original, finishes. The wood floors at the second floor hall and at the stair landing are distinguished through the use of simple painted borders with radius corners. The majority of wood that is used throughout the original portion of the house is Yellow pine, a typical regional building material at the time of the house's construction.

The stone foundation of the house's frame ell provides the base for the ell's wood frame walls, which originally stood one and a half stories in height and supported a moderately-pitched gable roof. Although the ell's original roof and its north wall were removed in the course of later alterations, the north wall's wood sill and the ell's wood floor joists remain in place. The framing of the ell's east and south walls remains partially intact and illustrates the transition between older braced framing traditions and the new balloon framing technology, as well as the use of white oak in some instances. The regularity that characterizes the frame ell's sawn framing members is also visible in the vestiges of the wood weatherboarding that covered the original exterior walls surfaces of the ell. In contrast with the random-width boards that are typical of earlier vernacular clapboard structures, the beveled wood siding of the frame ell is consistent in its width and thicknesses.

Figure 86: The image of the attic (above) shows the common rafter system sitting on a false-plate laid over the ceiling joists. What is also distinguishable various nailer types, indicating re-use and replacements. The older nailers are grey in color, whereas the newer boards are lighter and show circular saw marks.

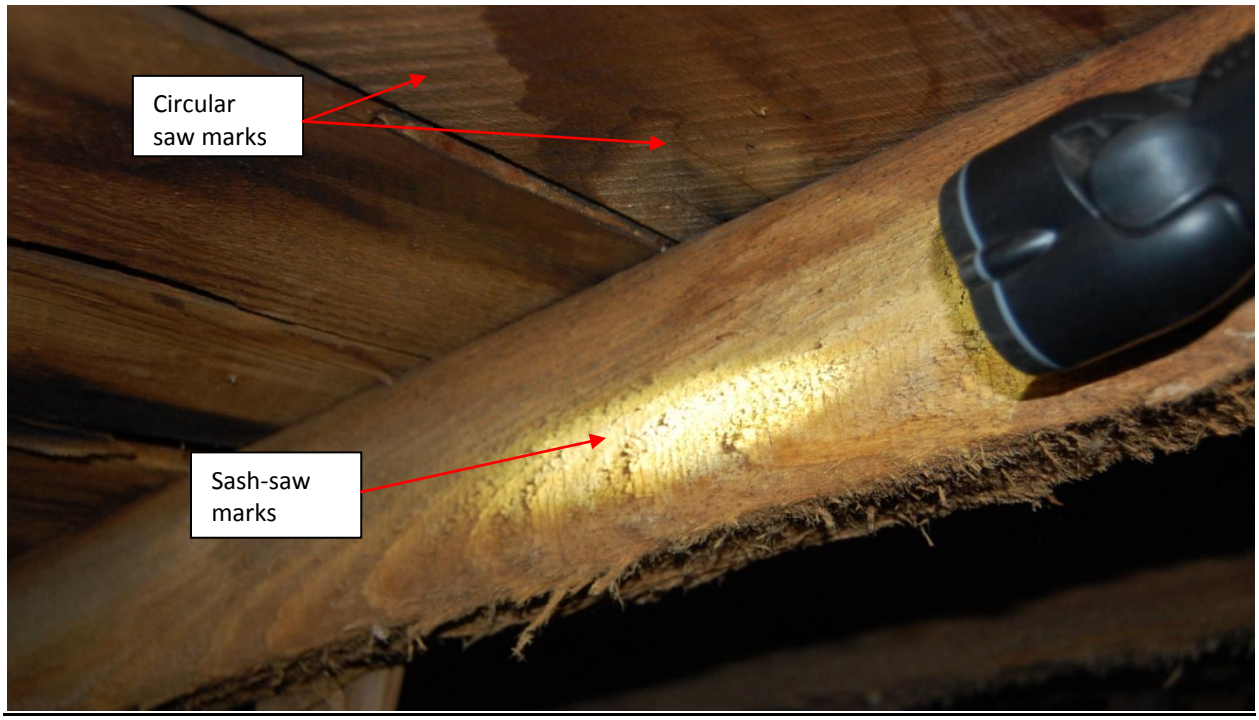


Figure 87: Raking light from a flashlight shows the sash saw marks, characterized by vertical, parallel, kerf marks, on the common white oak rafters of the 1850s structure. Just above the rafter circular saw marks can be distinguished on a replacement nailer.

Elements

The construction and design of the farmhouse uses a number of distinct elements that work to convey the building's specific historic character.

Windows

The original brick portion of the house is defined by wood sash windows that are aligned vertically on each elevation. The importance of symmetry and balance that is inherent in Greek Revival design is illustrated through the careful placement and spacing of the window openings. Original sash windows remain in place on the second floor of the house on the north, south, and west elevations; these windows are composed of six-over-six sash units that appear to be single-hung. Single hung windows are characterized by a top sash that is fixed in place and a bottom sash that is operable. There are no pulleys or sash cords visible at the jambs of the house's window units.

The original six-over-six sash windows at the house's second floor are characterized by plain beveled (tapered) muntin profiles. The window muntins are ⅝" wide and the sash units hold cylindrical glass characterized by ripples and imperfections. The window sash frames are secured by mortise and tenon joints at the corners, and the dowels that anchor these joints are visible through the painted finish. One of the windows at the west wall of the second floor's west bedroom holds two wood sash units that utilize an ovolo muntin profile. This type of muntin is characterized by an oval, convex moulding profile.

The original brick portion of the house underwent a series of renovations in the latter part of the 19th century which, judging by the stylistic details and features, likely coincided with the mid-late 1870s construction of the frame rear ell. The original six-over-six wood sash windows in the first floor rooms are thought to have been removed at this time, and newer, more stylish two-over-two sash windows installed. These new windows maintain the single-hung characteristic of the earlier windows suggesting that the original window surrounds were retained and updated sashes installed. The muntins that divide the two-over-two windows are wider than those that are present in the six-over-six windows. The muntin design of the dining room windows differs from the design of the front parlor windows, in that the dining room muntins are ⅞" wide at the interior, compared to the 1 ¼" wide muntins in the front parlor.

A number of new windows were added as part of the modern renovations that took place in the last half of the 20th century. These windows are modern insulated units in a variety of configurations. The modern renovations necessitated the removal of the original windows that were placed throughout the frame ell, due to the fact that the ell's walls were largely removed and new openings were installed. A surviving fragment of a window on the south elevation of the frame ell, which now forms the north wall of the first floor long room, indicates that the windows were single-hung sash windows. Exceptions to this window pattern may have occurred at the second floor of the frame ell, where historic photographs appear to record small, square single-sash windows on the ell's south elevation.

Figure 88: Located on the south elevation of the 1850s brick "ell", this window exhibits the later 2-over-2 configuration coinciding with alterations made in the 1870s-1880s. Note the "wavy" glass, typical of 19th century cylindrical and plate glass.

Figure 89: Facing towards the west, on the primary elevation, this second floor, six-over-six single-hung window is original to the structure.

Doors

The original, formal entrance for the Bowman-Hite Farmhouse is located on the west elevation and is distinguished through the use of flanking sidelights and a wide transom that extends across the opening. The entrance assembly has been modified to some degree, most noticeably through the installation of a modern six-panel wood door and exterior door surround. The door surround is characterized by a broken ogee pediment with a central urn motif. Despite the alterations, the main entrance holds a significant degree of original material with the exception of the single sheets of glass applied on the interior of the sidelights. Wood pegs are visible at the connections between the frames of the sidelight and transom, suggesting that the entrance's original sidelights and transom were kept and that new glass panels were installed. Interestingly, the muntin pattern of the sidelights coincides with designs represented in the 1833 edition of Asher Benjamin's *Practice of Architecture*, a popular building pattern book of the day. The wood frame of the front entry assembly, the flanking wood pilaster trim at the exterior, the interior trim, and the raised panels that are placed below the sidelights appear to be original to the house's construction. The existing six-panel entrance door is a modern addition, but original hinge mortises in the door jamb remain to suggest the placement of the original unit.

The original doors in the brick portion of the house typify those that are often found in Greek Revival architecture. The doors are wood, with two long vertical panels set side-by-side. The wood stiles and rails of the doors are secured by mortise and tenon joints that are then pegged with wood dowels. The panels are raised on each side of the doors, a detail that is present even on the closet doors on the second floor.

The doors that are used throughout the original brick portion of the house appear to be original units and are consistent in their style and construction. As noted, the original door at the main west entrance has been removed, and a modern six-panel wood door installed in its place. An original exterior door is positioned at the south side of the dining room (Room 103). This door, which maintains the Greek Revival detailing and configuration, likely provided access to a now-missing south porch. Scratches on the door's lock stile and on the adjacent wood jamb suggest that this door was a popular entrance point for the family dogs. Similar scratches are present on the surface of the dining room's west door (between the dining room and the front parlor - Room 102), but not on the corresponding jamb. This raises the possibility that the west door was relocated from the house's main entrance during renovations. However, the door does not fit the main entrance door opening.

The original doors in the brick portion of the house are supported on simple butt hinges, although one of the doors on the second floor has been re-set on a butt hinge with embossed designs. Original operating hardware remains on a number of doors in the form of cast iron rim locks and round knobs. The locks are marked with the manufacturer's name, and this indicates that the locks were produced some time after 1852 (Spencer, pg. 29).

The renovations that altered the house in the mid to late 1870s introduced two additional door openings in the original brick portion of the house. These new openings were fitted with doors in the then-current styles. The door opening at the east end of the first floor stair-hall (Room 101), which is an original opening, was fitted with a ½ glazed door. The door is hung on two brass butt hinges and is fitted with brass knobs and escutcheon plates. The hinges are placed at the north side of the door opening, and the frame exhibits two previous hinge mortises that have been filled. Traces of a stained and varnished finish, or perhaps faux wood graining, are visible on the door surround. Two four-panel doors were added to occupy additional new door openings. A new door opening was installed between the

two original bedrooms on the second floor (the west bedroom - Room 202, and the east bedroom - Room 203). An additional door opening was installed in the former exterior east wall to provide access to the added frame ell. Both doors utilize the four raised panel stile and rail design that is typical of the 1870's. Door hardware at these doors includes both hinges and surface-mounted rim locks with porcelain knobs.

A simple wood door is placed to access the closet under the stairs in the first floor stair-hall (Room 101). The exposed brick and lack of finishes in this closet suggest that this space was not part of the house's initial plan of storage areas. The door is formed by the horizontal wood boards that were cut from the stair's stringer wall in order to create the door opening, and are secured by a single vertical wood batten at the interior. The batten board is twelve inches wide, and is marked by circular saw marks and a wane (remnants of tree bark on a radius corner) on one of the board's long sides.

Modern doors throughout the newer portions of the building are typically flush wood doors. A double sliding glass door unit is used at the frame ell's former exterior south wall.

Figure 90: Located on the south wall, of the second floor bedroom, this two-paneled, wood door, without sticking, is a good example of the original doors at the Bowman-Hite farmhouse. The strap hinge on the upper left side of the door has been used as a repair as have the butt hinges. These butt hinges were likely installed sometime in the 1870s or 1880s. The rim lock on the door is also from a similar period.

Figure 91: This east facing doorway, leads from the first floor dining room of the brick "ell", to the 1870s rear frame addition. Note the four raised panels with sticking, as well as the rim lock and corresponding porcelain knob, popular after the 1870s.

Floors

The rooms in the house's original brick portion are floored with wood boards in various types of finishes and conditions. The boards are laid in the east-west direction in the first and second floor stair-halls, the dining room, and the east bedroom above. The floorboards are oriented in the north-south direction in the front parlor and the west bedroom. The boards range in size and include widths of 6 ¾", 6", 5 ¾", 5 ½", 4 ½", etc. The boards appear to utilize tongue and groove construction; additionally, countersunk and filled nail heads are visible at the butt joints of the boards. Typical of the period, the floors are laid directly on the wood floor joists below without an intervening subfloor. The boards at the first floor level have been heavily sanded and refinished with modern polyurethane. The second floor rooms appear to retain historic, although not necessarily original, finishes on the floors. Painted borders define the floors of the second floor stair-hall and the floor of the intermediate stair landing. The painted border is a simple band of contrasting color with radius corners. Archival evidence also suggests that the floors would have been carpeted as early as the 1860s as noted in a Charles and Rebecca Hite property inventory from the time.[210]

The first floor level of the house's frame ell addition retains a fragment of the structure's wood flooring that corresponds with the original footprint of the frame ell. Laid on wood joists, the flooring is positioned in the east-west direction and consists of tongue and groove boards that vary between 3 ½" and 4" in width. The surviving original floorboards of the rear frame ell do not appear to retain a visible finish.

[210] The terms “carpeting” during the 1860s would likely have referred to what we think today as area rugs, not wall-to-wall.

Figure 92: Found on the stairwell landing, the floorboards exhibit floor painting mimicking a woven textile, seen during the 1850s and 60s. On the upper right of the image remnants of the modern wall-to-wall carpeting can be seen.

Figure 93: The wood floor found in the front parlor is original to the 1850s. Similar flooring material can be found throughout the original, brick portion, of the house.

Interior Trim (Doors, Windows, and Baseboards)

The original brick portion of the houses utilizes door and window trim with two distinct profiles. Both styles of the woodwork maintain the use of corner blocks, which is a typical component of the Greek Revival style and also allowed the trim in this period to be installed without the time-consuming use of mitered joints between the side trim and head trim. The corner blocks are present in both plain (blind) and bulls-eye configurations. The original door trim is set on plinth blocks that are consistent with the height of the adjoining baseboard trim.

The door and window trim that finishes openings in the front parlor (Room 102) is the most detailed in the house and corresponds to the likely use of this room as the primary space for receiving and entertaining guests. Moulded pilaster trim is used in this room and is joined by incised bulls-eye corner blocks. The door trim is 7" wide and is positioned on plain plinth blocks, which are the same height as the baseboards. There do not appear to be many paint layers on the trim pieces. The window trim that is used at the front parlor's west windows was removed from the original wall surface and reinstalled following the alterations that furred-out the wall. Consequently, new filler pieces were installed to accommodate the new, increased thicknesses of the jambs. The window trim is formed by moulded pilaster trim that is joined by incised bulls-eye corner blocks. A length of wood trim forms the window apron under the wood sill. Similar to the door trim, the window trim is 7" wide and is painted.

The remainder of the original brick portion of the house is finished with plain wood trim and blind corner blocks. Generally, the window and door trim measures 6" wide; the window trim includes a band of plain apron trim of equal width below the window sills. The south window at the dining room (Room 103) is set in an exterior wall that has not been furred out. This window utilizes deep reveals and plain reveal boards. Modern renovations resulted in most of the north and west walls on the first and second floors being furred out to accommodate insulation, ductwork, and wiring. The trim at the windows on these walls was removed and then reinstalled, evidenced by the ghost marks of the trim that remain in the plaster. The window reveals have been correspondingly increased in depth and augmented with new trim. The original door trim rests on plain plinth blocks that correspond to the height of the baseboards. The non-original door openings between the dining room and the kitchen and between the east and west bedrooms were installed in the course of the 1870s-1880s renovations. The trim at these openings extends directly to the floor without the use of plinth blocks.

The junctions between the walls and floors in the original portion of the house are finished with simple wood baseboards. The predominant baseboard style and size is a one-piece base unit detailed by a stepped cap, and is 6" high. The baseboard that finishes the front parlor is likely a two-piece base design, which is 8 ½" high and is detailed by a bead at the top cap. The first floor stairhall utilizes the typical baseboard design with a stepped cap, and the unit is 6 ½" in height. A taller baseboard is represented at the base of the stair's stringer wall. The stringer wall base is topped by a beveled cap, which continues around to fully frame the board wall under the stair stringer. The style of base at the stringer wall is not present anywhere else in the house.

Figure 94: This west facing window, on the first floor, in the front parlor, exhibits more elaborate trimwork. Note the line on the window sill indicating where the wall was furred out and depth added.

Fireplace Mantles

The original brick portion of the house maintains four wood-burning fireplaces, one in each of the four main rooms. The fireboxes on the first floor have been altered through the installation of raised hearths; however, the original wood fireplace mantles survive and remain in-place at each of the house's four original fireplaces.

The fireplaces on the first floor of the house stand as central elements in the front parlor (Room 102) and the dining room (Room 103). The wood mantles on the first floor are significantly broader than those at the two bedrooms on the second floor, but all four utilize the same composition. The mantles are rendered in a typical Greek Revival style pattern. The mantle compositions consist of two plain tapered pilasters that rise to support a solid single board fascia. A single wide mantle shelf is placed at the top. The greater width of the first floor mantles creates compositions that convey a more horizontal emphasis, while the narrower fireboxes and mantles on the second floor are seemingly more vertical in character. The mantles at the second floor are positioned at the north wall of the west bedroom (Room 202) and on the east wall of the east bedroom (Room 203). Both fireplaces were originally flanked by shallow closets. Also of note is the off center nature of the brick hearth to the mantles as seen clearly in the second floor bedrooms although no physical evidence points to a previous mantle or opening.

Figure 95: The mantle (above) shows the added raised hearth and marble veneers. Through sensitive restoration the raised hearth may be removed to reveal the original floor level brick hearth.

Figure 96: The mantle in the upstairs, west bedroom, is similar to the downstairs mantle, pictured above. The original brick hearth can be seen to the right of the 1971 marble hearth (box). Note that it is off center with the original mantle.

Staircase

The staircase of a mid-to-upper class house in the 19th century was often the most prominent design element of the house's interior. The design, materials, and details of the staircase were meant to impress visitors and to convey a sense of the owner's wealth, taste, and status in the local community. Located in the house's primary entrance hall, the stair was one of the first elements that a visitor would encounter. To this end, the staircases were often graced with elaborate detail and finishes. The stairway that is located in the Bowman-Hite stairhall (Room 101) is relatively simple in its overall design, yet illustrates the typical Greek Revival style in its straight runs and clean, concise detail.

The stairway rises from the west end of the stairhall; the placement and orientation of the stair corresponds with the use of the stairhall's west door as the house's main entrance. The stair rises along the hall's south wall to a landing at the east end of the room, where it turns and ascends along the north wall to the second floor. Two square balusters are set in mortises on each tread, and the finely finished handrail is detailed with a series of ramps (a distinct, concave curve present where the wood handrail transitions from the stair slope to the horizontal landing railing). The wood handrail is formed in a profile that is curved at the top and flat at the bottom to receive the tops of the square balusters. The handrail is supported by a series of turned-wood newel posts, which utilize a basic profile often seen in Greek Revival style residences. The newel posts in the farmhouse, however, are given individuality through their unorthodox attenuated proportions. The newel posts that are positioned at the landing and at the second floor level are finished with decorative drops at the bases, which utilize a series of concentric circles. The stair landing fascia is plain but holds a border made of simple, squared-off wood trim pieces. The stair railing at the second level is terminated at the hall's south wall with a plain rectangular wood half-post with a pilaster cap. There are various infilled points at the connections in the lengths of stair railing that may conceal metal screws, as one screw head is visible at the top section of railing. The square balusters of the stair assembly are painted, while the handrail and newel posts are stained and varnished with a relatively light finish.

A secondary staircase was originally located in the dining room (Room 103) and was positioned against the room's west wall. The stair was enclosed and served the east bedroom (Room 203) above. This stair was removed in the course of the house's 20th century alterations.

Figure 97: Located in the front foyer, the image above shows the rise of the primary stair along the south elevation before turning at the landing. The simple newel drop, hanging from the landing, is a lingering building aesthetic from an earlier time that occasionally found its way into Greek Revival design.

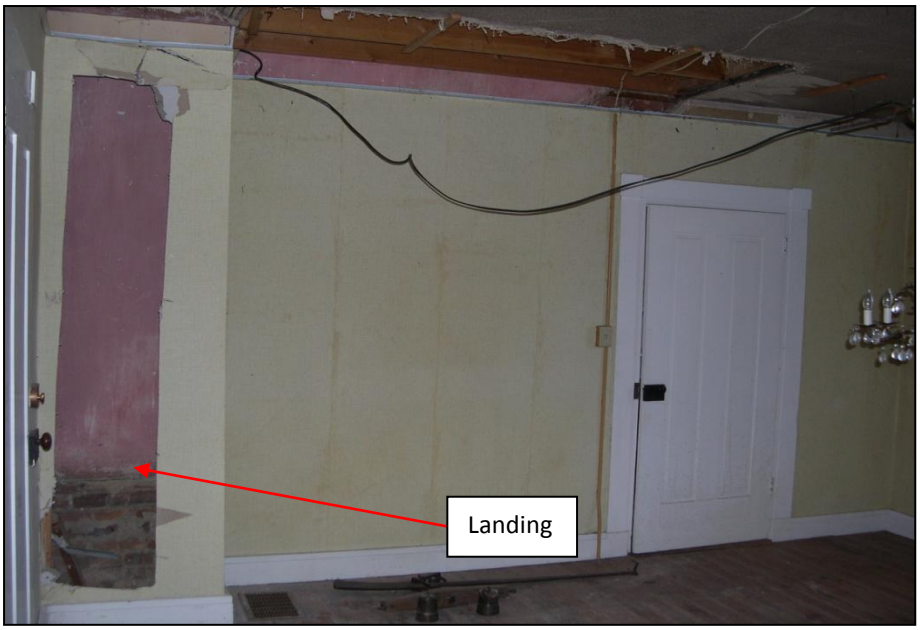


Figure 98: Looking west, remnants of the now vanished secondary staircase are plainly visible. The arrow denotes the landing where the stairs would have turned.

Plaster and Lath

The interior finished surfaces of the house's walls and ceilings are composed of plaster, installed in two coats, a rough coat and finish coat, typical of the antebellum period. The walls of the original brick structure are solid masonry, and therefore the plaster is applied directly onto the brick surfaces. Plaster and lath is used on the rooms' ceilings with noticeable damage and replacement visible. This is especially evident in the upstairs, west bedroom, where the plaster repairs can be seen and confirmed through the use of later circular sawn lath compared with the earlier riven lath seen elsewhere. Additionally, plaster is used to clad the walls of the two closets that flank the fireplace in the east bedroom (Room 203). The west walls of these closets are formed by simple boards, and the plaster has been applied directly to the surface of the boards without the use of wood lath. The plaster is only present at the room-side of these closet walls, however; the reverse sides of the board walls in the closets reveal the plain, unfinished boards.

Figure 99: This plaster ceiling is located on the first floor, in the dining room. Note the riven lath, typical of pre-war plaster work, as well as the two coats of plaster, rough (scratch) and finish.

Figure 100: This portion of the second floor ceiling, between the stairwell and west bedroom, shows the lath to be circular-sawn, indicating extensive ceiling repairs in the bedroom. Such repairs may have coincided with the replacement of nailers in the attic.

Siding

Photographs of the frame ell addition prior to the 20th century alterations show the structure to be clad with wood siding, in contrast to the brick of the original portion of the house. Although later alterations removed most of the ell's original walls and consequently its siding, portions remain along the north side of the first floor long porch (Room 107).

The original wood siding that is visible along what was the frame ell's south wall is beveled and maintains a 4 ½" exposure. The overall width of the siding boards is 5 ⅜", and the thickness ranges from ½" at the base to ⅜" at the top. The reverse-side of the siding shows it to be very regularly-cut using a circular saw.

A length of 5 ¼" corner trim was installed to form the exterior connection between the frame rear ell and the brick portion of the house - a fragment of this trim detail is visible at the east side of the dining room window.

Figure 101: The image on the left shows the junction between the original 1850s brick ell and the 1876-1880s frame addition. The weatherboard siding still remains intact under drywall installed by the Whithams' during the 1971 renovations.

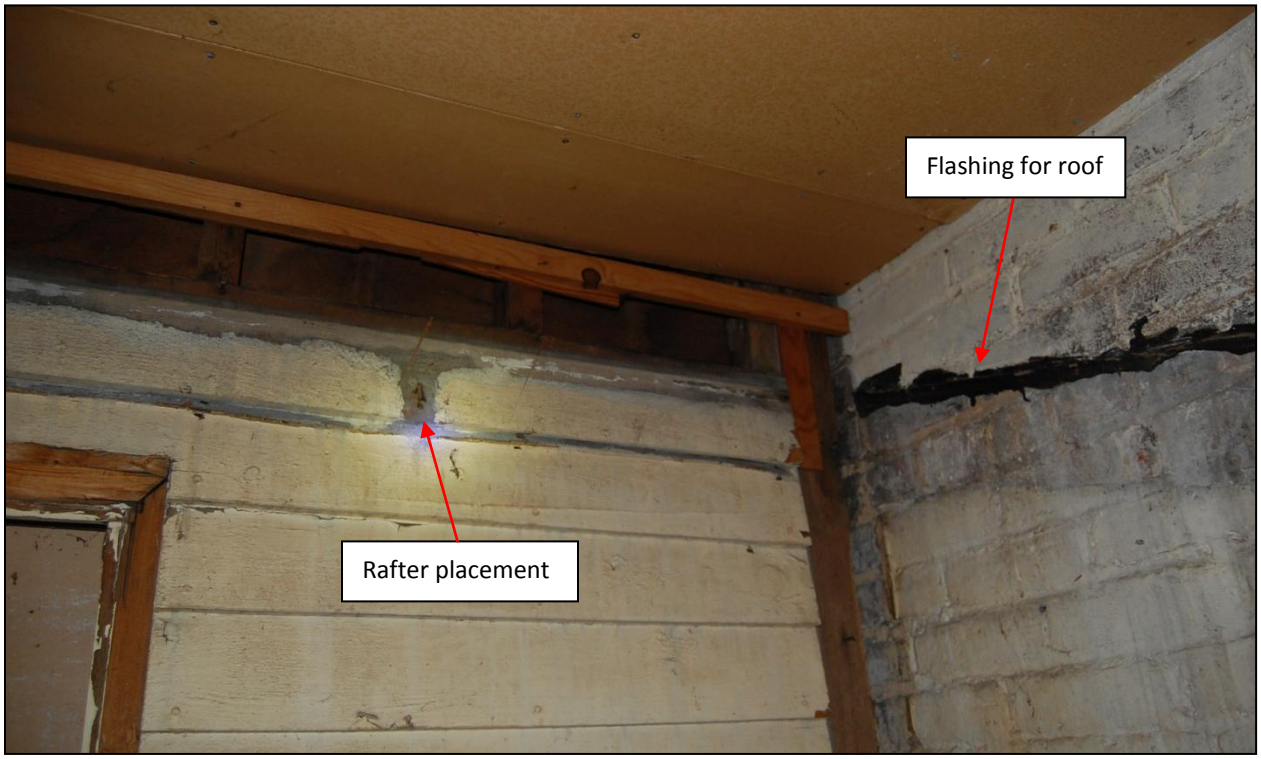


Figure 102: Above is an image showing the frame additions' siding on the north elevation, as well as "ghosts", indicating the configuration of a porch which at one time covered the original exterior cellar bulkhead.

Significance

Statement of Significance:

The Bowman-Hite farmstead, historically known as the Charlie Hite Farm, illustrates well the Warren County, Virginia family farmsteads, typical of the late-19th and early-20th centuries. This agricultural context is demonstrated by the historic size of the farm from 1881-1942, as well as the intact farmstead, which, includes the extant 1850s farmhouse, spring, late-19th century smoke house, ca. 1881 bank barn and livestock yard, early-20th century cow shed, and early-20th century chicken coops. The farmstead's location within the path of advancing Confederate troops, during the October 19, 1864, Battle of Cedar Creek, also connects the farmhouse directly to this historic event.[211] Through these contexts, Agriculture and Military, the farmstead meets National Register Criterion A, on both a national and local level, demonstrating association with a national historic event, the Battle of Cedar Creek in 1864, as well as its role in conveying local agricultural trends in Warren County, Virginia from 1881-1942.

Contextually, the properties development, and eventual decline, mirrors many regional farms within the lower Shenandoah Valley, affected by the Civil War, and the post war economic depression. Once part of Isaac Bowman's large landholdings in the late-18th and early-19th centuries, the land that would become the Charlie Hite Farm, was willed to his daughter, Rebecca Bowman, in 1843. At the time the property consisted of Isaac Bowman's mill complex, located along Cedar Creek, as well as 498 acres in Shenandoah and Warren Counties.[212]

Still single at the time she inherited the property, Rebecca Bowman married Charles Hite in 1849. Shortly after, in 1850, the couple sold the mill complex and consolidated their land holdings in Warren County, which at that time amounted to 393 + acres.[213] Sometime over the ensuing decade, the extant brick farmhouse, with Greek Revival elements, was constructed. A post-in-ground kitchen, which doubled as housing for 8 slaves, was also constructed nearby towards the southeast side of the farmhouse.[214] Evidence also suggests that a barn and another unknown structure were likely present on the property by the advent of the Civil War.[215]

This period, just prior to the outbreak of war, was the most prosperous time for the Charlie Hite farm. Comparatively, Hite's 393+ acres placed him well above the Warren County average of 269 acres. When evaluating the mean acreage per farm it is even more evident that Hite's farm was atypical in its size, being among the larger farms in the county. Adjacent to Warren County, Frederick County, had farms of similar size. However, Shenandoah County, also adjacent to Warren County had average farm sizes around 336 acres.[216]

Crop yields at Hite's farm in 1860 were also well above the Warren County averages. This is clearly evident when examining the two most popular crops grown for that year, corn and wheat. The average farm at the time was producing 380 bushels of corn and 199 bushels of wheat. The Hite farm during the same time is noted as producing 1,700 bushels of corn and 1,250 bushels of wheat. Livestock was little

[211] JED Hotchkiss, Hotchkiss Battle Maps, *Sketch of the Battle of Belle Grove*, October 19, 1864, No. 29
[212] Shenandoah County Will Book N, pp 521-526 (1826)
[213] Warren County Deed Book E, pg 66 (1850)
[214] *An Archaeological Assessment of the Bowman-Hite Farm Property*, William and Mary Center for Archaeological Research, 2012
[215] JED Hotchkiss, Hotchkiss Battle Maps, *Sketch of the Battle of Belle Grove*, October 19, 1864, No. 29
[216] 1860 Census Data, University of Virginia, http://mapserver.lib.virginia.edu/php/county.php; 1860 Census Data, University of Virginia, http://mapserver.lib.virginia.edu/php/county.php

different, with both swine and cattle herds larger than the average county farm. However, the types of crops and livestock grown on the farm mirrored those grown throughout the county.[217]

In addition to a vastly larger farm compared with many of their neighbors, the value of the farm at $13,000 was almost double that of the Warren County average. Hite also appears heavily invested in progressive farming methods with the 1860 census assigning a value of $350 to machinery on the farm. An 1861 inventory, seemingly confirms this large investment noting three McCormick ploughs and four or five double shovel ploughs.

Despite Rebecca Bowman's sizeable dowry, as well as large crop yields, by March 14, 1861, cracks begin to develop in the farms financial stability with a deed of trust entered into with the Bank of Winchester for $4,100. While the Hite's had taken out a series of loans totaling $13,873, for undisclosed reasons, beginning in 1859, this particular loan was the first to ask for "more ample and substantial securities." These more ample and substantial securities consisted of the farm, house, kitchen, slaves and furniture.

During the Civil War Charles Hite disappears, leaving W.P. Williams as the acting trustee of the estate, approving all expenditures made by Rebecca Hite. These years become difficult ones for the Hites, as two of their children die, and the farm appears to fall into disrepair. An 1871 account from tenant farmer James M. Bly notes that "the war was hard on the farm" and that prior to the war, the farm was worth $1,000 per year, but in its present condition, only $500-$700.[218] Despite these hardships, the farm escapes much of the devastation seen throughout the region, including the destruction wrought by Union General Sheridan.

While the farmstead's buildings and structures fall into disrepair, they appear to escape any substantial damage caused directly by the war. This is especially remarkable as the farmstead was directly in the path of Conner's Brigade. This brigade was under the command of Maj. James M. Goggin, during the Confederate's early morning attack on Joseph Thoburn's VIII Corps encampment during the October 19, 1864, Battle of Cedar Creek. One reason why the farmstead may have escaped damage during this battle is the complete surprise by which the Confederates took the Union positions just a few hundred yards away at the top of the hill.

While this portion of the battlefield did not see the most intense fighting, it is the location of one of the more complete "surprise" attacks conducted during the war. The Charlie Hite farmstead, although not a major feature on the battlefield, was no doubt used as a landmark for advancing Confederate troops as its location and even color, are noted on J. D. Hotchkiss's maps of Cedar Creek, made just days prior to the battle.[219] Because of this association with the initial attack on Union forces, the farmstead contributes to the larger, national significance, associated with the Battle of Cedar Creek.

Today, while the natural features and topography of the site remain intact, the only farmstead features left from the 1864 period of significance are the ca. 1850s brick farmhouse, the nearby spring, and the stone foundation of the bank barn. However, these features, as well as later structures, contribute greatly to the integrity of design, setting, and feeling associated with the battle. The farmhouse itself, despite later additions, still retains many of the seven aspects of integrity from this period including, design, workmanship, material, location, association, feeling, and setting.

[217] 1860 United States Federal Agricultural Census, Schedule 4, Warren County, Virginia, pg. 211.
[218] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880.
[219] Hotchkiss, Sketch book of Jed Hotchkiss, pg 48.

Despite selling their slaves in 1863 for $3,340 as well as renting the farm after the war, by 1870, George Hupp, trustee for William Stickley, a large creditor, calls in the Hite's much extended debt. About this same time, Charles Hite, abandons his wife, Rebecca, and his children. Left to fend for herself, the farm is put up for auction on January 7, 1871. The auction notice at the time describes the property as "…a large number of acres of fine bottom land, the upland is fertile and productive, well watered, with a fair proportion of timbered land. The mansion is a good brick and commodious building with all necessary outhouses, and a spring of fine water near the house, and, upon the whole, a most valuable and desirable estate." While Rebecca protests the sale, with court documents noting that rent from the land "is the only support now left to complaintant [Rebecca Hite]", the property is eventually auctioned off on September 1, 1872 for $8,000, half the assessment of $15,880. The purchaser of the property was creditor, William Stickley.[220]

Not only is the final sale price of the farm half its assessed value, but the property fails to auction on two previous attempts, illustrating the poor, post-war, economic climate in the lower Shenandoah Valley. Rebecca Hite seemingly confirms this economic climate during her 1871 Chancery Suit when she notes that "money is scarce" in the county.[221]

Four years after he bought the land, William Stickley sells it to John Purkey for $5,200, a notable loss.[222] Purkey, like Charles Hite, appears to overextend himself and is forced to auction 270 of the "old Charlie Hite" farm's 393+ acres on August 8, 1879. Situated on these 270 acres is a "good new frame dwelling house, stabling and other necessary improvements."[223] These buildings appear to have been constructed by Purkey and coincide with alterations and additions to the Charlie Hite farmstead carried out between ca. 1876-1880s.

During this same period, farms throughout the lower Shenandoah Valley are decreasing in size as the number of farms increase. This post-war shift to, smaller, family farms, is clearly illustrated by agricultural census data from the period which shows the acreage of the average Warren County farm decreasing from 269 acres in 1860 to 200 acres by 1880. This decrease would continue until about 1900 when the size of local farms, as well as the agricultural economy, would stabilize. At the same time, there is a sharp increase in the number of farms in the county, from 415 in 1860, to 579 in 1880. Surrounding counties, such as Shenandoah and Frederick, saw similar trends during this same period.[224]

Shortly after Purkey's sale of the 270 acres, in 1880, Abraham Kerns begins to rent the remaining 127 acres of the Charlie Hite farm, now considered a below average sized farm, including the farmstead constructed by the Hite's in the 1850s. The following year in 1881, Kern's pays the taxes on the property, "hitherto charged to Purkey…" as well as marries Ella, whose last name is unknown.[225] Around this same time the farmstead, undergoes a number of changes. These changes include the dismantling or demolition of all but the stone foundation of the ca. 1850s barn, as well as the post-in-ground kitchen structure. Whether it is through Purkey's money, or that of Abraham Kerns, a new Standard Pennsylvania bank barn is erected ca. 1881 as well as a rear frame kitchen addition onto the brick

[220] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880.
[221] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880.
[222] Warren County, Virginia, Clerks Office, Deed Book K, pg 198.
[223] Shenandoah Herald, August 6, 1879, pg 1 col. 4.; Shenandoah Herald, November 5, 1879, pg 1 col. 5
[224] 1870-1900 Agricultural Census, Schedule 4, Warren County, Frederick County and Shenandoah County, Virginia
[225] Warren County, Virginia, Clerks Office, Deed Book Q, pg 271.

farmhouse.[226] These physical changes to the farmstead are mirrored by other nearby farms, such as Mount Pleasant in Shenandoah County, which also builds a similar bank barn.

The re-incorporation of the kitchen, into the farmhouse, follows a much larger regional trend. Innovations in cooking as well as the end of slavery, no longer necessitate a standalone kitchen. Rather it becomes convenient to have a kitchen incorporated into the house.

The monetary investment into regional farms underscores a seemingly new found sense of optimism in agriculture throughout the valley. While it would not be until the 1890s that the regional agricultural economy would begin to turnaround, it had apparently stabilized by the early to mid 1880s. Such stabilization can be seen in the average cash value of farm product in Warren County from 1880 to 1890. Where a decade prior, 1870-1880, the average cash value of farm product fell from $1,282 to $583, the value actually went up between 1880 and 1890, from $583 to $585. Such trends, as is often the case, were mirrored by both Shenandoah and Frederick Counties.[227]

Approximately six years after he began to rent the Charlie Hite Farmstead and surrounding 127 acres, Abraham Kerns purchased the property outright in 1886 for $2,800.[228] Throughout Abraham Kern's ownership, the farm exemplifies the typical family farm found in Warren County and much of the surrounding region. An inventory of the farm conducted in 1900 notes that Kerns is not only growing hay and wheat, mainstays in the region, but also raising a bull, red cows, and milk cows.[229] Evidence also suggests that like the surrounding region, Kern's is beginning to expand on the orchard operations. Later in the 20th century the region would become known for apple production.

Unfortunately, on April 4, 1900, tragedy would strike as Abraham Kerns accidentally shoots himself. Left behind were his wife Ella and their young son Charles Kern, sixteen at the time.[230] However, despite this tragedy, Ella would continue to operate the farm with her son. In 1910, the census lists Ella as a "general farmer" and Charles as the "farm manager".[231] Around this same period, the Kern's would institute a number of small changes on the farm, many associated with agricultural innovations of the time such as the installation of lightning rods on the barn and wire fencing around the property.[232] Construction of an early, poured concrete silo also appears to have been undertaken around this time with similar structures evident at nearby farms like Mount Pleasant and Long Meadows.

Tragedy would strike the Kern's family again on October 29, 1941 with the passing of Charles Kerns. His wife Mary, whom he married during the 1910s, inherited the property which at the time was functioning very much the same as it was in 1900. Records from the time still note the presence of various cows including a black heifer, a Roane Durham, and a Guernsey.[233] However, with the death of her husband, and her mother-in-law too old for farm labor, Mary moved to nearby Middletown and rented the property until 1967 when she sold it to the Whithams.[234]

---

[226] Warren County Land Tax Books, 1881.
[227] 1870-1900 Agricultural Census, Schedule 4, Warren County, Frederick County and Shenandoah County, Virginia
[228] Warren County, Virginia, Clerks Office, Deed Book Q, pg 271.
[229] Warren County Will Book G, pg 433 (1907)
[230] Richmond Times Dispatch, April 6, 190
[231] 1910 Population Census, Schedule 1, Warren County, Virginia (Cedarville Township); pg. 1B (2349), line 24.
[232] Warren County Will Book G, pg 433 (1907)
[233] Warren County Clerk's Office, Will Book L, pg 375; Warren County Clerks Office, Will Book L, pg 411, 440
[234] Warren County, Virginia Deed Book 157, pg 393-394 (1967)

During the Whithams ownership of the farm substantial alterations would take place to the farmhouse. These changes included the enlargement of the rear frame ell, which would encase the earlier 1876-1880s addition, the addition of a two-car garage and a new concrete front porch. A corrugated metal utility shed would also be erected on the property during this time. However, despite these alterations, much of the integrity of the farmstead from the 1864 period as well as 1881-1942 period remains intact. One notable exception is the ca. 1876-1880s rear frame addition which lost much of its integrity during the 1970s renovations.

Despite a loss of 60-70% of the material integrity, enough physical evidence remains to undertake an accurate partial reconstruction. Such action is recommended to assist in the interpretation of the buildings development over time and to better illustrate how technological and economic developments played a role in the tangible agrarian landscape. Retention of the rear frame addition of the farmhouse will also provide means to more effectively utilize the structure for other activities beyond battlefield interpretation should circumstance warrant as it was originally intended to serve as a kitchen and could do so again.

Condition Assessment

Summary:

The Bowman-Hite farmhouse, despite some issues, remains in good condition. This is particularly true of the oldest, 1850's, Hite portion of the structure. Subsequent additions, particularly the Pirkey's mid to late 1870s rear frame addition, have not fared as well, having been much altered over the course of the structures development. The more recent Whitham era additions, 1967-2003, have also experienced condition problems, namely associated with moisture infiltration from the roof.

While the overall condition of the structure is fair to good there are some concerns that will need to be addressed in short order. The primary areas of concern deal mostly with moisture problems related to poor site drainage. This can be seen in the basement/cellar area where black and white rot have begun to cause problems with the north window. Step cracking (crack #4) seen from the exterior, deformation of the wood, high moisture content, and the visible presence of black and white rot all indicate that the window assembly is degrading and in need of stabilization and support. A certified engineer should be consulted on any issues such as these which deal with the buildings structural system and load bearing abilities.

Stabilization of the window assembly should be a high priority, which in turn should be followed by addressing the cause of the condition, namely site drainage issues. Normally the cause is addressed first, condition of the window warrants immediate stabilization. Poor site drainage, while the cause of many of the moisture related problems at the structure, appears to be stemming from clogged gutters, downspouts, and drains. Insuring that these are functioning to their full capacity and moving water effectively away from the basement foundation will help alleviate high relative humidity levels, rising damp, and the subsequent mold problems.

While dealing with the site drainage will greatly assist in moisture problems, proper ventilation in the basement/cellar area will also help remediate the mold issue. Historically, the basement window would have provided light and ventilation to the area. Coupled with a lime whitewash such measures were often successful in preventing mold growth and can be re-instituted to some measure assisting in remediating this problem.

The mortar joints on the stone foundation as well as the north and west elevations are also in need of repair. Removal of the Whitham era front porch has fixed many of the moisture problems that the west elevation was experiencing, and further work on site drainage will alleviate any additional rising damp issues, addressing the cause of the mortar failures. Re-pointing of the joints, in conjunction with the replacement of missing bricks under the west elevation's front entryway, will help ensure that the structure is weather tight and structurally sound. Such repairs will also assist in preventing unwanted animal incursions into the structure. Repair of mortar joints is also necessary on the west wall of room #107 (crack #3), where the splayed brick jack arch is slipping due to mortar loss.

Other condition concerns are also present throughout the structure and will need to be addressed at some point in the near future to prevent further loss of material integrity; however their condition does not immediately affect the structural integrity of the building. These issues include;

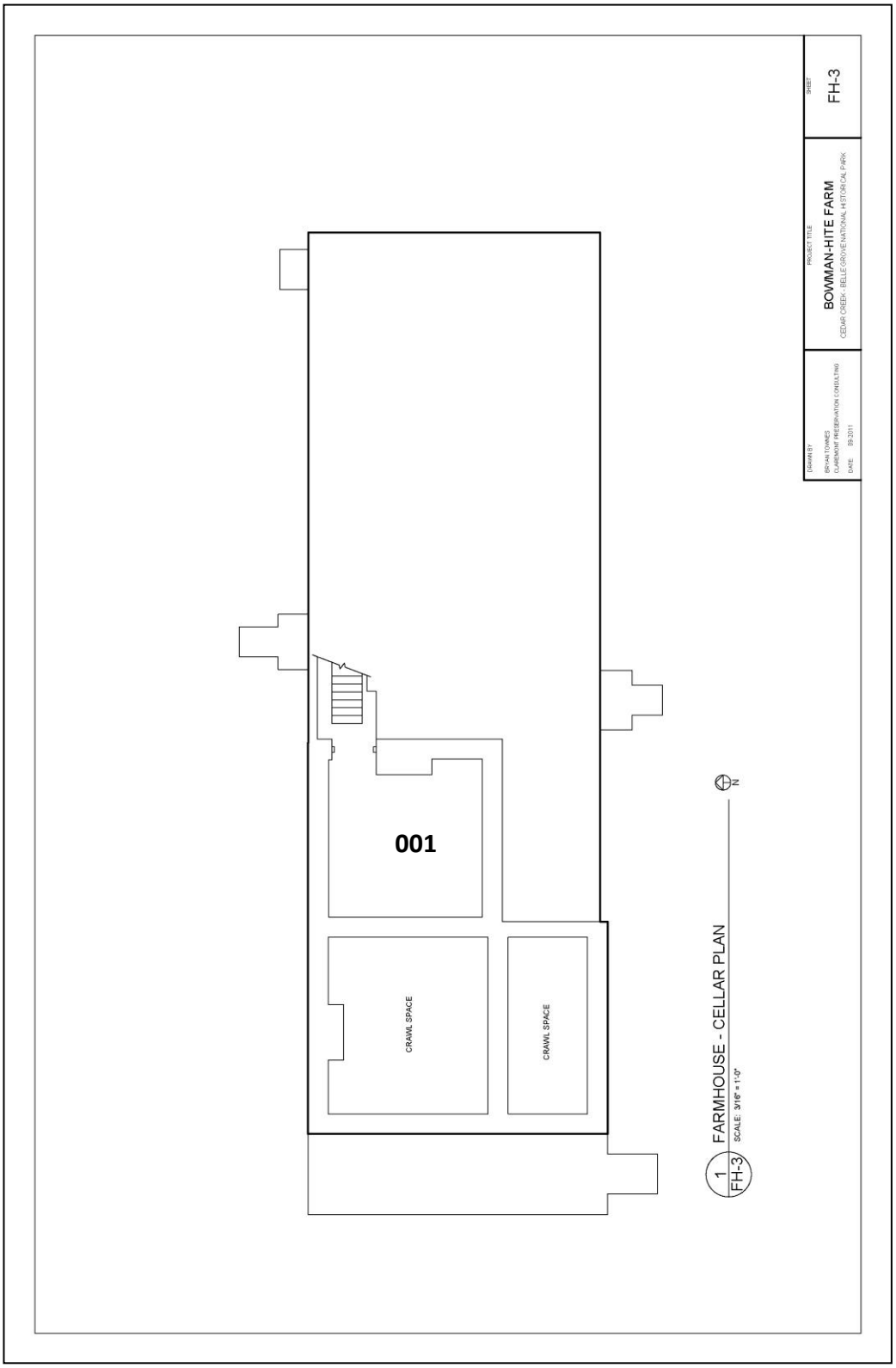
- Exterior window and door rot and degradation.
- Animal intrusions
- Surrounding vegetation and moisture retention.

