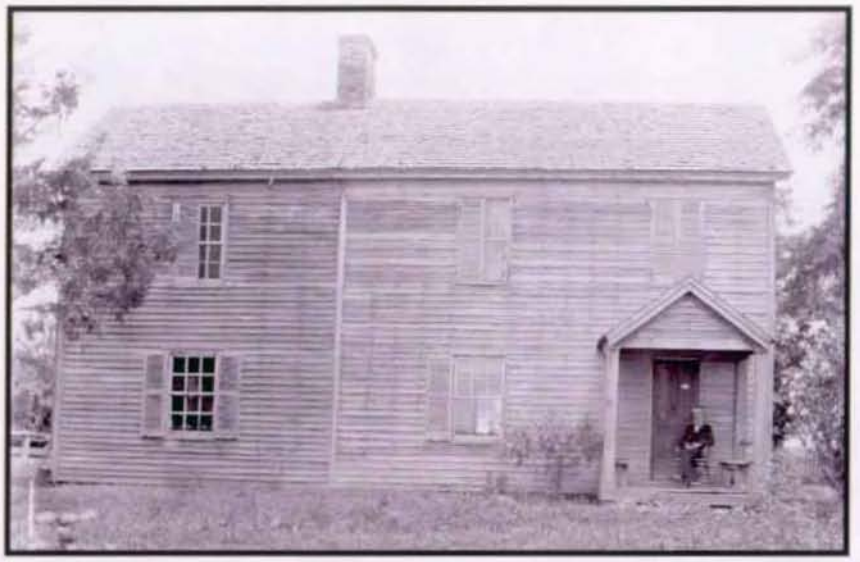
379/D-58

Henry House
Historic Structure Report
Final Revised Edition

Manassas National Battlefield Park
National Capital Region
Manassas, Virginia



prepared by:

Historic Preservation Training Center
U. S. National Park Service

August 2003

Color Scans
12/24/2003

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2003
Historic Structure Report
Final Revised Edition – Not Intended for Review
Henry House
Manassas National Battlefield Park
Manassas, Virginia
IDLCS #: 10782

Cover Photos:

Top
Henry House
July 14, 1896
Albert Kern Collection
Montgomery County Historical Society
Dayton, Ohio

Bottom
Henry House
Summer 1988
National Capital Region
Chief Historical Architect
National Park Service
Washington, D.C.

United States Department of the Interior

NATIONAL PARK SERVICE
Historic Preservation Training Center
4801 A Urbana Pike
Frederick, MD 21704

H30 (HPTC)

15 August 2003

Memorandum

To: Superintendent, Manassas National Battlefield Park

From: Superintendent, Historic Preservation Training Center

Subject: Transmittal of Final Project Material, Project Close Out

Ref: Historic Structure Report Project, Henry House

This memo documents the transmittal of the *Henry House Historic Structure Report, Final Revised Edition, 2003* and all associated project materials. All completed text components of the HSR have been reviewed by the park and regional office staff. The report has been revised based on those comments received. This transmittal fulfills the HPTC obligations under the *Final Revised Project Agreement* signed May 25, 2001. Products are distributed according to the *Final Project Agreement* and as per the attached distribution list.

Previously distributed project components include the following materials:

- *Architectural Measured Drawings, HABS Survey No. VA-1363, Henry House Project 2001* 379/25035
- *Condition Report & Temporary Stabilization Recommendations Report,* by Robert Silman Associates [RSA], PLLC, Washington, D.C., April 2001
- *First Review Draft HSR* by HPTC, June 2001
- *Second Review Draft HSR* by HPTC, August 2001
- *Punch List Report & Associated Sketches* by Robert Silman Associates [RSA], PLLC, Washington, D.C., August 2001
- *Final Review Draft HSR* by HPTC, October 2001
- *Henry House Interior Finishes Analysis (Paint & Wallpaper) Report*, by NPS Northeast Cultural Resources Center, Building Conservation Branch, Barbara Yokum Architectural Conservator, January 2002 379/D-53

For a complete listing of all project milestones and material transmitted to the park and regional office see the Preface Notes of the HSR where a list is provided.

Please note that the HSR is not completed, according to NPS *Cultural Resource Guidelines*, until Part 3 has been inserted. Part 3 is the responsibility of the Denver Service Center Project Management Team.

If this office can provide further information regarding this project please contact Senior Historical Architect Thomas A. Vitanza at 301-663-8206 x135 or at tom_vitanza@nps.gov.

Thank you for the opportunity to provide technical assistance for the historic Henry House.