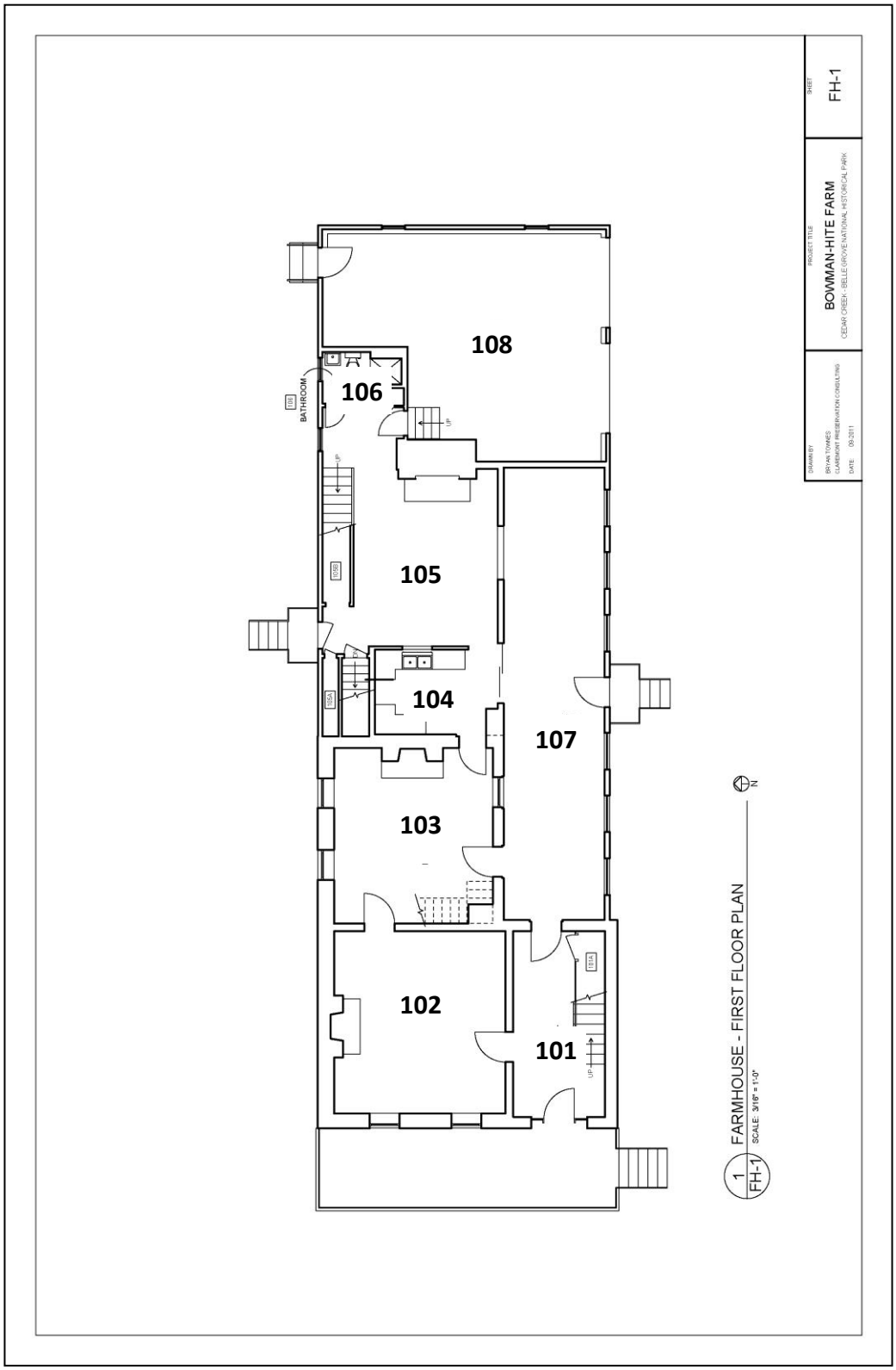
Location	General Condition (Good, Fair, Poor, Severe)	Construction Period
Exterior		
West Elevation	Fair	Period I-III
South Elevation	Good	Period I-III
East elevation	Good	Period I-III
North Elevation	Poor	Period I-III
Interior Cellar		
001-Cellar/Crawl Space	Poor	Period I
Interior First Floor		
101-Stairhall	Good	Period I
102-Front Parlor	Good	Period I
103-Dining Room	Good	Period I
104-Kitchen	Good	Period II
105-Den	Good	Period II
106-Bathroom	Good	Period III
107-Long Room	Fair	Period III
108-Garage	Good	Period III
Interior Second Floor		
201-Stairhall	Good	Period I
202-West Bedroom	Good	Period I
203-East Bedroom	Good	Period I
204-Hall	Fair	Period III
205-West Bathroom	Good	Period III
206-East Bathroom	Good	Period III
207-Ell West Bedroom	Fair	Period III
208-Hall Landing	Good	Period III
209-Ell East Bedroom	Good	Period III
210-Southeast Room	Fair	Period III
211-Laundry Room	Fair	Period III
Attic		
Attic	Fair	Period I-III

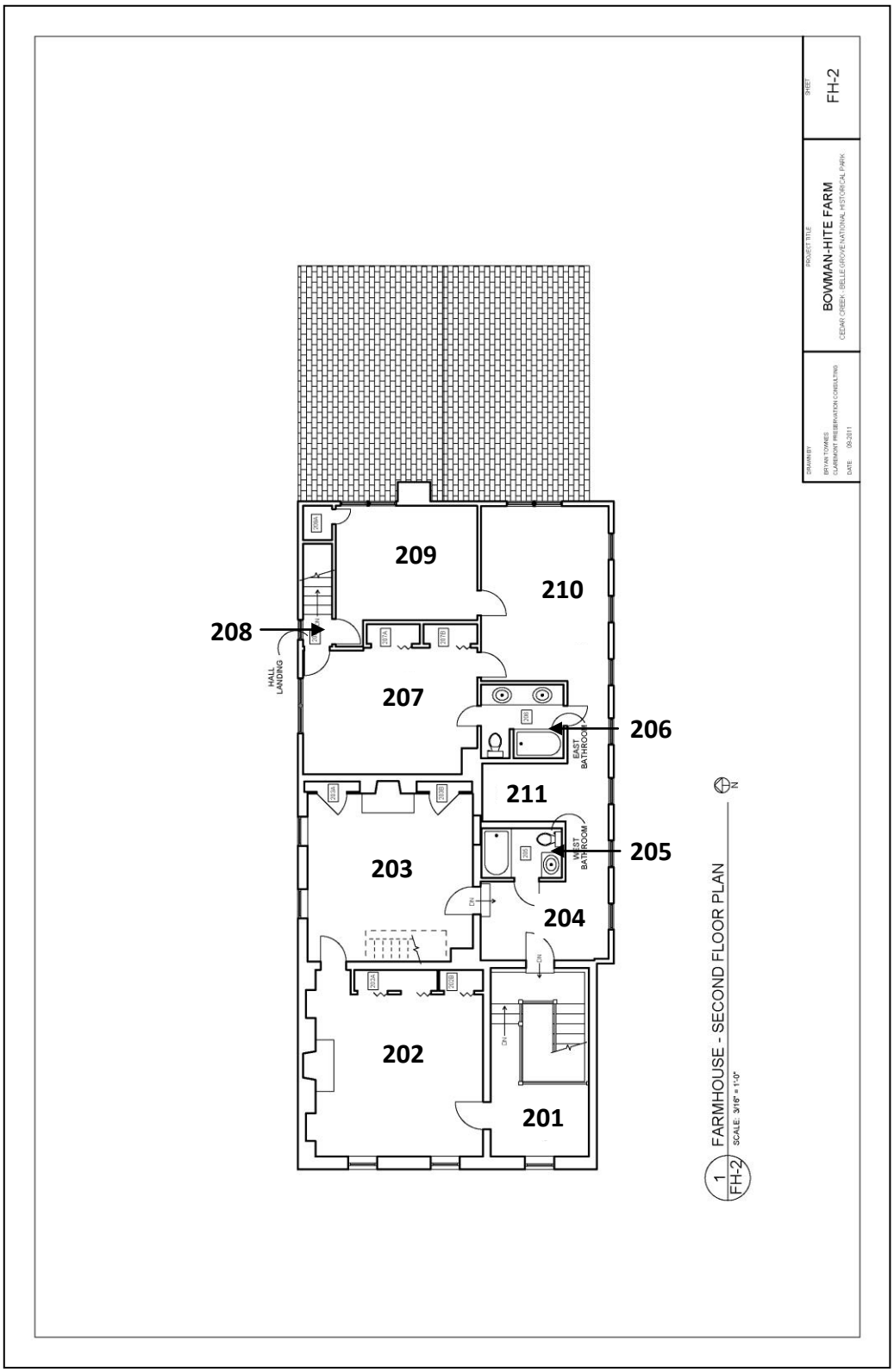
Table 2: General condition assessment table.

Condition Scale Explanation: The scale used to asses each location of the Bowman-Hite structure was created in order to provide qualitative information as to condition and help prioritize resources. More specific information concerning room condition is noted later in the text and should be examined prior to any action. **A certified engineer should always be consulted when dealing with structural issues**.

Good:	Structure is sound.
Fair:	Structural failure is unlikely but certain components show signs of degradation.
Poor:	Structural failure is possible without remediation.
Severe:	Structural failure is imminent.


001
CRAWL SPACE
CRAWL SPACE
N
1
FH-3
FARMHOUSE - CELLAR PLAN
SCALE: 3/16" = 1'-0"
DRAWN BY
BRYAN TOMKES
CLARKNOVET PRESERVATION CONSULTING
DATE: 09-2011
PROJECT TITLE
BOWMAN-HITE FARM
CEDAR CREEK - BELLE GROVE NATIONAL HISTORICAL PARK
SHEET
FH-3


108
106
BATHROOM
105
104
107
103
102
101
UP
FARMHOUSE - FIRST FLOOR PLAN
SCALE: 3/16" = 1'-0"
1
FH-1
N
SHEET
FH-1
PROJECT TITLE
BOWMAN-HITE FARM
CEDAR CREEK - BELLE GROVE NATIONAL HISTORICAL PARK
DRAWN BY
BRYAN TOWNES
CLAREMONT PRESERVATION CONSULTING
DATE: 09.2011


209
210
208
HALL LANDING
207
206
EAST BATHROOM
211
205
WEST BATHROOM
203
204
202
201
1 FH-2
FARMHOUSE - SECOND FLOOR PLAN
SCALE: 3/16" = 1'-0"
N
PROJECT TITLE
BOWMAN-HITE FARM
CEDAR CREEK - BELLE GROVE NATIONAL HISTORICAL PARK
SHEET
FH-2
DRAWN BY
BRYANT OWNES
CLAREMONT PRESERVATION CONSULTING
DATE: 09/2011

Exterior Elevations Condition Assessment

Exterior Summation of Results:

The exterior of the Bowman-Hite structure remains in relatively good overall condition with most issues not bearing on the building's structural integrity. That said there are a few areas of concern that need to be addressed in short order. These areas involve the north and west elevations and are largely associated with the poor site drainage.

The most pressing exterior concern is stabilization of the north elevation basement window. This window, due to its close proximity to the ground has been greatly affected by rising damp as well as moist conditions present on the north side of the structure and the interior cellar room. Such conditions have allowed for the growth of both black and white rot, compromising the window surround's structural integrity. Illustrating this loss of integrity are the step cracks which have formed on the exterior faced directly above the deforming window lintel. Stabilization of this component should be a high priority as its failure will likely result in the partial collapse of the brick wall in the immediate vicinity above the window.

Poor site drainage, the likely cause of the rising damp, rot, and generally moist conditions in the vicinity is another matter which will need to be addressed on the north elevation immediately. Without remediation any work completed will be subjected to the same conditions that promoted the degradation initially. Work should specifically concentrate on cleaning gutters and downspouts as well as ensuring that drains meant to remove water away from the foundation are functioning with an adequate slope.

Additional rot concerns endanger the material integrity of the north and west exterior elevation window and door surrounds. While first floor sashes as well as the entry door surround are later replacements, the window casings are original to the 1850s as are the second floor window assemblages. Age has certainly played a factor in their degradation, however lack of routine painting has also contributed. Currently, the condition of many of the window and door components will necessitate removal of rotten material and the installation of new, density and species compatible wood, which if property painted and maintained will address concerns. The removal in 2011 of the Whitham era front porch by the National Park Service was a good first step in addressing moisture concerns related to "splashback" that likely exacerbated the situation on the west elevation.

The removal of the porch also helped address moisture concerns relating to the failing mortar on the west and portions of the north elevations. At present re-pointing is necessary at the lower northwest corner of the structure, the lower portion of the brick wall along the west elevation, and a majority of the exposed stone foundation wall. Such remediation will help ensure that the structure remains sound and is able to prevent moisture penetration. During re-pointing of the west elevation effort should also be made to replace missing bricks, in-kind if possible, especially underneath the front door sill. Other holes around the door surround should also be addressed to prevent further moisture and animal infiltration.

Removal of inappropriate mortar, Portland Cement, throughout the stone foundation and exterior brick wall is also recommended to avoid future problems. Such repairs can often be identified at the Bowman-Hite house due to the "smearing" nature of the joint strike.

Exterior Condition Assessment Chart:

Image	Symptom	Cause	Affected Building Elements	Location
	Brown Rot	• Moisture	• Window frame • Window surrounds • Door sill and surround	• West elevation • North elevation
	Cracks	• Drainage • Additions	• Brick walls	• North elevation
	Failing Mortar Joints	• Moisture • Improper interventions	• Brick walls • Stone walls	• North elevation • West elevation • South elevation
	Loose/Missing Masonry	• Improper interventions	• Stone walls • Front entryway	• West elevation
	Holes	• Animals	• Stone foundation • Cinderblock foundation	• South elevation
	Moisture Retention	• Vegetation in close proximity to foundation	• Stone walls • Brick walls	• South elevation

Table 3: Exterior conditions assessment table.

West Elevation

Site:

The West elevation, with the removal of the front porch appears to have good site drainage and limited opportunity for moisture to be trapped against the foundation.

Wood Components:

Brown Rot:[235]

Window sills, both on the first and second floors of the west elevation show significant damage caused by brown rot. Window casings and surrounds also exhibit signs of rot, although to a lesser degree. The front door sill, like the window sills, also shows a high level of decay and indicates the potential for further rot behind the modern door surround.

Such high levels of depredation are due in large part to the installation of a modern, full width, concrete porch during the Whitham era of occupation, since removed. Splashback of moisture as well as poor drainage, trapping rainwater against the house, created an ideal situation for rot to develop on wood components as they were constantly kept moist. Additionally, protective paint layers, have over the years, degraded, allowing moisture penetration.

Masonry:

Failing Mortar Joints:

The lower portions of the west elevation's brick wall show the greatest mortar degradation at the Bowman-Hite house. Here the mortar has been damaged through repeated saturation by water splashback caused by the previous Whitham era porch. This led to the dissolution of the lime binder in the brick mortar as well as created a situation which promoted mechanical degradation through the freeze-thaw process.[236]

The stone foundation also shows signs of mortar failure. Originally struck in a "v", which shed water and protected underlying mortar lifts, this joint has, over time and through insensitive interventions, been removed. The removal of the protective joint has created a situation in which water can more readily penetrate and saturate underlying mortar lifts causing degradation through chemical dissolution of the lime binder as well as mechanical means such as freeze/thaw.

Missing or Loose Masonry:

[235] Brown rot or brown cubical rot encompasses a number of rots which are typically characterized by the "cubical shapes" they created in the infected wood. While these rots prefer softwoods they will attack hardwoods. This category of rot also includes the "dry rots" which have the capability of surviving without the introduction of an outside water source as they are capable of creating their own moisture. (Weaver, Conserving Buildings, pg 25)
[236] The free/thaw process occurs when water penetrates a substance and is then frozen causing the embedded water to expand. The force of the water expanding pushes against the material forcing it apart and widening cracks and voids. This process is particularly damaging to brick, stone and mortar.

Alterations to the front porches of the farmhouse during the Whitham's era of ownership have resulted in the removal and loosening of bricks directly under the front entryway. While the removal of these bricks has not affected the structural integrity of the building, it has opened holes in the building envelope, subjecting the structure to unwanted animal activity. Re-pointing and replacement of missing bricks is important to ensure a fully enclosed building envelope.

Miscellaneous:

Since purchase of the property, three of the faux wood shutters on the west elevation have been damaged or are missing. Added during the Whitham era, these features are not considered to be historic

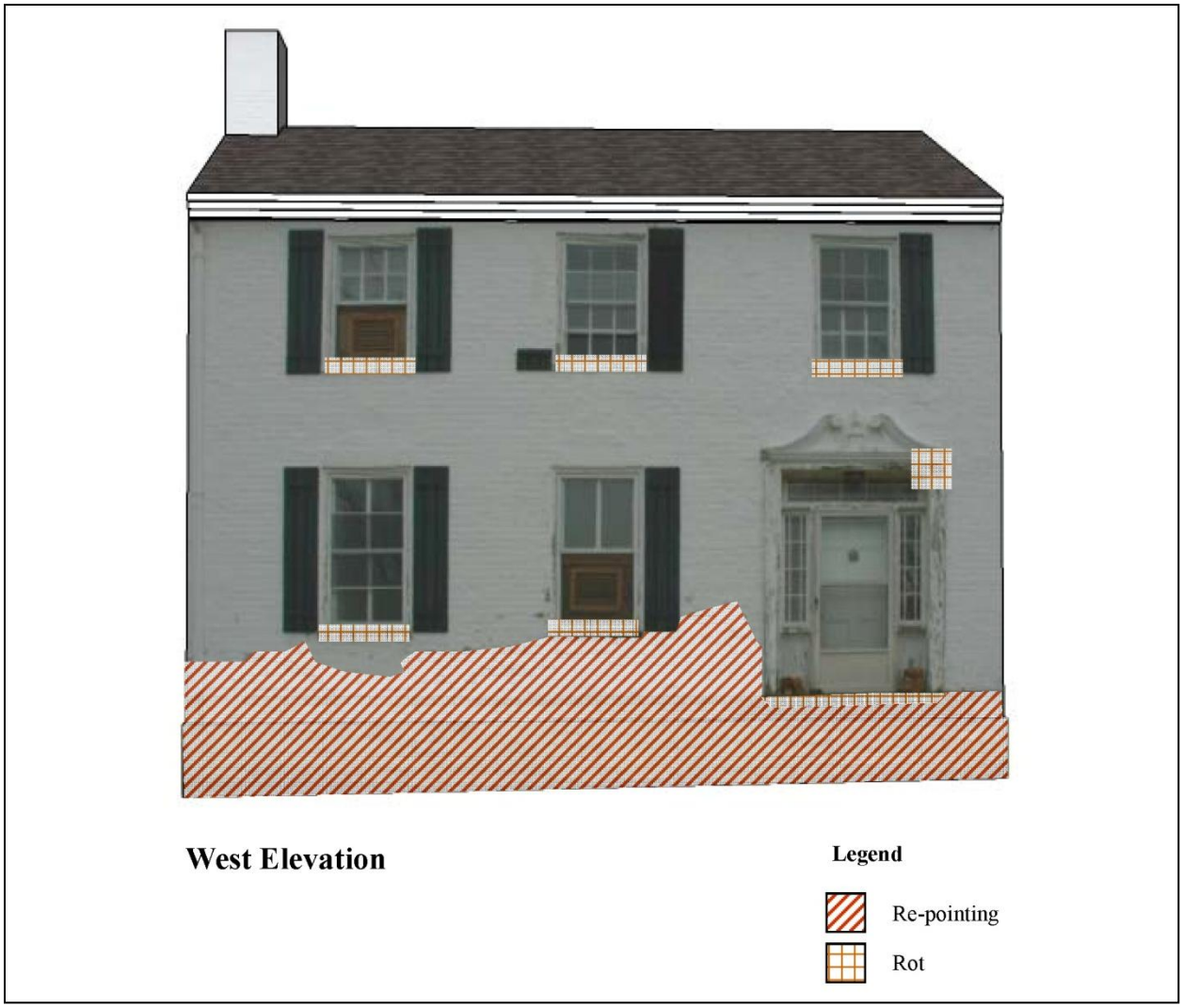


Figure 103: The image above shows the west elevation of the Bowman-Hite farmhouse. Noted by the red hatching are the areas where insensitive, Portland cement, repairs have been made as well as areas in need of re-pointing. The orange square hatching denotes areas where severe rot has occurred.

Figure 104: The image on the top right shows the brown or cubical rot affecting one of the original window sills. Top left is an example of a deteriorated mortar joint on the west elevation.

South Elevation

Site:

Drainage:

The south elevation has gutters with three downspouts, all positioned on the Whitham era addition. While this is adequate for the roof area, the water from the downspouts is discharged into clogged, poorly sloped or nonexistent ground drains, limiting the ability of the system to adequately remove water away from the structures foundation. Such poor drainage is a major contributor to rising damp issues associated with the basement and foundation.

Vegetation:

The presence of plantings in close proximity to the 1850s, Charles and Rebecca Hite brick structure, can contribute to retention of moisture exacerbating mortar loss. Additionally, larger plantings, if allowed to mature, can undermine foundations, especially when cut down and removed, as rotting roots leave voids which can collapse cracking walls.

Animal Activity:

While not an extensive problem, the southwest corner, where the Whitham era addition joins the 1850s, Charles and Rebecca Hite structure, does exhibit signs of animal borrowing. Such burrows can undermine foundations, leading to cracking, as well as provide access points to the interior of the structure.

Holes in the attic window vent screen as well as the loose fitting nature of the sash within the window surround provide an opportunity for animal access, with bats taking up regular residence in the attic space. Access points for animals into the structure are also found underneath the Whitham era jetty, where the vinyl has been removed, exposing the wood joists.

Wood Components:

Brown Rot:

There is limited exposed wood on the south elevation of the structure. One exception is the attic vent window positioned at the center of the gable on the original 1850s portion of the structure. The window surround exhibits some signs of brown rot as does the sill, although the interior window casing remains in relatively good condition. Positioned on the south elevation, the window receives adequate exposure to light as well as protection from weather, which typically comes from the north and west, limiting potential degradation caused by rot. The protective layer of paint also seems to be intact, providing further protection against rot.

While the wooden verge board is at present covered with aluminum siding, this is an area of potential concern. Situated so close to the roof and gutters, verge boards, are often exposed to damp conditions. Additionally, the aluminum covering may be helping to trap moisture against the wooden verge board, promoting rot.

Poor drainage and the failure of a protective paint layers has also led to degradation of the Whitham era garage doors.

Masonry:

Cracks

Located on the southeast corner of the cinder block foundation is a step crack, likely created due to settlement issues possibly associated with the direct discharge of water from the downspout adjacent to the foundation.

Failing Mortar Joints:

The stone foundation also shows signs of mortar failure. Originally struck in a "v" joint which shed water and protected underlying mortar lifts, this joint has over time degraded. The degradation of the protective joint has created a situation in which water can more readily penetrate and saturate underlying mortar lifts causing degradation through chemical dissolution of the lime binder as well as mechanical means such as freeze/thaw.

Miscellaneous:

The appearance of the aluminum siding of the Whitham era addition is at present showing signs of deterioration, primarily chalking. While this poses no threat to the structural integrity of the building, but it does impact its aesthetics. Overtime the paint will continue to chalk, exposing more of the underlying aluminum.

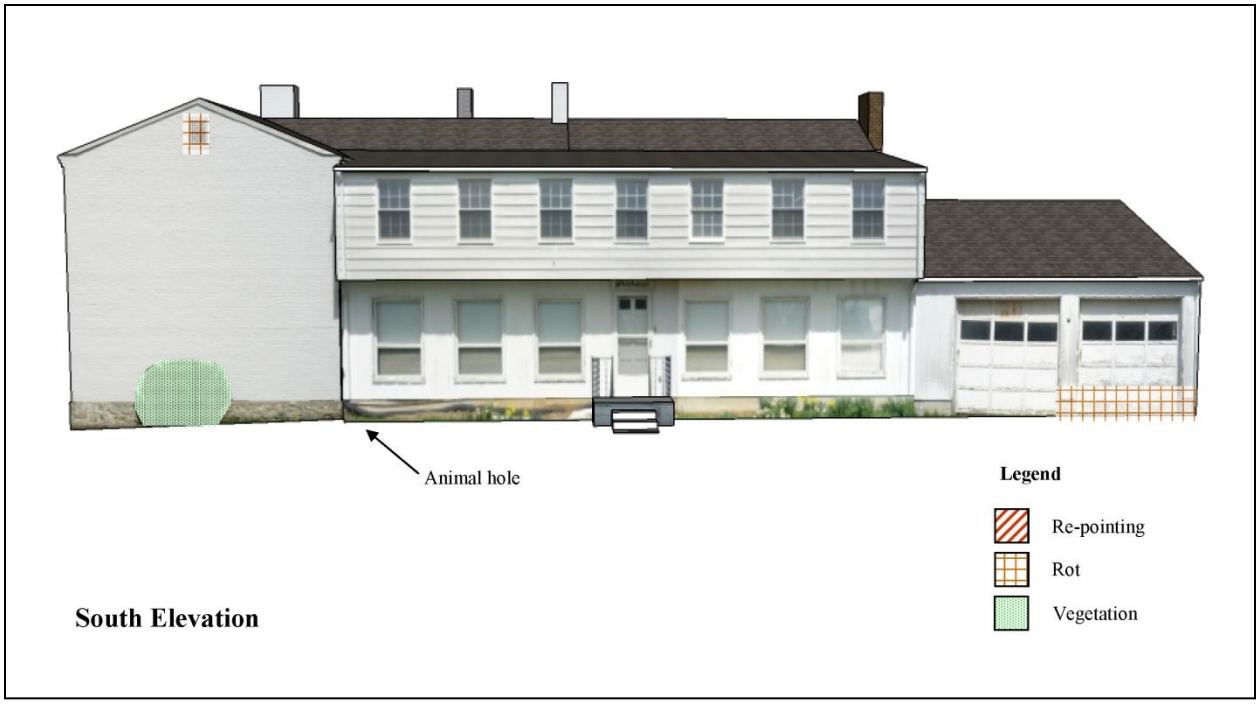


Figure 105: The south elevation pictured above has a variety of issues indicated by the colored hatching including the need for re-pointing, vegetation removal and rot concerns.

Figure 106: The top left image shows the garage doors and step crack in the CMU foundation possibly caused by poor drainage away from the structure's foundation. The bottom right image shows a close-up of the once louvered vent. Despite the deterioration on the outside the interior of the frame and sash remains in good condition.

East Elevation

Site:

The East elevation appears to exhibit adequate drainage, although the field to the east of the house tends to remain saturated. There are no nearby trees or shrubs that could potentially cause problems. No evidence of animal occupation has been observed on this elevation.

Wood Components:

Due to most components on this elevation dating to the Whitham era of occupation (1967-2003), as well as the use of aluminum siding to cover wood details, there is little damage visible to any wood components.

Masonry:

Failing Mortar Joints:

Two of the chimneys of the structure can be clearly seen from the east elevation, including one of the original 1850s, Charles and Rebecca Hite, chimneys, located at the east gable end of the brick "ell". The other chimney is associated with the 1870s Pirkey frame addition and was raised a full story during the Whitham era additions. Both chimney stacks exhibit failing mortar joints due to weathering. Similar to what is occurring on the stone foundation; the exposed chimney stacks are also susceptible to water penetration and subsequent dissolution of the lime binder as well as freeze/thaw action. The loss of mortar likely explains the steel bracing currently being used on the original 1850s, rear ell chimney stack, preventing any lateral movements. Poor mortar pointing associated with the raising in height of the 1870s Pirkey chimney stack is likely a culprit behind its current condition, as the older portion of the chimney stack remains in excellent condition.

While there is little that can be done to reduce weather exposure of the chimney mortar joints, aside from altering the aesthetic appearance and integrity, the chimney caps can be inspected on a regular basis to ensure that water is not penetrating vertically into the masonry stack. Correct re-pointing can also assist in reducing the weathering of the stacks.

Missing or Loose Masonry:

Loss of mortar on the two east elevation chimneys has resulted in some loose bricks. Loose material, especially on chimneys can create a hazard as well as opening the building element to further degradation.

Miscellaneous:

Miscellaneous:

The appearance of the aluminum siding of the Whitham era addition is at present showing signs of deterioration, primarily chalking. While this poses no serious threat to the structural integrity

of the building, it does impact the aesthetics of the structure. Overtime the paint will continue to chalk, exposing more of the underlying aluminum.

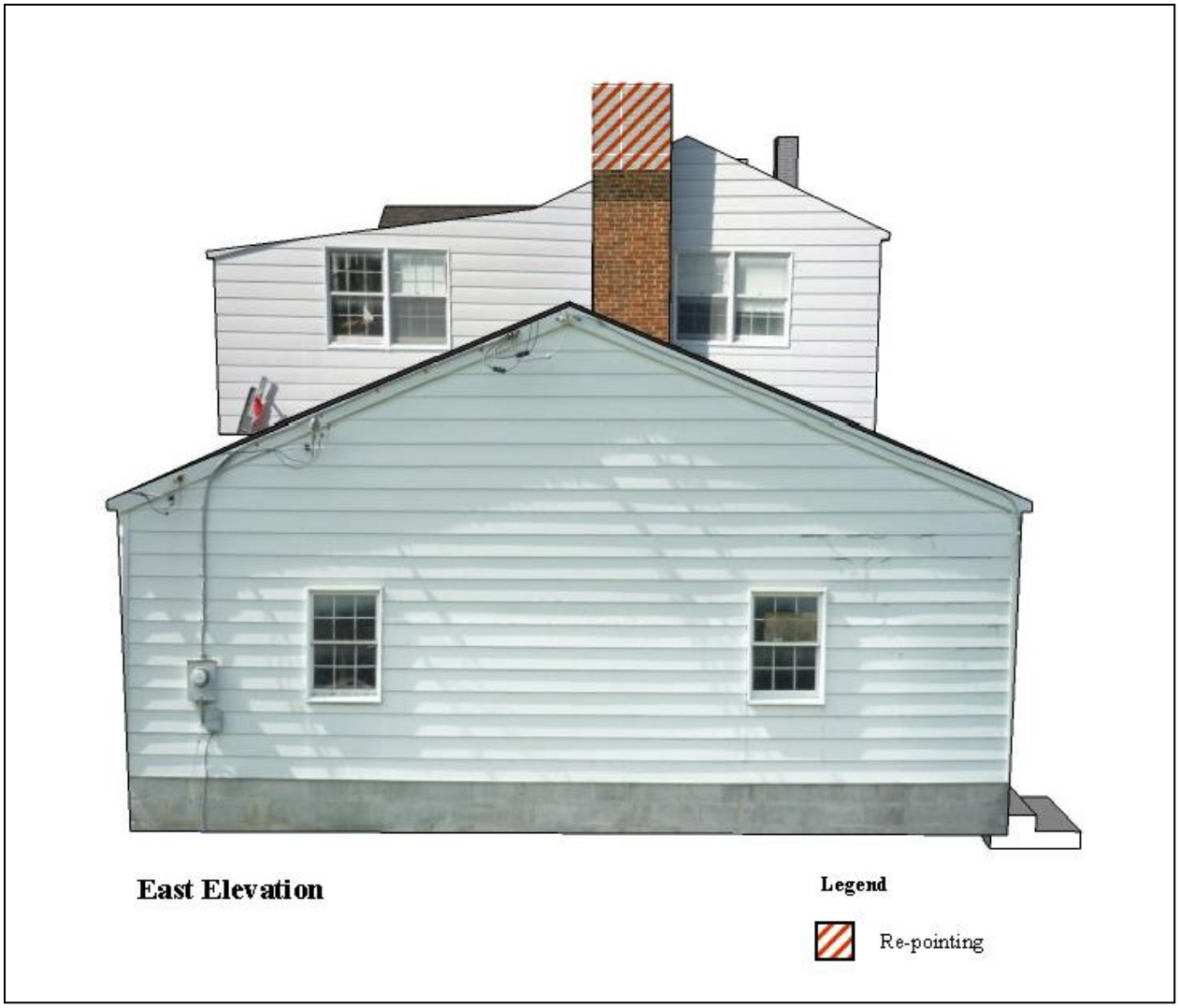


Figure 107: The top image shows the east elevation with the ca. 1876-1880s chimney. Noted at the top of the chimney is the need for re-pointing work. The left image clearly shows the change in brick type between the 1876-1880s portion of the chimney and the newer, ca. 1971 portion.

North Elevation

Site:

Drainage:

Five downspouts, including three on the 1850s, brick structure, are located on the north elevation. At present only the northwest downspout appears to be connected to a drain and is properly carrying water away from the structures foundation. Another downspout, placed where the rear brick ell intersects with the main structure, is connected to a buried drain pipe. No exit for the pipe could be located, indicating potential clogging issues. The other three downspouts discharge directly against the structures foundation.

The poor drainage on the north elevation is likely the cause of the rising damp issues experienced in the structures basement, as well as the damp conditions present on the north elevations foundation walls. Pooling of water caused by such drainage problems can also over time contribute to the undermining of the buildings foundation.

Wood Components:

Brown Rot:

The wood lintel above the basement window, as well as the surrounding casing, on the north elevation of the 1850s, brick structure shows signs of brown rot, due to rising damp caused by poor drainage. Northern exposure provides an ideal environment for such rot, as there is limited opportunity for any damp material to dry. The presence of moss on the foundation stones provides confirmation of damp conditions.

Currently, the actual wood lintel and window casings are obscured on the exterior by wood boards; however, the presence of a step crack above the window indicates that the brown rot and damp conditions are having an adverse affect, likely contributing to the lintel's deformation.

Four windows on the first and second floors of the rear brick ell's north elevation also show signs of brown rot, due to exposure and failing protective paint layers. Such rot is most apparent on the window sills.

Masonry:

Cracks:

Cracks are present on the north elevation of the structure with other cracks fixed during past re-pointing efforts. One fine step crack appears above the splayed brick jack arch of the first floor, east window, on the north elevation. The cause of this crack appears to be due to the jack arch having slipped, causing the wood window surround to slightly deform. At present this crack is small, and the jack arch appears to be in relatively good condition. The crack should be monitored for future deformation.

A much larger crack, crack #4, was only recently revealed with the removal of the Whitham era cinder block vent stack. The cause of the crack is the result of the basement window lintel failing due to rot. Presence of a step crack above the lintel indicates the shear movement of the brick mass and is typical of such a failure. The failed lintel should be replaced or stabilized as soon as possible.

Failing Mortar Joints:

The original stone foundation shows multiple examples of mortar failure due to weathering. Originally struck in a "v" joint, this lime heavy lift would have added relief as well as served its practical function of shedding water. Today, with this protective lift gone in most places, water penetrates deep into the wall and mortar accelerating the mortar decay process through dissolution of the lime binder as well as freeze/thaw action.

The brick walls of the north elevation, particularly the northwest corner, also show signs of mortar joint deterioration. In this instance, the likely culprit was a leaking downspout. Water from the leak has over time saturated the area, dissolving the mortar's lime binder. Freeze-thaw during winter months has also worked to break apart these mortar joints.

The original 1850s, north gable end chimney shows some signs of mortar degradation, although at present it remains in good condition. Like other areas of the structure water saturation has created a scenario favorable to lime binder dissolution as well as freeze-thaw action. Cracks in the chimney cap may be partially responsible for additional vertical moisture penetration. Additionally, salts, inherent in fuel such as coal and charcoal can also cause degradation over time in chimney stacks, as such impurities can crystallize and expand, degrading soft materials like lime mortar.

Miscellaneous:

Miscellaneous:

The appearance of the aluminum siding of the Whitham era addition is at present showing signs of deterioration, primarily chalking. Additionally, moisture present on the north elevation has created conditions favorable for mold growth on certain areas. While these issues pose no serious threat to the structural integrity of the building, it does impact the aesthetics of the structure. Overtime the paint will continue to chalk exposing more of the underlying aluminum.

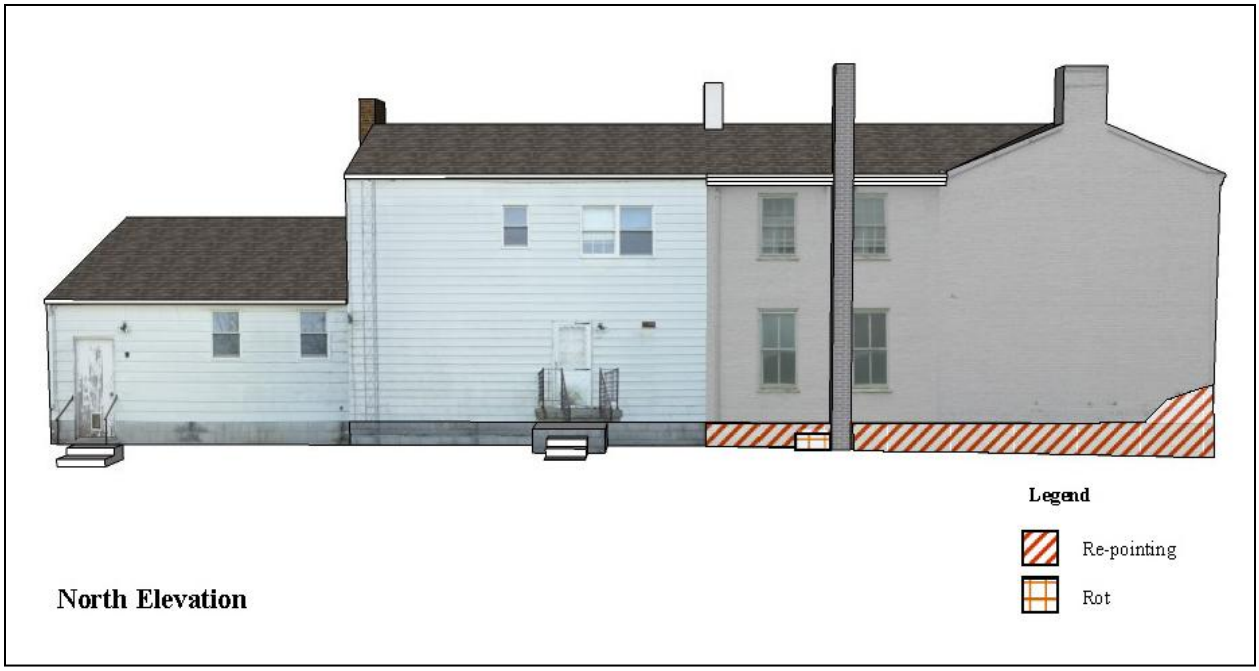


Figure 108: The image above shows the north elevation with the area noted by the red hatching exhibiting mortar loss. The Crack #4 has formed where the rot is denoted near the cellar window (below). Today, 2012, the cinderblock vent stack shown in the above images has been taken down.

Figure 109: The image above shows the step crack, crack #4, above the wood lintel of the basement/cellar window. These cracks are typical of failing lintels.

Figure 110: The image shows the northwest corner of the Bowman-Hite house. Note the mortar and paint deterioration close to the downspout, as well as where the cinderblock porch that was along the west elevation but has since been removed. (Spencer, 2012)

Interior Condition Assessment

Cellar Summation of Results:

The cellar room of the Bowman-Hite structure is currently in poor condition due to moisture issues. Relative humidity readings gathered during a sixteen day period from December 2011- January 2012, two months with fairly average rainfall for the region, noted levels as high as 89.3% with a mean reading of 80.47%. Typically levels above 70% are considered high. Over time, such high levels will promote mold and fungus growth, leading to rot. Such growth is already present on the cellar floor joists and has begun to compromise the wood lintel of the north wall window. As noted in the evaluation of the structures north elevation, this wood component and the rest of the window surround are in need of immediate stabilization.

Cause of the high moisture levels is in large part due to the poor site drainage on the north elevation, of which clogged gutters, clogged downspouts and the lack of adequate drains to remove water away from the foundation play a large role. Without site drainage operating effectively, water has been pooling against the foundation, exacerbating rising damp issues as well as promoting high relative humidity levels.

Improper interventions, such as the poured concrete floor has also had a negative effect on the structure. Instead of allowing moisture to rise through a porous floor and harmlessly dispel in the air, the impervious flooring has caused increased capillary action in the stone walls, forcing water higher, and placing wooden components such as the cellar window and floor joists at risk.

The insertion and subsequent removal of ductwork has also been damaging to the cellar, leaving behind spaces with unsupported brickwork. While the locations of these spaces appear to have had an immediate impact on the structural system, the removal of portions of the wooden floor joists for the same purpose is more problematic. Coupled with increased moisture levels, such weakening of the joists could lead to further structural damage. However, at the moment there appear to be no adverse affects.

Basement Condition Assessment Chart:

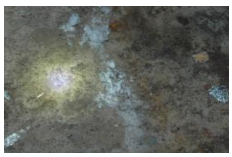
Image	Symptom	Cause	Affected Building Elements	Location
	Missing Bricks	• Improper interventions	• Brick wall • Stone wall	• West wall • South wall • East wall
	Standing Water	• Poor site drainage	• Stone wall • Brick wall • Wood components	• Northwest corner
	Efflorescence/ Cryptofloresence	• Poor site drainage • Rising damp	• Stone wall	• West wall • South wall • East wall • North wall
	Animal Droppings	• Animals	• Floor	• Floor
	Black Rot	• Poor site drainage • Rising damp • High RH	• Basement window	• North wall
	White Rot	• Poor site drainage • High RH	• Wood components	• Ceiling
	Charring	• High temperatures	• Wood joists • Wood floorboards	• Near the south wall, ceiling
	Compromised Wood Joist	• Improper interventions	• Wood joists	• Ceiling
	Beetle Exit Holes	• Beetles (wood type)	• Wood joists	• Ceiling

Table 4: Basement conditions assessment table.

Room 001 - Basement / Crawl Space

Wood Components:

Compromised Wood Members:

Like the masonry, various wood joists were compromised structurally during the installation of the HVAC system during the Whitham era of ownership. Compromising of the wood joists directly interferes with the member's ability to carry load, potentially creating structural problems. Currently, there appear to be no signs of imminent structural failure; however, repair of the joists is warranted to avoid future problems.

Charred Wood Members:

While not a large or ongoing issue, two joists, numbers four and five (**appendix V**) exhibit signs of charring near the intersection with the south basement wall. Thermal degradation of wood can begin at temperatures ranging from 131-149°F, but must reach about 480°F for charring to occur.[237] However, as is the nature of wood, a charred surface does not necessarily mean that the member has been structurally compromised. Examination of the wood joists seems to indicate that the charring is superficial rather than structural. At present there appears to be little evidence as to the cause of the charring.

Insect Infestation:

Small beetle exit holes from the basement floor joists can be readily seen, however the lack of any frass indicates that the infestation is not an ongoing problem. Because the beetles are no longer present it is difficult to identify the culprit. Some beetles which prefer yellow pine, the type of wood present, include the Anbrosia beetles and pinhole borers of the Platypodidae family. This species does not reinfest.[238]

Black and White Rot:

When observed, such rot is often the result of high wood moisture content often exceeding 40-50%.[239] The fungi itself is white, but leaves behind wood that looks as though it has been burned. While moisture readings of 40-50% were not obtained during the initial investigation, it is possible that after heavy rains wood in close proximity to the exterior and ground level could reach such levels. The extent of the rot is localized, only occurring near the basement window opening on the north wall, as well as on a few joists and floorboards near the same location. Of particular concern is the wood lintel spanning the window opening, which appears to be failing as indicated by the presence of step cracks, crack #4 (**appendix VI**), on the north exterior brick wall. The cause of the black rot is due to poor basement ventilation, poor perimeter drainage, and rising damp exacerbated by the poured concrete slab.

[237] Weaver, Conserving Buildings, pg 20-21.
[238] Weaver, Conserving Buildings, pg 31.
[239] Weaver, Conserving Buildings, pg 26.

Moisture content (MC) readings taken of the basement wood joists ranged from 14.8% - 22.2%.[240] Such readings are relatively high, ideal being around 13%, although they fall shy of the 25-30% range when fungal decay typically begins.[241] However, it should be noted that the woods moisture content is different than the relative humidity, which ranged from 89.3%-68.3% in the basement during a sixteen day period from the end of December to the beginning of January. Placing this in context, high RH is considered to be any reading above 70%. Such high readings can also independently promote fungal growth despite wood moisture content being below the 25% threshold. However, continued exposure to such high RH conditions, as well as surface fungal growth, will eventually cause the woods moisture content to rise, accelerating and promoting further degradation. Increased moisture content within the joists can also affect the MOE of wood quite substantially, as static bending strength is reduced 2% for every 1% increase in moisture content. Whereas compression strength is reduced 6% for every 1% increase in moisture content.[242]

Rising damp, while contributing to crypto-florescence and efflorescence on the stone foundation wall, has had limited impact on the moisture content of the floor joists, aside from contributing to the relative humidity of the room. This is illustrated by consistent moisture readings throughout the basement wood joists, whereas joists affected by rising damp would have higher MC levels where they come into contact with the stone foundation. The one location where this is demonstrated is where the wood joist comes into contact with the stone chimney mass at the east end of the room, although the likely culprit for these high readings is moisture penetration from the chimney, not due to rising damp.

The cause of the high relative humidity and rising damp in the basement is due in large part to the poor perimeter drainage around the house, including clogged or missing downspouts and gutters. Inadequate ventilation is also partially responsible for high humidity levels and fungal growth, and could be partially alleviated by the reinstatement of the basement window on the north elevation. Installation of the poured concrete pad in the basement has also created problems by increasing the effects of capillary action on the surrounding walls.

Findings from this investigation determined that despite high relative humidity and wood moisture content, the basement joists were still in relatively good condition. Readings ranged between 42µs and 61µs (adjusted values), well within the acceptable range for pine, which is considered anything below 70µs.[243]

---

[240] The Delmhorst BD-2100 resistance moisture meter was used to quantitatively determine wood moisture content in the basement floor joists. Mositure readings using another qualitative scale were also used to gauge the rising damp concerns within the basement stone wall. Further assessment of the basement's moisture environment was also carried out using a HOBO© remote data logger which not only measured relative humidity but also temperature, dew point and light intensity. A full description of the processes methodology and technical aspects is located in the Appendix X.

[241] Weaver, Conserving Buildings, pg 37.

[242] Weaver, Conserving Buildings, pg 20

[243] Stress Wave Timing is a method which utilizes time of flight (TOF), or the time it takes sound propagated by a transmitting transducer to travel through a material to reach a receiving transducer. Applied to wood this technique can be utilized to provide qualitative information concerning possible decay and degradation. The basic principle used to provide this information is that the stress wave generated by impacting the transmitting transducer will travel more quickly through dense than decayed wood.

Further analysis of the findings involved plotting the relationship of stress wave timing values against wood moisture content values to determine if any correlations existed. Under circumstances where moisture was causing wood to rot there would be a direct correlation between higher wood moisture content and longer stress wave times. However, this was not the case in the basement where the results showed no correlation, further indicating the lack of significant degradation within the wood joists.

While stress wave timing did not appear to identify any degradation yet present in the joists, a resistance drill was used to confirm the previous findings. Since previous tests using the stress wave timber indicated no decay in the wood joists, only one area was selected for drilling. The sample area was located on joist eight, on the north wall, where the joist comes into contact with the stone foundation. While moisture content readings for this section of the joist were only 17.8%, it did have the highest stress wave timing reading at 61µs (adjusted value). Results from the test confirmed that the wood member appears to be intact at that location with no apparent degradation.[244]

Visible in the northwest corner of the basement is a hole in the poured concrete pad with standing water. This appears to be the location of a previous sump pump which is no longer in operation. The presence of the standing water alone does not necessarily constitute a threat to the structure, but it can promote agents of degradation. These agents include increased relative humidity, increased wood moisture content, mold growth and an increased likelihood of insect infestation. The cause of the standing water is the poor site drainage, due in large part to missing or clogged gutters and downspouts.

Masonry:

Missing Bricks:

During installation of the HVAC system during the Whitham era of occupation (1967-2003), holes were created in the masonry basement walls for ductwork. While this did not initially cause problems, the shift in load has increased stress on certain areas, including portions of the ground sill and brick walls. Because the ground sill was never meant to act in such a capacity, and also due to its small size, potential exists for future failure. Currently, there are no indications of such failure, although moisture problems in the basement will affect the load-bearing capacity of the wooden sill. Where sections of the brick wall were taken out to accommodate ductwork and are no longer supported, the potential for further brick failure exists. Further cracking in the brick walls may also occur over time without proper support of these openings.

Efflorescence/Cryptofloresence:

Efflorescence and cryptoflorescense result when a liquid solution containing salt evaporates allowing the formation of salt crystals. When these crystals form on the surface of a material it

[244] Resistance drilling utilizes a 3mm drill bit (size of a beetle exit hole) which graphically portrays the density of a wood member through a 1:1 ratio chart. When high density or sound wood is encountered, the chart reads at high levels, whereas areas of decay, with little density, read as low levels. As the chart is portrayed at a 1:1 scale, the depth and extent of decay at that one point can be quantitatively determined.

is called efflorescence and is for the most part only detrimental to the aesthetics of a structure. However, when salt crystals, often sodium chloride, form below the surface of stone or brick, the result is cryptoflorescence, which often results in the flaking off, or "spalling", of the brick or stones surface. Consistent spalling is cause for concern as it can eventually weaken a building's structural integrity.

Currently, both cryptoflorescence and efflorescence can be found in the basement of the Bowman-Hite house. The cause is directly related to rising damp, where groundwater is drawn up the walls through capillary action. Such action often occurs in porous materials such as stone and brick and is often inevitable to some degree. However, the extent of capillary action, or how high the water moves up a wall, can be directly influenced by poor site drainage as well as the installation of impermeable materials such sealants or Portland cement floors. The later is present in the basement of the Bowman-Hite farmhouse and is in part responsible for high rising damp levels. These high levels are noted by discoloration on surrounding material as well as the presence of salts left behind when the capillary action cannot overcome evaporation and ceases to rise further, allowing for salt re-crystallization.

In high relative humidity (RH) situations salt tends to stay in solution, however when the RH drops below 75% it begins to crystallize. The basement of the Bowman-Hite farmhouse constantly fluctuates around the 75% RH level, exacerbating the situation as the salt is constantly dissolving and re-crystallizing, thereby creating continuous mechanical pressure on the surface of the basement bricks and stone. Measurements taken during the period from 12/22/2011 – 1/8/2012 indicated that the RH in the basement dropped below 75% a total of five times.[245]

Finish:

With the exception of whitewash the basement area was never finished with plaster.

Miscellaneous:

Animal Droppings:

The presence of animals in any home can be damaging to the structure, especially wild animals. While the evidence of animal occupation appears old, there is evidence of animal droppings. These dropping help promote the growth of fungus and can potential lead to unhealthy air conditions as well as rot issues. Small gaps in the foundation or even old burrowing holes can provide access for animals.

[245] Watt, Building Pathology, pg 192-193

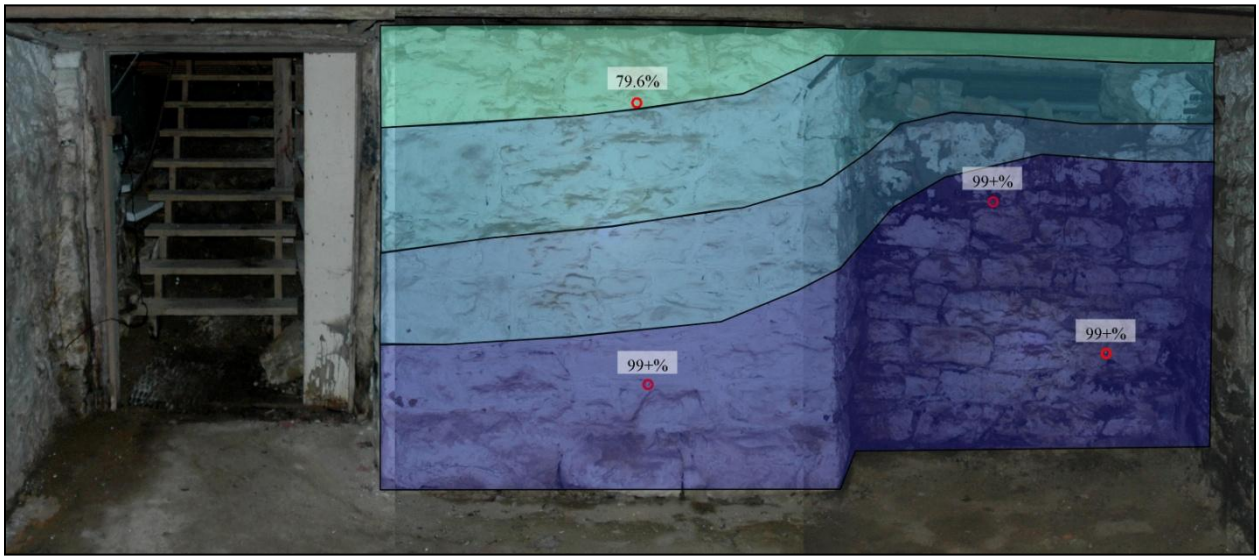


Figure 111: The graphic above of the east cellar wall, with projecting chimney mass, shows the high moisture readings prevalent at the base of the foundation which gradually decline higher up the wall. This is a clear indication of rising damp.

Figure 112: Floor joists in the cellar are for the most part in good condition however, HVAC interventions in some cases cut into the joists diminishing their load bearing capacity as seen above. The wood lintel above the north wall window can also be seen to the right and appears to be bowing slightly.

Figure 113: This image of the underside of a floorboard shows the presence of white rot in the cellar. This mold thrives in moist conditions.

Figure 114: The image to the left shows the presence of black rot, typically found in very moist areas. This particular image is of the bottom right on the north cellar wall window.

First Floor Summation of Results:

The first floor of the Bowman-Hite farmhouse is in good overall condition with few exceptions. Temperature and relative humidity are the cause for one of these exceptions, which is affecting both plaster and paint. From December 22, 2011 to January 8, 2012 temperature and relative humidity readings were collected every 12 minutes in both the cellar and on the first floor of the house. Readings over this period indicate fluctuations in both these conditions that would explain the development of hairline cracks in the plaster as well as the flaking paint seen throughout the house.

Temperatures during the time ranged from a high of 50.38^{o}F to a low of 28.45^{o}F. Fluctuations were often less than the 21.93^{o}F noted previously but did occur twice daily. Such fluctuations in the structure were mitigated somewhat by the ability of the brick massing to store and release solar heat. Over time, the repeated temperature fluctuations create micro cracking in the plaster as well as contribute to paint peeling.

Relative humidity readings ranged from a high of 89.5% to a low of 32.40% with a mean of 59.48%. Such results indicate the presence of high levels of humidity, which can cause paint to peel and flake, especially in conjunction with the thermal fluctuations previously noted. However, the average relative humidity (RH) reading of 59.48% seems to indicate that ventilation measures undertaken by the National Park Service in 2011 are working, mitigating the potential for mold growth. As noted previously, RH readings of 70%+ are considered high. However, conditions within the furred wall cavities could provide a suitable environment for mold growth.

Aside from moisture related issues, there does appear to be some mortar loss associated with a crack that has formed on the west wall of room #107, the first floor Long Room. Specifically, the crack has formed on the left side of the splayed brick jack arch, which allows for the opening into the 1850s portion of the structure. While the crack does not appear to be growing, it should be re-pointed and monitored as soon as possible.

First Floor Condition Assessment Chart:

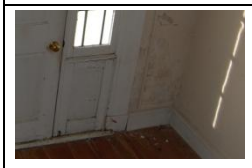
Image	Symptom	Cause	Affected Building Elements	Location
	Mold and Plaster staining	• Moisture ("splashback")	• Plaster wall	• Room #101, west wall
	Plaster Cracks	• Temperature fluctuations • Relative humidity fluctuations	• Plaster walls	• All rooms
	Masonry Cracks	• Age of mortar • Slight movement of structure	• Brick wall	• Room #107, west wall
	Paint Flaking	• Temperature fluctuations • Relative humidity fluctuations	• Walls	• All rooms
	Damaged Bricks	• Insensitive interventions	• Brick wall	• Room #103
	Missing Wood components	• Insensitive interventions	• Wood floors • Frame walls	• Room #105

Table 5: First floor condition assessment table.

Room 101 – Stairhall:

Wood Components:

The wood components in the first floor stair hall are in good condition, with no visible signs of damage or decay.

Masonry:

The brick walls of the room are finished with plaster, providing limited access for their assessment. The one exception is the exposed bricks in the closet under the stairs, which appear to be in good condition. Upon inspection of the walls, no serious cracks have been identified.

Finish:

Plaster and Paint:

The general condition of the plaster and paint in the stair hall room is good. Some minor flaking and hairline cracks in the plaster, likely caused by humidity and temperature fluctuations, can be observed.

The exception to the overall good condition of the plaster and paint is the northwest corner of the room. Here damage caused by water "splashback", from the now removed front porch, saturated the brick walls enough to allow moisture to penetrate into the room, affecting the plaster and paint in this area.

Moisture penetration at the top of the exterior door surround may also have contributed to the damp conditions and subsequent plaster and paint damage. While the damage is apparent, it appears to have been relatively recent as the plaster remains attached to the masonry walls. Despite the lack of current plaster failure, it is not uncommon for such failure to occur months after initial moisture exposure.

Miscellaneous:

Animals:

While at the moment the presence of mice within the house is not a cause for major concern, over time, if left un-addressed they can do damage. Currently, evidence of rodents can be found under the stairs in the form of droppings and skeletal remains.

Figure 115: Plaster deterioration can be seen in the bottom right of the image corresponding to exterior mortar failure. Discoloration of the plaster is another sign of the moisture infiltration.

Figure 116: Hairline cracks can be seen in the ceiling as well as some discoloration likely caused by temperature fluctuations as well as moisture penetration.

Room 102 - Front Parlor:

Wood Components:

The condition of the wood components in the room is good with no visible signs of decay or deterioration.

Masonry:

The overall condition of the interior brick walls is difficult to discern as it remains concealed by plaster and drywall. However, there appear to be no major structural cracks or other indications that the brick walls are in poor condition.

Finish:

Plaster and Paint:

The overall condition of the plaster and paint is good with some minor flaking of the paint. This is likely due in part to high relative humidity conditions and temperature fluctuations on the first floor.

Hairline cracks are also present in the plaster finish, likely caused by temperature and humidity fluctuations. The most notable crack appears on the upper right corner of the south door surround. At the moment this crack appears to only be affecting the plaster finish.

No water stains are present indicating water infiltration at this time.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection.

Figure 117: Peeling paint can be clearly seen above the first floor parlor's mantle. While general temperature fluctuations are a culprit, the chimney flue likely maintains a temperature variation when compared with the interior rooms. This variation is likely exacerbating the situation.

Room 103 - Dining Room:

Wood Components:

The wood components of the room appear to be in good condition. Unlike other rooms, selective demolition has made the inspection of some of the wood floor joists possible, including where they are pocketed into the exterior brick wall. At present there appear to be no signs of moisture or deterioration in these areas.

The finish wood work, including the baseboards, door surrounds, and window surrounds, all appear in relatively good condition. Some damage was sustained to select pieces when they were temporarily removed during the furring out of the wall for duct installation. The damage mainly consists of "blown out" portions, due to improper nail removal. Select areas of the baseboard were removed during the installation of cabinets.

The wood floors of the dining room also exhibit some superficial markings, likely caused by the matting used for modern carpeting.

Masonry:

Due to the selective demolition and opening of the furred wall as well as duct chase, portions of the brick masonry walls are visible in this room. From observations at these locations, it appears that they remain in relatively good condition. Some damage is visible on the north wall where the duct was run to the second floor. Here the bricks show evidence that the fired facing has been removed, exposing the softer, under fired portion of the brick. Typically, this is only a problem when the brick is exposed to exterior conditions.

Finish:

Plaster and Paint:

The majority of the room is finished with wallpaper, obscuring much of the plaster. While not directly visible, no bulges in the wall indicate that the plaster remains attached to the underlying brick. Where items have been removed, such as the secondary staircase and the duct work, plaster will need to be replaced. However this damage is limited to small areas.

Wallpaper:

The most current and prevalent wallpaper in the room exhibits signs of deterioration, due in large part to age. This includes the yellowing of the paper as well as the prominent appearance of glue lines. Additionally, the older wallpaper revealed during the selective demolition of a portion of the furred out gypsum wall also shows signs of degradation caused in part by age, application of additional wallpaper layers, and also mold. Often the temperature difference between un-insulated metal ductwork and stagnant air, in the case of the furred out wall, can create condensation, an ideal environment for mold growth. The wallpaper, as compared to paint and plaster, also provides a food source. While the majority of the north wall still remains enclosed by the more modern gypsum wall, the mold issue, while problematic, appears to be relatively mild. However, further demolition of the Whitham era gypsum wall will be necessary

to determine the entire extent of the mold problem and the condition of the various layers of wallpaper that remain.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection.

Figure 118: Wall paper was found in the dining room when the furred drywall was removed. The paper appears to be similar to patterns found during the 1850s. The paper also exhibits some signs of mold indicating possible moisture retention within the furred wall cavities.

Figure 119: Removed for ductwork, the hole in the plaster ceiling now allows for the examination of interior brick as well as where the wood floor joists intersect with the brick wall.

Room 104 – Kitchen:

Wood Components:

The wood components of the kitchen, from what is visible, appear to be in good shape, albeit dirty. Over the years, improper ventilation in the kitchen area, has allowed for a thick coating of oils and grease to build up on all surfaces, trapping dirt. This issue is cosmetic.

During Whitham era modifications, some of the beadboard, originally used as an interior finish on the 1870s addition, were removed. Beadboard exposed with the removal of ductwork in the southwest corner of the kitchen also shows damage caused during the ductworks installation.

Masonry:

The west wall of the kitchen, while mostly concealed with plaster and drywall, does have a small area where the brick of the Hite era rear ell is exposed. The brick appears to be in good condition, and other observations of the room give no indication to suggest otherwise.

Finish:

Plaster and Paint:

Plaster was only used on the north brick wall of the kitchen room and remains in good condition. The lone exception is the small area where the original brick was revealed during removal of the drywall.

Where the yellow paint associated with the 1870s addition remains and is visible, some crazing and flaking has occurred. This is especially noticeable where the ductwork was located in the southwest corner of the room. Changes in the temperature and relative humidity, due to such close proximity to the ductwork, likely played a role.

Miscellaneous:

Overall, assessment of the room remains difficult, as many of the 1870s components are concealed with ductwork or covered with modern materials such as drywall and vinyl flooring. Such concealment can often hide problems, but at present none are apparent.

Figure 120: Taken from the Whitham era kitchen located on the first floor of the 1870s frame addition, the image above shows the east wall of the original brick ell

Figure 121: Concealed when ductwork was installed, the yellow paint, the only apparent coat, appears in relatively good condition on the interior beadboard but is flaking on the plaster.

Room 105 – Den:

Wood Components:

No signs of deterioration are observable at present. The main issue concerning condition deals with missing components of the 1870s floor, as well as large sections of both the north and south walls. With the exception of some older water stains, in the southeast corner of the room, the wood members appear to be in good condition. One of the 1870s window casings is also visible on the south wall of the room, and exhibits no signs of deterioration. However, many of its components are now missing, including the sashes, muntins, and glass.

Masonry:

The east chimney stack is the only masonry in the room. Aside from dirt, it appears to be in good condition.

Finish:

The original interior finish, likely beadboard, or horizontal boards as seen in the kitchen, was removed throughout the room and replaced with faux wood paneling. Where still extant, the faux wood paneling appears to be in good condition.

Miscellaneous:

Like other areas in the house, there is evidence of rodents. The remains of a squirrel were found in the wall cavity adjacent to the fireplace.

Figure 122: Exposed balloon framing can be seen in the southeast corner of the 1870s wood frame addition. No insulation appears to have ever been installed. Note the larger corner post and the staggered downbracing.

Figure 123: The later Whitham era additions were added to the 1870s wood frame encapsulating much of the foundation. The image shows the northeast corner of the structure with the mortise for the corner post tenon still visible (arrow).

Room 106 - First Floor Bathroom:

Wood Components:

There are limited wood components in the bathroom, with the exception of a window and its casing, which are in good condition. The subflooring, at present concealed but vinyl flooring, may have some damage sustained by moisture leaks from both the toilet and shower. At present no damage is visible.

Masonry:

No masonry present.

Finish:

The drywall, apart from being dirty, is in relatively good condition.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection.

Room 107 - First Floor Long Room:

Wood Components:

The overall condition of the wood components in the room, where visible, appears to be good. Some selective demolition carried out during archaeological excavations of the cistern located under the rooms east end floor has resulted in the removal of some wood joists associated with the Whitham era expansion.

Other selective demolition of drywall on the north wall of the room has revealed the 1870s frame addition siding, as well as one of the windows, mentioned previously in room #105. With the exception of missing components, the wood appears to be in good condition.

Masonry:

The brick wall at the west end of the room was at one point the exterior to the original, 1850s, Hite structure. Now painted white, the wall remains in good condition, showing few signs of deterioration, with the exception of the crack occurring near the splayed jack arch.

Cracks:

Crack 3 (**appendix VI**): Crack #3 is located on the first floor of the east elevation above the original exterior doorway to the side porch. The cause of the crack appears to be the result of mortar failure in the splayed jack arch, which keeps the structural element in compression. While upon initial inspection the **15.2 mm, P 6 crack,** appears severe, closer inspection notes that, as of yet the wood casing directly above the doorway and under the jack arch has shown no signs of deformation consistent with added load. Additionally, no step cracks have formed above the jack arch indicating shear movement. This may be the result of some mortar still being intact and functioning to keep the jack arch in compression. Re-pointing of the joint should be a high priority to avoid any future damage or failure of the jack arch.

Finish:

The drywall finish and flat white paint, aside from dirt, exhibits no signs of deterioration.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection.

Figure 124: Circled in red is crack #3 at the base of the splayed jack arch. Through the doorway is the front entry hall to the 1850s brick structure. On the right is the brick ells south elevation with doorway and window visible.

Figure 125: The location of the gravel denotes where the brick lined cistern was backfilled after an archeological excavation. The cut floor joists are a result of the excavation on the east end of the room.

Room 108 – Garage:

Wood Components:

Water Staining:

While the exposed trusses in the garage are in good condition, there is some water staining in a few locations. This can also be viewed on the plywood sub roofing. This problem is localized and not of immediate concern.

Rot:

Rot is limited to the bottom of the garage doors, which are in close proximity to the poured concrete slab. This problem is localized and not of immediate concern.

Masonry:

The 1870s chimney stack, as well as the garage cinder block foundation, appear to be in good condition.

Finish:

The sheathing applied to the wall studs appears to be in good condition. There are no other finishing materials applied to the walls.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection. The reused porch posts also remain in good condition.

Figure 126: The large stone and brick chimney stack was built as part of the 1870s frame addition for the purpose of moving the kitchen from a dependency building back into the house. The size and design of the stack is typically found on older structures. On the left is one of the re-used posts (arrow) from the south porch, also dating to the 1870s.

Interior Condition Assessment

Second Floor Summation of Results:

The second floor of the Bowman-Hite farmhouse remains structurally sound, with just a few areas of concern. Most notable is the damage being caused by failed roof flashing in room #204. Water penetration has caused the drywall ceiling to collapse in locations and has created an environment ideal for mold growth and rot. Other water damage can be seen in rooms #201, #202, and #203, where the plaster shows staining associated with water leaks. These leaks appear to be past occurrences, although the accumulation of bat guano and rodent waste in the 1850s attic has likely contributed to the staining and cracking of the ceiling plaster.

Masonry wall cracks are also a concern on the second floor. While nothing at the moment appears to be of immediate concern to the buildings structural integrity, cracks in room #207, and room #211 should be monitored to ensure no further movement. As both cracks contain no paint, their occurrence is more recent, likely after the early 1970s, when the Whitham addition was added and the interior walls repainted white.

Temperature and relative humidity are the cause for a large amount of the superficial micro cracks and flaking affecting both plaster and paint. From December 22, 2011 to January 8, 2012, temperature and relative humidity readings were collected every 12 minutes in both the cellar and on the first floor of the house. Readings over this period indicate fluctuations that would explain the development of hairline cracks in the plaster, as well as the flaking paint seen throughout the house.

Temperatures during the time ranged from a high of 50.38^{o}F to a low of 28.45^{o}F. Fluctuations were often less than the 21.93^{o}F noted previously but did occur twice daily. Such fluctuations in the structure were mitigated somewhat by the ability of the brick massing to store and release solar heat. Over time the repeated temperature fluctuations can create micro cracking in the plaster as well as contribute to paint peeling.

Relative humidity readings ranged from a high of 89.5% to a low of 32.40%, with a mean of 59.48%. Such results indicate the presence of high levels of humidity, which can cause paint to peel and flake, especially in conjunction with the thermal variations previously noted. The average relative humidity (RH) reading of 59.48% seems to indicate that ventilation measures undertaken by the National Park Service in 2011 are working, mitigating the potential for mold growth. As noted previously, RH readings of 70%+ are considered high. However, conditions within the furred wall cavities could provide a suitable environment for mold growth.

Second Floor Condition Assessment Chart:

Image	Symptom	Cause	Affected Building Elements	Location
	Plaster Staining	• Moisture infiltration • Animal droppings	• Plaster Ceilings	• Ceilings of rooms #201, #202, and #203
	Plaster Cracks	• Temperature • Relative humidity • Modifications	• Plaster walls and ceilings	• Rooms #201, #202, #203
	Masonry Cracks	• Slight movement of structure • Loading	• Brick wall	• Room #207, west wall, and room #211, north wall
	Paint Flaking	• Temperature • Relative humidity	• Walls	• All rooms
Image N/A	Mold	• Failed flashing and moisture penetration	• Drywall Ceiling • Floors	• Room #204 and room #210
Image N/A	Black Rot	• Failed flashing and moisture penetration	• Drywall Ceiling • Floors	• Room #204 and room #210
	Missing Bricks	• Insensitive intervention of HVAC	• Interior masonry walls	• Room #201, #202,and #203

Table 6: Second floor condition assessment table.

Room 201 - Second Floor Stair hall:

Wood Components:

The woodwork present in the second floor stair hall remains in good condition. Apart from imprints left from the previous carpeting mat, the floorboards are also intact and show few signs of decay.

Missing Components:

While what remains is in relatively good condition, conversion of the original 1850s east stairwell window into a door during the Whitham era of ownership (1967-2003), resulted in the loss of some wood trim. This is specifically apparent where the new doorway was cut into the lower brick wall, which widens where the first and second floor walls meet.

Masonry:

Obscured by plaster and paint, the masonry walls for the most part appear in good condition. The one exception is a small area on the north wall where ductwork was installed and subsequently removed.

Missing or Loose Masonry:

During installation of ductwork during the Whitham era of ownership, a hole was cut into the north masonry wall of the second floor stairwell. The subsequent removal of the ductwork has created a situation in which the brickwork is no longer supported and has begun to collapse in that immediate area. While cause for some concern, the interior wall does not appear to be carrying any load from the attic, so the structural implications are likely limited.

Finish:

Paint and Plaster:

The paint applied to the interior plaster work exhibits some signs of peeling and crazing likely associated with temperature and relative humidity fluctuations. Stenciling at the top of the wall shows similar signs of deterioration, as well as damage caused by subsequent over painting.

The plaster work remains in relatively good condition except where the ductwork was removed. This has left a hole not only in the brick wall, but also the plaster. Small hairline cracks can also be found in the plaster walls and ceiling.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection.

Figure 127: Converted into a doorway during the Whitham era, the east facing stairwell window still retain much of its original integrity even though the trim has been moved in some cases. The header for the window can still be seen above the current doorway (arrow). Stenciling can also be seen on the plaster wall just before the ceiling. This was covered for some time by the dropped ceiling.

Figure 128: During the insertion of ductwork for the HVAC system hoes were cut throughout the Bowman-Hite house. This hole is located on the north wall in the front entry hall.

Room 202 - West Bedroom:

Wood Components:

The interior wood components of the room show wear but appear to be in good condition. This is particularly true of the floor, which shows marks left behind by the previous carpeting.

Masonry:

Obscured by the Whitham era furred wall, as well as plaster and paint, the masonry walls are difficult to assess. Where selective demolition has occurred on the west wall, it appears to be in relatively good condition. The exceptions are locations where ductwork was installed and has since been removed.

Missing or Loose Masonry:

Ductwork installed during the Whitham period of ownership and which has since been removed, left holes through the brick on the south and east walls, now concealed by the 20th century closet.

Finish:

Paint and Plaster:

The plaster walls of the room appear to be in good condition, although there is extensive flaking of the paint. Small hairline cracks can also be found in the plaster walls, although these are typical, particularly under environmental conditions where temperature and relative humidity fluctuate.

The ceiling is, unfortunately, not in as good condition as the interior walls of the room. Water infiltration over the years, as well as bat guano and rodent feces deposited in between the attic joists, have left stains, as well as created de-keying of the plaster in certain locations. Such de-keying occurs when the plaster and lathe expand during a wet period, thereby cutting the keys which hold the plaster to the lathe backing. While such a process can happen over a short course of time, it often takes the plaster fully drying before it begins to detach and sag, eventually failing. Significant cracks, which have developed in the northwest corner of the room, are often indications of pending plaster failure.

The plaster ceiling also appears to have been replaced or extensively repaired as evident by its inconsistency as well as the use of circular sawn lathe compared to the riven lathe used in other, original locations, around the house.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection.

Figure 129: Installed during the Whitham period of occupation, the modern closets conceal some of the damage done by ductwork installation.

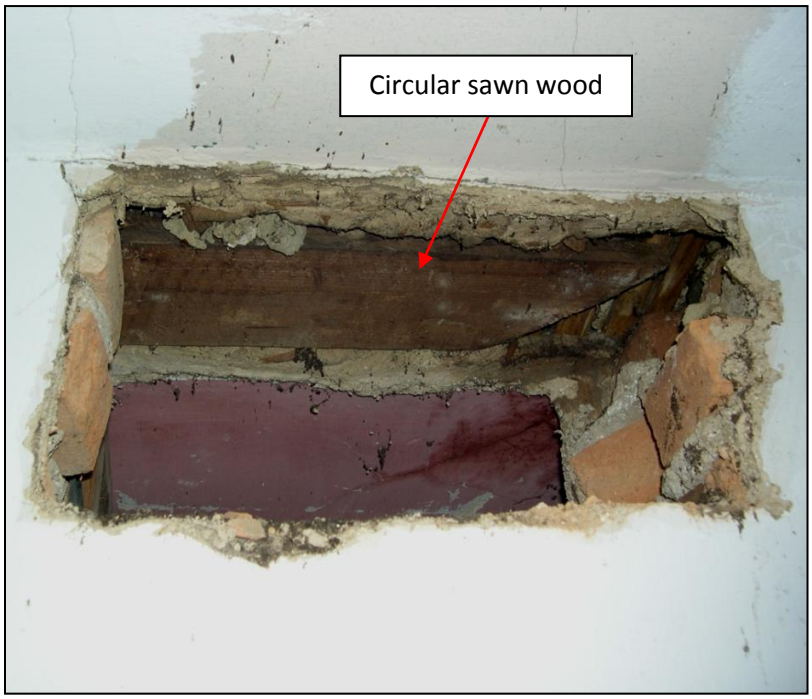


Figure 130: A close-up view of ductwork damage on the east wall of the bedroom. Note the presence of circular saw marks on the supporting wood lintel.

Room 203 - East Bedroom:

Wood Components:

The interior wood components of the room show wear but appear to be in good condition. This is particularly true of the floor, which shows marks left behind by the previous carpeting.

Missing Components:

While the majority of the wood used in the room is in good condition, some of the components relating the 1850s, Hite era structure, are missing. This includes components to the two original windows located on the south elevation. One was converted into a doorway, whereas the other was concealed by drywall.

Other wooden components, specifically the baseboards and window and door casings have been moved from their original locations when the walls were furred out and ductwork installed.

Masonry:

Obscured by the Whitham era furred wall as well as plaster and paint, the masonry walls are difficult to assess. Where selective demolition has occurred on the west wall, it appears to be in relatively good condition. The exceptions are locations where ductwork was installed and has since been removed.

Missing or Loose Masonry:

Ductwork installed during the Whitham period of ownership and which has since been removed, left a hole through the brick on the west walls, now concealed by the closet.

Finish:

Paint and Plaster:

The plaster walls of the room, where visible, appear to be in good condition. However, humidity and temperature fluctuations have caused the paint in this room to flake and peel.

The ceiling, is unfortunately, not in as good condition as the interior walls of the room. Water infiltration over the years, especially above the fireplace, as well as bat guano deposited in between the attic joists, have left stains as well as created de-keying of the plaster from its lathe in certain locations. Such de-keying occurs when the plaster and lathe expand during a wet period, thereby cutting the keys which hold the plaster to the lathe backing. While such a process can happen over a short course of time, it often takes the plaster fully drying before it begins to detach and sag, eventually failing. Obvious past repairs can be seen in some ceiling locations, likely done using incompatible plaster, which could have an impact at some future point.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection.

Figure 131: A view of the east wall of the room showing the peeling paint above the fireplace. Water damage and more modern ceiling repairs can be seen at the top of the image.

Figure 132: A close-up view of ductwork damage on the east wall of the bedroom. Note the presence of circular saw marks on the supporting wood lintel. A water stain can also be seen at the top left of the image.

Room 204 – Hall:

Wood Components:

The wood components of the room appear to be in relatively good condition, albeit dirty, with the exception being the subflooring near the south end of the room.

Rot:

Due to water infiltration from failed roof flashing, rot has set in, causing severe decay. Water is also saturating the rafters and attic joists in the same location, although at present these are concealed behind failing drywall.

Masonry:

The original exterior masonry walls of the 1850's Hite structure are visible on the west and the north walls of the room. At present, it appears that the masonry work is in good condition.

Finish:

The drywall, particularly on the south and west walls of the room exhibits, water staining. Mold can also be seen at some of the same locations, as can cracked drywall, a result of alternating dry and wet conditions.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection.

Figure 133: A view of the west wall of the room, through the converted 1850s stair hall window, now doorway. Note the damage to the ceiling above.

Room 205 - West Bathroom:

Wood Components:

The majority of the room's framing is visible due to the removal of the fiberglass shower, as well as the drywall. Initial observations indicate the wood to be in good condition, as well as the subfloor below the shower. The removal of the shower on the north end of the room also exposed the original, 1850s, Hite era, brick wall and one of the elevation's windows. The window's wood is in good condition, although the east portion of the window sill, located in the laundry room, has split.

Masonry:

The masonry wall exposed during the removal of the drywall shows evidence of repairs and re-pointing, although it currently is in good condition.

Finish:

A large portion of the drywall has been removed, exposing the wood framing. The drywall and wallpaper that does remain is in fair condition.

Miscellaneous:

The vinyl flooring shows signs of wear and is in poor condition. No sign of animals or other deterioration was noticed in the room at the time of inspection.

Room 206 - East Bathroom:

Wood Components:

The majority of the rooms framing is visible due to the removal of the fiberglass shower, as well as the drywall. Initial observations indicate the wood to be in good condition as well as the subfloor below.

Masonry:

None present

Finish:

A large portion of the drywall has been removed, exposing the wood framing. The drywall and wallpaper that does remain is in fair condition.

Miscellaneous:

The vinyl flooring shows signs of wear and is in poor condition. No sign of animals or other deterioration was noticed in the room at the time of inspection.

Room 207 - Ell West Bedroom:

Wood Components:

The visible wood components in the room are in good condition. Removed ductwork in the southwest corner of the room has revealed the corner post for the 1870s frame addition still intact, although much of the remainder of the structure was demolished during the Whitham era additions. The flooring shows signs of wear associated with being covered in carpeting for a prolonged period of time.

Masonry:

The masonry wall on the west side of the room is in good condition, with the exception of a crack running vertically down the center. There is also a small vertical water stain present on the walls surface, although this appears to have occurred some time ago.

Cracks:

Crack 1(**appendix VI**): Crack #1 is located on the second floor of the rear ells east elevation. The formation of the crack appears to have occurred after the last painting of the structures exterior, as no paint seems to have penetrated the crack. The consistent painting of the brick wall both below and above the previous 1870s wood frame roofline suggests that the wall was repainted after the Whitham addition in the 1970s. This is important, as it suggests that the cause of the crack may be independent of the Whitham additions or possibly a delayed result of extra loading. The crack may also be associated with poor drainage issues around the foundation perimeter. At the current time the **1.2 mm crack is classified as a P 3 crack** which has little to no effect on the structure other than aesthetic. However, the cracks size and width should continue to be monitored.[246]

Finish:

The drywall is in good condition except for exploratory holes made in the ceiling as well as the duct chase.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection.

[246] Weaver, Conserving Buildings, pg 5

Figure 134: A view of crack #1 on the west wall of room #207.

Room 208 - Hall Landing:

Wood Components:

The landing contains few wood components, all which remain in good condition. The flooring shows signs of wear associated with being covered in carpeting for a prolonged period of time.

Masonry:

No masonry present.

Finish:

The faux wood paneling remains in good condition.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection.

Room 209 - Ell East Bedroom:

Wood Components:

The wooden components in the room appear to be in good condition. The flooring shows signs of wear associated with being covered in carpeting for a prolonged period of time.

Masonry:

No masonry present.

Finish:

The drywall is in good condition with a small water stain above the north doorway.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection.

Room 210 - Southeast Room:

Wood Components:

The wood trim and window components are in good condition. Where water has been leaking from the roof and pooling on the floor, the particle subflooring has become discolored. Mold appears to be growing in these locations.

Masonry:

No masonry present.

Finish:

The drywall in the room is in poor condition due to moisture problems. This has resulted in discoloration, as well as cracking and peeling. One area of the ceiling towards the eastern portion of the room exhibits severe water damage, with mold encircling the area of decay.

Miscellaneous:

No sign of animals or other deterioration was noticed in the room at the time of inspection.

Room 211 - Laundry Room:

Wood Components:

The majority of the rooms framing is visible due to the removal of the drywall and is in good condition. Removal of the drywall on the north wall also exposed the original, 1850s, Hite era, brick wall and a portion of one of the elevations windows. The window's wood is in good condition, although the east portion of the window sill, located in the room, has been split off.

Masonry:

The masonry wall exposed during the removal of the drywall shows evidence of repairs and re-pointing, although it currently is in good condition.

Cracks:

Crack 2 (**appendix VI**): Crack #2 is located on the second floor of the rear ells southeast corner. The formation of this crack appears to have taken place after the wall was last repainted, which seems to be prior to the Whitham additions. This is important, as it identifies the additions as possible culprits. At present, the **crack size of 1.6 mm is classified as a P 3 crack** and has little to no effect on the structure other than aesthetic. However the cracks size and width should continue to be monitored.

Finish:

A large portion of the drywall has been removed, exposing the wood framing. The drywall and wallpaper that does remain are good condition.

Miscellaneous:

The vinyl flooring shows signs of wear, as well as other stains possibly associated with spilled detergent, and is in poor condition. No sign of animals or other deterioration was noticed in the room at the time of inspection.

Figure 135: A view of the laundry room with crack #2 visible on the brick ells south exterior wall. Note the pockets in the brick wall for the exterior porch which once ran along the south side of the building.

Interior Condition Assessment

Attic Summation of Results:

The attic space above the 1850s, Hite era portion of the structure remains in relatively good condition. Evidence suggests that at some point in the past, there were water problems, which likely necessitated the replacement of some of the roof nailers and possibly damaged the second floor plaster ceilings. Currently, there appear to be no major leaks in this portion of the structure.

Despite dry conditions, rot associated with the south gable end window, as well as the poor condition of its screen, have provided access for animals, particularly bats. These animals currently roost under the attic's insulation, adding to the piles of animal droppings, primarily rodent, currently between the joists. This extra weight, as well as the moisture, has contributed to the staining and deterioration of the plaster ceilings below. Further evidence of the rodent problem can be found in the numerous snake skins scattered throughout the attic.

Attic Condition Assessment Chart:

Image	Symptom	Cause	Affected Building Elements	Location
	Animal droppings	• Animals	• Plaster ceilings	• Attic
	Rot	• Moisture	• Window frame	• South gable end window
	Water Staining	• Water infiltration	• Rafter and nailers	• Attic
	Mold	• Water infiltration	• Nailers	• Attic

Table 7: Attic condition assessment table.

Attic:

Wood Components:

The majority of the attic's framing is in good condition. Some nailers located in the older, 1850s Hite era portion of the structure exhibit staining associated with prolonged periods of water exposure, and there appears to be evidence of past mold problems.

Masonry:

The masonry walls exposed in the attic are in relatively good condition, but in certain areas, mainly near the chimney stacks, some past water staining is visible, likely caused by failed flashing.

Finish:

No finish.

Miscellaneous:

Evidence indicates that snakes, rodents, and bats reside in the attic space. Guano from the bats, as well as rodent droppings, piled between the floor joists, have caused staining as well as deformation of the plaster. These droppings are most prevalent in the 1850s, Hite era portion of the attic space.

Figure 136: The image above shows the space between the attic joists filled with bat guano and rodent droppings. Also evident are the lathe nailers, seen between the joists. The image to the left shows a large black snake skin indicating the presence of a food source, likely bats and rodents.

Bibliography

Bibliography:

Primary Sources:

1840 U.S. Population Census, Schedule 1, Shenandoah County, Virginia, roll 371.

1850 U.S. Population Census, Schedule 1, Shenandoah County, District 58, Virginia.

1850 U.S. Population Census, Schedule 1, Warren County, Front Royal, VA.

1850 U.S. Slave Census, Schedule 5, Warren County, District 69.

1860 U.S. Agricultural Census, Schedule 4, Warren County, VA.

1860 U.S. Manufacturing Census, Frederick County, VA, Winchester.

1860 U.S. Manufacturing Census, Shenandoah County, VA.

1860 U.S. Manufacturing Census, Warren County, VA.

1860 U.S. Population Census, Schedule 1, Warren County, VA..

1860 U.S. Slave Census, Schedule 5, Warren County, VA

1870 U.S. Manufacturing Census, Frederick County, VA, Winchester.

1870 U.S. Manufacturing Census, Shenandoah County, VA.

1870 U.S. Manufacturing Census, Warren County, VA.

1870 U.S. Population Census, Schedule 1, Frederick County, VA.

1870 U.S. Population Census, Schedule 1, Front Royal District, Warren County, VA.

1870 U.S. Population Census, Schedule 1, Shenandoah County, VA

1880 U.S. Population Census, Schedule 1, Davis Township, Shenandoah County, VA.

1880 U.S. Population Census, Schedule 1, Warren County, VA

1910 U.S. Population Census, Schedule 1, Warren County, VA

1920 U.S. Population Census, Schedule 1, Warren County, VA

Bowman Family Papers, 1861-1900. Accession 6743, Albert and Shirley Small Special Collections Library. University of Virginia, VA., 1861-1900.

Daniel Stickley, *Account Book of Daniel Stickley,* Swem Library Special Collections, College of William & Mary, 1845-1856.

Daniel Stickley, *Valley Mills Day Book, Saw Mill Strasburg,* Swem Library Special Collections, College of William & Mary, 1853-1899.

Frederick County, Chancery Suit, Widow of Isaac Bowman vs. Isaac Bowman etc., 1830-096, Library of Virginia,1830.

Frederick County, Clerks Office, Order Book 1, pp. 15, 16, 29 (1743)

Frederick County, Clerks Office, Order Book 8, pp. 134 (1758)

Frederick County, Clerks Office, Will Book 3, pp. 431-434 (1764)

Journals of W.E. Sumers, Carpenter, 1857-1861, and of *Lewis A. Smith* [manuscript] 1857-1865. Accession #3407, Albert and Shirley Small Special Collections Library, University of Virginia. Charlottesville, VA., 1857-1865.

Kerns. (1960s). *Sketch Plan of the Bowman-Hite Property* [pencil]. Warren Co., VA: National Park Service.

Lovell, John T. and James S. Trout. *Warren Sentinel*. Cf. Cappon, L.J. VA Newspapers. Fort Royal, VA: Kames S. Trout, John Clark & Son, 1869-1876.

Luray and Front Royal Turnpike Company. L*uray and Front Royal Turnpike Company Minute Book and Ledger*, 1851-1869. Virginia, 1851-1869.

Miller, C.L. *Warren County, VA Sheriff's Tax Book, 1868*. Special Collections Research Center, Swem Library Special Collections. College of William & Mary, VA., 1868.

Mutual Assurance Society of Virginia, microfilm, reel 3, vol. 26, policy No. 2110, 1803.

Mutual Assurance Society of Virginia, microfilm, reel 4, vol. 39, policy No. 1015 [2110], 1806.

New Shenandoah Company (Port Republic, VA.). *New Shenandoah Company Minute Books, 1815-1857*. Swem Library Special Collections. College of William & Mary, VA, 1818-1857.

Hite-Bowman-Hall family. *Hite-Bowman-Hall Family Papers, 1766-1954* [microfilm]. Accession 40832, personal papers collection, The Library of Virginia, Richmond, VA., 1766-1954.

Ney, Jacob. 1882. Hay-Fork. U.S. Patent 261,562, filed March 20, 1882, and issued July 25, 1882

Richmond Times Dispatch, *Accidently Killed*, April 6, 1900, pg 5 col. 3

Roller Family. *Records, 1868-1915*. Accession 27740. Business records collection, The Library of Virginia, Richmond, VA., 1868-1915.

Shenandoah County, Chancery Suit, Isaac Bowman v. Henry Bowman et. al., 1853-010 The Library of Virginia, 1853.

Shenandoah County, Chancery Suit, Isaac S. Bowman v. Robert Bowman, 1844-004, Library of Virginia, 1844.

Shenandoah County, Chancery Suit, Robert Bowman (estate) v. Rebecca Hite, 1882-027, The Library of Virginia, 1882.

Shenandoah County, Chancery Suit, Washington Bowman v. Robert C Bowman, 1853-012 The Library of Virginia, 1853.

Shenandoah County, Clerks Office, Deed Book 9, pg 95-97 (1868)

Shenandoah County, Clerks Office, Deed Book 52, pg 136.

Shenandoah County, Clerks Office, Will Book N, pp 521-526 (1826)

Shenandoah County, Clerks Office, Will Book T, 521 (1834-1836)

Shenandoah County, Clerks Office, Will Book V, 18-19 (1839).