Sincerely,

H. Thomas McGrath

Attachment

Enclosures

DISTRIBUTION OF THE HSR & OTHER PROJECT RELATED MATERIALS

By copy of this memo, HPTC distributes the HSR as per Section VI of the *Final Project Agreement*, and as follows:

LOCATION	PRODUCTS			
	HSR Binder	**HSR Spiral Bound**	**HSR Other**	**Compact Disk**
MANA: In House	6		Field Photo Binder	6
MANA: NPS-28		16		
NCRO	2		Unbound Copy with photographs	1
HABS	1		Architectural Drawings	
DSC-TIC	1			1
HPTC	2			1
TOTALS	**12**	**16**		**9**

- 22 copies to Manassas National Battlefield Park (6 copies for park use in 3-ring binders, 16 spiral bound copies for distribution as per NPS-28, Appendix D)
- Two (2) copies to the National Capital Regional Office in binders
- One (1) copy to Denver Service Center Technical Information Center in binder
- Two (2) copies retained by HPTC Library (1 binder, 1 spiral bound)

In addition, one copy of the report is being submitted unbound, with original print photographs as part of the text, to the NCRO Library. Compact Disk copies of all project files will be sent to the park and the regional office.

Transmittal of the HABS drawings for the Henry House (VA-1363) to the U.S. Library of Congress is by the HABS office, as drawings were retained by that office upon completion.

cc:
MANA – Superintendent, Robert Sutton
MANA – Assistant Superintendent – Karen Cucurullo
MANA – Cultural Resource Manager, Ray Brown
MANA – Chief of Maintenance, Jim Thompson
NCRO – Regional Director, Terry R. Carlstrom
NCRO – Chief, Cultural Resources Preservation Services, Darwina Neal
NCRO – Regional Historical Architect, Rebecca Stevens
HABS – John A. Burns

In Addition to the above listed, distribution of Electronic Copies of Memo:

DSC – Bonita Mueller, Ken Duce
HABS – Mark Schara
HAFE – Mia Parsons
MANA – Ed Raus, Jim Burgess
NCRO – Stephen Potter, Gary Scott, Maureen Joseph

CD DIRECTORY

Note: This is a list of section folders under each major folder.
Individual documents or sub-section folders are not listed here.

MANA HEHO HSR Folder

1_HSR Administration

2_HSR Developmental History
- A_Historical Background
- B_Chronology & Use
- C_Physical Description

3_HSR Treatment & Use

4_Appendices
- Administrative
- Bibliographies
- Material Analysis
- Reference Documents
- Value Analysis Reports

Dividers

MANA HEHO HSR PROJECT Folder

CORRESPONDENCE
- Project Agreement
- Project Reports
- Miscellaneous Correspondence

DRAFT HSRs
- First Draft
- Second Draft
- Miscellaneous

DSC AE Comments by HPTC

HSR Graphics

MANA Planning Documents

RSILMANFILES Emergency Stabilization
- HPTC Documents
- R Silman & Associates Documents

WORKING Photofiles
- 1988 NPS Exterior Elevations
- Ebrhardt Family Photographs
- HSR Figure Scans (Used in HSR)
- HPTC HEHO Field Photos
- KERN Collection (Dayton, OH)
- LCS Images from NCRO files
- MANA Maintenance Documentation
- MANA Library Historical Photographs
- MANA Maintenance Polaroids
- NCRO 1992 B&W Exterior Elevations
- NCRO CD Images (Empty Folder)
- New MANA Pictures for HSR
- New TAV HSR MANA Pictures for HSR
- Old Postcards - Miscellaneous
- Manassas Museum Postcards (McBryde Library)

Historic Structure Report
Final Revised Edition

HENRY HOUSE
IDLCS No. 10782

Manassas National Battlefield Park
Prince William County
Manassas, Virginia

U.S. Department of the Interior
National Park Service

Historic Preservation Training Center
4801A Urbana Pike, Gambrill House
Frederick, MD 21704

AUGUST 2003

Prepared by:

Historic Preservation Training Center
National Park Service
U.S. Department of the Interior

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Sara Polzin, Exhibit Specialist Intern

Project Team

National Park Service:

Historic Preservation Training Center
Manassas National Battlefield Park
National Capital Region, Cultural Resource Preservation Services

Report Consultants:

NPS, Building Conservation Branch, Northeast Regional Office
NPS, Denver Service Center
NPS, Historic American Buildings Survey
NPS, Harpers Ferry Interpretive Design Center Historic Photograph Collection

Montgomery County Historical Society, Dayton, Ohio

Robert Silman & Associates, Structural Engineers, PLLC, Washington, D.C.