Shenandoah County, Personal Property Tax Lists, 1787

Shenandoah Herald, August 6, 1879, pg 1 col. 4.

Shenandoah Herald. *Trustees Sale of a Fine Farm in Warren Co., VA*. Advertisement., Woodstock, VA., August 6, 1879, pg 3.

Shenandoah Herald, November 5, 1879, pg 1 col. 5

Shenandoah Herald, June 7, 1889, pg 2, col. 1-3.

Steele, L.R. *Warren Messenger*. Cf. Cappon, L.J. VA Newspapers. Front Royal, VA: Kames S. Trout, John Clark & Son, 1869-1876.

The American Farmer, Page's Improved Patent Portable Saw Mill and Steam Engine. Advertisement. March, 1850.

The Virginia Magazine of history and Biography, Vol. XIII, No. 2

Timberlake Family. *The Timberlake Family Ledgers, 1835-1871*. Accession 40387. Personal papers collection, The Library of Virginia, Richmond, VA., 1835-1871.

Statistical Gazetteer of the State of Virginia. Toland & Burger's Saw Manufactory. Advertisement. 1854

Virginia, Board of Public Works. *Fort Royal Turnpike Company Records, 1848-1874*. Virginia, 1848-1874.

Warren County, Chancery Suit, Rebecca Hite v. George Hupp, 1880, The Library of Virginia, 1880.

Warren County, Clerks Office, Council Minutes, June 19, 1854

Warren County, Clerks Office, Deed Book E, pg 66 (1850)

Warren County, Clerks Office, Deed Book G, pg 415.

Warren County, Clerks Office, Deed Book H, pg 16 (1861)

Warren County, Clerks Office, Deed Book I, pg 335

Warren County, Clerks Office, Deed Book K, pg 198.

Warren County, Clerks Office, Deed Book Q, pg 271

Warren County, Clerks Office, Deed Book 1, pg 319 (1896)

Warren County, Clerks Office, Instrument Number 030003079 (2003)

Warren County, Clerks Office, Instrument Number 030003078 (2003)

Warren County, Clerks Office, Will Book G, pg 433 (1907)

Warren County, Clerks Office, Will Book L, pg 375

Warren County, Clerks Office, Will Book L, pg 411, 440

Warren County, Personal Property Tax Records, Charles J. Hite, 1851-1861

Warren County Personal Property Tax Books, 1885

Warren County Land Tax Records, 1836-1850

Warren County Land Tax Records, 1867

Warren County Land Tax Records, 1876

Warren County Land Tax Records, 1881

Warren County Land Tax Records, 1882

Warren County Land Tax Records, 1888

Warren Sentinel Accounts [manuscript] 1888-1896. Albert and Shirley Small Special Collections Library, University of Virginia.

Secondary Sources:

Allen, John C. *Uncommon Vernacular: The Early Houses of Jefferson County, West Virginia, 1735-1835* (Morgantown, West Virginia: West Virginia University Press, 2011.

Beirne, Rosamond and John Scarff. *William Buckland 1734-1774 Architect of Virginia and Maryland* (1958)

du Bellet, Louise Pecquet, Edward Jaquelin and Martha Cary Jaquelin. Some Prominent Virginia Families, Vol. 4 (Lynchburg, VA: J.P. Bell Co., 1907)

Benjamin, Asher. *The Architect or Practical House Carpenter* (Boston, MA: L. Coffin, Printer, 1844)

Benjamin, Asher. *The American Builder's Companion* (Boston, MA: R.P. & C. Williams, 1827)

Bowman Family Bible Record, 1791-1831. The Library of Virginia, Richmond, Virginia: 1791-1831.

Cartnell, Thomas Kemp. *Shenandoah Valley Pioneers and Their Descendants*. (Winchester, VA: Eddy Press Corporation, 1909)

Chappell, Edward. A*cculturation in the Shenandoah Valley: Rhenish Houses of the Massanutten Settlement*, in *Common Places* edited by Dell Upton and John Michael Vlach (Athens, GA: University of Georgia Press, 1986) pp. 27-57.

Commisso, Michael. *Land Use History for Cedar Creek and Belle Grove National Historic Park*. Boston, Mass: National park Service, 2007.

Cooke, John Esten. *Virginia: A History of the People*. (Boston, Houghton, Mifflin and Company, 1883)

Crowninshield, Benjamin W. *The Battle of Cedar Creek, October 19, 1864, A Paper Read Before the Massachusetts Military Historical Society, December 8, 1879*. (Cambridge, Mass: Riverside Press, 1879)

Curtin, Philip et al. *Discovering the Chesapeake: The History of an Ecosystem* (Baltimore, MD: Hopkins University Press, 2001)

Dickinson, Josiah Look. *The Fairfax Property; The Northern Neck, the Fairfax Manors, and Beginnings of Warren County in Virginia*. (Front Royal, VA: Warren Press, c1959)

Dodd, Jordon, Liahona Research, comp. Maryland Marriages, 1667-1899. (database in Provo-UT: the Genealogical Network, Inc., 2000)

English, William Hayden. *Conquest of the Country Northwest of the River Ohio*, Vol. I,1895.

Earley, Lawrence S. *Looking for Longleaf: The Fall and Rise of an American Forest* (Chapel Hill, NC: The University of North Carolina Press, 2004)

Farm Buildings. (Chicago Ill: The Breeders Gazette, 1916)

Frangiamore, Catherine L. *Wallpapers in Historic Preservation*, Technical Preservation Services Division, Office of Archaeology and Historic Preservation, (National Park Service, Washington, DC, 1977)

Gettens, Rutherford and George L. Stout. *Painting Materials* (New York: Dover Publications, 1966)

Goins, Elizabeth S. *Standard Practice for Determining the Components of Historic Cementitious Materials* (U.S. Dept of Interior, National Park Service, NCPTT, 2002)

Hoadley, Bruce R. *Identifying Wood: Accurate Results with Simple Tools* (Newtown, CT: Taunton Press, Inc., 1990)

Hofstra, Warren. *The Planting of New Virginia: Settlement and Landscape in the Shenandoah Valley* (John Hopkins University Press, 2004).

King, Matthew L. *Silos: Construction and Service* (St. Paul, MN: Webb Publishing Co., 1913)

Koon, Kenneth and Warren Hofstra. *After the Backcountry* (Knoxville, TN: University of Tennessee Press, 2000).

Lee, Daniel and J. Vick Jr. *Side Hill Barn*, *The Genesee Farmer*, v. XII (March. 1851)

Long, Catherine M. *An Evaluation of the Virginia Land Book and Related Records for Their Usefulness in Providing Rural Land Information*. Blacksburg, VA: Virginia Polytechnic Institute and State University, College of Agriculture and Life Sciences, 1986.

Lounsburg, Carl. *An Illustrated Glossary of Early Southern Architecture and Landscape* (Charlottesville, VA: University Press of Virginia, 1994)

McAlister, Virginia and Lee. *A Field Guide to American Houses* (New York: Alfred Knopf, 2002)

McClearly, Ann E. *Forging a Regional Identity: Development of Rural Vernacular Architecture in the Central Shenandoah Valley, 1790-1850*, in *After the Backcountry: Rural Life in the Great Valley of Virginia, 1800-1900*. University of Tennessee Press, 2000

McKee, Harley J. *Introduction to Early American Masonry* (Washington, D.C.: Preservation Press, 1973)

Mitchell, Robert, ed. *Appalachian Frontiers: Settlement, Society, and Development in the Preindustrial Era* (Lexington, KY: University Press of Kentucky, 1991)

Moody, Minnie Hite. *Long Meadows*. Special Collections, University of Virginia, (New York: The Macmillian Company: New York, 1941)

Nelson, Lee. "Nail Chronology as an Aid to Dating Old Buildings" *Technical Leaflet 48* v. 24, no. 11 (Nashville, TN: American Association for State and Local History, Nov. 1968)

Newton D. Mereness. *Travels in the American Colonies*. Edited under the auspices of the Colonial Dames of America. (New York: The MacMillian Company, 1916), pp 335

Noble, Allen and Richard Cleek. *The Old Barn Book*, (New Brunswick, NJ: Rutgers University Press, 2009)

Noble, Allen. Wood brick and Stone Vol. II (Amherst, MA: The University of Massachusetts Press, 1984)

Peters, Margaret T. and Maral S. Kalbian. *The Bowman-Hite Property, Warren County, Virginia: Narrative History, Timeline and Annotated Bibliography*. (Prepared for the Shenandoah Valley Battlefield Foundation in Cooperative Agreement with the National Park Service, Cedar Creek and Belle Grove National Historical Park, 2010)

Pellerin, Roy and Robert Ross ed., Nondestructive Evaluation of Wood, Forest Products Society, Madison, WI (2002)

Powers, M . C. "Aggregate Classification." Journal of Sedimentary Petrology, v. 23 (1953).

Proceedings of the 15th International Symposium on Nondestructive Testing of Wood, USDA Forest Products Laboratory and Natural Resources Research Institute of Minnesota, Duluth, MN, September 2007.

Radford, William. *20th Century Practical Barn Plans* (Chicago, ILL: America Publishing Co., 1902)

Richards, John. *A Treatise on the Construction and Operation of Wood-Working Machine* (New York: William Clowes and Son, 1872)

Shawver, John L. *Plank Frame Barn Construction* (New York, NY: David Williams Co., 1904)

Simmons, Roger. *Wood- Using Industries of Virginia* (American Forestry Association, 1912)

Skinner, John S. (ed.). *Book of the Farm, Vol. I* (New York, NY: Agricultural Book Publisher, 1857)

Sloane, Eric. *A Museum of Early American Tools* (New York: Ballentine Books, 1964)

Sutherland, Daniel. *The Expansion of Everyday Life, 1860-1876* (Fayetteville Ark: The University of Arkansas Press, 2000)

Teutonico, Jeanne. *A Laboratory Manual for Architectural Conservators* (Rome: ICCROM, 1968)

The American Farmer, 1820

Torraca, Giorgio. *Lectures on Materials Science for Architectural Conservation* (Los Angeles, CA: The Getty Conservation Institute, 2009)

Torraca, Giorgio. *Porous Building Materials* (ICCROM, 1981)

Walker, Laurence C. and Brian P. Oswald. *The Southern Forest* (New York: CRC Press, 2000)

Wayland, John W. *Twenty-five Chapters on the Shenandoah Valley*. (Strasburg, VA: Shenandoah Publishing Company, 1957)

Wayland, John W. *A History of Shenandoah County*, *Virginia*, (1927)

Wayland, John W. *The German Element of the Shenandoah Valley of Virginia.* (Charlottesville, VA., 1907)

Wayland, John W. *The Bowmans*. (Stanton, VA: The Press of the McClure Company, Inc., 1943)

Warren's Heritage: Journal of the Warren Heritage Society. Warren County, VA: Warren Heritage Society, 2006.

Watt, David S. *Building Pathology* (Oxford: Blackwell Publishing, 2007)

Weaver, Martin. *Conserving Buildings* (New York: John Wiley & Sons, Inc, 1997)

Wilson, Kenneth M. *Window Glass in America*, Building Early America: Proceedings of the Symposium Held at Philadelphia to celebrate the 250th Birthday of the Carpenters' Company of the City & County of Philadelphia. Charles E. Peterson Editor (Randor, Penn.: Chilton Book Company, 1976) pp. 151-164

Maps:

Atlas 82:9; 85:33, 38, 99:2; Gillespie, LC #537: ``Battlefields of Fisher's Hill and Cedar Creek Virginia'' Prepared by Bvt. LT. Col. G. L. Gillespie, major of Engineers, USA, from surveys made under his directions, by order of Lt.Gen P.H. Sheridan, etc., 1873, uncolored, Scale 1:12,000, 2 sheets, each 121x69cm, overall size 121x138cm

Gillespie, G. L. *Battlefield of Cedar Creek*, 1873, Library of Congress

Hotchkiss, Jed., *Sketch book of Jed. Hotchkiss*, Capt. & Top. Eng., Hd. Qrs., 2nd Corps, Army of N. Virginia, pg 48, Library of Congress

Hotchkiss, Jed. *Battle of Belle Grove or Cedar Creek.*, (Oct. 19, 1864) map no. 195, Library of Congress

Report of the Camps, Marches & Engagements of the Second Corps, Army of Northern Virginia, and of the Army of the Valley Dist. Of the Dept. of Northern VA, during the Campaign of 1864: (Virginia) by Jed Hotchkiss, Top. Eng. V.D. No. 29, "Battle of Belle Grove or Cedar Creek, Virginia.", Library of Congress

Hotchkiss, J., Hotchkiss Battle Maps, *Sketch of the Battle of Belle Grove*, October 19, 1864, No. 29

Hotchkiss, J., Hotchkiss Battle Maps, *Sketch of the Battle of Belle Grove*, October 19, 1864, No. 195

Joshua Fry and Peter Jefferson, *A Map of the Most Inhabited Parts of Virginia*, 1755

Lake Atlas, Shenandoah County, Virginia 1885.

Varle, Charles. *Map of Frederick, Berkeley & Jefferson Co., VA*, Philly, 1809, Library of Congress

Site Visits:

Site visit and sampling, Long Meadows, Warren County, Virginia, December 14, 2010.

Site visit and sampling, Mt. Pleasant, Shenandoah County, Virginia, December 13, 2010.

Site visit and sampling, Ft. Bowman (Harmony Hall), Frederick County, Virginia, December 14, 2010.

Site visit and sampling, Bowman-Hite House, Warren County, Virginia, December 2010.

Site visit and sampling, Bowman-Hite House, Warren County, Virginia, February 2011

Site visit and sampling, Bowman-Hite House, Warren County, Virginia, March 2011

Site visit and sampling, Bowman-Hite House, Warren County, Virginia, July 2011

Unpublished Reports and Manuscripts:

An Archaeological Assessment of the Bowman-Hite Farm Property, William and Mary Center for Archaeological Research, 2012

Kalbian, Maral S. *National Register Nomination for Long Meadows*, Warren County, Virginia (1995)

Cultural Landscape Inventory, "Whitham Farmstead." (2007)

Margaret Peters and Maral Kalbian, "The Bowman-Hite Property, Warren County, Virginia: Narrative History, Timeline, and Annotated Bibliography." (2010)

Bryan Townes and Michael Spencer, "Measured Drawings and Existing Conditions Documentation for Bowman-Hite House and Barn," (2010)

Cedar Creek and Belle Grove National Historical Park, "General Management Plan," (2010)

Michael Spencer, "Forensic Analysis of the Bowman-Hite Farmhouse and Barn," (2011)

Bryan L. Townes, "Bowman-Hite Farmhouse and Bank Barn Historic Structure Documentation; Building Evolution and Use; Physical Description Inventory," (2011)

Williams and Mary center for Archaeological Research, "An Archaeological Assessment of the Bowman-Hite Farm Property," (2012)

Websites:

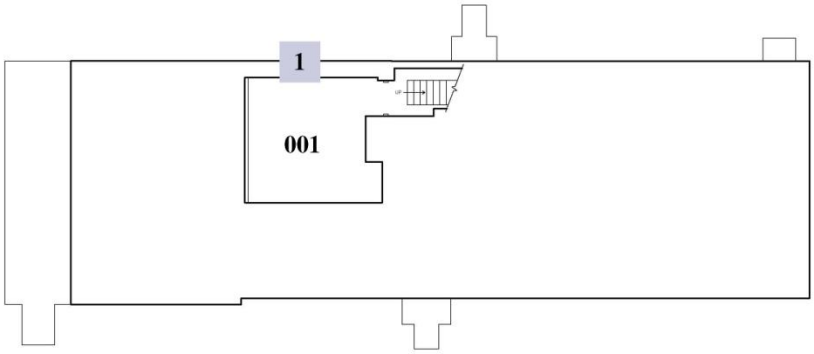
Seilier, John and John Peterson. *Dendrology at Virginia Tech,* online, June 2011 <http://dendro.cnre.vt.edu/dendrology/factsheets.cfm>.

Appendix

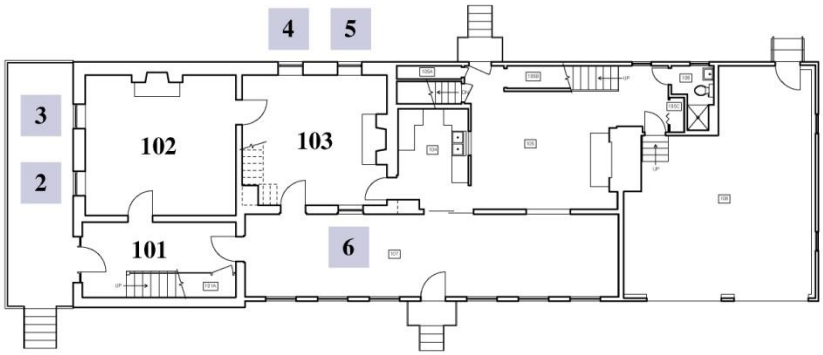
Appendix I:

Bowman-Hite

Window Schedule



1 A-27 HOUSE - BASEMENT

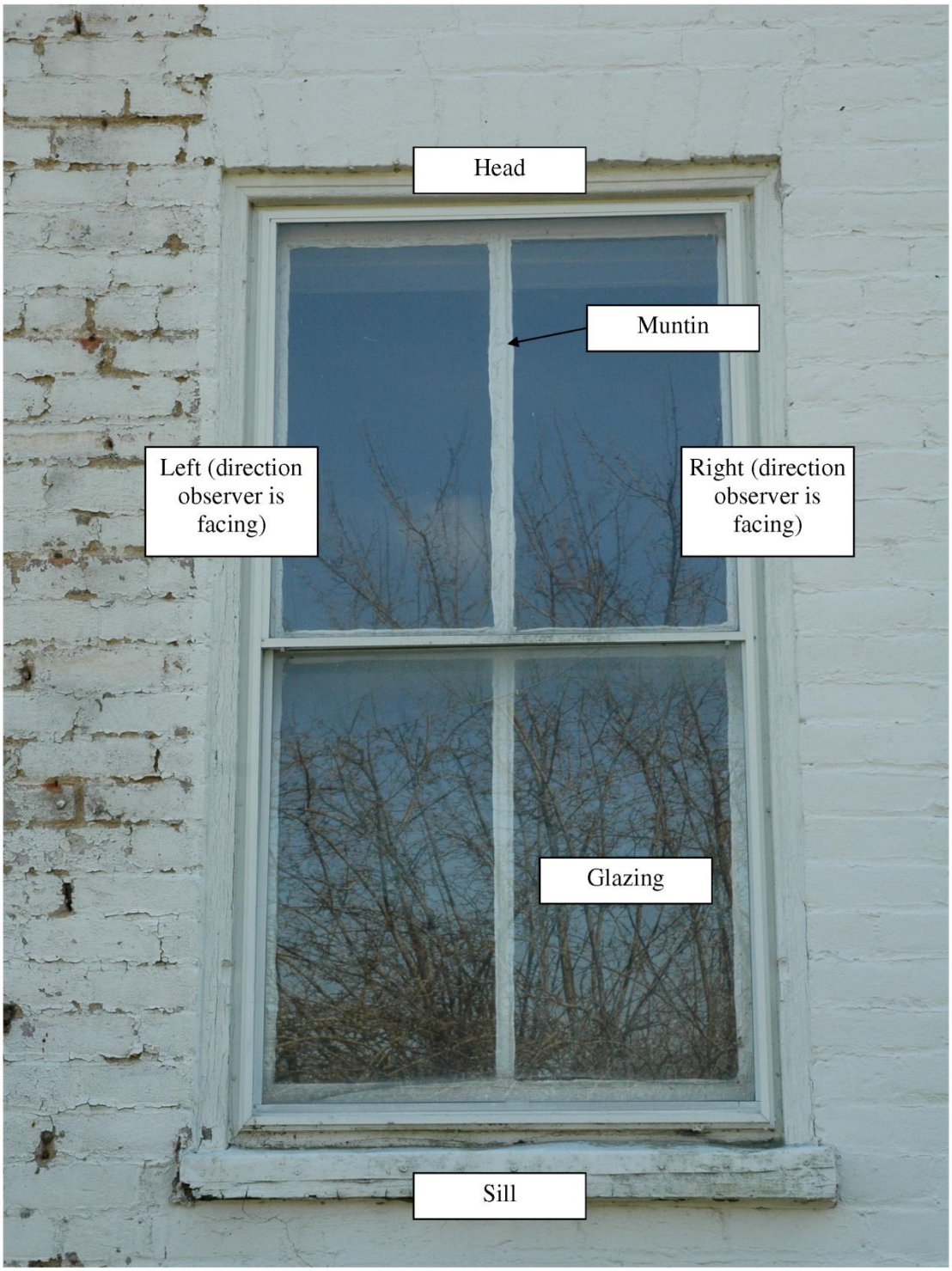


1 A-21 HOUSE - FIRST FLOOR

1 A-24 HOUSE - SECOND FLOOR

X = Window #

X = Room #


Head
Muntin
Left (direction observer is facing)
Right (direction observer is facing)
Glazing
Sill

Bowman-Hite Farmhouse Window Schedule:

Window Number: 001 **Room Number**: 001 **Window Type**: A **Transom Type**: N/A	**Window Exposure**: North **Functional**: **Yes**: **No**: X
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper							
	Lower							
Fixed (single)	Fixed	4	II,3,4	II,4	II,4	II,4	4	4

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II,3,4	II,4	II,4	II,4	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II,1,3,4	II,1,4	II,1,4	II,1,4	N/A			

Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	N/A				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Window Schedule:

Window Number: 002 **Room Number**: 102 **Window Type**: B **Transom Type**: N/A	**Window Exposure**: West **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper	III	III, 1	III, 1	III, 1	III, 1	III, 1	III, 1
	Lower	III	III, 1	III, 1	III, 1	III, 1	III, 1	III, 1
Fixed (single)	Fixed							

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II, 1, 3	II, 1, 3	II,1,3	II, 1, 4	N/A			

Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	N/A				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Window Schedule:

Window Number: 003 **Room Number**: 102 **Window Type**: B **Transom Type**: N/A	**Window Exposure**: West **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper	III	III, 1	III, 1	III, 1	III, 1	III, 1	III, 1
	Lower	III	III, 1	III, 1	III, 1	III, 1	III, 1	III, 1
Fixed (single)	Fixed							

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II, 1, 3	II, 1, 3	II,1,3	II, 1, 4	N/A			

Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	N/A				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Window Schedule:

Window Number: 004
Room Number: 103
Window Type: B
Transom Type: N/A

Window Exposure: North

Functional: **Yes**: X **No**:

Condition and Integrity Codes:

I	Period 1, 1734-1843
II	Period 2, 1843-1872
III	Period 3, 1872-1881
IV	Period 4, 1881-1967
V	Period 5, 1967-2003
1	Peeling paint
2	Painted shut
3	Damage, bending, or hole in existing element
4	Missing or severely deteriorated
5	Hardware missing or in poor condition
6	Existing sash chain/rope damaged or missing
7	Cracked or broken glass
8	Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper	III	III, 1	III, 1	III, 1	III, 1	III, 1	III, 1
	Lower	III	III, 1	III, 1	III, 1	III, 1	III, 1	III, 1
Fixed (single)	Fixed							

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II, 1, 3	II, 1, 3	II,1,3	II, 1, 4	N/A			

Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	N/A				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Window Schedule:

Window Number: 005 **Room Number**: 103 **Window Type**: B **Transom Type**: N/A	**Window Exposure**: North **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper	III	III, 1	III, 1	III, 1	III, 1	III, 1	III, 1
	Lower	III	III, 1	III, 1	III, 1	III, 1	III, 1	III, 1
Fixed (single)	Fixed							

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II, 1, 3	II, 1, 3	II,1,3	II, 1, 4	N/A			

Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	N/A				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Window Schedule:

Window Number: 006 **Room Number**: 103 **Window Type**: B **Transom Type**: N/A	**Window Exposure**: South **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper	III	III	III	III	III	III	III
	Lower	III	III	III	III	III	III	III
Fixed (single)	Fixed							

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	N/A				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Window Schedule:

Window Number: 007 **Room Number**: 201 **Window Type**: C **Transom Type**: N/A	**Window Exposure**: West **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper	II	II, 1	II, 1	II, 1	II, 1	II, 1	II, 1
	Lower	II	II, 1	II, 1	II, 1	II, 1	II, 1	II, 1
Fixed (single)	Fixed							

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II, 1, 3	II, 1, 3	II,1,3	II, 1, 4	N/A			

Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	N/A				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Window Schedule:

Window Number: 008 **Room Number**: 202 **Window Type**: C **Transom Type**: N/A	**Window Exposure**: West **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper	II	II, 1	II, 1	II, 1	II, 1	II, 1	II, 1
	Lower	II	II, 1	II, 1	II, 1	II, 1	II, 1	II, 1
Fixed (single)	Fixed							

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II, 1, 3	II, 1, 3	II,1,3	II, 1, 4	N/A			

Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	N/A				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Window Schedule:

Window Number: 009 **Room Number**: 202 **Window Type**: C **Transom Type**: N/A	**Window Exposure**: West **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper	II	II, 1	II, 1	II, 1	II, 1	II, 1	II, 1
	Lower	II	II, 1	II, 1	II, 1	II, 1	II, 1	II, 1
Fixed (single)	Fixed							

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II, 1, 3	II, 1, 3	II,1,3	II, 1, 4	N/A			

Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	N/A				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Window Schedule:

Window Number: 010 **Room Number**: 203 **Window Type**: C **Transom Type**: N/A	**Window Exposure**: North **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper	II	II, 1	II, 1	II, 1	II, 1	II, 1	II, 1
	Lower	II	II, 1	II, 1	II, 1	II, 1	II, 1	II, 1
Fixed (single)	Fixed							

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II, 1, 3	II, 1, 3	II,1,3	II, 1, 4	N/A			

Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	II, 4				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Window Schedule:

Window Number: 011 **Room Number**: 203 **Window Type**: C **Transom Type**: N/A	**Window Exposure**: North **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper	II	II, 1	II, 1	II, 1	II, 1	II, 1	II, 1
	Lower	II	II, 1	II, 1	II, 1	II, 1	II, 1	II, 1
Fixed (single)	Fixed							

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II, 1, 3	II, 1, 3	II,1,3	II, 1, 4	N/A			

Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	II, 4				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Window Schedule:

Window Number: 012 **Room Number**: 203 **Window Type**: C **Transom Type**: N/A	**Window Exposure**: South **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper	4	4	4	4	4	4	4
	Lower	4	4	4	4	4	4	4
Fixed (single)	Fixed							

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	N/A				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Window Schedule:

Window Number: 013 **Room Number**: 301 (attic) **Window Type**: D **Transom Type**: N/A	**Window Exposure**: South **Functional**: **Yes**: **No**: X
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass Over painting on glass

Sash		**Glazing**	**Top Rail**	**Bottom Rail**	**Left Stile**	**Right Stile**	**Muntins**	
							Hor.	Vert.
Double/Single Hung	Upper							
	Lower							
Fixed (single)	Fixed	4	II, 1, 3	II, 1, 3	II, 1, 3	II, 1, 3	N/A	N/A

Interior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Sill**	**Transom Bar**			
	II, 1, 3	II, 1, 3	II, 1, 3	II, 1, 3	N/A			

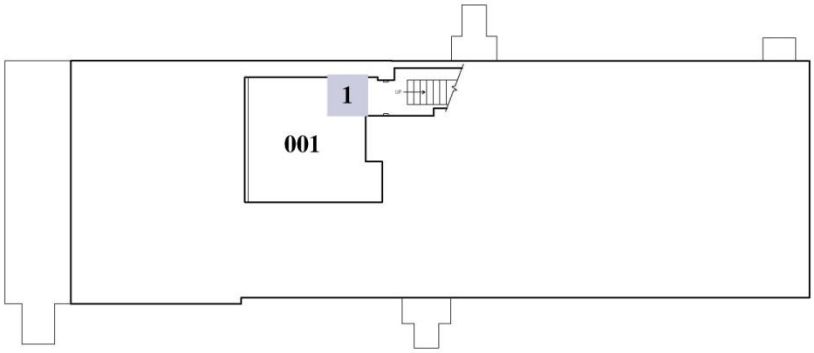
Hardware	**Pulls**	**Sash Lock**	**Pulley/ Chain**	**Locks/Stays**				
	N/A	N/A	N/A	N/A				

Surveyed by: Michael Spencer Date: 2/19/2012

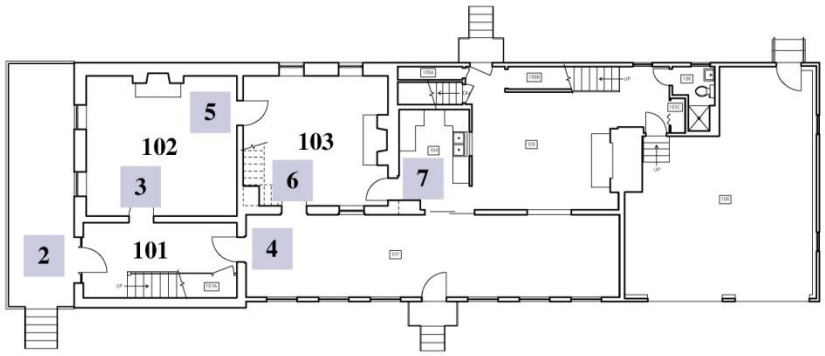
Appendix II:

Bowman-Hite

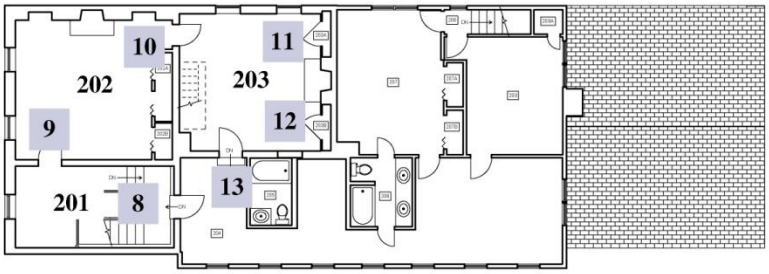
Door Schedule



1 A-27 HOUSE - BASEMENT
SCALE: 1/8" = 1'-0"
N



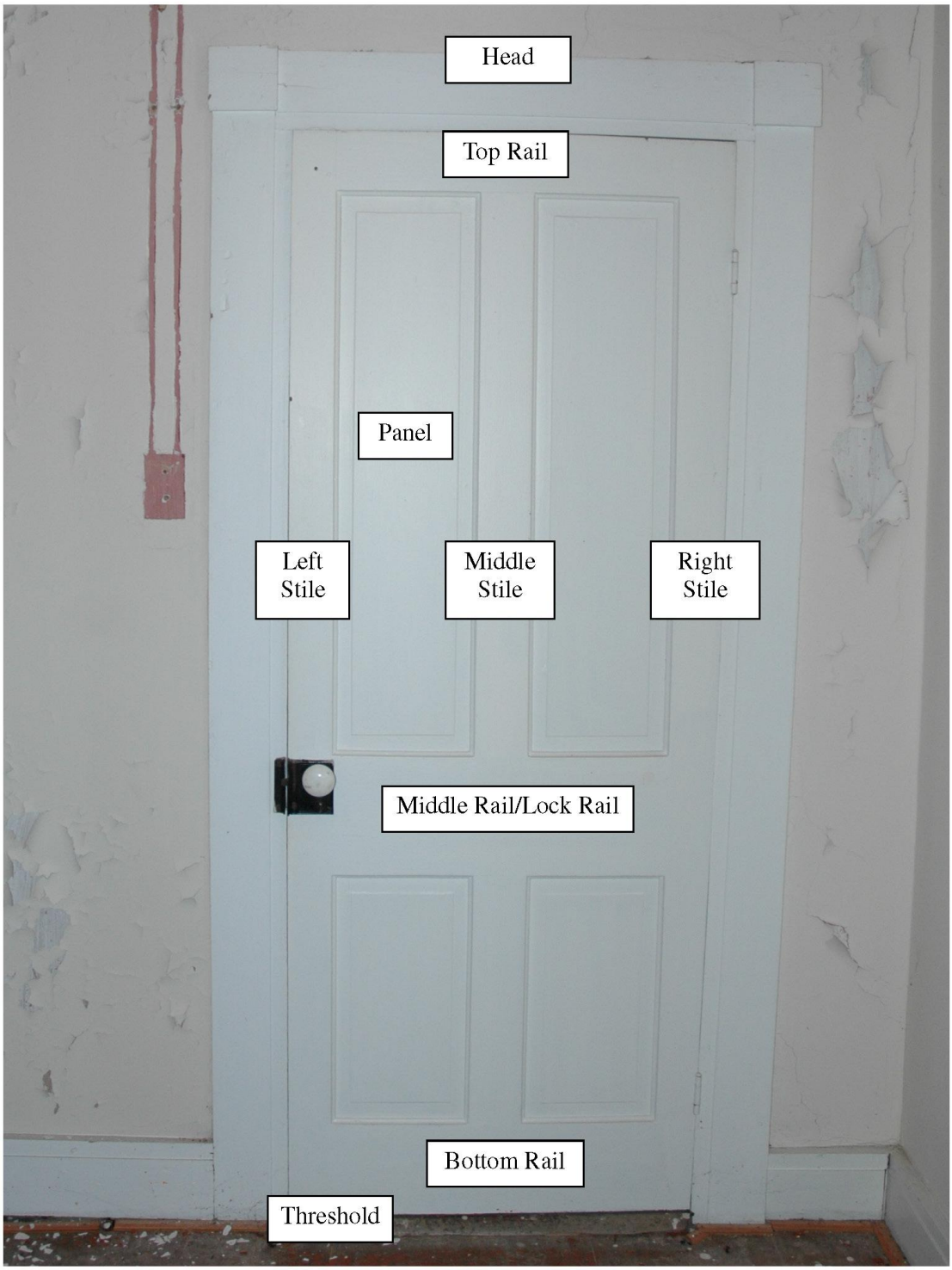
1 A-21 HOUSE - FIRST FLOOR
SCALE: 1/8" = 1'-0"
N



1 A-24 HOUSE - SECOND FLOOR
SCALE: 1/8" = 1'-0"
N

X = Door #

X = Room #


Head
Top Rail
Panel
Left Stile
Middle Stile
Right Stile
Middle Rail/Lock Rail
Bottom Rail
Threshold

Bowman-Hite Farmhouse Door Schedule:

Door Number: 001
Room Number: 001
Door Type: A **Transom Type**:

Door Exposure/Wall: East

Functional: **Yes**: X **No**:

Condition and Integrity Codes:

I	Period 1, 1734-1843
II	Period 2, 1843-1872
III	Period 3, 1872-1881
IV	Period 4, 1881-1967
V	Period 5, 1967-2003
1	Peeling paint
2	Painted shut
3	Damage, bending, or hole in existing element
4	Missing or severely deteriorated
5	Hardware missing or in poor condition
6	Existing sash chain/rope damaged or missing
7	Cracked or broken glass
8	Over painting on glass

Door	Glazing	Panels	Top Rail	Middle Rail	Bottom Rail	Left Stile	Middle Stile	Right Stile
Two Paneled								
Four Paneled	N/A	4	4	4	4	4	4	4
Six Paneled								
1/2 Glazed								

Interior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II, 3	II, 3	II, 3	N/A	N/A			

Exterior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II, 3	II, 3	II, 3	II, 3	N/A			

Hardware	Pulls/ Knobs	Eschuteon	Door Stop	Locks	Hinges			
Mineral								
Brass								

Transom	Lights	Muntins	Casing Head	Left	Right			

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Door Schedule:

Door Number: 002
Room Number: 101
Door Type: B
Transom Type: Rectangular

Door Exposure/Wall: West

Functional: **Yes**: X **No**:

Condition and Integrity Codes:

I	Period 1, 1734-1843
II	Period 2, 1843-1872
III	Period 3, 1872-1881
IV	Period 4, 1881-1967
V	Period 5, 1967-2003
1	Peeling paint
2	Painted shut
3	Damage, bending, or hole in existing element
4	Missing or severely deteriorated
5	Hardware missing or in poor condition
6	Existing sash chain/rope damaged or missing
7	Cracked or broken glass
8	Over painting on glass

Door	Glazing	Panels	Top Rail	Middle Rail	Bottom Rail	Left Stile	Middle Stile	Right Stile
Two Paneled								
Four Paneled								
Six Paneled	N/A	V	V	V	V	V	V	V
1/2 Glazed								

Interior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	II			

Exterior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II, 1, 3, 4	II, 1, 3, 4	II, 1, 3, 4	II, 1, 3, 4	II, 1, 3, 4			

Hardware	Pulls/ Knobs	Eschuteon	Door Stop	Locks	Hinges			
Mineral								
Brass	V	V	N/A	V	V			

Transom	Lights	Muntins	Casing Head	Left	Right			
	V	II, 4	II, 1, 3, 4	II, 1, 3, 4	II, 1, 3, 4			

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Door Schedule:

Door Number: 003
Room Number: 102
Door Type: C
Transom Type: N/A

Door Exposure/Wall: South

Functional: **Yes**: X **No**:

Condition and Integrity Codes:

I	Period 1, 1734-1843
II	Period 2, 1843-1872
III	Period 3, 1872-1881
IV	Period 4, 1881-1967
V	Period 5, 1967-2003
1	Peeling paint
2	Painted shut
3	Damage, bending, or hole in existing element
4	Missing or severely deteriorated
5	Hardware missing or in poor condition
6	Existing sash chain/rope damaged or missing
7	Cracked or broken glass
8	Over painting on glass

Door	Glazing	Panels	Top Rail	Middle Rail	Bottom Rail	Left Stile	Middle Stile	Right Stile
Two Paneled	N/A	II	II	N/A	II	II	N/A	II
Four Paneled								
Six Paneled								
1/2 Glazed								

Interior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	N/A			

Exterior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	N/A			

Hardware	Pulls/ Knobs	Eschuteon	Door Stop	Locks	Hinges			
Mineral	II	N/A	II	II	II			
Brass								

Transom	Lights	Muntins	Casing Head	Left	Right			

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Door Schedule:

Door Number: 004 **Room Number**: 101 **Door Type**: D **Transom Type**: N/A	**Door Exposure/Wall**: West **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Door	**Glazing**	**Panels**	**Top Rail**	**Middle Rail**	**Bottom Rail**	**Left Stile**	**Middle Stile**	**Right Stile**
Two Paneled								
Four Paneled								
Six Paneled								
1/2 Glazed	III	III	III	III	III	III		III

Interior Frame/Casing	**Head**	**Left**	**Right**	**Threshold**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Threshold**	**Transom Bar**			
	II	II	II	II	N/A			

Hardware	**Pulls/ Knobs**	**Eschuteon**	**Door Stop**	**Locks**	**Hinges**			
Mineral								
Brass	III	III	II	III	III			

Transom	**Lights**	**Muntins**	**Casing Head**	**Left**	**Right**			

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Door Schedule:

Door Number: 005
Room Number: 103
Door Type: C
Transom Type: N/A

Door Exposure/Wall: West

Functional: **Yes**: X **No**:

Condition and Integrity Codes:

I	Period 1, 1734-1843
II	Period 2, 1843-1872
III	Period 3, 1872-1881
IV	Period 4, 1881-1967
V	Period 5, 1967-2003
1	Peeling paint
2	Painted shut
3	Damage, bending, or hole in existing element
4	Missing or severely deteriorated
5	Hardware missing or in poor condition
6	Existing sash chain/rope damaged or missing
7	Cracked or broken glass
	Over painting on glass

Door	Glazing	Panels	Top Rail	Middle Rail	Bottom Rail	Left Stile	Middle Stile	Right Stile
Two Paneled	N/A	II	II	N/A	II	II	N/A	II
Four Paneled								
Six Paneled								
1/2 Glazed								

Interior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	N/A			

Exterior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	N/A			

Hardware	Pulls/ Knobs	Eschuteon	Door Stop	Locks	Hinges			
Mineral	II	N/A	II	II	II			
Brass								

Transom	Lights	Muntins	Casing Head	Left	Right			

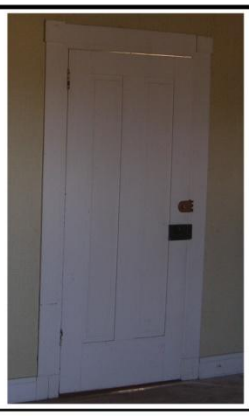
Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Door Schedule:

Door Number: 006
Room Number: 103
Door Type: C
Transom Type: N/A

Door Exposure/Wall: South

Functional: **Yes**: X **No**:



Condition and Integrity Codes:

I	Period 1, 1734-1843
II	Period 2, 1843-1872
III	Period 3, 1872-1881
IV	Period 4, 1881-1967
V	Period 5, 1967-2003
1	Peeling paint
2	Painted shut
3	Damage, bending, or hole in existing element
4	Missing or severely deteriorated
5	Hardware missing or in poor condition
6	Existing sash chain/rope damaged or missing
7	Cracked or broken glass
	Over painting on glass

Door	Glazing	Panels	Top Rail	Middle Rail	Bottom Rail	Left Stile	Middle Stile	Right Stile
Two Paneled	N/A	II	II	N/A	II	II	N/A	II
Four Paneled								
Six Paneled								
1/2 Glazed								

Interior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	N/A			

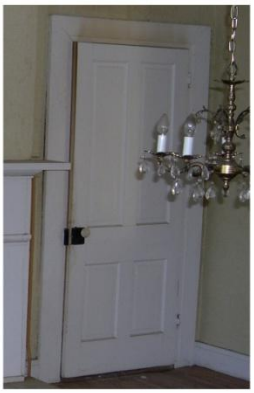
Exterior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	N/A			

Hardware	Pulls/ Knobs	Eschuteon	Door Stop	Locks	Hinges			
Mineral	II	N/A	II	II	II			
Brass				V				

Transom	Lights	Muntins	Casing Head	Left	Right			

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Door Schedule:

Door Number: 007 **Room Number**: 103 **Door Type**: E **Transom Type**: N/A	**Door Exposure/Wall**: East **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass Over painting on glass

Door	**Glazing**	**Panels**	**Top Rail**	**Middle Rail**	**Bottom Rail**	**Left Stile**	**Middle Stile**	**Right Stile**
Two Paneled								
Four Paneled	N/A	III	III	III	III	III	III	III
Six Paneled								
1/2 Glazed								

Interior Frame/Casing	**Head**	**Left**	**Right**	**Threshold**	**Transom Bar**			
	II	II	II	II	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Threshold**	**Transom Bar**			
	II	II	II	II	N/A			

Hardware	**Pulls/ Knobs**	**Eschuteon**	**Door Stop**	**Locks**	**Hinges**			
Mineral	III	N/A	N/A	III	III			
Brass								

Transom	**Lights**	**Muntins**	**Casing Head**	**Left**	**Right**			

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Door Schedule:

Door Number: 008
Room Number: 201
Door Type: F
Transom Type: N/A

Door Exposure/Wall: East

Functional: **Yes**: X **No**:

Condition and Integrity Codes:

I	Period 1, 1734-1843
II	Period 2, 1843-1872
III	Period 3, 1872-1881
IV	Period 4, 1881-1967
V	Period 5, 1967-2003
1	Peeling paint
2	Painted shut
3	Damage, bending, or hole in existing element
4	Missing or severely deteriorated
5	Hardware missing or in poor condition
6	Existing sash chain/rope damaged or missing
7	Cracked or broken glass
	Over painting on glass

Door	Glazing	Panels	Top Rail	Middle Rail	Bottom Rail	Left Stile	Middle Stile	Right Stile
Two Paneled	N/A	II	II	N/A	II	II	II	II
Four Paneled								
Six Paneled								
1/2 Glazed								

Interior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	V	N/A			

Exterior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	V	V	V	V	N/A			

Hardware	Pulls/ Knobs	Eschuteon	Door Stop	Locks	Hinges			
Mineral								
Brass	V	N/A	N/A	N/A	V			

Transom	Lights	Muntins	Casing Head	Left	Right			

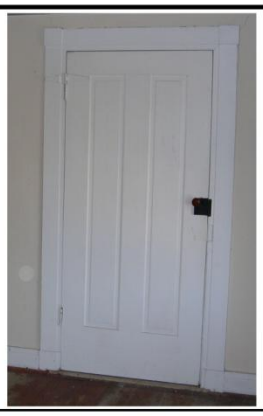
Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Door Schedule:

Door Number: 009
Room Number: 202
Door Type: C
Transom Type: N/A

Door Exposure/Wall: South

Functional: **Yes**: X **No**:



Condition and Integrity Codes:

I	Period 1, 1734-1843
II	Period 2, 1843-1872
III	Period 3, 1872-1881
IV	Period 4, 1881-1967
V	Period 5, 1967-2003
1	Peeling paint
2	Painted shut
3	Damage, bending, or hole in existing element
4	Missing or severely deteriorated
5	Hardware missing or in poor condition
6	Existing sash chain/rope damaged or missing
7	Cracked or broken glass
	Over painting on glass

Door	Glazing	Panels	Top Rail	Middle Rail	Bottom Rail	Left Stile	Middle Stile	Right Stile
Two Paneled	N/A	II	II	N/A	II	II	N/A	II
Four Paneled								
Six Paneled								
1/2 Glazed								

Interior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	N/A			

Exterior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	N/A			

Hardware	Pulls/ Knobs	Eschuteon	Door Stop	Locks	Hinges			
Mineral	III	N/A	N/A	III	III-IV			
Brass								

Transom	Lights	Muntins	Casing Head	Left	Right			

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Door Schedule:

Door Number: 010 **Room Number**: 202 **Door Type**: E **Transom Type**: N/A	**Door Exposure/Wall**: East **Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass Over painting on glass

Door	**Glazing**	**Panels**	**Top Rail**	**Middle Rail**	**Bottom Rail**	**Left Stile**	**Middle Stile**	**Right Stile**
Two Paneled								
Four Paneled	N/A	III	III	III	III	III	III	III
Six Paneled								
1/2 Glazed								

Interior Frame/Casing	**Head**	**Left**	**Right**	**Threshold**	**Transom Bar**			
	III	III	III	III	N/A			

Exterior Frame/Casing	**Head**	**Left**	**Right**	**Threshold**	**Transom Bar**			
	III	III	III	III	N/A			

Hardware	**Pulls/ Knobs**	**Eschuteon**	**Door Stop**	**Locks**	**Hinges**			
Mineral	III	N/A	N/A	III	III			
Brass								

Transom	**Lights**	**Muntins**	**Casing Head**	**Left**	**Right**			

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Door Schedule:

Door Number: 011
Room Number: 203
Door Type: C
Transom Type: N/A

Door Exposure/Wall: East

Functional: **Yes**: X **No**:

Condition and Integrity Codes:

I	Period 1, 1734-1843
II	Period 2, 1843-1872
III	Period 3, 1872-1881
IV	Period 4, 1881-1967
V	Period 5, 1967-2003
1	Peeling paint
2	Painted shut
3	Damage, bending, or hole in existing element
4	Missing or severely deteriorated
5	Hardware missing or in poor condition
6	Existing sash chain/rope damaged or missing
7	Cracked or broken glass
	Over painting on glass

Door	Glazing	Panels	Top Rail	Middle Rail	Bottom Rail	Left Stile	Middle Stile	Right Stile
Two Paneled	N/A	II	II	N/A	II	II	N/A	II
Four Paneled								
Six Paneled								
1/2 Glazed								

Interior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	N/A			

Exterior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	N/A			

Hardware	Pulls/ Knobs	Eschuteon	Door Stop	Locks	Hinges			
Mineral	N/A	N/A	N/A	N/A	II			
Brass								

Transom	Lights	Muntins	Casing Head	Left	Right			

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Door Schedule:

Door Number: 012
Room Number: 203
Door Type: C
Transom Type: N/A

Door Exposure/Wall: East

Functional: **Yes**: X **No**:

Condition and Integrity Codes:

I	Period 1, 1734-1843
II	Period 2, 1843-1872
III	Period 3, 1872-1881
IV	Period 4, 1881-1967
V	Period 5, 1967-2003
1	Peeling paint
2	Painted shut
3	Damage, bending, or hole in existing element
4	Missing or severely deteriorated
5	Hardware missing or in poor condition
6	Existing sash chain/rope damaged or missing
7	Cracked or broken glass
	Over painting on glass

Door	Glazing	Panels	Top Rail	Middle Rail	Bottom Rail	Left Stile	Middle Stile	Right Stile
Two Paneled	N/A	II	II	N/A	II	II	N/A	II
Four Paneled								
Six Paneled								
1/2 Glazed								

Interior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	N/A			

Exterior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	II	N/A			

Hardware	Pulls/ Knobs	Eschuteon	Door Stop	Locks	Hinges			
Mineral	N/A	N/A	N/A	N/A	II			
Brass								

Transom	Lights	Muntins	Casing Head	Left	Right			

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Door Schedule:

Door Number: 013
Room Number: 203
Door Type: C
Transom Type: N/A

Door Exposure/Wall: South

Functional: **Yes**: X **No**:

Condition and Integrity Codes:

I	Period 1, 1734-1843
II	Period 2, 1843-1872
III	Period 3, 1872-1881
IV	Period 4, 1881-1967
V	Period 5, 1967-2003
1	Peeling paint
2	Painted shut
3	Damage, bending, or hole in existing element
4	Missing or severely deteriorated
5	Hardware missing or in poor condition
6	Existing sash chain/rope damaged or missing
7	Cracked or broken glass
	Over painting on glass

Door	Glazing	Panels	Top Rail	Middle Rail	Bottom Rail	Left Stile	Middle Stile	Right Stile
Two Paneled	N/A	II	II	N/A	II	II	N/A	II
Four Paneled								
Six Paneled								
1/2 Glazed								

Interior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	II	II	II	V	N/A			

Exterior Frame/Casing	Head	Left	Right	Threshold	Transom Bar			
	V	V	V	V	N/A			

Hardware	Pulls/ Knobs	Eschuteon	Door Stop	Locks	Hinges			
Mineral								
Brass	V	N/A	N/A	V	V			

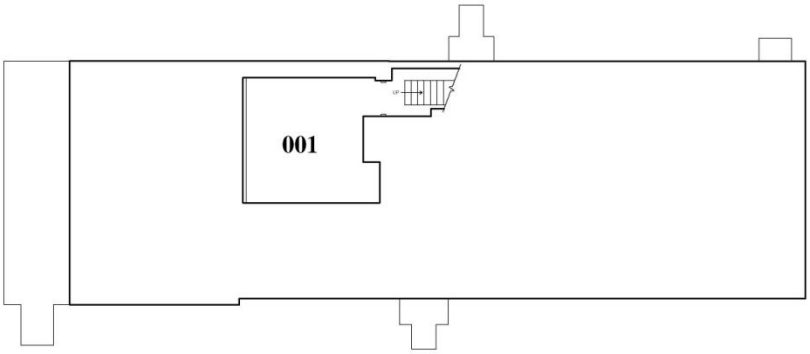
Transom	Lights	Muntins	Casing Head	Left	Right			

Surveyed by: Michael Spencer Date: 2/19/2012

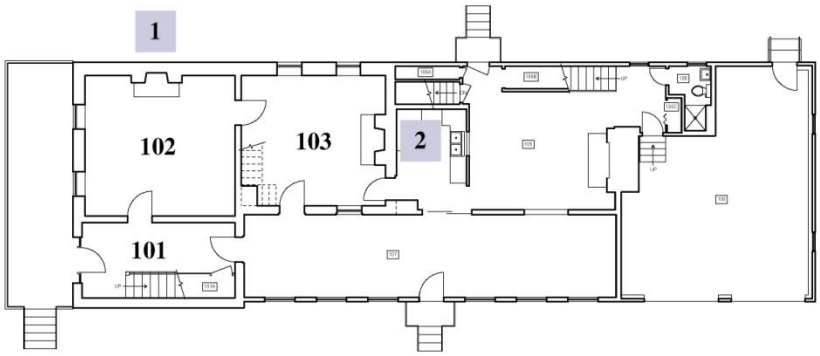
Appendix III:

Bowman-Hite

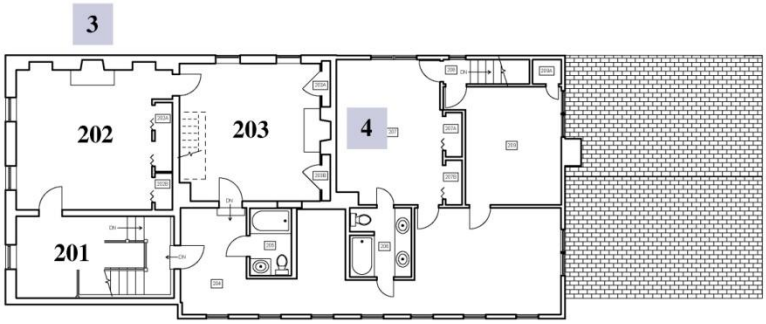
Mantle Schedule



1 A-27 HOUSE - BASEMENT



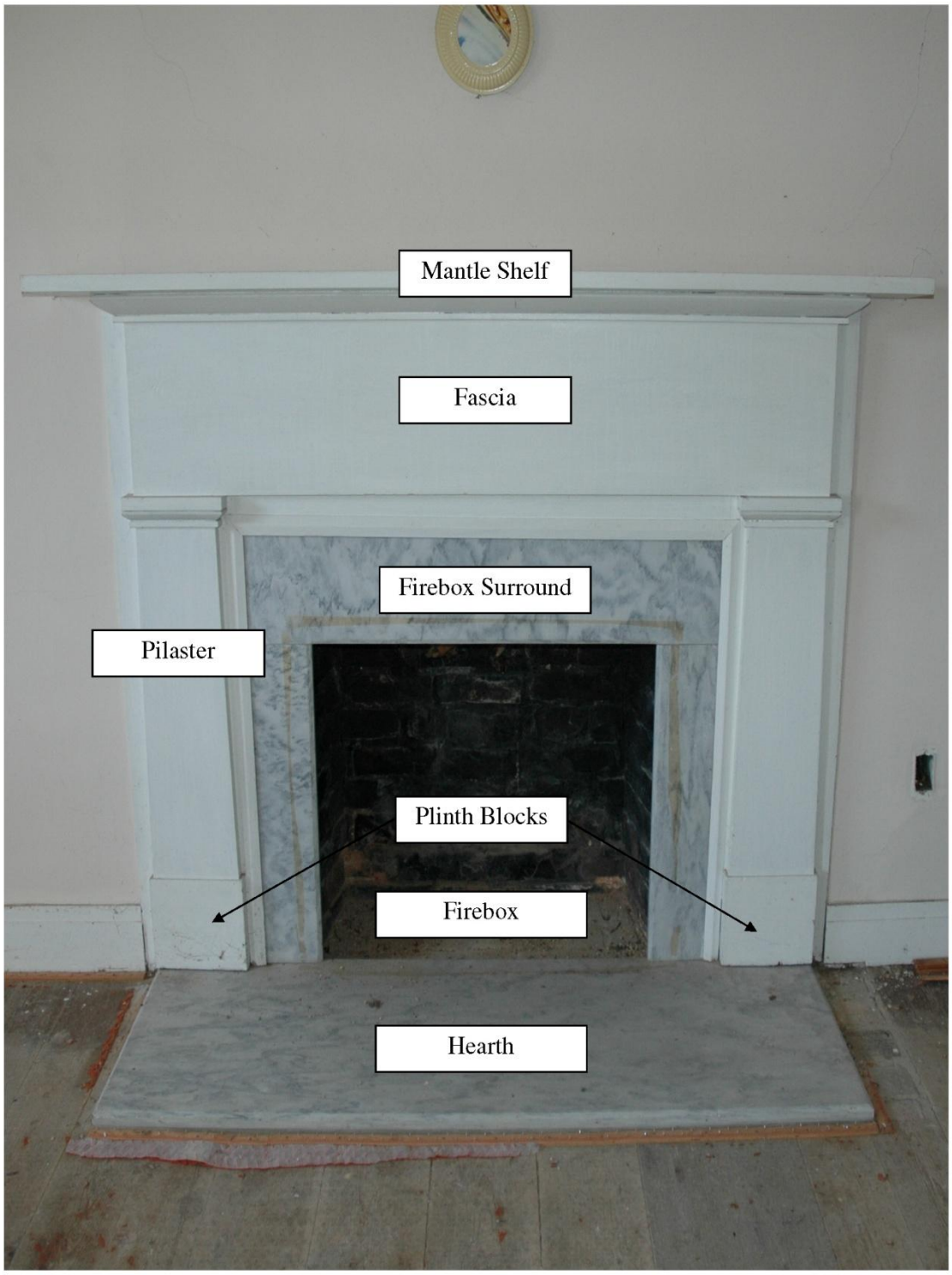
1 A-21 HOUSE - FIRST FLOOR



1 A-24 HOUSE - SECOND FLOOR

X = Mantle #

X = Room #


Mantle Shelf
Fascia
Firebox Surround
Pilaster
Plinth Blocks
Firebox
Hearth

Bowman-Hite Farmhouse Mantle Schedule:

Mantle Number: 001 **Room Number**: 102 **Mantle Type**: A	**Mantle Location**: North Wall **Fireplace Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Mantle	Pilasters	Plinth Blocks	Mantle Shelf	Firebox Sur-round	Head/Fascia	Trim
Wood	II	II, 4	II	II (under), V	II	II

	Hearth	Firebox				
Marble Veneer	V					
Brick		II, V				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Mantle Schedule:

Mantle Number: 002 **Room Number**: 103 **Mantle Type**: B	**Mantle Location**: East Wall **Fireplace Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Mantle	Pilasters	Plinth Blocks	Mantle Shelf	Firebox Sur-round	Head/Fascia	Trim
Wood	II	II, 4	II	II (under), V	II	II

	Hearth	Firebox				
Marble Veneer	V					
Brick		II, V				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Mantle Schedule:

Mantle Number: 003 **Room Number**: 202 **Mantle Type**: C	**Mantle Location**: North Wall **Fireplace Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Mantle	Pilasters	Plinth Blocks	Mantle Shelf	Firebox Sur-round	Head/Fascia	Trim
Wood	II	II	II	II (under), V	II	II

	Hearth	Firebox				
Marble Veneer	II (under), V					
Brick		II				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Mantle Schedule:

Mantle Number: 004 **Room Number**: 203 **Mantle Type**: C	**Mantle Location**: East Wall **Fireplace Functional**: **Yes**: X **No**:
	**Condition and Integrity Codes**: I Period 1, 1734-1843 II Period 2, 1843-1872 III Period 3, 1872-1881 IV Period 4, 1881-1967 V Period 5, 1967-2003 1 Peeling paint 2 Painted shut 3 Damage, bending, or hole in existing element 4 Missing or severely deteriorated 5 Hardware missing or in poor condition 6 Existing sash chain/rope damaged or missing 7 Cracked or broken glass 8 Over painting on glass

Mantle	Pilasters	Plinth Blocks	Mantle Shelf	Firebox Sur-round	Head/Fascia	Trim
Wood	II	II	II	II (under), V	II	II

	Hearth	Firebox				
Marble Veneer	II (under), V					
Brick		II				

Surveyed by: Michael Spencer Date: 2/19/2012

Appendix IV:

Bowman-Hite

Moisture Testing

Moisture Testing:

The Delmhorst BD-2100, electrical resistance type moisture meter was used to quantitatively determine wood moisture content in the basement floor joists. Moisture readings using another qualitative scale were also used to gauge the rising damp concerns within the basement's stone walls. Further moisture assessment of the basement and first floor utilized a HOBO© remote data logger which not only measured relative humidity but also temperature, dew point and light intensity.

Delmhorst BD-2100 Results:

Moisture content (MC) within the wood joists ranged from 14.8% - 22.2%, which, on the high end is just shy of fiber saturation point, or the point when fungal decay typically begins (25-30%).[247] Tests were conducted just after a heavy rain. Ideally, moisture content within the wood joists would be below 13%. While rising damp does appear to be an issue, high relative humidity (RH) levels within the basement is the major factor affecting MC within the wood joists.

The stone walls in the basement were also tested at various intervals using a qualitative scale on the Delmhorst BD-2100. Results indicated that the stone walls were uniformly damp with the exception of the east wall. Here moisture levels decreased as the wall rose. Such results would be expected with rising damp.

HOBO Data Logger:

Basement:

Information from a data logger placed in the basement over a sixteen day period helped confirm the presence of high relative humidity levels in the basement despite cold exterior temperatures and relatively little rain during the period. Relative humidity levels ranged from a high of 89.3% to a low reading of 68.3%. Placing that in context, relative humidity levels above 70% are considered high. Only for a few minutes during the sixteen days was the relative humidity ever below these high levels. While wood moisture content is the primary reason for rot to occur, high relative humidity levels allow for little evaporation of woods moisture, encouraging by proxy, mold growth and eventual rot. Additionally, relative humidity levels play a role in the presence of efflorescence and the eventual spalling of stone and brick. At RH levels above 75% sodium chloride goes into solution, whereas below 75% the solution re-crystallizes.[248] This fluctuation acts as like a "jack hammer", with expanding salt crystals prying against the stones surface causing spalling. The basement readings also indicated that temperature and dew point are constantly within 4-5°F of each other creating the "clammy" environment and leading to condensation at times.

First Floor:

The first floor, as expected due to increased ventilation, showed different results when monitored for temperature, relative humidity and dew point. During the same sixteen day period, temperatures ranged from 50.38^{o}F to 28.45^{o}F and averaged 40.58^{o}F. Relative humidity was also high at times with a max value recorded at 89.30%. While this value was high, it was a notable exception, as relative

[247] Weaver, Conserving Buildings, pg 37.
[248] Watt, Building Pathology, pg 192-193

humidity values only rose above 75% four times during the period and averaged just 68.30%, within acceptable limits. On one occasion temperature and dew point came within 4.41°F of each other likely causing some condensate to form within the structure. Such close values between temperature and dew point are relatively common in the basement and account for the "clammy" conditions often felt.

Joist #	North	Middle	South
1 (west)	20.8	19.4	19.5
2	19.4	19.6	17.0
3	20.3	20.1	20.1
4	17.5	20.1	18.1
5	18.8	18.6	16.4
6	14.8	18.3	16.4
7	16.8	19.9	19.0
8	17.8	22.2	17.0
9 (east)	18.9	N/A	18.8
Averages	***18.3%***	***20.0%***	***18.0%***

Table 8: All values expressed as percentages. Both the high (red) and low (green) moisture content levels are highlighted. Note that the middle readings, taken from the middle of the joists, do not vary drastically from the ends of the joists which make contact with the masonry walls. If rising damp were the sole culprit, levels on the ends of the joists would be higher than those levels found in the middle; however, the opposite is true, indicating relative humidity (RH) as a reason for high readings.

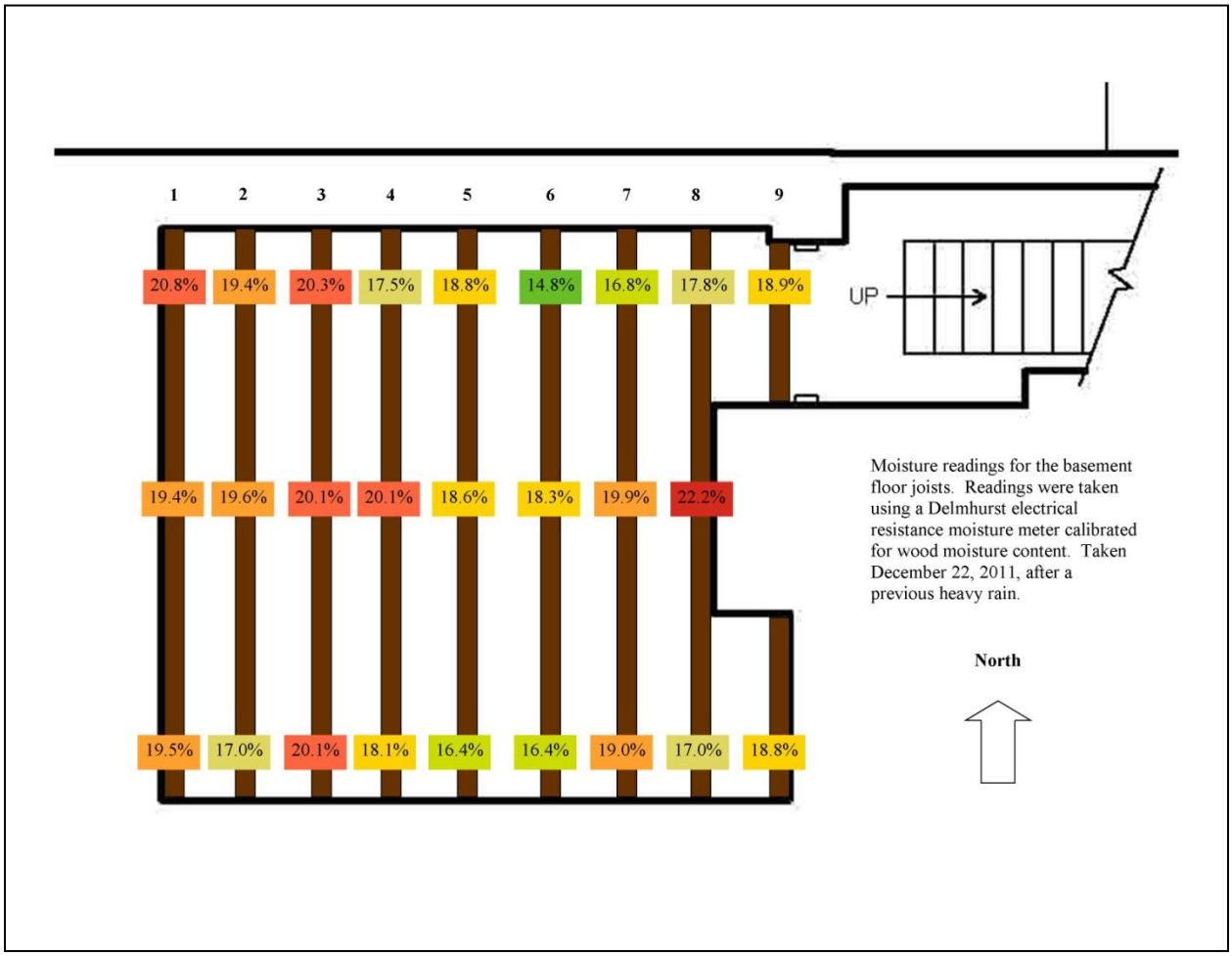


Figure 137: the schematic above shows the basement area in plan with individual floor joists labeled 1 (west) through 9 (east). There appear to be few discernible patterns to the moisture content distribution readings among joists. The highest level may be in part due to water penetration from the chimney above.

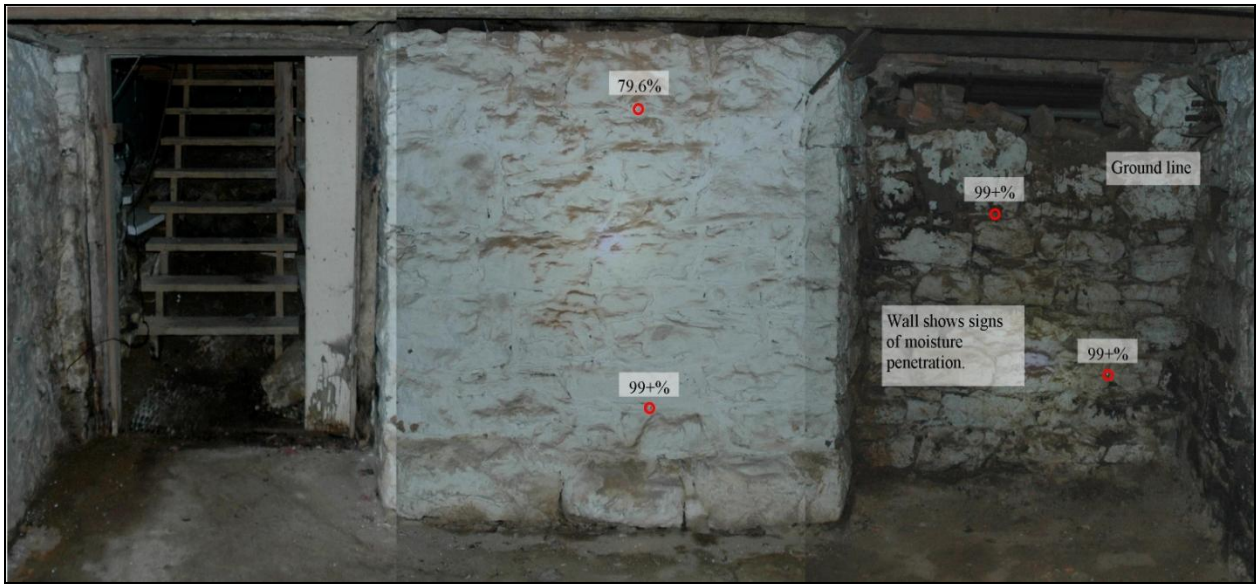


Figure 138: The east basement wall showing areas measured using the Delmhorst moisture meter. The discoloration visible on the walls indicates the presence of efflorescence.

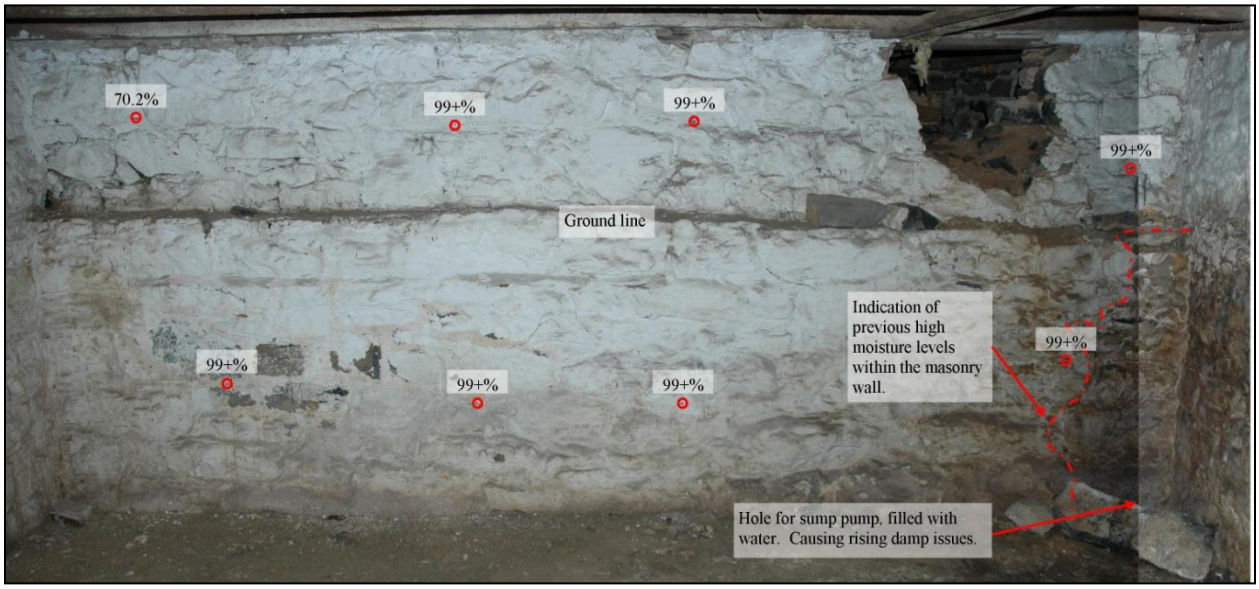


Figure 139: The west basement wall showing areas measured using the Delmhorst moisture meter. In the lower right of the image is the hole where the sump pump was kept. This is also the area where a downspout discharges, note the discoloration.

Figure 140: The south basement wall showing levels of rising damp indicated by the dashed line. At the time of the readings all moisture readings were high despite this wall being an interior wall. One reason behind this constant damp is the poured concrete floor which is helping increase capillary action within the stone walls.

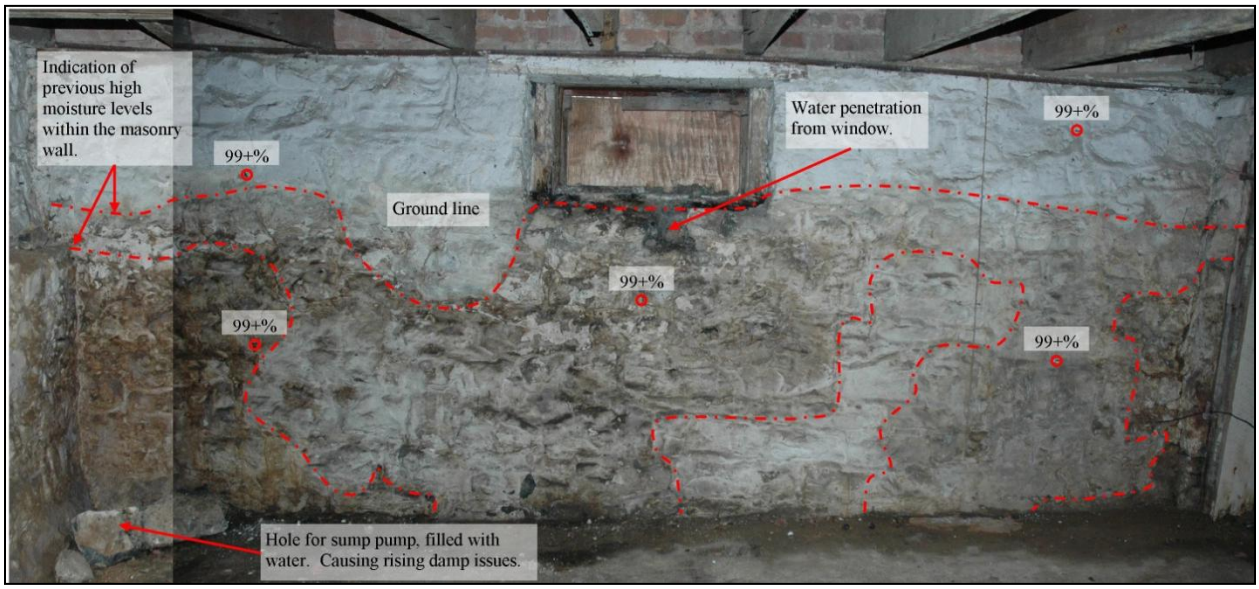


Figure 141: The north wall shows the greatest moisture problems. The various discolorations indicate rising damp levels as well as apparent moisture penetration from a clogged downspout (left) and the centrally placed window,.

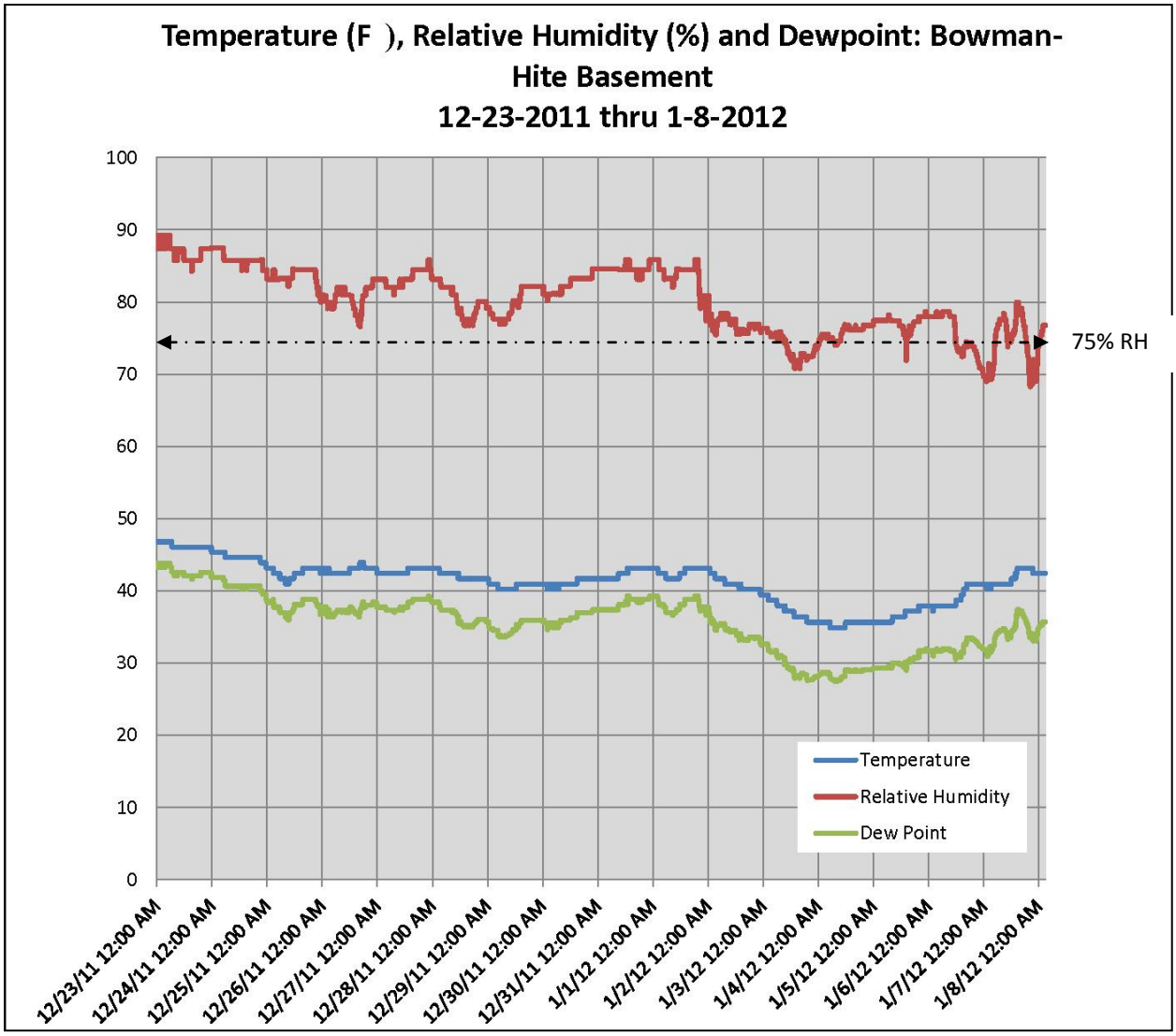


Figure 142: This chart shows the relative humidity (RH%), temperature (F°) and dew point (F°) from the period starting on December 23rd and running through January 8th for the basement floor of the house. Note the high RH values, in excess of 70%, which can encourage mold growth, as well as the fluctuations above and below the 75% level. Such fluctuations encourage spalling in stone and brick caused by salt dissolution and re-crystallization.

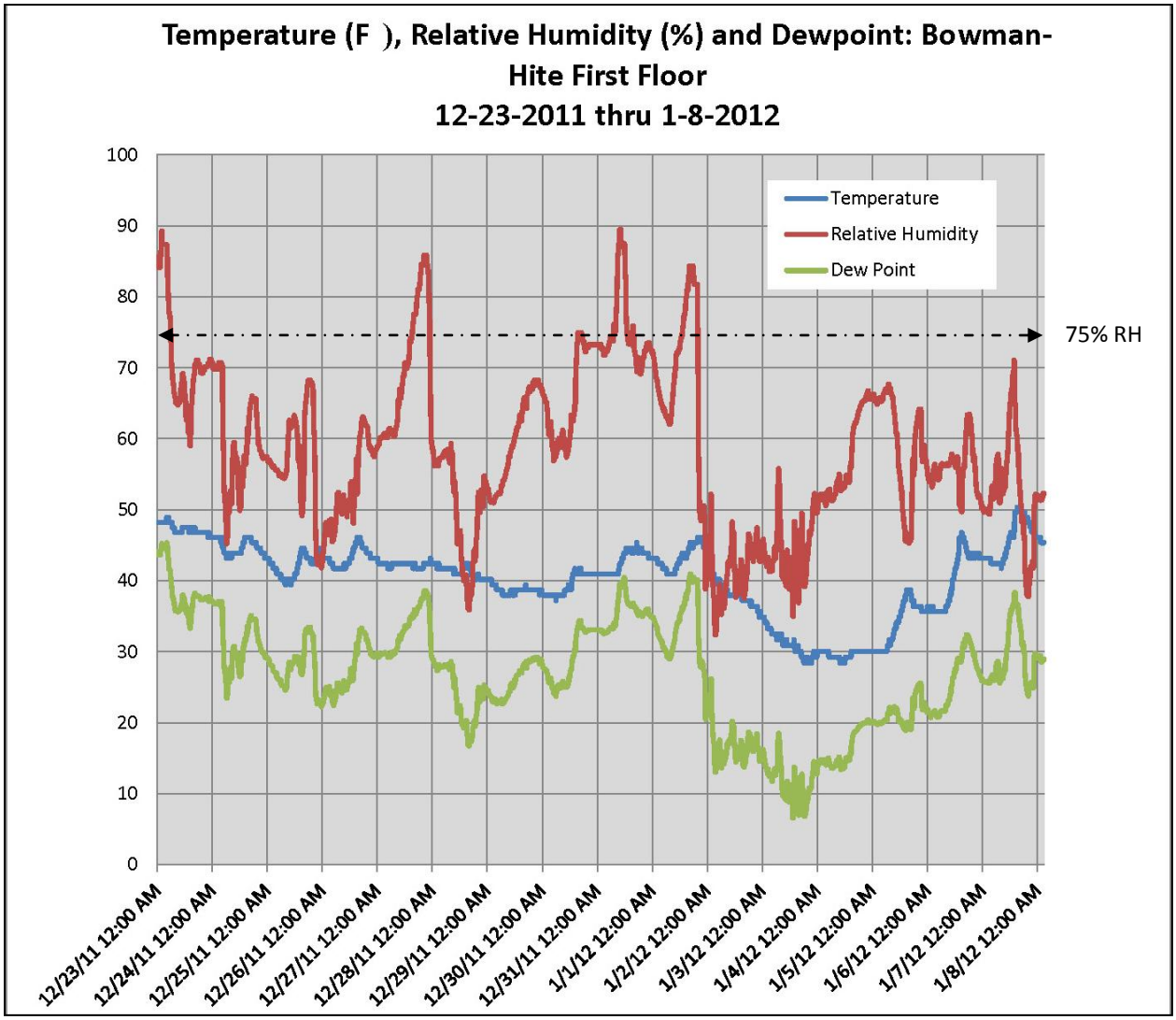


Figure 143: This chart shows the relative humidity (RH%), temperature (F°) and dew point (F°) from the period starting on December 23rd and running through January 8th for the first floor of the house.

Condition	Basement	First Floor
Temperature (max.)	46.82	50.38
Temperature (min.)	34.88	28.45
Temperature (avg.)	41.39	40.58
Relative Humidity (max.)	89.30	89.50
Relative Humidity (min.)	68.30	32.40
Relative Humidity (avg.)	80.47	59.48
Dew Point (max.)	43.86	45.38
Dew Point (min.)	27.50	6.58
Dew Point (avg.)	35.82	27.15

Table 9: This table compares environmental values of the first floor and basement of the Bowman-Hite house. Note the difference in average relative humidity between the two floors.

Appendix V:

Bowman-Hite

Stress Wave Timing Results

Stress Wave Timing (Time of Flight) Investigation:

Stress Wave Timing is a method which utilizes time of flight (TOF), or the time it takes sound to propagate through wood. Applied to wood members, this technique can be utilized to provide qualitative information concerning possible decay and degradation. The basic principle used to provide this information is that the stress wave generated by impacting the transmitting transducer will travel more quickly through dense than decayed wood. This is similar to the established notion that the shortest distance between two points is a straight-line; the stress wave in this instance is acting in the same manner. Applying this concept to degradation within a wood member means that the longer the propagation times of the stress wave through the wood the more likely decay is present. The timing of the stress wave can also be correlated to the extent of degradation with larger times indicating the possibility of greater decay. Published time of flight values based on a variety of parameters has made it possible to compare field data and to make accurate assessments regarding degradation potential. However, while this minimally invasive test is often correct, use of a resistance drill can confirm suspicions (**see appendix X**).

The parameters and factors that affect the use of stress wave timing in the integrity assessment of wood members are important to understand and incorporate within the investigations methodology. Divergence from said parameters can cause significant deviations in results. Below is a list of parameters that can affect the TOF results;

- Wood grain orientation
- Size of wood member
- Wood species
- Transducer orientation, placement and depth
- Wood moisture content
- Ambient temperature

The device used for the stress wave timing investigation at the Bowman-Hite house was a FAKOPP microsecond timing device. This battery powered device works by inserting “needles”, one a transducer and one a receiver, at 45° angles, on opposite sides of the woods surface. Once placed, a small hammer is used to tap the transducer, thereby sending a stress wave through the wood. This process is repeated three times in the same location to establish an accurate average reading. The joists tested in the basement were all approximately the same size.

Findings from this investigation determined that despite high relative humidity and wood moisture content, the basement joists were in relatively good condition. Readings ranged between 42µs - 61µs (adjusted values), well within the acceptable range for yellow pine. Anything above 70µs, at the determined wood moisture content, would likely have indicated some rot.

Further analysis of the findings involved plotting the relationship of stress wave timing values against wood moisture content values to determine if any correlations existed. Under circumstances where moisture was causing wood to rot there would be a direct correlation between higher wood moisture content and longer stress wave times. However, this was not the case in the basement where the results showed no correlation, further indicating the lack of significant degradation within the wood joists.

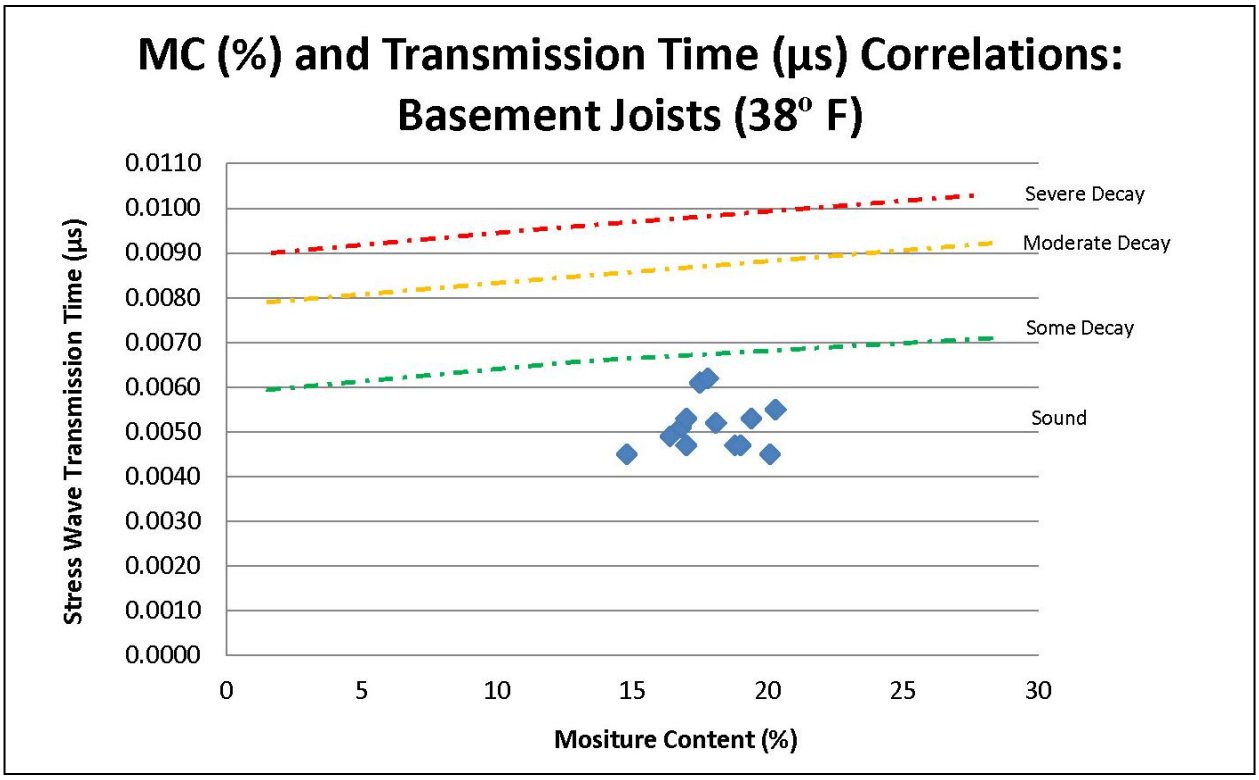


Figure 144: This chart shows the stress wave timing results in relation to moisture content. Note the lack of correlation between the two indicating that there is likely no degradation as a result of wood moisture content.

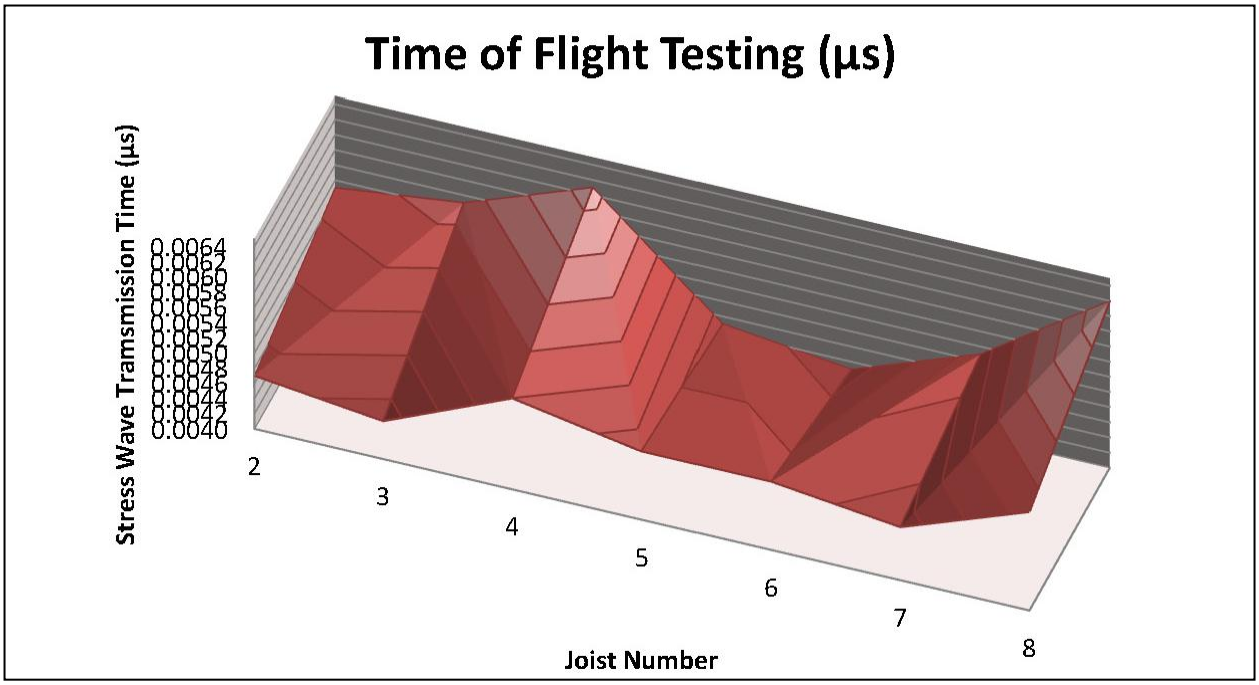
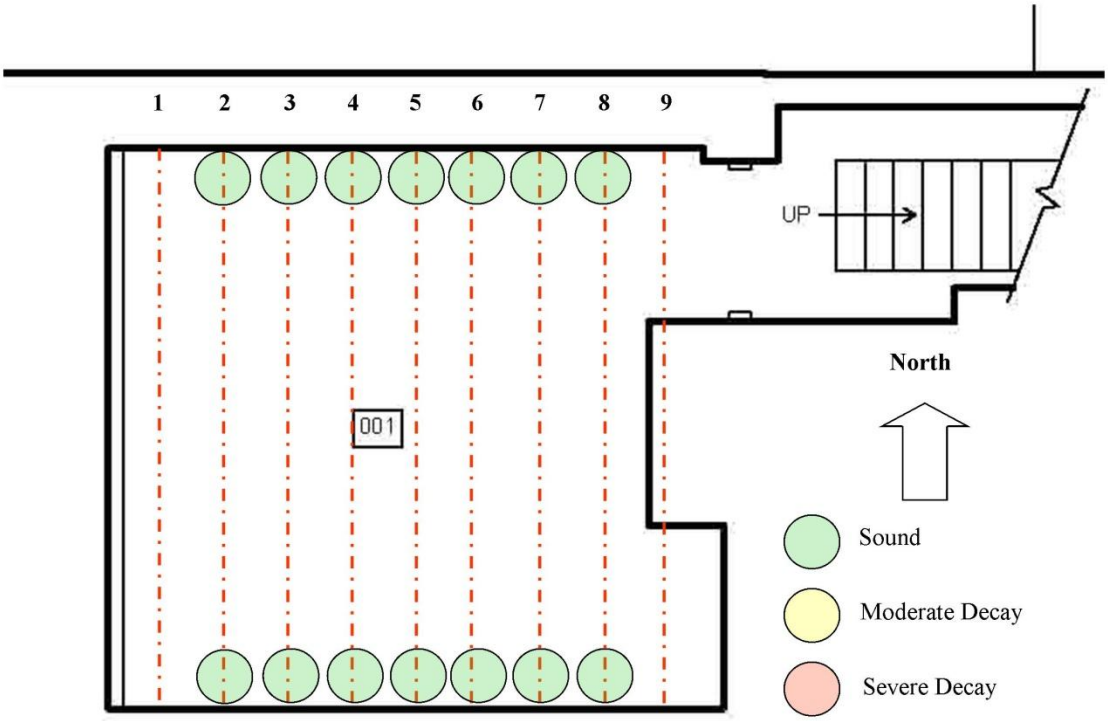


Figure 145: This chart shows the results of the time of flight or stress wave timing tests conducted on the wood joists. The x-axis defines the joist number, with the top of the chart oriented towards the north wall, and the bottom the south. Higher values indicate the possibility of degradation within the wood, however all values obtained were well below levels of concern. Note the two "spikes" near the north wall.