Acknowledgements

Thanks to the Project Team, both NPS staff and consultants, for help in compiling this report. All comments made have been appreciated and put to good use in the final revised edition of this report.

Thanks also to the Ebhardt family, Joan Zenzen, Dr. Henry Glassie, Mary Oliver, Albert Kern, John Harry Shannon (The Rambler) and Hugh F. Henry, Jr. for their help in understanding the significance of the Henry House.

With any product whose origin lies in many sources, doubtless there are errors here, despite best efforts to do away with them. As for those bad dates and names, questionable interpretations, odd allusions, and things that are just plain wrong, the responsibility is mine. tav. 08/11/03.

Henry House
Manassas National Battlefield Park
Historic Structures Report
Final Revised Edition, August 2003

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These sections should be completed after the recommended treatments have been performed. It is issued as a separate document. See NPS *Director's Order No. 28, Cultural Resource Management Guidelines* for further guidance.

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APPENDICES

Administrative

- *List of Classified Structures Single Entry Report Form, Henry House, LCS ID 010782*, National Capital Regional Office, Chief Historical Architect, January 2001.

The following documents were distributed as part of the HSR project. Copies will be found on the accompanying HSR CD:

- Project Agreement between HPTC, MANA, and NCRO
- Project Agreement between NCRO and HABS
- Project Agreement between HPTC and NECRC
- Contract between HPTC and R. Silman & Associates Structural Engineers, PLLC
- HPTC Project Status Reports (6)
- Denver Service Center Value Analysis Reports

Bibliography

- Historic Structure Report Bibliography
- Resources Documentation Report

Documentation

- Drawings

  Historic American Buildings Survey Drawings, Henry House, Sudley Road, Manassas National Battlefield Park, Prince William County, Virginia, Survey No. VA-1363, 5 sheets, 2001.

- Miscellaneous HPTC Field Drawings (listed in report text)

- Family Report on Henry House, by Christian Frederick Ebhardt and Kathryn Ebhardt Weatherholtz, undated, received 06/12/2003 at HPTC from MANA.

Material Analysis

The following documents were distributed as part of the HSR project. Copies will be found on the accompanying HSR CD:

- *Historic Finishes Analysis (Paint and Wallpaper) Report*
  NPS, Northeast Cultural Resources Center, Building Conservation Branch

- *Structural Analysis Reports and Correspondence*
  Robert Silman & Associates, Structural Engineers, PLLC

- *Temporary Emergency Structural Stabilization Documentation*
  Robert Silman & Associates, Structural Engineers, PLLC

The following documents are provided with the HSR:

- *Crack Monitor Field Reports*
  Historic Preservation Training Center

- *Historic Plaster and Mortar Analysis Report*
  Historic Preservation Training Center

END of CONTENTS.

INTRODUCTION

Preface Notes & Management Summary

Preface Notes

The Historic Structure Report Project for the Henry House has been underway for a period of almost three years, and three intermediate reports have been issued and reviewed. While this *Final Revised Edition* is by no means the "final" word on the architectural fabric of the Henry House, it does provide insight and documentation of the extant structure. A quick overview of work-to-date is in order to allow the reader to place this final revised edition (according to the budget) of the project report in its proper place. There is more detail about several of the supporting documents mentioned here in the Management Summary and various other places throughout the report.

The project, which began in November 2000, quickly evolved into two separate but related tasks. One focused on the research and development of the Historic Structure Report (HSR); the other focused on the temporary emergency structural stabilization of the building so it would survive long enough to be preserved and rehabilitated. This was necessary because during the preliminary walk through of the building in February 2001 several notable structural cracks were identified, and, due to the lack of the majority of lateral cross-tie floor joists in the large center room of the structure, it was suggested the building's walls were alarmingly spreading apart.

Fabric Investigation and Structural Evaluation of Exterior Wall Frame System at North Block.

Temporary Emergency Structural Stabilization brace in place on 1st floor. Note lack of exterior wall structure.

The HSR project, funded by the National Capital Regional Office Cultural Resource Preservation Program, occurred at this time to support the NPS line item construction program's MANA-155 "Rehabilitate the Henry House" project. The program's scheduled funding for the construction phase of the project was still more than five (5) years in the future. Immediate action was deemed necessary to monitor and stabilize the building for the interim time period.

The structural engineering firm Robert Silman Associates [RSA], PLLC, Structural Engineers, Washington, D.C., was brought on board to work as consultants with the HPTC Senior Historical Architect to evaluate and design a temporary emergency structural stabilization plan. The monitoring of structural cracks indicated the walls were spreading apart and needed to be quickly supported. Documentation of this process, and the design, will be found in the *Condition Report and Temporary Stabilization Recommendations* dated April 2001 and the sketches and punch list memos that go with it.

This temporary emergency stabilization structure was later constructed by the park maintenance staff with regional funds and was periodically inspected by the structural engineers. The resultant internal structural support remains in place to this day (May 2003) and is likely now supporting the building. Its removal will be part of the line-item construction ultimate treatment project. Monitoring of the cracks ceased after the submittal of the *Final Review Draft – Reference Copy* HSR transmitted 31 October 2001.

It is important to note that the two tracks of the overall project, the HSR track and the line-item construction track, were separate projects and were funded by different sources. As such, communication and coordination between the two project teams did occur; however, the impact of the HSR project on the line-item project appears to have been negligible. Treatment recommendations prepared by the HSR team were communicated to the park management and the line item project team, but no direct correlation can be made as far as the ultimate treatment of the building is concerned based on the preliminary design development documents package associated with the line item construction program.

Other project tasks involved the production of A*rchitectural Measured Drawings* by the Washington, D.C. based Historic American Building Survey (HABS) unit of the NPS. This resulted in a series of five (5) drawing sheets being completed. This drawing set has been catalogued as *Henry House Project 2001, VA-1363* and has been transmitted to the Library of Congress as part of the permanent National Park Service collection of historic structures.

Another project task evaluated and reported on the interior finishes of the Henry House. The *Interior Finishes Analysis (Paint and Wallpaper) Report* was completed by the Building Conservation Branch, Northeast Cultural Resources Center, National Park Service, Lowell, MA by Architectural Conservator Barbara Yocum in January 2002. This study analyzed existing finishes and resulted in eighty-eight (88) paint samples and twelve (12) samples of wallpaper being collected. The report includes an Introduction, Methodologies, Analysis Results, Conclusions, Recommendations and Appendices. It was distributed by HPTC in January 2002 as a separate report and is not included within the covers of the HSR. Interior treatment decisions should consider this significant report.

Both of these products are part of the larger HSR project. Complete chronologies of those efforts will be found in this report.

The following list will provide an overview of some of the major milestones in the history of the HSR project.

- The initial request from the park, through the regional office, for HPTC to undertake this project was in November 2000.
- Formal request to HPTC received from Regional Office, 30 January 2001.
- HPTC agrees to undertake project via memo to NCRO, 05 February 2001.
- *Draft Project Agreement* submitted by HPTC for review, 8 February 2001
- Preliminary field work by HPTC carried out weeks of 12 and 19 Feb 2001.
- Presentation of Preliminary Findings, Scope of Work and Project Agreement Meeting 26 February 2001; attended by park, regional and HPTC staff.
- On-site meeting and investigative field visit with structural engineers (Robert Silman Associates, PLLC) took place on 7 March 2001.
- Three additional *Draft Project Agreements* (03/15/01, 04/10/01, 05/16/01) were submitted for review to the park and regional office. Comments were received and each document was rewritten with changes and resubmitted.
- *Henry House – Condition Report & Temporary Stabilization Recommendations (Preliminary)* by Robert Silman Associates, PLLC, Structural Engineers, Washington, D.C., 26 March 2001.
- *Henry House - Condition Report & Temporary Stabilization*, by Robert Silman Associates, PLLC, Structural Engineers, Washington, D.C., 23 April 2001. Additional sketches were provided to clarify certain conditions and forwarded to the HPTC on 17, 24, and 30 May, 2001.
- The *Final Approved Project Agreement* was signed 25 May 2001.
- *First Review Draft HSR* transmitted 19 June 2001.
- *Punch List Report & Associated Sketches*, by Robert Silman Associates, PLLC, Structural Engineers, Washington, D.C., 14 August 2001.
- Short Term Emergency Stabilization Treatment Recommendations by HPTC, 17 August 2001.
- *Second Review Draft HSR* by HPTC transmitted 31 August 2001.
- Prioritized Preservation Maintenance Deficiencies & Condition Summary and Revised Character Defining Features by HPTC transmitted 4 September 2001.
- Final Draft Chronology and Development and Use Sections by HPTC transmitted 21 September 2001.
- *Final Punch List Report & Associated Sketches*, by Robert Silman Associates, PLLC, Structural Engineers, Washington, D.C., 26 October 2001.
- *Final Review Draft – Reference Copy* HSR by HPTC transmitted 31 October 2001.
- Final Prioritized Punch List for Temporary Structural Stabilization Project by HPTC transmitted 26 October 2001.