Joist # and sample location	Moisture Content (%)	Average of three tests (µm)	Adjustment Factor	Adjusted Value (µm)
2 North	19.4	0.0052	x1.01	0.0053
3 North	20.3	0.0051	x1.07	0.0055
4 North	17.5	0.0060	x1.01	0.0061
5 North	18.8	0.0047	x1.01	0.0047
6 North	14.8	0.0045	x0.99	0.0045
7 North	16.8	0.0050	x1.01	0.0051
8 North	17.8	0.0061	x1.01	0.0062
2 South	17	0.0047	x1.01	0.0047
3 South	20.1	0.0042	x1.07	0.0045
4 South	18.1	0.0051	x1.01	0.0052
5 South	16.4	0.0048	x1.01	0.0049
6 South	16.4	0.0048	x1.01	0.0049
7 South	19	0.0047	x1.01	0.0047
8 South	17	0.0052	x1.01	0.0053

Table 10: This table shows the joists tested in the basement of the Bowman-Hite farmhouse and their adjusted micro-second readings.

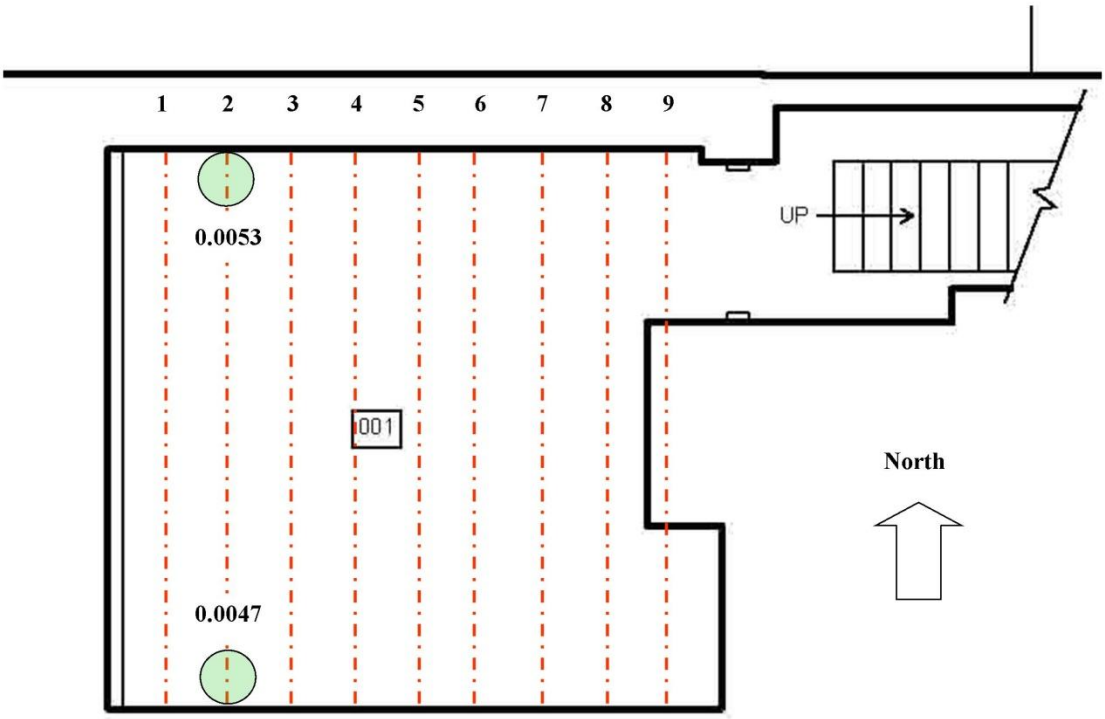


Number (element)	Condition	Additional Analysis
1 (joist)	Sound	pg
2 (joist)	Sound	pg
3 (joist)	Sound	pg
4 (joist)	Sound	pg
5 (joist	Sound	pg
6 (joist)	Sound	pg
7 (joist)	Sound	pg
8 (joist)	Sound	pg
9 (joist)	Sound	pg

Bowman-Hite Farm House Basement Joist Analysis:

Joist Number: 002 **Floor**: Basement **Wood Type**: Yellow Pine	**Joist Location**: West Wall **Temperature**: 38°F **Relative Humidity**: 80%

Joist # and sample location	Moisture Content (%)	Average of three tests (µm)	Adjustment Factor	Adjusted Value (µm)
2 North	19.4	0.0052	x1.01	0.0053
2 South	17	0.0047	x1.01	0.0047



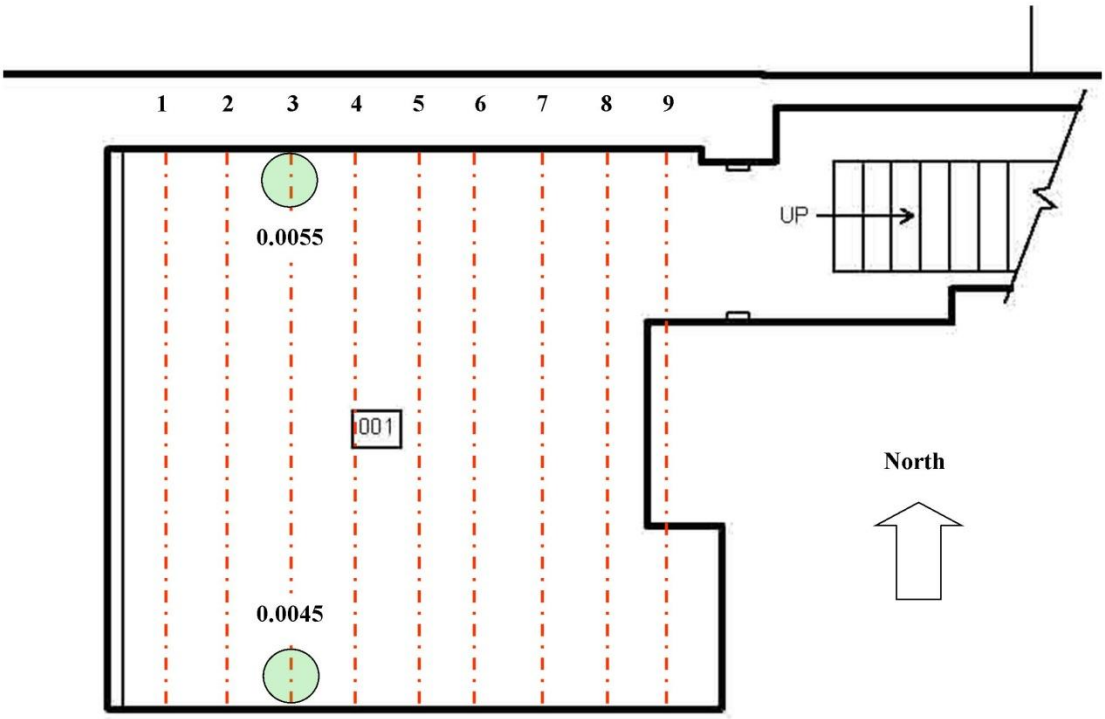
Surveyed by: Michael Spencer

Date: 1/9/2012

Bowman-Hite Farm House Basement Joist Analysis:

Joist Number: 003 **Floor**: Basement **Wood Type**: Yellow Pine	**Joist Location**: West Wall **Temperature**: 38°F **Relative Humidity**: 80%

Joist # and sample location	Moisture Content (%)	Average of three tests (µm)	Adjustment Factor	Adjusted Value (µm)
3 North	20.3	0.0051	x1.07	0.0055
3 South	20.1	0.0042	x1.07	0.0045



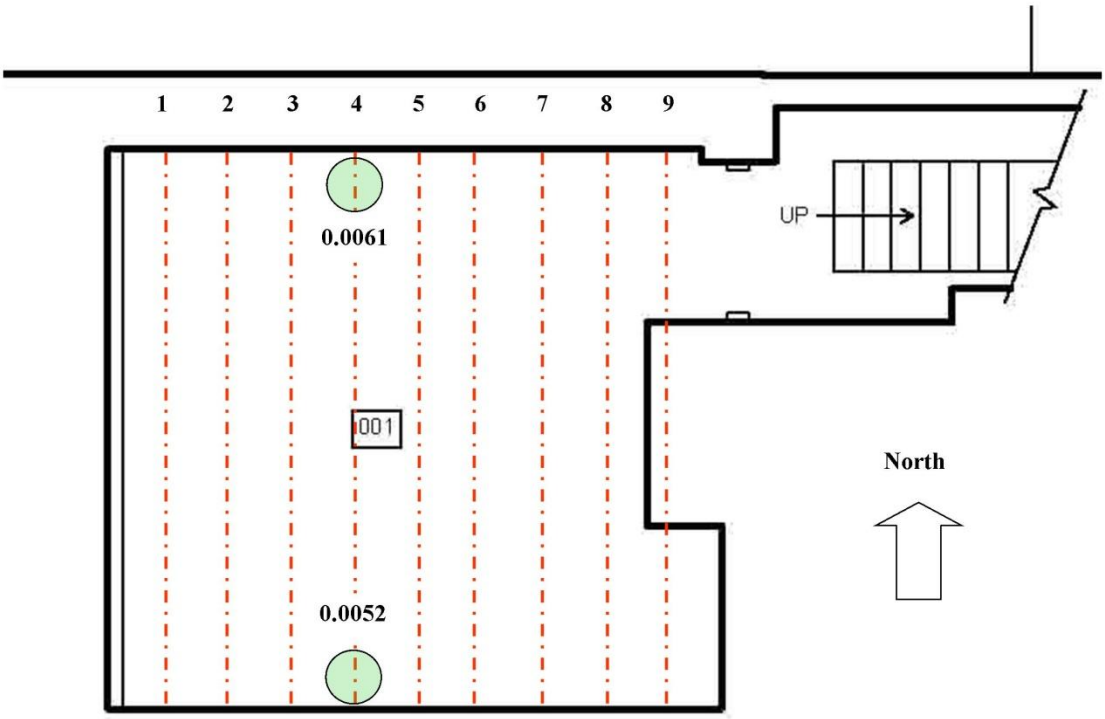
Surveyed by: Michael Spencer

Date: 1/9/2012

Bowman-Hite Farm House Basement Joist Analysis:

Joist Number: 004 **Floor**: Basement **Wood Type**: Yellow Pine	**Joist Location**: West Wall **Temperature**: 38°F **Relative Humidity**: 80%

Joist # and sample location	Moisture Content (%)	Average of three tests (µm)	Adjustment Factor	Adjusted Value (µm)
4 North	17.5	0.0060	x1.01	0.0061
4 South	18.1	0.0051	x1.01	0.0052



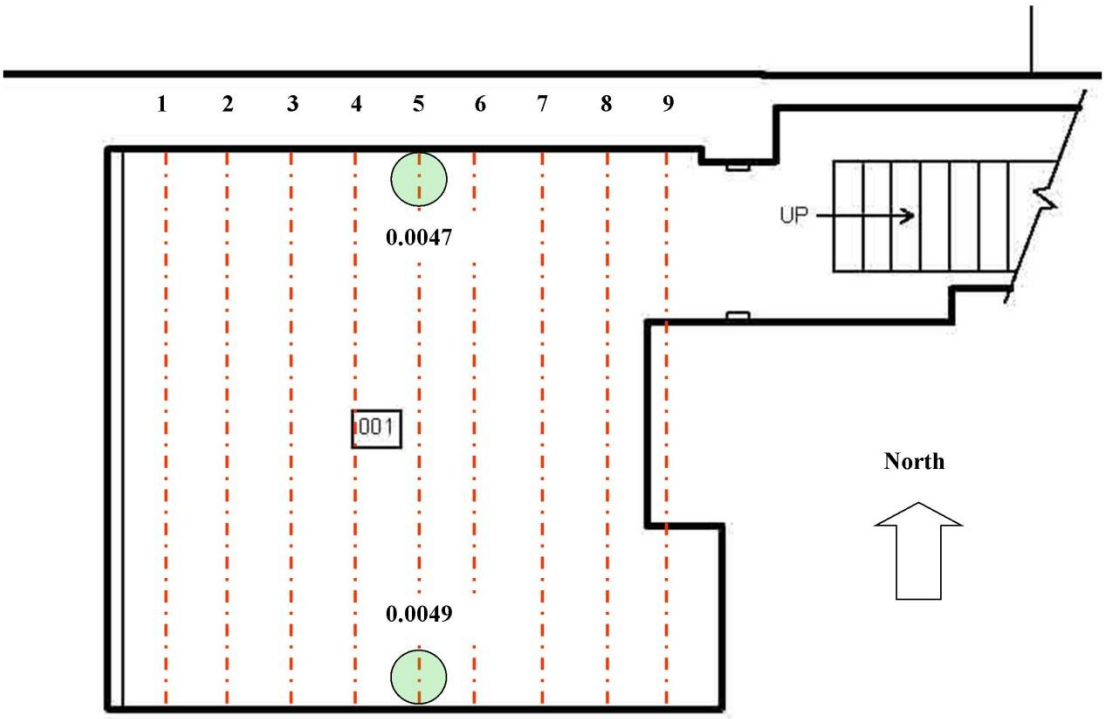
Surveyed by: Michael Spencer

Date: 1/9/2012

Bowman-Hite Farm House Basement Joist Analysis:

Joist Number: 005 **Floor**: Basement **Wood Type**: Yellow Pine	**Joist Location**: West Wall **Temperature**: 38°F **Relative Humidity**: 80%

Joist # and sample location	Moisture Content (%)	Average of three tests (µm)	Adjustment Factor	Adjusted Value (µm)
5 North	18.8	0.0047	x1.01	0.0047
5 South	16.4	0.0048	x1.01	0.0049



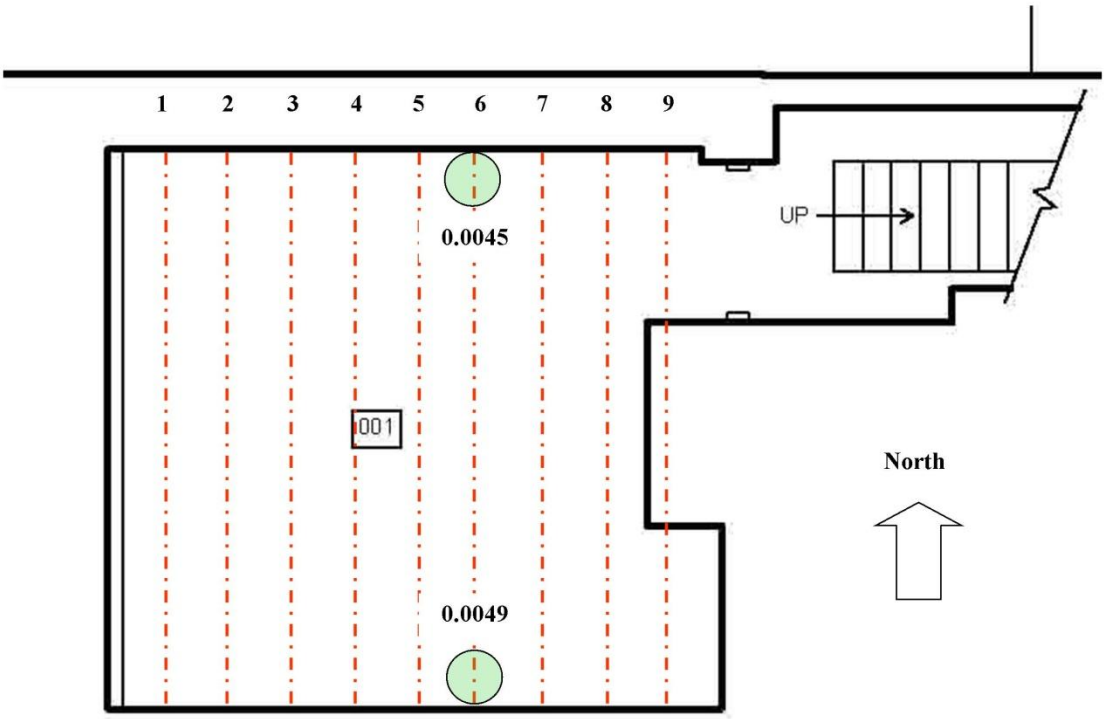
Surveyed by: Michael Spencer

Date: 1/9/2012

Bowman-Hite Farm House Basement Joist Analysis:

Joist Number: 006 **Floor**: Basement **Wood Type**: Yellow Pine	**Joist Location**: West Wall **Temperature**: 38°F **Relative Humidity**: 80%

Joist # and sample location	Moisture Content (%)	Average of three tests (µm)	Adjustment Factor	Adjusted Value (µm)
6 North	14.8	0.0045	x0.99	0.0045
6 South	16.4	0.0048	x1.01	0.0049



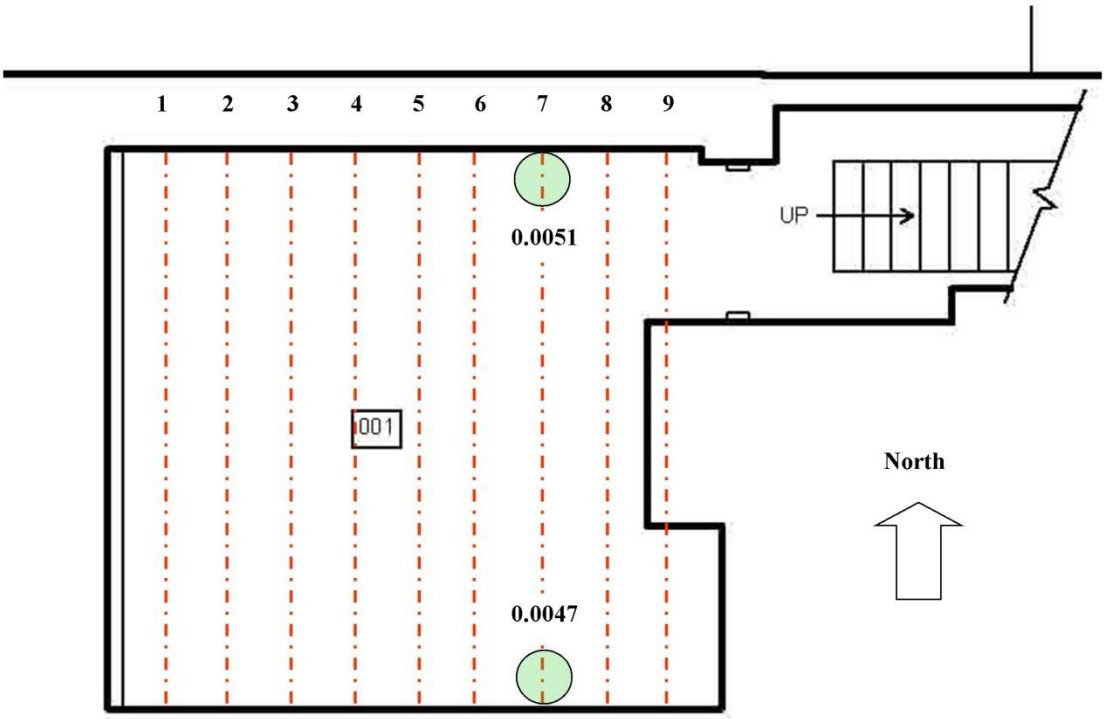
Surveyed by: Michael Spencer

Date: 1/9/2012

Bowman-Hite Farm House Basement Joist Analysis:

Joist Number: 007 **Floor**: Basement **Wood Type**: Yellow Pine	**Joist Location**: West Wall **Temperature**: 38°F **Relative Humidity**: 80%

Joist # and sample location	Moisture Content (%)	Average of three tests (µm)	Adjustment Factor	Adjusted Value (µm)
7 North	16.8	0.0050	x1.01	0.0051
7 South	19	0.0047	x1.01	0.0047



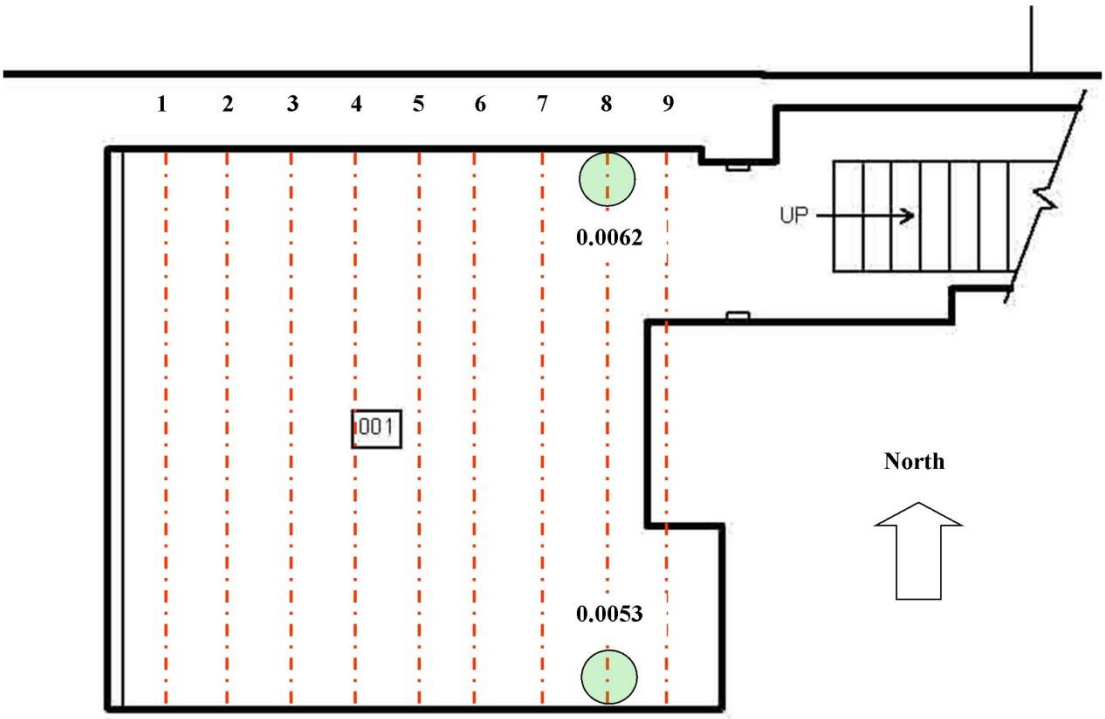
Surveyed by: Michael Spencer

Date: 1/9/2012

Bowman-Hite Farm House Basement Joist Analysis:

Joist Number: 008 **Floor**: Basement **Wood Type**: Yellow Pine	**Joist Location**: West Wall **Temperature**: 38°F **Relative Humidity**: 80%

Joist # and sample location	Moisture Content (%)	Average of three tests (µm)	Adjustment Factor	Adjusted Value (µm)
8 North	17.8	0.0061	x1.01	0.0062
8 South	17	0.0052	x1.01	0.0053



Surveyed by: Michael Spencer

Date: 1/9/2012

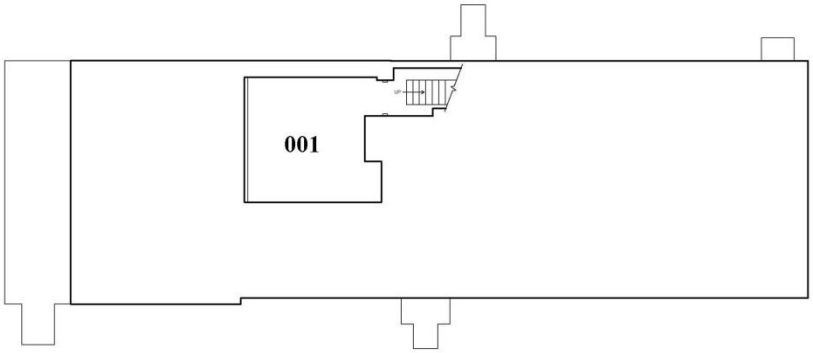
Appendix VI:

Bowman-Hite

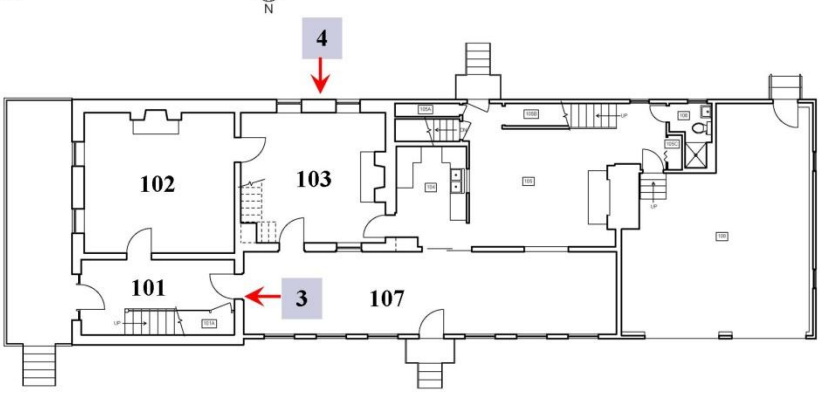
Crack Monitoring Results

Cracks:

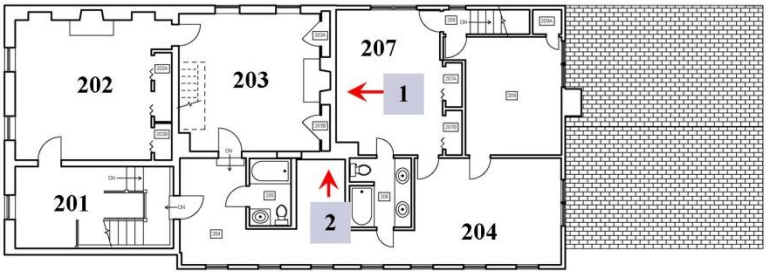
Cracks can occur in historic structures for a number of reasons; settlement, differential coefficients of expansion, incompatible materials, and failure of structural components. The Bowman-Hite farmhouse currently exhibits four cracks located on the period II structure. Three of these cracks are currently being monitored and the fourth was just recently discovered upon removal of the cinderblock chimney added in the late 20th century. From initial observations it appears that the cracks are currently growing; however further monitoring will be required to ensure that this is not the result of natural thermal expansions and contractions. Ambient temperature must also be monitored when crack measurements are taken to ensure that any movements are not the result of temperature fluctuations. While the first and second cracks appear to be perplexing in terms of their cause, cracks three and four appear straightforward. Crack three appears to be the result of mortar failure in the splayed jack arch. Without the arch in full compression the crack will continue to expand as the arch slowly falls. The fourth crack appears to be the result of a failed wood lintel creating a step crack.



1 A-27 HOUSE - BASEMENT



1 A-21 HOUSE - FIRST FLOOR



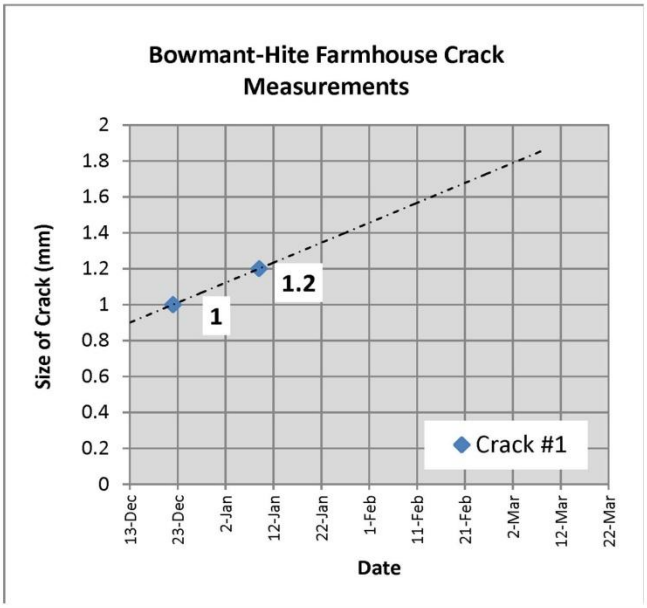
1 A-24 HOUSE - SECOND FLOOR

X = Crack #

X = Room #

Bowman-Hite Farmhouse Crack Monitoring:

Crack Number: 001 **Room Number**: 207 **Type**: Structural	**Specific Location**: East Exterior Wall **Currently Moving**: **Yes**: X **No**:

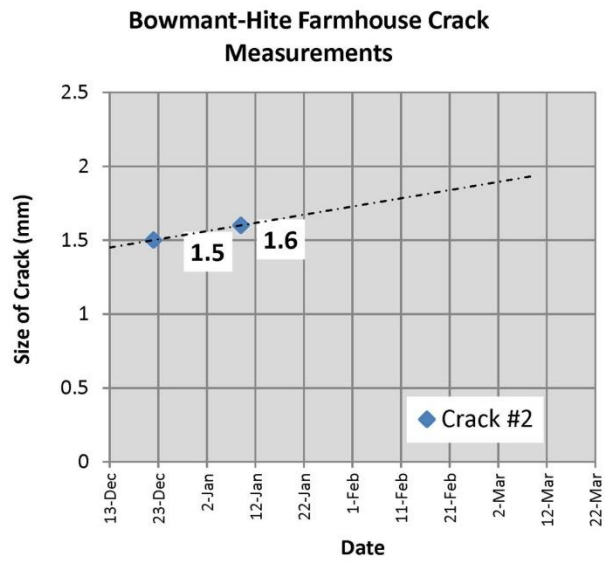


Crack #1	Dec. 22	Jan. 9				
Distance (crack size) mm.	1	1.2				
Distance (point to point) mm.	13.9	14.1				
Ambient Temperature F°	55	35				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Crack Monitoring:

Crack Number: 002 **Room Number**: 204 **Type**: Structural	**Specific Location**: Southeast Corner Exterior Wall **Currently Moving**: **Yes**: X **No**:



Crack #1	Dec. 22	Jan. 9				
Distance (crack size) mm.	1.5	1.6				
Distance (point to point) mm.	37	37.1				
Ambient Temperature F°	55	35				

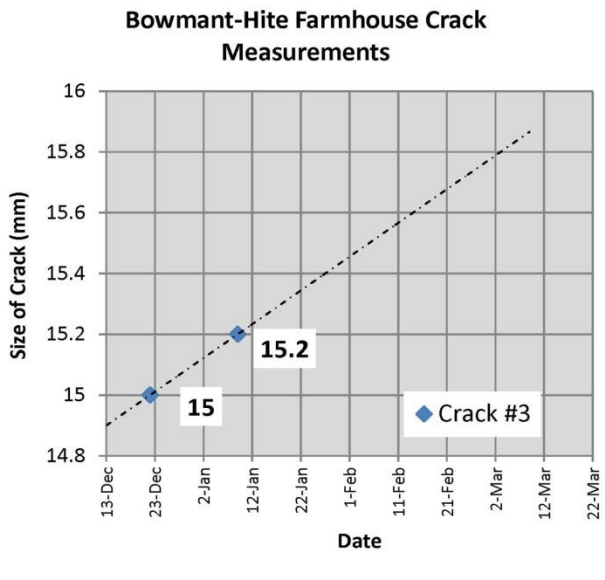
Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Crack Monitoring:

Crack Number: 003
Room Number: 107
Type: Structural

Specific Location: East Exterior Wall , Door Jack Arch

Currently Moving: **Yes**: X **No**:



Crack #1	Dec. 22	Jan. 9				
Distance (crack size) mm.	15	15.2				
Distance (point to point) mm.	38.5	38.7				
Ambient Temperature F°	55	35				

Surveyed by: Michael Spencer Date: 2/19/2012

Bowman-Hite Farmhouse Crack Monitoring:

Crack Number: 004 **Room Number**: Exterior **Type**: Structural	**Specific Location**: North Exterior Wall , Brick Ell **Currently Moving**: **Yes**: X **No**:
 	

Crack #1	Dec. 22	Jan. 9				
Distance (crack size) mm.	Not available	Not available				
Distance (point to point) mm.	Not available	Not available				
Ambient Temperature F°						

*Crack was located after the removal of the cinder block chimney at which point filed observations had ceased. Return trips are need to quantify distances and movement.

Surveyed by: Michael Spencer Date: 2/19/2012

Appendix VII:

Bowman-Hite

Land Tenure and Timeline

Land Tenure and Timeline:

*The owner of land refers to the present owner of the land upon which the Bowman-Hite farmhouse now stands.

Date	Owner	Tenant	Notes	Residence/Buildings
1730	John and Isaac Van Meter		40,000 acres (land grant)	
1734	George Bowman		1,000 acres	
1750s	George Bowman			Fort Bowman (stone house) and the first Bowman's Mill along Cedar Creek are built. The mill site is located where route 635 crosses Cedar Creek.
1768	Isaac Bowman		George Bowman dies leaving 180 acres (in then Shenandoah County) to Isaac Bowman. This includes Fort Bowman but not the mill complex further up Cedar Creek.	
1787	Isaac Bowman			
1793	Isaac Bowman			Second Bowman's Mill complex built along Cedar Creek (present day crossing of Bowman's Mill Road at Cedar Creek) by Isaac Bowman. This complex includes a saw mill, grist mill, a frame house, blacksmith shop, and two other frame structures.
1812-13	Isaac Bowman		Isaac Bowman is referenced as living at a Mt. Pleasant as early as 1806, indicating a possible earlier structure.	Mt. Pleasant, a Federal style brick structure is built on the south side of Cedar Creek by Isaac Bowman.

Date	Owner	Tenant	Notes	Residence/Buildings
1826			Isaac Bowman dies and leaves the portion of land, 498 acres, where the Bowman-Hite house now stands as well as the Bowman Mill complex to Rebecca Bowman	
1843	Rebecca Bowman		Rebecca Bowman turns 21 and inherits her portion of the Bowman estate, 498 acres in Warren and Shenandoah Counties.	
1843-1851	Rebecca Bowman		The southern parcel of Rebecca's holdings in Shenandoah County, roughly 98 acres, is sold.	
1849	Rebecca and Charles Hite		Rebecca marries Charles Hite. They are taxed for 222 ¼ acres in Warren County, Virginia	
1849	Rebecca and Charles Hite		During this period of time property is acquired on the Warren County side of Cedar Creek from George and Mary Brinker (sister).	
1850	Rebecca and Charles Hite		Rebecca is noted as living at Long Meadows, perhaps indicating that Charles is occupying the residence at the mill complex.	
1850	Rebecca and Charles Hite		Rebecca and Charles sell the Bowman Mill complex along with 8 acres to George Bowman. They are taxed for 393+/- acres.	$500 in improvements
1850-1857	Rebecca and Charles Hite		Taxed for 393 +/- acres	$500 in improvements

Date	Owner	Tenant	Notes	Residence/Buildings
1858-1861	Rebecca and Charles Hite		Taxed for 393 +/- acres	$300 in improvements
Late 1850s	Rebecca and Charles Hite			Brick house and post-in-ground kitchen/slave quarters likely built. Other dependencies likely constructed as well.
1859	Rebecca and Charles Hite		First of six substantial loans taken out by Charles Hite.	
1860	Rebecca and Charles Hite		House mentioned in deed of trust.	
1861	Rebecca and Charles Hite		House and kitchen mentioned in deed of trust.	
1863	Rebecca and Charles Hite		Rebecca is noted as selling her slaves through a trustee implying the absence of her husband Charles Hite.	
1864	Rebecca and Charles Hite			Four structures, the farmhouse, kitchen and two additional structures, one likely a barn, shown on a Hotchkiss map.
1867-1869	Rebecca and Charles Hite	James Bly and Connor Stickley	Creditors call in their debts, taxes on the property paid by trustee Robert Bowman. Charles and Rebecca are noted as living in Middletown, Virginia.	
1869	Rebecca and Charles Hite	John Baldwin	John Baldwin allows Charles Hite and business partner, john Winnsburrow, to log on the property. Creditors quickly end this enterprise citing that it devalues the property.	

Date	Owner	Tenant	Notes	Residence/Buildings
1869-1870	Rebecca Hite	John Baldwin	Charles Hite abandons Rebecca and his children	
1870	Rebecca Hite		George Hupp calls in debts.	
1871-1872	Rebecca Hite	Samuel Grove	While the property is mired in court due to debts, Rebecca continues to rent the farm.	
1872	William Stickley	Samuel Grove	Farm is auctioned to William Stickley for $8,000. The farm consists of 393 +/- acres.	Brick "mansion" noted as well as "all necessary outhouses".
1876	John Pirkey		William Stickley sells property for $5,200	
1876-1881	John Pirkey			Rear wood frame addition added and kitchen dependency removed
1879	John Pirkey		270 acres of the "old Hite" farm sold to H.C. Wilson, not including the Bowman-Hite house but including a recently built frame house and dependencies.	
1880	John Pirkey		128 acres	$300 in improvements
1881	John Pirkey	Abraham Kerns	128 acres	Present bank barn constructed, $500 in improvements
1886	Abraham Kerns	Abraham Kerns	128 acres including the Bowman-Hite farmhouse sold to Abraham Kerns for $2,800.	

Date	Owner	Tenant	Notes	Residence/Buildings
1896	Abraham Kerns	Abraham Kerns	Agreement between Kerns and Wilson to transfer approx. ½ acre of alnd for construction of the county road.	
1900	Ella and Charles Kerns	Ella and Charles Kerns	Abraham Kerns accidentally shoots himself. Ella, his wife, and Charles, his son inherit the farm.	
1941	Ella and Mary Kerns	Ella and Mary kerns	Charles Kerns dies leaving his mother and wife, Mary, the farm.	
1967	Lloyd and Ruth Whitham		Mary Kerns sells the 127.5 acre.	
1971	Lloyd and Ruth Whitham			Renovations and additions, including the second story on the rear frame ell, the garage, and numerous dependencies are built.
2003	NPS and SVBF		The estate of Ruth and Lloyd Whitham sells the farm.	

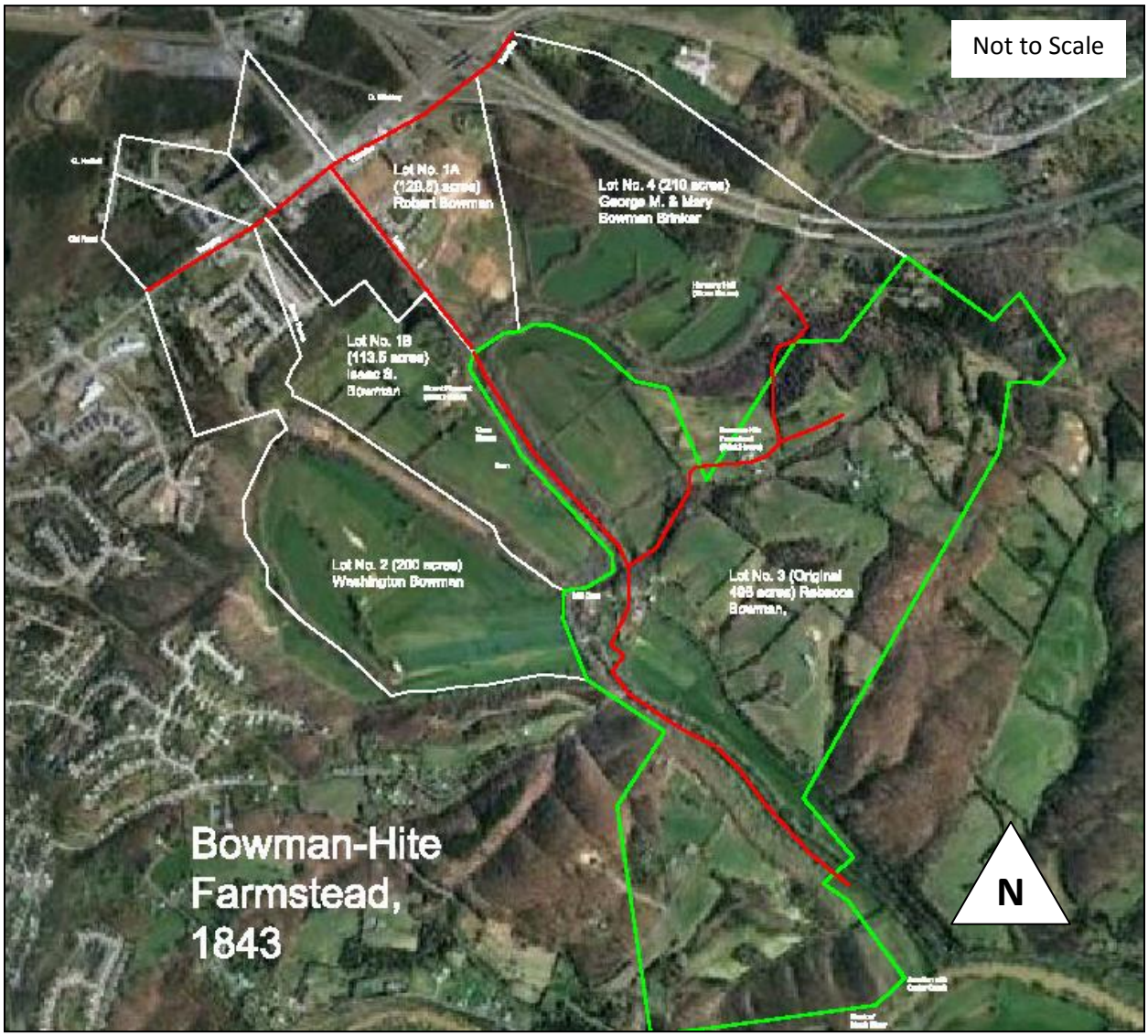


Figure 146: The green boundary denotes Rebecca Bowman's inheritance in 1843 when she "came of age". The property totaled 498 +/- acres with a Mill complex along Cedar Creek.

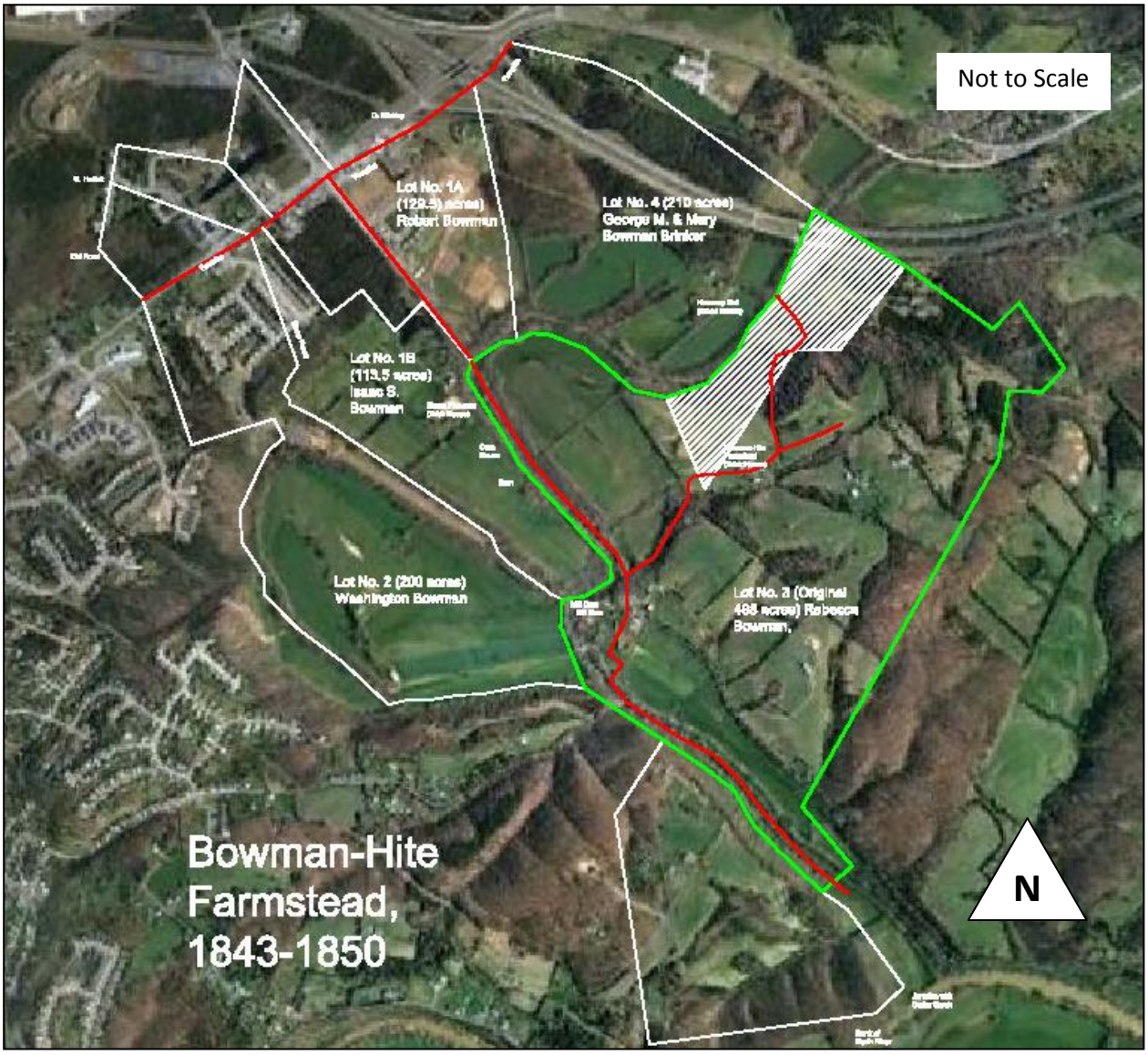


Figure 147: Sometime prior to 1850 the lower portion of Rebecca Bowman's holdings in Shenandoah County were sold. At the same time land was acquired (hatched) on the northern boundary line of the property from Rebecca's sister Mary Brinker.

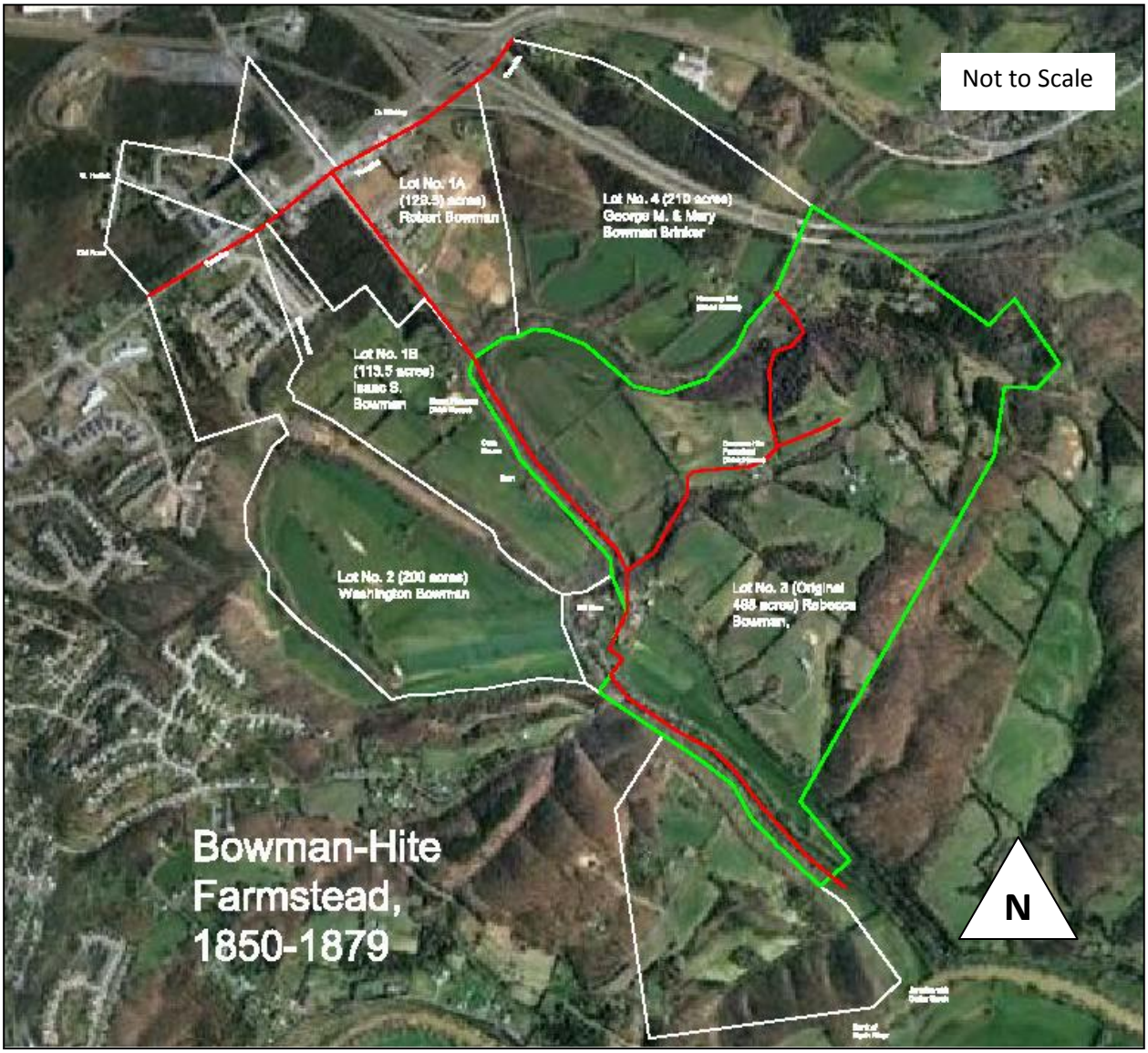


Figure 148: The mill lot, consisting of 8 acres, is sold in 1850.

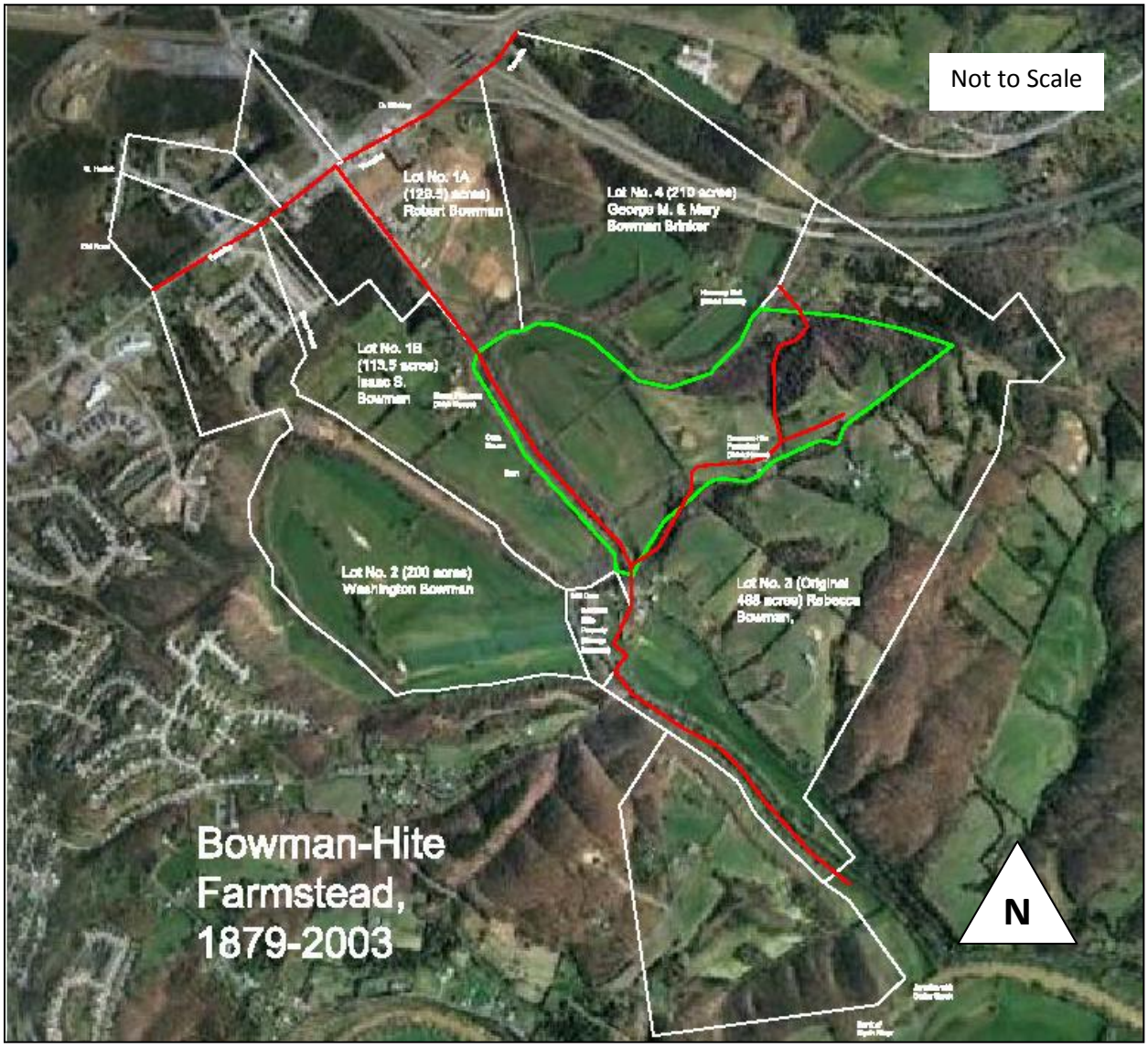


Figure 149: A large portion, 229 acres, of the original land holdings are sold to H.C. Wilson in 1879 by then owner john Pirkey. The resulting acreage totals 127 +/- acres.

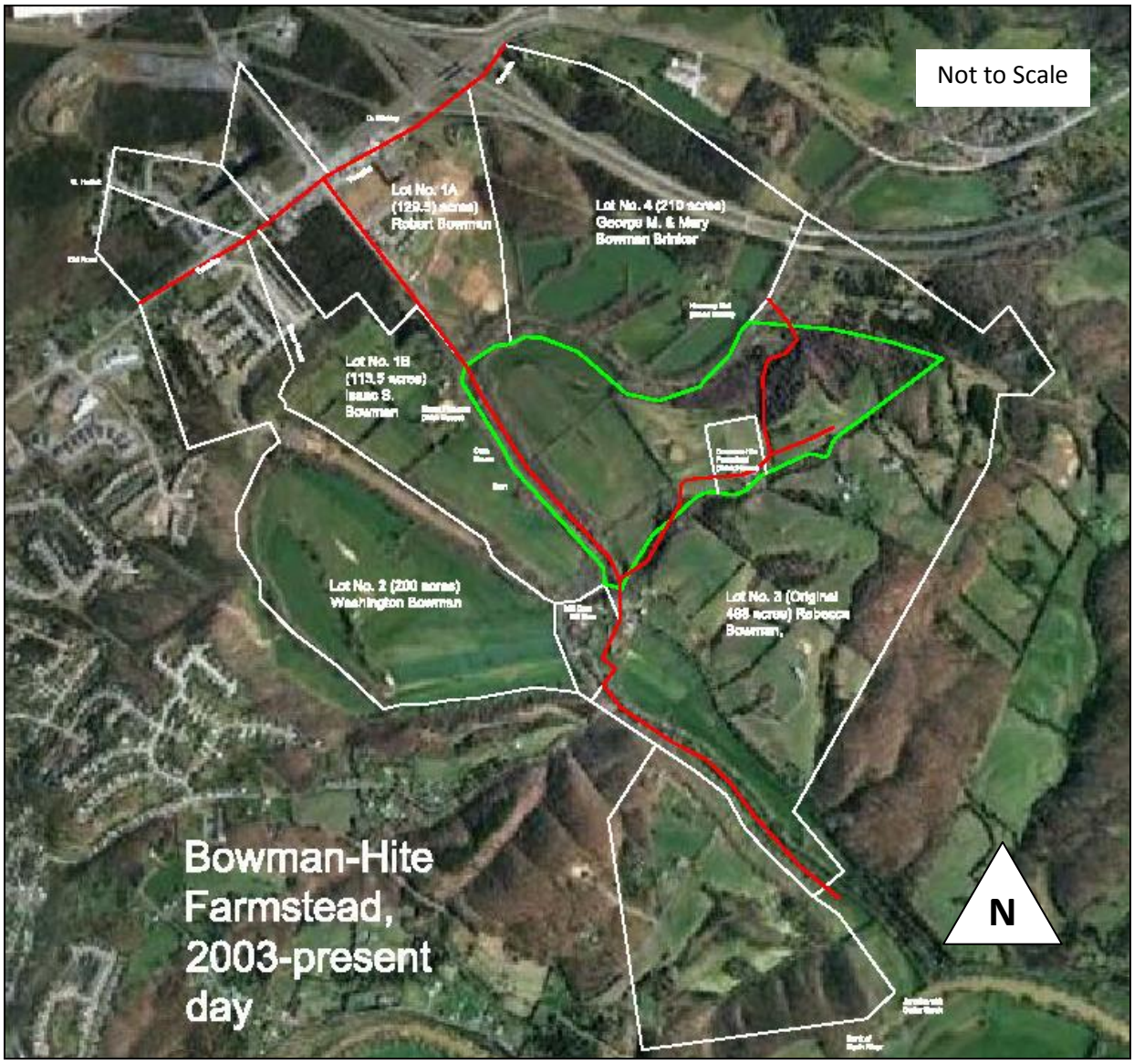


Figure 150: Eight acres are carved out for the National Park Service while the rest of the 127 acres is purchased by the SVBF.

Appendix VIII:

Bowman-Hite

National Register Nomination (Draft)

NPS Form 10-900 OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property
Historic name: Charlie Hite Farm
Other names/site number: Whittham House; Whithaven/DHR File No. 093-0138
Name of related multiple property listing:
N/A
(Enter "N/A" if property is not part of a multiple property listing

2. Location
Street & number: 621 Bowmans Mill Road
City or town: Strasburg State: Virginia County: Warren
Not For Publication: [ ] Vicinity: [x]

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this ___ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property ___ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

___national ___statewide ___local
Applicable National Register Criteria:

___A ___B ___C ___D

Signature of certifying official/Title: **Date**

State or Federal agency/bureau or Tribal Government

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official: **Date**

Title : **State or Federal agency/bureau or Tribal Government**

1

United States Department of the Interior
National Park Service / National Register of Historic Places Registration Form
NPS Form 10-900 OMB No. 1024-0018

Hite, Charles, Farm
Name of Property

Warren County, Virginia
County and State

4. National Park Service Certification

I hereby certify that this property is:

___ entered in the National Register

___ determined eligible for the National Register

___ determined not eligible for the National Register

___ removed from the National Register

___ other (explain:) _____

Signature of the Keeper Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

Private:	☐
Public – Local	☐
Public – State	☐
Public – Federal	X

Category of Property

(Check only one box.)

Building(s)	X
District	☐
Site	☐
Structure	☐
Object	☐

Sections 1-6 page 2

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Noncontributing	
3	1	buildings
1		sites
3		structures
		objects
7	1	Total

Number of contributing resources previously listed in the National Register 0

6. Function or Use

Historic Functions
(Enter categories from instructions.)
DOMESTIC/ single dwelling
DOMESTIC/ secondary structure
AGRICULTURE/SUBSISTENCE/ agricultural outbuildings
AGRICULTURE/SUBSISTENCE/ animal facility
AGRICULTURE/SUBSISTENCE/ processing

Current Functions
(Enter categories from instructions.)
VACANT/NOT IN USE

7. Description

Architectural Classification
(Enter categories from instructions.)
MID-19TH CENTURY/Greek Revival

Materials: (enter categories from instructions.)
Principal exterior materials of the property:

foundation:	STONE/limestone
	CONCRETE
walls:	BRICK
	METAL/aluminum
roof:	ASPHALT

Narrative Description
(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

The brick, two-story, three-bay, side passage with rear ell, Bowman-Hite farmhouse, with Greek Revival elements, is located in rural, Warren County, Virginia on Bowman's Mill Road approximately two miles east of Strasburg, Virginia. Situated on top of a hill that gently slopes west towards Cedar Creek, the farmstead was constructed during the 1850s by Charles and Rebecca Hite, and once was part of a larger 393+/- acre farm. Since 2003 the property has been reduced to 8 acres, currently owned by the Department of the Interior (DOI). The surrounding 134 acres is owned by the Shenandoah Valley Battlefields Trust and remains in agricultural use, maintaining the bucolic feeling, association, and setting of the historic Bowman-Hite farmstead and thus providing a relatively high degree of integrity to the site.

Narrative Description

Contained within the DOI acreage is a complete farmstead consisting of 8 buildings, structures, and archaeological sites. Of these 8 resources, 7 are considered to be contributing to the farmhouse's two periods of significance, 1864, associated with the Battle of Cedar Creek, and 1881–1942, associated with the property's contribution to understanding of agriculture in Warren County, Virginia during Reconstruction and mechanization (1865-1914).

The farm's gravel driveway crosses a small stream and follows the historic course of an antebellum roadway that passed through the property until the late-19th century. The most imposing of the contributing resources is the large, timber-framed, ca. 1881 Standard Pennsylvania Bank Barn, located southeast of the driveway and encountered immediately upon entering the property. South of the barn is the livestock yard with adjacent, frame, cow-shed built during the early to mid-20th century. Further up the drive, towards the farmhouse, is a non-contributing, late-20th century corrugated metal shed. The 1850s farmhouse itself is situated at the end of the current driveway. While a number of additions have been made to the original brick farmhouse, the building still retains much of its integrity. Northeast of the house are two smaller contributing resources. The first is approximately 12 x 12, late-19th century, frame smokehouse covered in weatherboard siding, the other is a frame, mid-20th century chicken coop. Southeast of the house, approximately 100 yards away, is a, larger, mid-20th century, rectangular, frame chicken coop, resting on a pier foundation. Immediately south of this coop and east of the bank barn is a spring. Despite much use over the decades, the extant, contributing resources, remain in fair condition and retain a relatively high level of the seven aspects of integrity.

The primary resource, within the Charlie Hite farmstead is the Bowman-Hite house. This single-family dwelling is a side passage, two-story, three-bay, single-pile, side-gabled, brick structure with a rear ell. Originally built during the 1850s, the white building has been added too over the course of its approximately 160 years. The primary façade originally faced west towards Cedar Creek, and also Rebecca Hite's family home of Mount Pleasant, approximately 1 mile away in the same direction. However, a non-historic, 1970s rear frame addition, clad with aluminum siding, re-oriented the structure to face towards the driveway and current path of Bowman's Mill Road. This addition also encapsulated an earlier ca. 1876-1880s 1 ½ story addition. As it currently stands, the house is in relatively good condition with much of its integrity from both the 1864 and 1881-1942 periods of significance intact, albeit concealed to some degree.

Exterior:

The west, two-story elevation, originally the primary façade, consists of three bays and is topped by a side-gable roof. The house is set on a continuous, mortared, rough-cut, irregular coursed, limestone foundation. Exterior walls of the house are brick, painted white, and laid in a 1:5 Common Bond. Recently, portions of the foundation and wall have been heavily re-pointed due to mortar loss caused by "splashback "of water. Brick corbelling can be seen at the top of the wall where the roof begins.

The focal element of the west elevation is the original side passage, front entrance, located on the southern bay. Although the six-paneled door is a modern replacement, portions of the door surround, including the sidelights and transom are original. The rectangular transom is

comprised of 3 horizontal muntins and 4 vertical muntins. The center ribbon of glass panes created by this muntin configuration is slightly larger than those above and below. The sidelights of the entryway are divided in a similar fashion, with three vertical muntins and three horizontal muntins. Below each sidelight is a raised wood panel. Originally, a small, one-story, one-bay, raised porch would have provided shelter for those entering the house, however in the 1970s, this was removed, and a concrete porch, spanning the entire façade, was installed. As of 2012, this porch had also been removed. The last vestige of the 1970s alteration is the broken ogee pediment with decorative urn. The entire door surround, with the exception of the broken ogee pediment, is similar to that found at nearby Springdale, in Frederick County, Virginia. Located directly above the entryway is an original, six-over-six, single-hung wood window with later, ca. 1970s, fixed, faux wood paneled, black shutters. The wood sill of the window is in poor condition.

The other two bays of the west elevation are comprised of four windows, two on the first floor, and two, directly above, on the second floor. While the wood window casings and trim on the first floor are original, the two-over-two configuration is a later, ca. 1876-1880s alteration. The second floor, single-hung, six-over-six, wood windows, are however, original to the house. Like the window above the entryway, the wood window sills are in poor condition. Splayed brick jack arches are positioned above each window with faux wood, black paneled shutters, on either side.

The south elevation is dominated by the ca. 1970s, frame, two-story, seven-bay, rear ell addition which is an extension of the original, two-story, brick ell as well as an enlargement of a south porch. A contemporary, one-story, two-bay, garage further extends the structure to the east. Located on the west side of the elevation is the gable end of the original brick house set atop a continuous, irregular-course, rough-cut, limestone foundation. Placed within the gable is a single louvered attic vent. The 1:5 Common Bond brick pattern is clearly evident.

During the 1970s, the south elevation became the primary façade with an entryway located in the middle of the 7-bay, central addition. Set atop a continuous, raised, cinderblock foundation, the first floor of the addition is slightly recessed from the gable end of the original brick house. This floor is clad in vertical, board-and-batten, aluminum siding. The second floor of the addition is cantilevered over the first floor providing for a shallow overhang. Unlike the first floor the aluminum siding is horizontal.

Fenestration on this portion of the south elevation is symmetrical, with a centrally placed doorway. Serviced by four concrete steps with a black metal railing, and a cinder block stoop, the entryway has a modern, four-paneled, two-light, door. Above the door is a wood sign with black lettering reading "Whithaven". Three modern, one-over-one, double-hung windows, are placed on either side of the doorway. Located above each of these seven openings, on the second floor, are seven, six-over-six, double-hung, windows. Above these windows is a projecting eave which intersects the original brick house well below the east or rear elevations

corbelling. A modern, asphalt shingle clad roof, slopes gently back, to the earlier gable roof of the brick ell.

The two-bay, side-gabled, garage is characterized by the two, fifteen paneled, garage doors. Three of the panels within each door are glass providing some light into the garage area. Where the doors are placed, the continuous cinder block foundation is broken. Siding on the garage is a continuation of the vertical, board-and-batten, aluminum siding previously noted.

The east elevation is largely comprised of the gable end of the 1970s, 1-story, two-bay, garage addition. Set atop a continuous cinder block foundation, the east elevation of the frame addition is covered with horizontal aluminum siding. Two, six-over-six, double-hung, windows are placed within the wall with the peak of the west to east gable roof creating a bilateral symmetry.

Recessed behind the east elevation of the garage, is the east elevation of the 1970s, rear ell, two-story addition. The northern portion of the east elevation is an extension of the original, single-bay, rear brick ell and is capped with a steeply pitched gable roof clad in asphalt shingles. The southern portion of this elevation is the enclosed porch addition with a low sloped shed roof, also with asphalt shingles and similar in form to an extended secondary porch roof. Set within the elevations second floor are two, paired, six-over-six, double-hung, windows. An exterior end, brick chimney, from the now encased, ca. 1876-1880s, rear frame addition, rises above the roof just south of the peak. Because the earlier addition was only 1 ½ stories in height, a brick change is clearly evident on the chimney when it was raised to accommodate the 1970s addition. Like the garage this frame addition is clad within horizontal aluminum siding.

The seven-bay, north elevation, is broken into two three distinct components. On the east end of the elevation is the one-story, three-bay, side-gable garage. Comprising the center of the elevation is the two-story, one-bay, side-gable frame addition. The west end of the elevation is the original house, with the brick gable end visible as well as the rear, two-story, two-bay, brick ell.

Situated atop a continuous, raised, rough-cut, irregular-coursed, limestone foundation, the 1:5 Common Bond brick gable end wall of the original house is unadorned. A single interior end chimney bisects the gable and creates a broken rake. Brick corbelling is apparent near the top of the chimney.

Projecting from the gable end is the two-story, brick ell which displays the same raised limestone foundation and brick bond as previously noted. Set within the two-bay ell are five windows, two on the first floor, two on the second and one in the basement. The first floor windows are two-over-two, single-hung, wood windows, likely replaced during the ca. 1876-1880s renovations. Directly above these two windows are six-over-six, single-hung, wood windows, original to the house. The window trim for all four windows is original and shows

evidence of wooden shutters. Placed above each of these window openings is a splayed jack arch, all of which appear in relatively good condition. Centered below the four, first and second floor windows, is a basement window set within the limestone foundation. Only the opening and window casing remain intact but appear to be original to the house. During the 1970s additions and renovations this window was covered partially with a cinder block vent stack which aided in its deterioration. This stack has since been removed. Brick corbelling can be seen at the intersection with the asphalt shingle roof. Projecting from this roof is an interior brick chimney, which originally would have been an interior end chimney on the brick ell. Like the other interior end chimney, the top is corbelled.

The center portion of the north elevation is a 1970s, two-story, one-bay, aluminum clad, frame continuation of the original brick ell. Not only does the wall material change between this addition and the original house, but the foundation changes from limestone to a continuous, raised, cinderblock foundation. Set within the elevation, is a single, first floor entryway, accessed via a set of four cinderblock steps with a black iron railing and a cinderblock stoop. The door is ½ glazed with the top half divided into nine lights. A metal storm door, with faux wood diagonal rails and triangular panels, protects the door. Located above the entryway, on the second floor are three windows. These asymmetrically placed windows consist of one small, one-over-one, double –hung, bathroom window as well as a set of paired, six-over-six, double-hung windows. There is a slightly projecting eave at the top of the wall that aligns well with the brick corbelling on the original house.

The one-story, three-bay garage is situated on the far, eastern end of the north elevation. Similar to the 1970s, two-story addition previously described, the garage also has a cinderblock foundation and horizontal aluminum siding. One wood slab or flush door, with dog door, on the far eastern side of the garage provides access to the interior. Two poured concrete steps, with metal pipe railings on either side lead to the doorway. West of the doorway are two one-over-one, double-hung windows.

Interior:

Originally accessible only by an exterior entryway on the east elevation of the house, the basement room is located directly under the original rear ell. Likely used for storage, the room is whitewashed with a modern poured concrete floor. Until recently, the house's HVAC system took up a large portion of the room. Today the basement is accessible by a small set of stairs, leading from the first floor family room or den, installed during the 1970s.

The original portion of the house's first floor consists of the stair hall, the parlor, and the dining room. Configuration of these rooms resulted in an "L" shaped plan that was oriented with the formal entrance door facing to the west. Additional exterior doors were positioned at the east end of the stair hall and at the south side of the dining room which originally would have led to an exterior porch situated along the south elevation. This door would have also provided direct

access from the dining room to the kitchen structure on the south side of the house. Later, ca. 1876-1880s, the rear ell was extended with a two-story, frame addition that re-incorporated the kitchen into the main house. Further expansion in the 1970's resulted in the enlargement of the rear kitchen and a partial conversion of the space into a family room. The exterior, south porch was also enclosed creating a sun room. Other first floor rooms were added as well including a bathroom, closets, a stairwell and the garage.

The second floor of the house reflects the layout of the first floor to a large degree. Two bedrooms are located above the parlor and dining room in the original house and are accessible via the original staircase. Initially separate, and accessed via two staircases, the bedrooms were connected sometime during the ca. 1876-1880s renovations. The second original staircase, connecting the first floor dining room and rear second floor bedroom, was removed during the 1970s.

When the ca. 1876-1880s, rear frame kitchen was added, the loft space above was separated from the original brick structure and was likely accessed by a ladder or set of steep stairs from the kitchen. Not until the 1970s addition was this loft space transformed into a full height bedroom connected to the main house by the encapsulation, and raising, of the one-story, south porch as well as the installation of a rear stairwell. In addition to the encapsulated porch serving as a hallway it also provided space for a laundry room and two bathrooms. Another bedroom was also added to the second floor at the far eastern end of the house.

While the second floor addition provided more space, the floor heights failed to match the original. This resulted in a series of steps from the second floor of the original brick ell down to the encapsulated second floor porch. Another access point to the encapsulated second floor porch was inserted by converting the original stairwell landing window into a door opening with a single step up.

The interior detailing and finishes, much like the construction methods, coincide with fashion during the various periods of construction. Like many buildings dating from the antebellum period, emphasis in design and detail, within the original portion of the house, was placed on the more public rooms, such as the front foyer and parlor. These spaces were fashioned to project social standing and affluence and the Bowman-Hite house was no different.

Refinished, tongue-and-groove, pine flooring, is found throughout the original house as well as portions of the ca. 1876-1880s addition. Carpeting is noted as being applied to the floor as early as 1861. Additionally, the stair landing exhibits a painted floor resembling ingrain carpeting, popular at the time. Flooring for the more modern portions of the building consists of particle board and plywood sub-flooring overlaid with vinyl tiles and carpeting. Registers, corresponding to the late-20th century ductwork, are placed throughout the house, at times puncturing the wood flooring.

One of the most prominent interior features found throughout the house, with the exception of the front parlor, are the 6 ½" baseboards. This simple element is comprised of a single sash sawn board, approximately 1 inch thick, with the top quarter recessed 1/8" providing for visual relief. The front parlor baseboards only differ slightly, with a ¾" bead added to the top. This simple design component is also used for nearly all the original window and door surrounds. Unadorned square blocks at the top corners of each interior door and window surround, as well as plinth blocks at the base of the door surrounds can be found throughout the building and are original. These features, while chaste, still present a clear reference to the Greek Revival styling's of the time. The front parlor's door and widow surrounds, as one might expect, are more elaborate. Like the other door and window surrounds throughout the house, the front parlor windows incorporate inverted baseboards below the window sill as a decorative feature, however the sides and tops of the window and door surrounds are different. Rather than a single recessed element, a raised "v" has also been planed into the single board. The corners of the doors and windows are emphasized with distinct conical shaped patera. The overall effect is much more impressive than other rooms. However it is achieved with more or less the same base elements as previously described, conveying a sense of "economy", prevalent throughout the house. No baseboards appear to exist from the ca. 1876-1880s portion of the house, instead simple boards with a ¼ round, were installed throughout the house in the 1970s.

The four mantles located in each room also convey this sense of economical Greek Revival design. Clearly vernacular in nature, they only differ slightly from each other, with each bearing similarities to Greek Revival designs illustrated in Asher Benjamin's 1830 publication, *The Architect or Practical House Carpenter*.[1] The relationship to such design patterns is clearly illustrated in the presence of a quirk, or sharp return in the molding, typical of Greek Revival. The design of the house mantles, while simple, was used extensively in Virginia, as an 1854 example from Braehead in Fredericksburg appears very similar. The stark appearance of the mantles is, however, quite different than the elaborate mantles found at nearby Mount Pleasant. During the 1970s, these mantles were altered with marble stone veneers applied to each. The two downstairs hearths were also raised, damaging the lower portions of the original mantles. The later fireplace, located within the ca. 1876-1880s portion of the house, is relatively unadorned and appears to have been altered in the 1970s as well. At present the opening in the apparently replaced or updated brick surround, is covered.

The interior two-paneled doors used at the Bowman-Hite house, like the mantles, fit with the Greek Revival style and original 1850s period of construction. Furthermore, the panels themselves are shallow-raised, without any "sticking", another poplar aesthetic during the time compared to earlier Mount Pleasant where the door panels are raised with "sticking".[2] Many of the doors at the Bowman-Hite house also retain their original hardware and hinges, as noted by the lack of previous lock mechanisms on the original doors. At the time, the use of butt hinges

[1] Benjamin, Asher, "The Architect or Practical House Builder", (1830), pg.
[2] Allen, *Uncommon Vernacular*, pg 288-293; The term sticking is frequently used when describing moldings that have been planned and is often associated with wood paneling.

was becoming increasingly popular, as costs began to fall for iron production. These hinges replaced earlier "H", "HL" and strap hinges found at places like Fort Bowman. The original 1850s Russell and Erwin Company rim locks with mineral knobs used at the Bowman-Hite house were also different from nearby family structures, having just appeared on the market in the 1850s. These knobs and locks found extensive use, both prior to the war, as well as after, as less expensive substitutes for brass.[3] Later four-paneled doors with Chantell Co. locks and porcelain knobs can be found in the later ca. 1876-1880s addition as well as a ½ glazed door with an oval brass escutcheon in the first floor foyer. Similar four-paneled doors with modern brass knobs and butt hinges can be found throughout the 1970s addition.

Initial construction of the Bowman-Hite house incorporated two stairways, something not atypical for the period. The primary staircase was designed as an open-well type, with a landing situated along the far wall from the front entryway. From this landing the stair continued, a short flight, from the opposite side of the initial rise along the south wall. Adding light to the stairway was a single window placed on the east elevation just above the stairway landing. While decorative elements, such as stair brackets are missing, the square banisters, as well as the overshot, barrel newel post, directly reference Greek Revival design and are similar to Jefferson County, West Virginia examples from the 1840s and 1850s.[4] While falling out of fashion during the 1850s, the Bowman-Hite primary stairway also exhibits newel drops or pendants, similar to those found at Mount Pleasant.[5]

The secondary staircase located in the rear ell provided access from the dining room to a single, second floor bedchamber. While this steep and narrow staircase no longer exists, similar staircases in the area, such as the Stickley House, are enclosed with a series of wedge shaped steps at the bottom in order to orient in the proper direction. Evidence of a landing at the southwest corner of the room seems to verify at least the directional change of the stairs. No other details are currently known about this staircase, as the re-finishing of the wood floor has destroyed much of the evidence.

The modern stair in the den was installed in the course of the 1970s renovation. The stair rises to the second floor along the room's north wall and is characterized by tapered round balusters and a moulded handrail. The handrail is anchored by a turned wood newel post, and a wood handrail is placed along the north wall on metal brackets. The stair components are stained and varnished. Carpet pads and nailing strips are secured to each of the steps; the carpeting has been removed. Thin plywood cutouts are used as decorative brackets along the stair stringer; like the balusters and handrail, the brackets are stained and varnished. A small wood access door is placed at the stair's stinger wall and provides access to the closet under the stairway.

---

[3] Hennessy, *Pioneers in the Hardware Industry*, The Doorknob Collector, May 1986, No. 18, pg 1.; Eastwood, *A Potter's Delight*, The Doorknob Collector, May 1988, No. 29, pg 1-3.
[4] Allen, *Uncommon Vernacular*, pg 260-267.
[5] Allen, *Uncommon Vernacular*, pg 268.

Further distinguishing the structure as antebellum are the various wall finishes. Plaster walls had by the 1850s replaced the earlier aesthetic of wood paneling found at Fort Bowman and wainscoting found at Mount Pleasant. However, as techniques for manufacturing the wood lath on which the plaster was laid had yet to be mechanized, the Bowman-Hite still uses a riven form typical of many antebellum structures throughout Virginia. Later when the walls were furred out for ductwork, drywall was laid overtop the plaster. Drywall has also been applied to much of the ca. 1876-1880s rear frame addition walls concealing the yellow, horizontal wood planking, originally exposed. Other locations within the ca. 1876-1880s addition appear to never have been finished, with portions currently covered with faux wood laminate. A dropped ceiling in the kitchen area on the first floor has concealed the horizontal bead-board ceiling finish original to the ca. 1876-1880s period of construction. Wall finishing for the 1970s rear addition consists of drywall.

Applied to the plaster was paint, which in the majority of rooms appears to have been a dark grey with trim color varying significantly over time. Originally, Charles and Rebecca Hite used dark colors, especially a gold tone, which is prevalent on a majority of the original baseboards. However, the upstairs mantle, in the front bed chamber, shows evidence of faux graining. The other mantles in the house, while they do not exhibit faux graining, do exhibit darker paint schemes. Such paint colors would have been typical for the time and are seen in contemporary structures.[6] Wall paper was another finish material used in the Bowman-Hite house, with portions still found in the dining room. This original machine printed paper consisted of a shiny floral design popular during the 1850s.[7] The more modern areas of the house exhibit primarily white paint although the second floor laundry room is finished with colorful wallpaper.

[6] Spencer, *Forensic Analysis of the Bowman-Hite Farmhouse and Barn*, 2011
[7] Frangiamore, *Wallpapers in Historic Preservation*, pg. 27-30.

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- [x] A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- [ ] B. Property is associated with the lives of persons significant in our past.
- [ ] C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- [ ] D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply.)

- [ ] A. Owned by a religious institution or used for religious purposes
- [ ] B. Removed from its original location
- [ ] C. A birthplace or grave
- [ ] D. A cemetery
- [ ] E. A reconstructed building, object, or structure
- [ ] F. A commemorative property
- [ ] G. Less than 50 years old or achieving significance within the past 50 years

Areas of Significance
(Enter categories from instructions.)
AGRICULTURE
MILITARY

Period of Significance
ca. 1881-1942
1864

Significant Dates
1864

Significant Person
(Complete only if Criterion B is marked above.)
N/A

Cultural Affiliation
N/A

Architect/Builder
N/A

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The Bowman-Hite farmstead, historically known as the Charlie Hite Farm, illustrates well the Warren County, Virginia family farmsteads, typical of the late-19th and early-20th centuries. This agricultural context is demonstrated by the historic size of the farm from 1881-1942, as well as the intact farmstead, which, includes the extant 1850s farmhouse, spring, late-19th century smoke house, ca. 1881 bank barn and livestock yard, early-20th century cow shed, and early-20th century chicken coops. The farmstead's location within the path of advancing Confederate troops, during the October 19, 1864, Battle of Cedar Creek, also connects the farmhouse directly to this historic event.[8] Through these contexts, Agriculture and Military, the farmstead meets National Register Criterion A, on both a national and local level, demonstrating association with a national historic event, the Battle of Cedar Creek in 1864, as well as its role in conveying local agricultural trends in Warren County, Virginia from 1881-1942.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

Contextually, the properties development, and eventual decline, mirrors many regional farms within the lower Shenandoah Valley, affected by the Civil War, and the post war economic depression. Once part of Isaac Bowman's large landholdings in the late-18th and early-19th centuries, the land that would become the Charlie Hite Farm, was willed to his daughter, Rebecca Bowman, in 1843. At the time the property consisted of Isaac Bowman's mill complex, located along Cedar Creek, as well as 498 acres in Shenandoah and Warren Counties.[9]

Still single at the time she inherited the property, Rebecca Bowman married Charles Hite in 1849. Shortly after, in 1850, the couple sold the mill complex and consolidated their land holdings in Warren County, which at that time amounted to 393 + acres.[10] Sometime over the ensuing decade, the extant brick farmhouse, with Greek Revival elements, was constructed. A post-in-ground kitchen, which doubled as housing for 8 slaves, was also constructed nearby towards the southeast side of the farmhouse.[11] Evidence also suggests that a barn and another unknown structure were likely present on the property by the advent of the Civil War.[12]

This period, just prior to the outbreak of war, was the most prosperous time for the Charlie Hite farm. Comparatively, Hite's 393+ acres placed him well above the Warren County average of

[8] JED Hotchkiss, Hotchkiss Battle Maps, *Sketch of the Battle of Belle Grove*, October 19, 1864, No. 29
[9] Shenandoah County Will Book N, pp 521-526 (1826)
[10] Warren County Deed Book E, pg 66 (1850)
[11] *An Archaeological Assessment of the Bowman-Hite Farm Property*, William and Mary Center for Archaeological Research, 2012
[12] JED Hotchkiss, Hotchkiss Battle Maps, *Sketch of the Battle of Belle Grove*, October 19, 1864, No. 29

269 acres. When evaluating the mean acreage per farm it is even more evident that Hite's farm was atypical in its size, being among the larger farms in the county. Adjacent to Warren County, Frederick County, had farms of similar size. However, Shenandoah County, also adjacent to Warren County had average farm sizes around 336 acres.[13]

Crop yields at Hite's farm in 1860 were also well above the Warren County averages. This is clearly evident when examining the two most popular crops grown for that year, corn and wheat. The average farm at the time was producing 380 bushels of corn and 199 bushels of wheat. The Hite farm during the same time is noted as producing 1,700 bushels of corn and 1,250 bushels of wheat. Livestock was little different, with both swine and cattle herds larger than the average county farm. However, the types of crops and livestock grown on the farm mirrored those grown throughout the county.[14]

In addition to a vastly larger farm compared with many of their neighbors, the value of the farm at $13,000 was almost double that of the Warren County average. Hite also appears heavily invested in progressive farming methods with the 1860 census assigning a value of $350 to machinery on the farm. An 1861 inventory, seemingly confirms this large investment noting three McCormick ploughs and four or five double shovel ploughs.

Despite Rebecca Bowman's sizeable dowry, as well as large crop yields, by March 14, 1861, cracks begin to develop in the farms financial stability with a deed of trust entered into with the Bank of Winchester for $4,100. While the Hite's had taken out a series of loans totaling $13,873, for undisclosed reasons, beginning in 1859, this particular loan was the first to ask for "more ample and substantial securities." These more ample and substantial securities consisted of the farm, house, kitchen, slaves and furniture.

During the Civil War Charles Hite disappears, leaving W.P. Williams as the acting trustee of the estate, approving all expenditures made by Rebecca Hite. These years become difficult ones for the Hites, as two of their children die, and the farm appears to fall into disrepair. An 1871 account from tenant farmer James M. Bly notes that "the war was hard on the farm" and that prior to the war, the farm was worth $1,000 per year, but in its present condition, only $500-$700.[15] Despite these hardships, the farm escapes much of the devastation seen throughout the region, including the destruction wrought by Union General Sheridan.

While the farmstead's buildings and structures fall into disrepair, they appear to escape any substantial damage caused directly by the war. This is especially remarkable as the farmstead was directly in the path of Conner's Brigade. This brigade was under the command of Maj. James M. Goggin, during the Confederate's early morning attack on Joseph Thoburn's VIII Corps

[13] 1860 Census Data, University of Virginia, http://mapserver.lib.virginia.edu/php/county.php; 1860 Census Data, University of Virginia, http://mapserver.lib.virginia.edu/php/county.php
[14] 1860 United States Federal Agricultural Census, Schedule 4, Warren County, Virginia, pg. 211.
[15] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880.

encampment during the October 19, 1864, Battle of Cedar Creek. One reason why the farmstead may have escaped damage during this battle is the complete surprise by which the Confederates took the Union positions just a few hundred yards away at the top of the hill.

While this portion of the battlefield did not see the most intense fighting, it is the location of one of the more complete "surprise" attacks conducted during the war. The Charlie Hite farmstead, although not a major feature on the battlefield, was no doubt used as a landmark for advancing Confederate troops as its location and even color, are noted on J. D. Hotchkiss's maps of Cedar Creek, made just days prior to the battle.[16] Because of this association with the initial attack on Union forces, the farmstead contributes to the larger, national significance, associated with the Battle of Cedar Creek.

Today, while the natural features and topography of the site remain intact, the only farmstead features left from the 1864 period of significance are the ca. 1850s brick farmhouse, the nearby spring, and the stone foundation of the bank barn. However, these features, as well as later structures, contribute greatly to the integrity of design, setting, and feeling associated with the battle. The farmhouse itself, despite later additions, still retains many of the seven aspects of integrity from this period including, design, workmanship, material, location, association, feeling, and setting.

Despite selling their slaves in 1863 for $3,340 as well as renting the farm after the war, by 1870, George Hupp, trustee for William Stickley, a large creditor, calls in the Hite's much extended debt. About this same time, Charles Hite, abandons his wife, Rebecca, and his children. Left to fend for herself, the farm is put up for auction on January 7, 1871. The auction notice at the time describes the property as "...a large number of acres of fine bottom land, the upland is fertile and productive, well watered, with a fair proportion of timbered land. The mansion is a good brick and commodious building with all necessary outhouses, and a spring of fine water near the house, and, upon the whole, a most valuable and desirable estate." While Rebecca protests the sale, with court documents noting that rent from the land "is the only support now left to complaintant [Rebecca Hite]", the property is eventually auctioned off on September 1, 1872 for $8,000, half the assessment of $15,880. The purchaser of the property was creditor, William Stickley.[17]

Not only is the final sale price of the farm half its assessed value, but the property fails to auction on two previous attempts, illustrating the poor, post-war, economic climate in the lower Shenandoah Valley. Rebecca Hite seemingly confirms this economic climate during her 1871 Chancery Suit when she notes that "money is scarce" in the county.[18]

[16] Hotchkiss, Sketch book of Jed Hotchkiss, pg 48.
[17] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880.
[18] Chancery Suit, Warren County, Virginia, "Rebecca Hite v. George Hupp", 1880.

Four years after he bought the land, William Stickley sells it to John Purkey for $5,200, a notable loss.[19] Purkey, like Charles Hite, appears to overextend himself and is forced to auction 270 of the "old Charlie Hite" farm's 393+ acres on August 8, 1879. Situated on these 270 acres is a "good new frame dwelling house, stabling and other necessary improvements."[20] These buildings appear to have been constructed by Purkey and coincide with alterations and additions to the Charlie Hite farmstead carried out between ca. 1876-1880s.

During this same period, farms throughout the lower Shenandoah Valley are decreasing in size as the number of farms increase. This post-war shift to, smaller, family farms, is clearly illustrated by agricultural census data from the period which shows the acreage of the average Warren County farm decreasing from 269 acres in 1860 to 200 acres by 1880. This decrease would continue until about 1900 when the size of local farms, as well as the agricultural economy, would stabilize. At the same time, there is a sharp increase in the number of farms in the county, from 415 in 1860, to 579 in 1880. Surrounding counties, such as Shenandoah and Frederick, saw similar trends during this same period.[21]

Shortly after Purkey's sale of the 270 acres, in 1880, Abraham Kerns begins to rent the remaining 127 acres of the Charlie Hite farm, now considered a below average sized farm, including the farmstead constructed by the Hite's in the 1850s. The following year in 1881, Kern's pays the taxes on the property, "hitherto charged to Purkey…" as well as marries Ella, whose last name is unknown.[22] Around this same time the farmstead, undergoes a number of changes. These changes include the dismantling or demolition of all but the stone foundation of the ca. 1850s barn, as well as the post-in-ground kitchen structure. Whether it is through Purkey's money, or that of Abraham Kerns, a new Standard Pennsylvania bank barn is erected ca. 1881 as well as a rear frame kitchen addition onto the brick farmhouse.[23] These physical changes to the farmstead are mirrored by other nearby farms, such as Mount Pleasant in Shenandoah County, which also builds a similar bank barn.

The re-incorporation of the kitchen, into the farmhouse, follows a much larger regional trend. Innovations in cooking as well as the end of slavery, no longer necessitate a standalone kitchen. Rather it becomes convenient to have a kitchen incorporated into the house.

The monetary investment into regional farms underscores a seemingly new found sense of optimism in agriculture throughout the valley. While it would not be until the 1890s that the regional agricultural economy would begin to turnaround, it had apparently stabilized by the early to mid 1880s. Such stabilization can be seen in the average cash value of farm product in Warren County from 1880 to 1890. Where a decade prior, 1870-1880, the average cash value

[19] Warren County, Virginia, Clerks Office, Deed Book K, pg 198.
[20] Shenandoah Herald, August 6, 1879, pg 1 col. 4.; Shenandoah Herald, November 5, 1879, pg 1 col. 5
[21] 1870-1900 Agricultural Census, Schedule 4, Warren County, Frederick County and Shenandoah County, Virginia
[22] Warren County, Virginia, Clerks Office, Deed Book Q, pg 271.
[23] Warren County Land Tax Books, 1881.

of farm product fell from $1,282 to $583, the value actually went up between 1880 and 1890, from $583 to $585. Such trends, as is often the case, were mirrored by both Shenandoah and Frederick Counties.[24]

Approximately six years after he began to rent the Charlie Hite Farmstead and surrounding 127 acres, Abraham Kerns purchased the property outright in 1886 for $2,800.[25] Throughout Abraham Kern's ownership, the farm exemplifies the typical family farm found in Warren County and much of the surrounding region. An inventory of the farm conducted in 1900 notes that Kerns is not only growing hay and wheat, mainstays in the region, but also raising a bull, red cows, and milk cows.[26] Evidence also suggests that like the surrounding region, Kern's is beginning to expand on the orchard operations. Later in the 20th century the region would become known for apple production.

Unfortunately, on April 4, 1900, tragedy would strike as Abraham Kerns accidentally shoots himself. Left behind were his wife Ella and their young son Charles Kern, sixteen at the time.[27] However, despite this tragedy, Ella would continue to operate the farm with her son. In 1910, the census lists Ella as a "general farmer" and Charles as the "farm manager".[28] Around this same period, the Kern's would institute a number of small changes on the farm, many associated with agricultural innovations of the time such as the installation of lightning rods on the barn and wire fencing around the property.[29] Construction of an early, poured concrete silo also appears to have been undertaken around this time with similar structures evident at nearby farms like Mount Pleasant and Long Meadows.

Tragedy would strike the Kern's family again on October 29, 1941 with the passing of Charles Kerns. His wife Mary, whom he married during the 1910s, inherited the property which at the time was functioning very much the same as it was in 1900. Records from the time still note the presence of various cows including a black heifer, a Roane Durham, and a Guernsey.[30] However, with the death of her husband, and her mother-in-law too old for farm labor, Mary moved to nearby Middletown and rented the property until 1967 when she sold it to the Whithams.[31]

During the Whithams ownership of the farm substantial alterations would take place to the farmhouse. These changes included the enlargement of the rear frame ell, which would encase the earlier 1876-1880s addition, the addition of a two-car garage and a new concrete front porch. A corrugated metal utility shed would also be erected on the property during this time.

[24] 1870-1900 Agricultural Census, Schedule 4, Warren County, Frederick County and Shenandoah County, Virginia
[25] Warren County, Virginia, Clerks Office, Deed Book Q, pg 271.
[26] Warren County Will Book G, pg 433 (1907)
[27] Richmond Times Dispatch, April 6, 190
[28] 1910 Population Census, Schedule 1, Warren County, Virginia (Cedarville Township); pg. 1B (2349), line 24.
[29] Warren County Will Book G, pg 433 (1907)
[30] Warren County Clerk's Office, Will Book L, pg 375; Warren County Clerks Office, Will Book L, pg 411, 440
[31] Warren County, Virginia Deed Book 157, pg 393-394 (1967)

However, despite these alterations, much of the integrity of the farmstead from the 1864 period as well as 1881-1942 period remains intact. One notable exception is the ca. 1876-1880s rear frame addition which lost some of its integrity during the 1970s renovations.

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

(see Historic Structures Report for full bibliography)

Previous documentation on file (NPS):

____ preliminary determination of individual listing (36 CFR 67) has been requested
____ previously listed in the National Register
____ previously determined eligible by the National Register
____ designated a National Historic Landmark
____ recorded by Historic American Buildings Survey #_____
____ recorded by Historic American Engineering Record # _____
____ recorded by Historic American Landscape Survey # _____

Primary location of additional data:
____ State Historic Preservation Office
____ Other State agency
_X_ Federal agency
____ Local government
____ University
____ Other
Name of repository: Cedar Creek and Belle Grove National Historic Park, National Park Service

Historic Resources Survey Number (if assigned): DHR File No. 093-0138

10. Geographical Data

Acreage of Property 8 acres

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates
Datum if other than WGS84:_____
(enter coordinates to 6 decimal places)

1. Latitude: 38.997333° Longitude: -78.322628°
2. Latitude: 38.999336° Longitude: -78.323134°
3. Latitude: 38.999242° Longitude: -78.324851°
4. Latitude: 38.996824° Longitude: -78.324069°

Or
UTM References
Datum (indicated on USGS map):

☐ NAD 1927 or ☐ NAD 1983

1. Zone: Easting: Northing:
2. Zone: Easting: Northing:
3. Zone: Easting: Northing:
4. Zone: Easting : Northing:

Verbal Boundary Description (Describe the boundaries of the property.)
The nominated property comprises all of Warren County tax parcel 679, containing 8 acres.
The parcels GPIN/PPIN number is 5034-26-9498.

Boundary Justification (Explain why the boundaries were selected.)
The property boundary encompasses the entire 8 acres of the farm conveyed to the United States Department of the Interior in 2003. Included within these 8 acres is the farmsteads curtilidge from the 1864 and 1881-1942 periods of significance. The remainder of the farm, approximately 134 acres, was conveyed to the Shenandoah Valley Battlefields Foundation, also in 2003.

---

11. Form Prepared By

name/title: Michael Spencer, Assistant Professor
organization: University of Mary Washington
street & number: 1301 College Avenue
city or town: Fredericksburg state: Virginia zip code:22401-5300
e-mail mspen1bi@umw.edu
telephone: 540-654-1311
date: 5/14/2013

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
  (not included in draft)
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
  (not included in draft)
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property:

City or Vicinity:

County: State:

Photographer:

Date Photographed:

Description of Photograph(s) and number, include description of view indicating direction of camera:

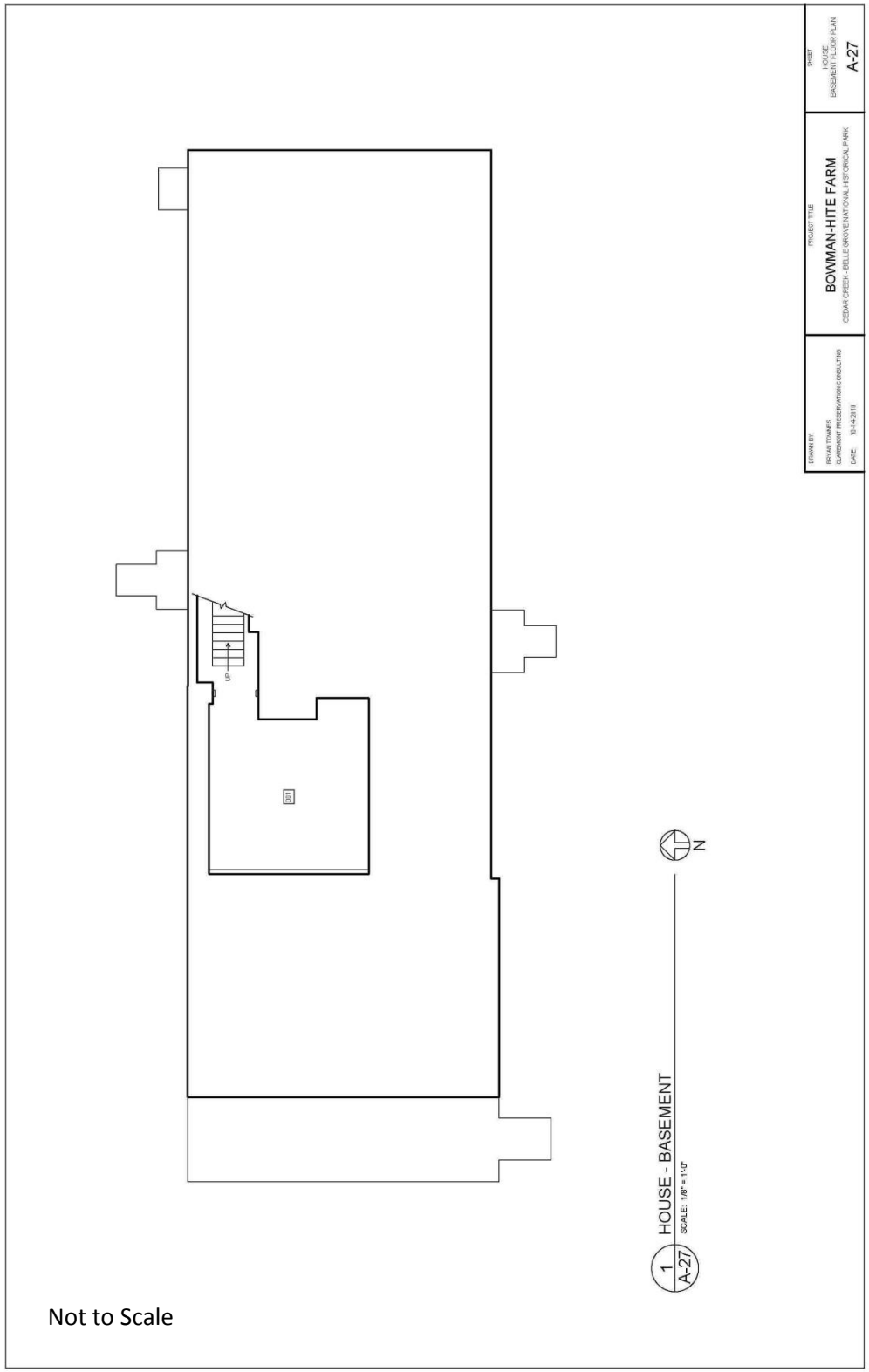
1 of ___.

(not included in draft)

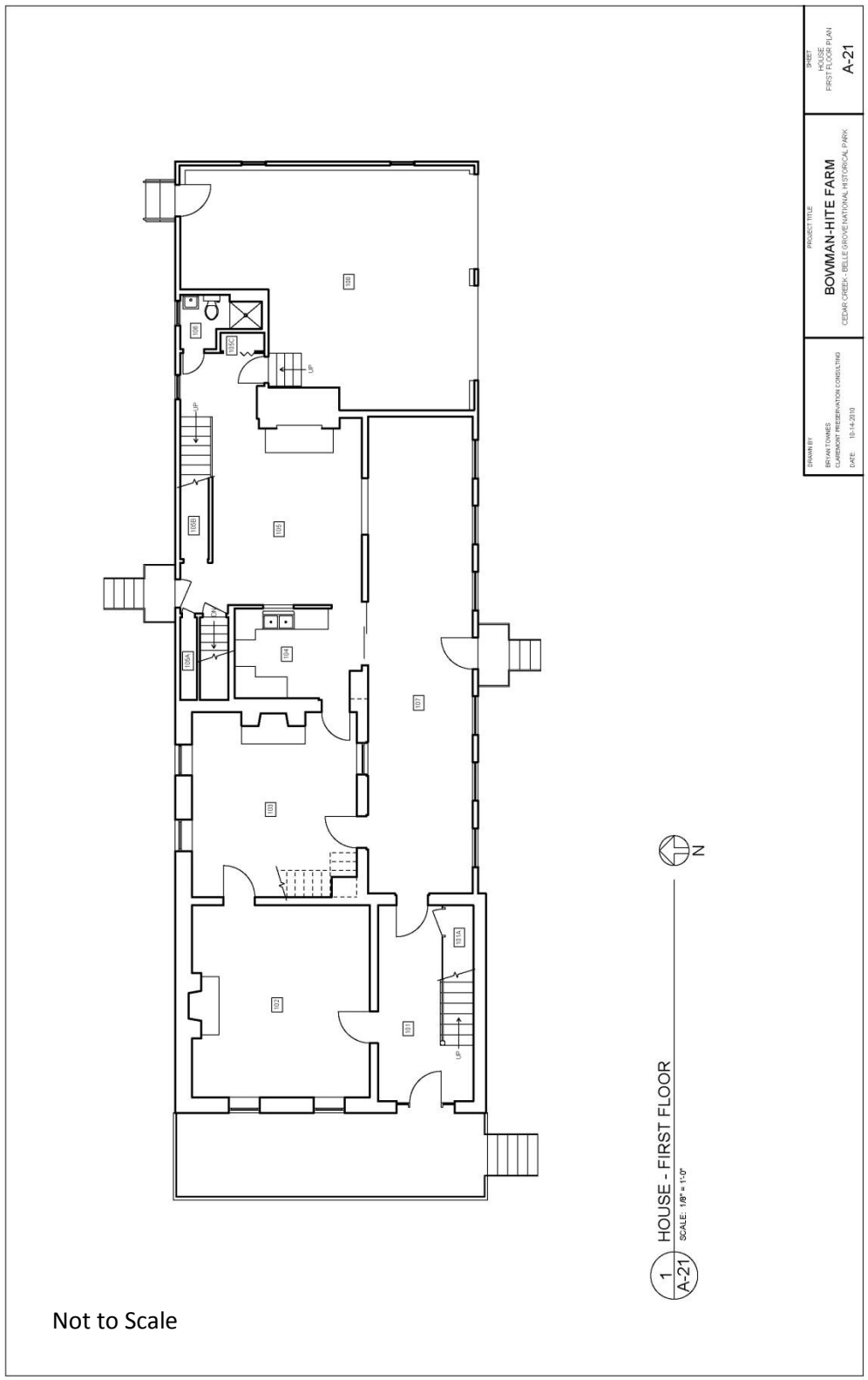
Appendix VIII:

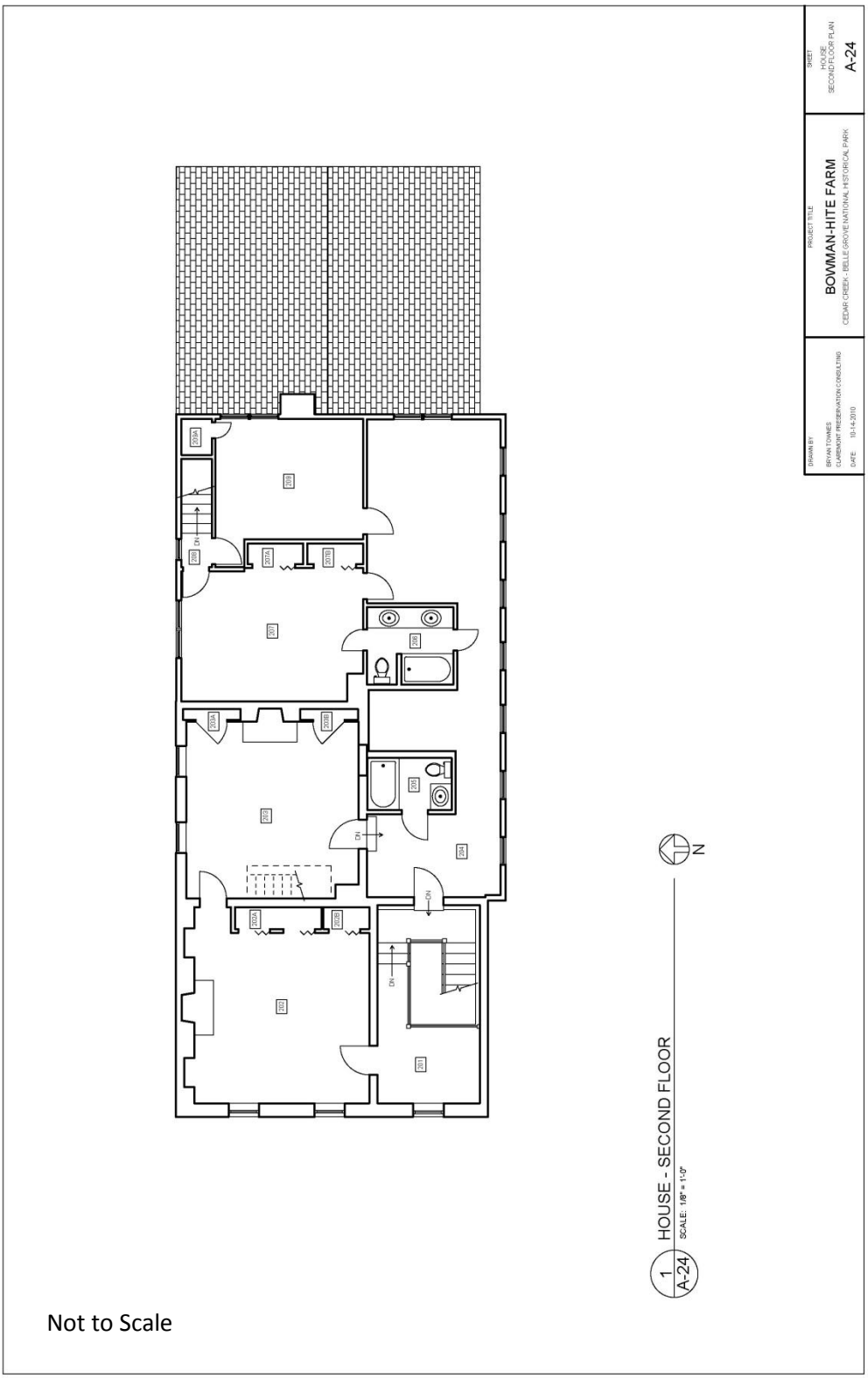
Bowman-Hite

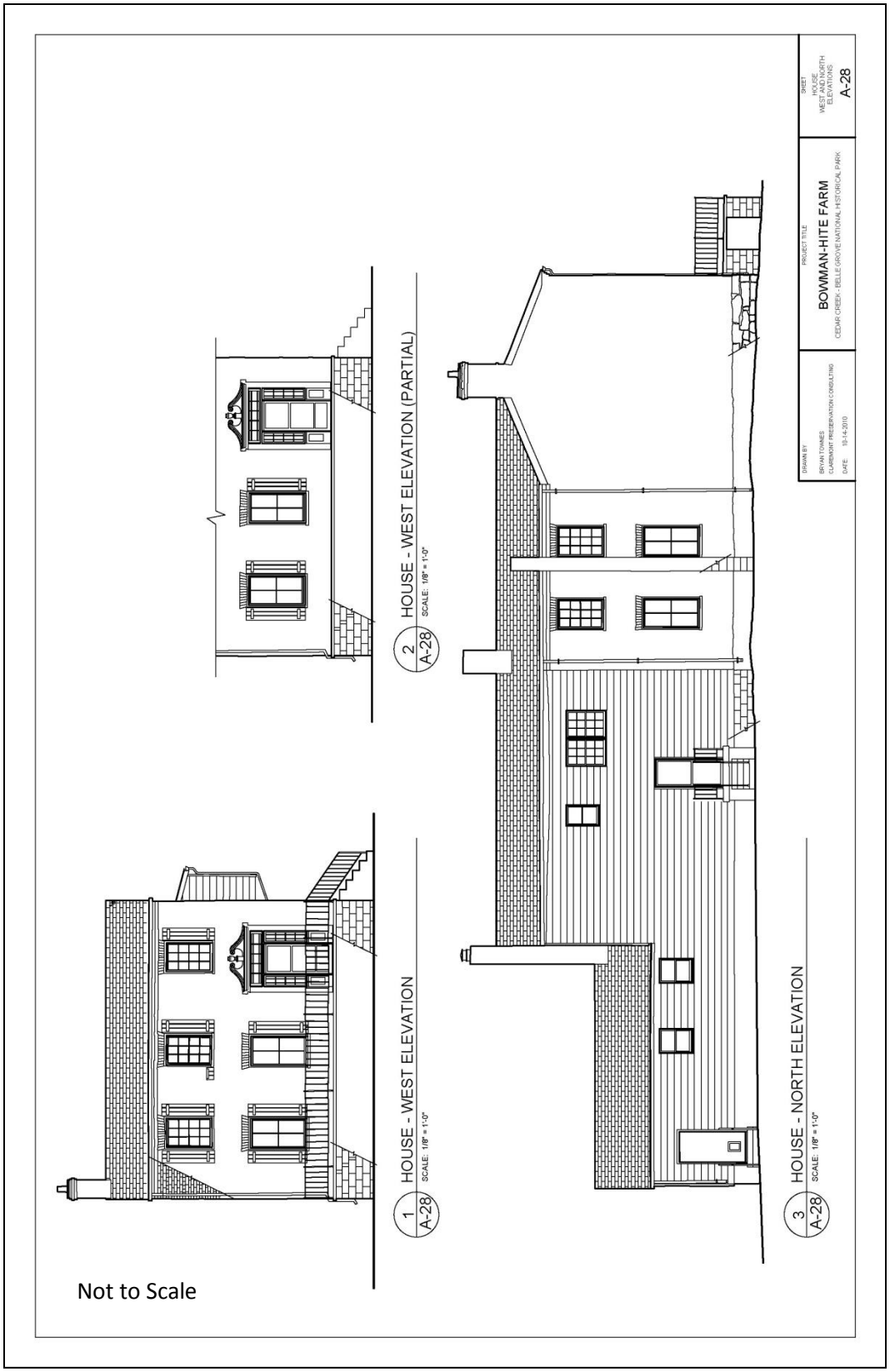
Measured Drawings

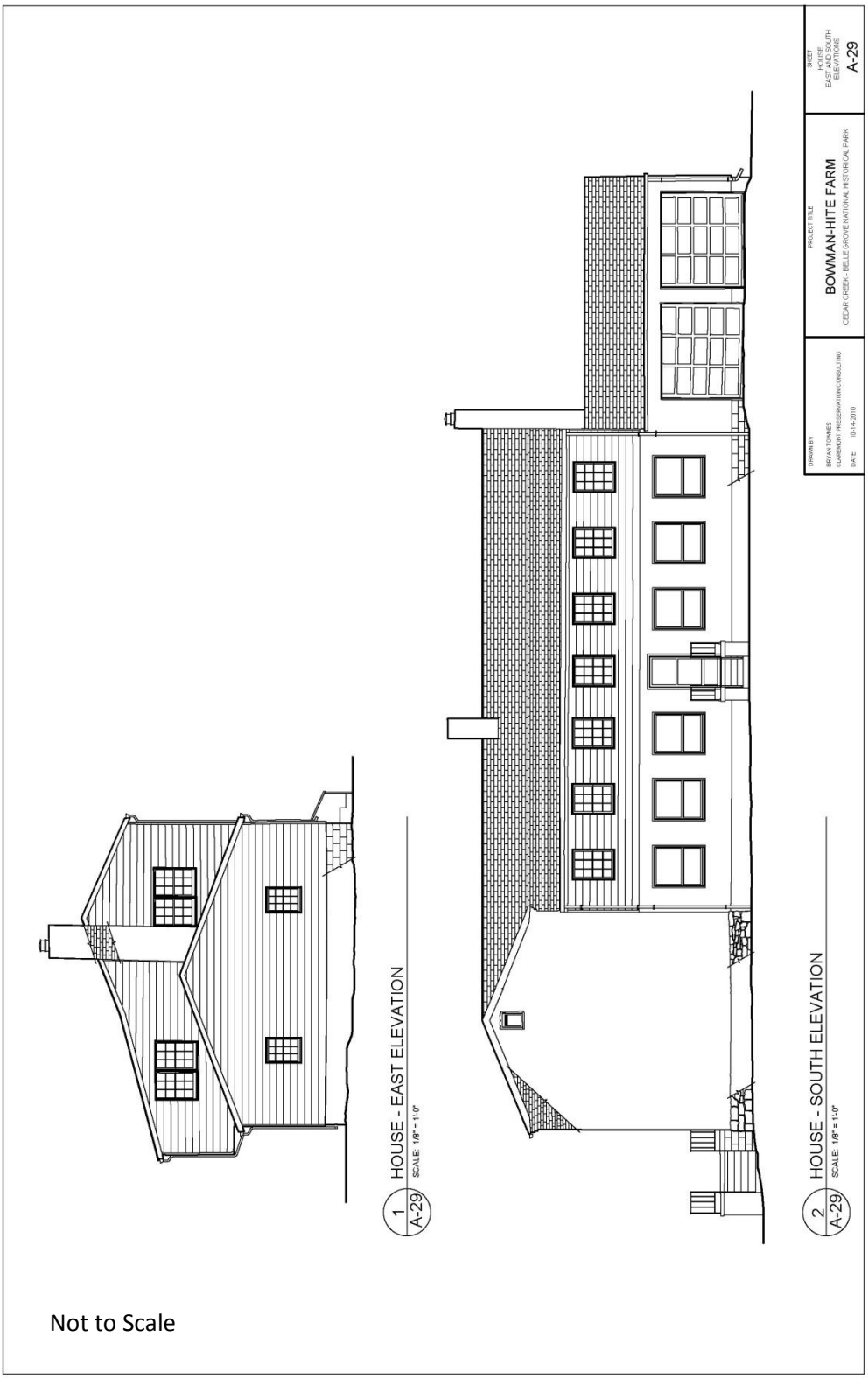

UP
1001
1
A-27
HOUSE - BASEMENT
SCALE: 1/8" = 1'-0"
N
DRAWN BY
BRYAN TOWNES
CLAIREMONT PRESERVATION CONSULTING
DATE: 10-14-2010
PROJECT TITLE
BOWMAN-HITE FARM
CEDAR CREEK - BELLE GROVE NATIONAL HISTORICAL PARK
SHEET
HOUSE
BASEMENT FLOOR PLAN
A-27

Not to Scale

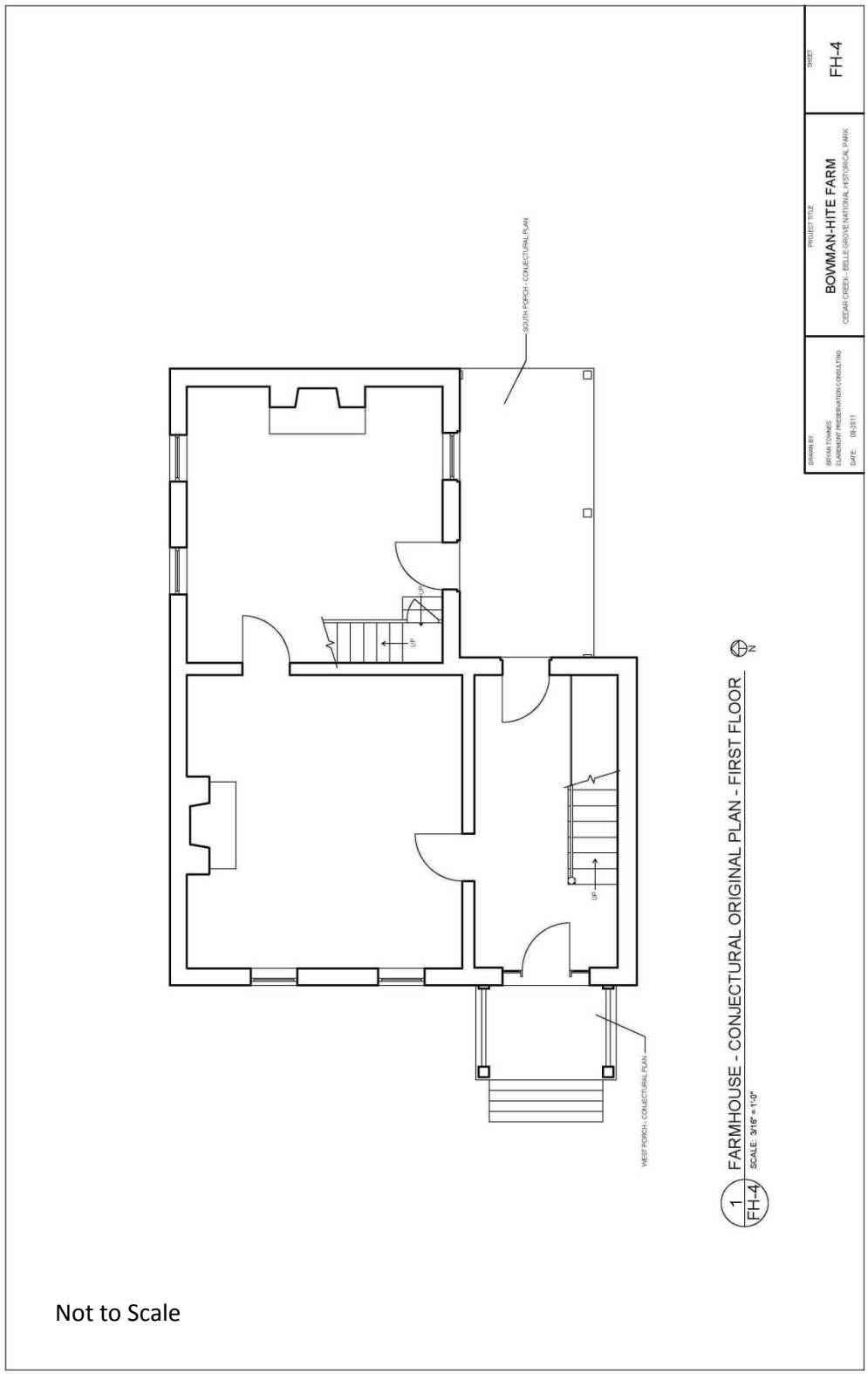

SHEET
HOUSE
FIRST FLOOR PLAN
A-21
PROJECT TITLE
BOWMAN-HITE FARM
CEDAR CREEK - BELLE GROVE NATIONAL HISTORICAL PARK
DRAWN BY
BRYAN TOWNES
CLAREMONT PRESERVATION CONSULTING
DATE: 10-14-2010
N
1
A-21
HOUSE - FIRST FLOOR
SCALE: 1/8" = 1'-0"
Not to Scale


SHEET
HOUSE
SECOND FLOOR PLAN
A-24
PROJECT TITLE
BOWMAN-HITE FARM
CEDAR CREEK - BELLE GROVE NATIONAL HISTORICAL PARK
DRAWN BY
BRYAN TOWNES
CLAREMONT PRESERVATION CONSULTING
DATE: 10-14-2010
1
A-24
HOUSE - SECOND FLOOR
SCALE: 1/8" = 1'-0"
N
Not to Scale

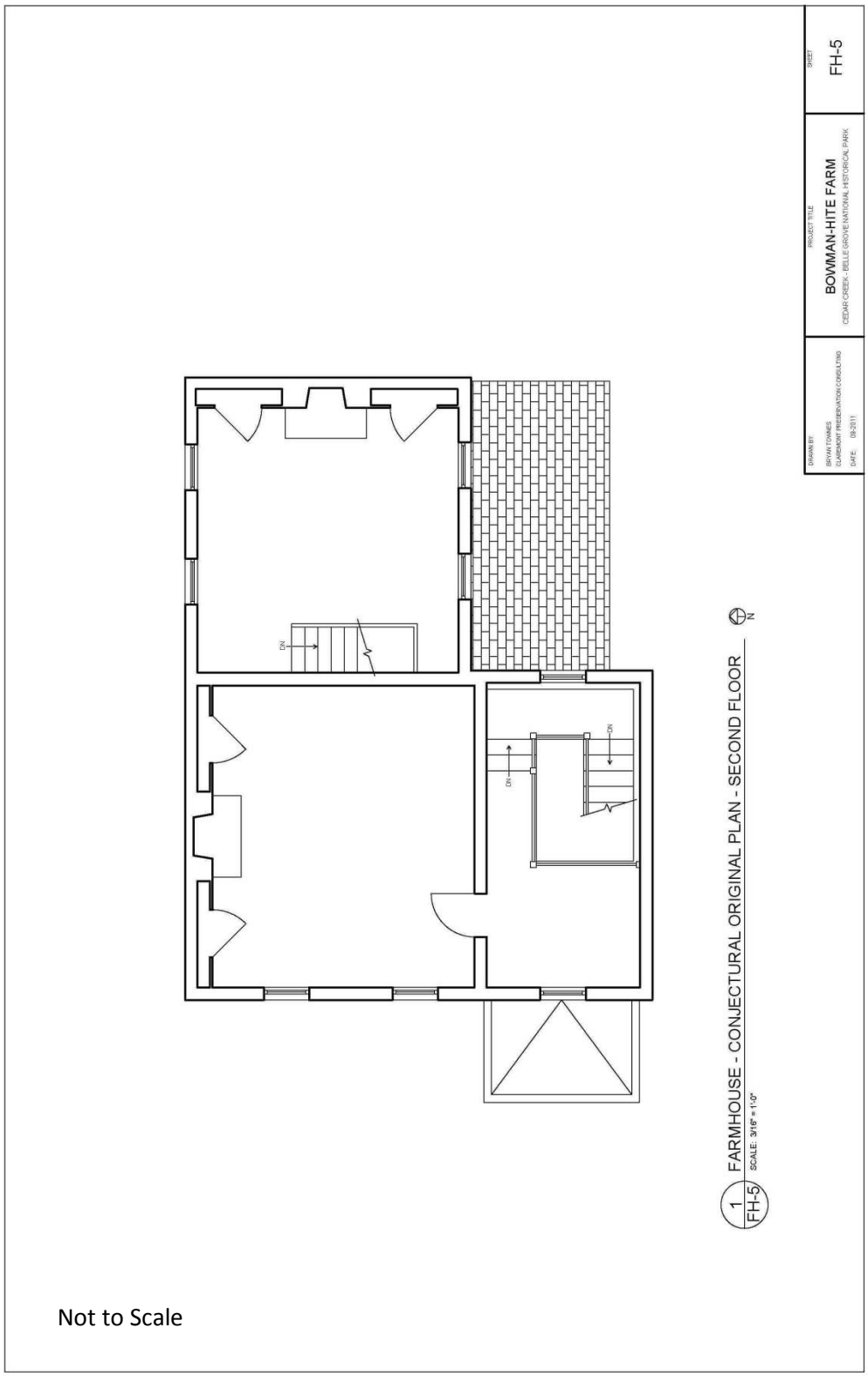

1 A-28
HOUSE - WEST ELEVATION
SCALE: 1/8" = 1'-0"
2 A-28
HOUSE - WEST ELEVATION (PARTIAL)
SCALE: 1/8" = 1'-0"
3 A-28
HOUSE - NORTH ELEVATION
SCALE: 1/8" = 1'-0"
Not to Scale
DRAWN BY
BRYAN TOWNES
CLAIREMONT PRESERVATION CONSULTING
DATE: 10-14-2010
PROJECT TITLE
BOWMAN-HITE FARM
CEDAR CREEK - BELLE GROVE NATIONAL HISTORICAL PARK
SHEET
HOUSE
WEST AND NORTH
ELEVATIONS
A-28


1
A-29
HOUSE - EAST ELEVATION
SCALE: 1/8" = 1'-0"
2
A-29
HOUSE - SOUTH ELEVATION
SCALE: 1/8" = 1'-0"
DRAWN BY
BRYAN TOWNES
CLAIREMONT PRESERVATION CONSULTING
DATE: 10-14-2010
PROJECT TITLE
BOWMAN-HITE FARM
CEDAR CREEK - BELLE GROVE NATIONAL HISTORICAL PARK
SHEET
HOUSE
EAST AND SOUTH
ELEVATIONS
A-29

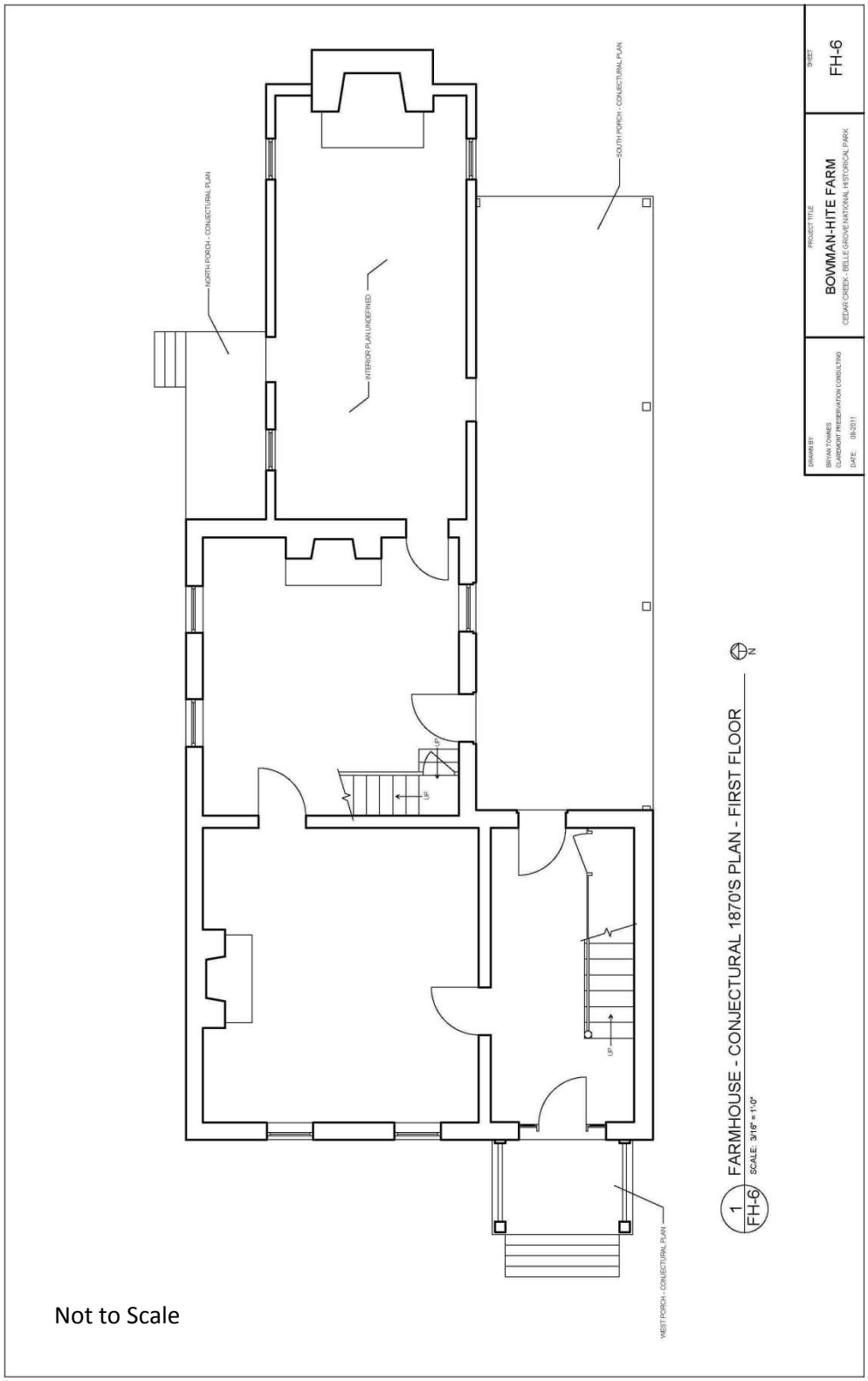
Not to Scale


SOUTH PORCH - CONJECTURAL PLAN
WEST PORCH - CONJECTURAL PLAN
UP
UP
UP
1
FH-4
FARMHOUSE - CONJECTURAL ORIGINAL PLAN - FIRST FLOOR
SCALE: 3/16" = 1'-0"
N
DRAWN BY
BRYAN TOWNES
CLAIREMONT PRESERVATION CONSULTING
DATE: 08-2011
PROJECT TITLE
BOWMAN-HITE FARM
CEDAR CREEK - BELLE GROVE NATIONAL HISTORICAL PARK
SHEET
FH-4

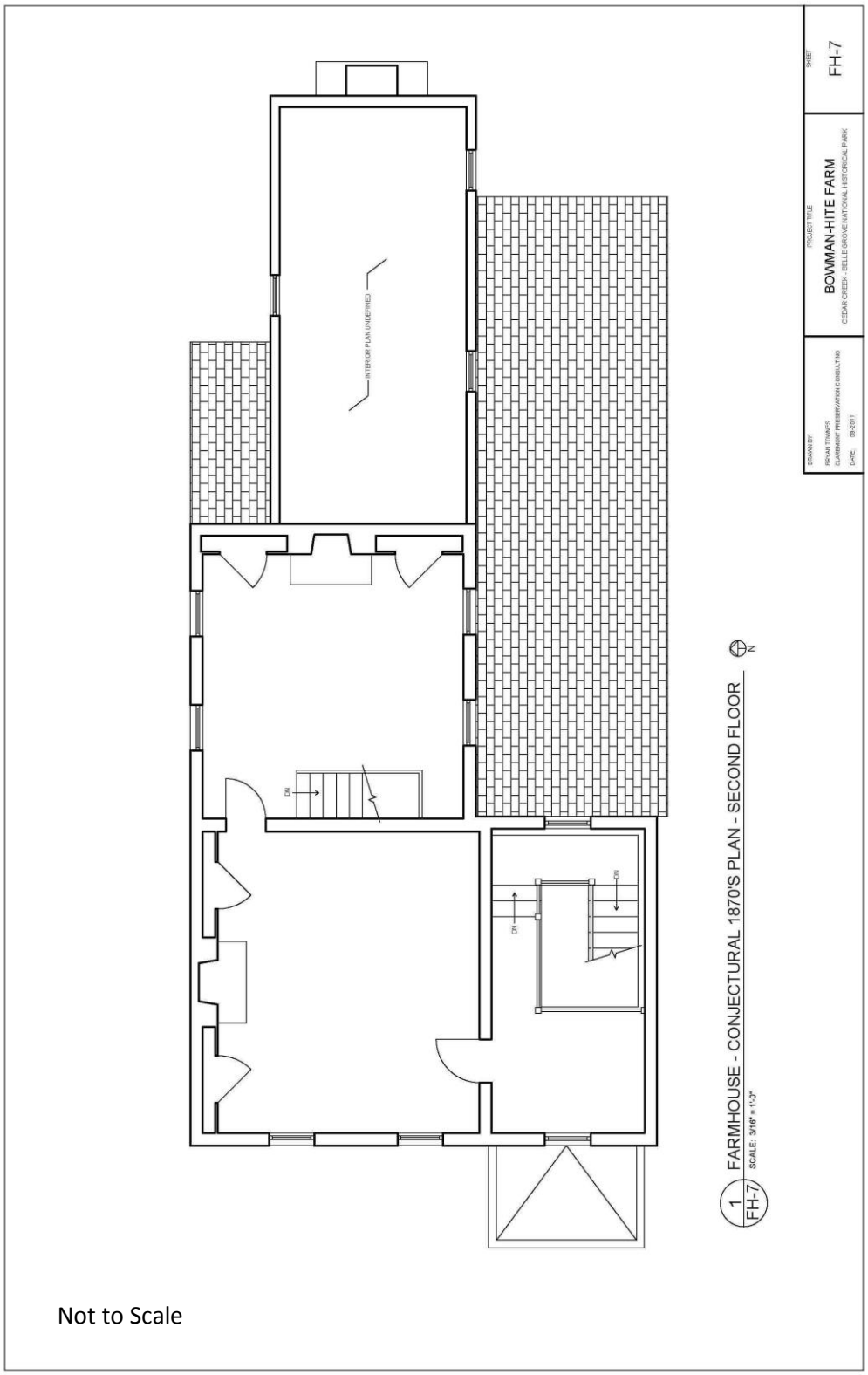
Not to Scale


DN
DN
DN
1
FH-5
FARMHOUSE - CONJECTURAL ORIGINAL PLAN - SECOND FLOOR
SCALE: 3/16" = 1'-0"
N
DRAWN BY
BRYAN TOWNES
CLAIREMONT PRESERVATION CONSULTING
DATE: 08-2011
PROJECT TITLE
BOWMAN-HITE FARM
CEDAR CREEK - BELLE GROVE NATIONAL HISTORICAL PARK
SHEET
FH-5

Not to Scale


NORTH PORCH - CONJECTURAL PLAN
INTERIOR PLAN UNDEFINED
SOUTH PORCH - CONJECTURAL PLAN
UP
UP
UP
WEST PORCH - CONJECTURAL PLAN
1
FH-6
FARMHOUSE - CONJECTURAL 1870'S PLAN - FIRST FLOOR
SCALE: 3/16" = 1'-0"
N
PROJECT TITLE
BOWMAN-HITE FARM
CEDAR CREEK - BELLE GROVE NATIONAL HISTORICAL PARK
SHEET
FH-6
DRAWN BY:
BRYAN TOWNES
CLAREMONT PRESERVATION CONSULTING
DATE: 09-2011

Not to Scale


INTERIOR PLAN UNDEFINED
DN
DN
DN
1
FH-7
FARMHOUSE - CONJECTURAL 1870'S PLAN - SECOND FLOOR
SCALE: 3/16" = 1'-0"
N
DRAWN BY
BRYAN TOWNES
CLAIREMONT PRESERVATION CONSULTING
DATE: 09/2011
PROJECT TITLE
BOWMAN-HITE FARM
CEDAR CREEK - BELLE GROVE NATIONAL HISTORICAL PARK
SHEET
FH-7

Not to Scale