- *Henry House Interior Finishes Analysis (Paint and Wallpaper)* by Building Conservation Branch, Northeast Cultural Resources Center, NPS; transmitted 16 January 2002.

Project Status Reports – A series of project reports were required as part of the HSR project administration. These reports contain detailed information about the research and field work aspects of the projects and they are contained in the Appendices to this report. Six (6) reports were issued within the time period between 12 February 2001 and 23 October 2001. Various sections of the HSR have been completed at different times throughout the duration of the project. Dates located in the footer bar of each section indicate the substantial completion date for that section. Minor editing may have occurred between that date and the date of issuance as per the final transmittal memo.

This *Final Revised Edition* of the *Henry House Historic Structure Report* was compiled and previous sections edited, using comments received in September and October 2001, and in April and May of 2003. Work on the report was concluded after final rounds of comments were incorporated in July and August 2003.

After a year's hiatus, during which the Historic Structure Report for the Brawner House (another historic structure at Manassas National Battlefield Park) was completed, the path returned to the Henry House and the completion of its HSR. During the intervening time period, decisions were made that will affect the integrity and appearance of the building. The driving force behind the development of this HSR is the NPS Line Item Construction Program and specifically the funded project for the Rehabilitation of the Henry House, part of MANA -155 package. This work included in that package is being managed by the NPS Denver Service Center.

This HSR was substantially completed prior to the NPS decision making process and does not include details of the Value Analysis (VA) process, the Choosing By Advantage (CBA) process or the National Park Service Development Advisory Board (DAB) presentation and determination process. Information concerning those processes is the responsibility of the Denver Service Center Project Management Team overseeing the line-item construction package. References to the various documents that record the above-mentioned decision making and approval process will be located in other NPS documents mentioned elsewhere in this report.

The author's goal for this HSR is that it will capture all the relevant information about the condition of the extant structure during the years of the project between February 2001 and May 2003. Future readers of the this report will have access to the knowledge of the structure as it existed during this time period, prior to the proposed rehabilitation project that will have a major impact on the extant fabric of the structure.

Some of this intervention was required in order to determine the exact condition of the building and to document the extant conditions at the time. Throughout this process of fabric investigation every effort was made to protect the integrity of the historic fabric and to record changes and intrusions made for research purposes.

Temporary Preservation in Progress Interpretive Marker In Place at the Henry House, December 2002

Just over the horizon of the completion of this report is a construction project that will forever affect the historic qualities of the building. More comprehensive building fabric intervention than has heretofore been seen will occur to rehabilitate the structure. The goal of the proposed (now approved and funded) rehabilitation is twofold; to restore the exterior of the building to a specific period of significance and to adaptively re-use the interior for modern day purposes. The nature of any construction project on a historic building is destructive; historic fabric will be forever lost and the integrity of the building will be reduced. This is the price to be paid for progress.

To return the building to use is a notable event after it has lain dormant for so many years. The trade-off for making possible the visitor access to the building is to forgo a more sensitive preservation effort that may have retained more fabric in-situ for future study and evaluation.

The management decision was made in a climate of the discovery of severe structural challenges with the historic core frame work of the building and the lingering effects of years of reduced routine and cyclic maintenance. All in all, it may be the only decision to keep and bring alive the building on the battlefield which marks the location of a remarkable family history and a nationally significant event. This HSR is not the "final word" as much will be learned about the structure during the rehabilitation process.

As internationally recognized vernacular architecture and folklore specialist Dr. Henry Glassie says in his recent book *Vernacular Architecture*,

"The house spoke of history."

Thomas A. Vitanza
May 12, 2002

Hugh Fauntleroy Henry at the Henry House, 1896
Photo by Albert Kern, Kern Photographic Collection,
Montgomery County Historical Society, Dayton Ohio

Management Summary

This project, "Historic Structure Report for the Henry House" was conducted under the auspices of an approved Project Agreement between the Historic Preservation Training Center, the National Capital Region, and Manassas National Battlefield Park; all of which are units of the National Park Service, U.S. Department of the Interior. NPS policies and guidelines were adhered to in the production and distribution of this report.

The purpose of the project is stated to produce an HSR for a previously undocumented historic building according to *NPS Cultural Resource Management Guidelines, Release No. 5, 1997*. The immediate goal being to provide an HSR that will further describe and document the architectural and historical evolution of the building as well as document the integrity of the extant fabric.

Other goals have been:

- to provide Temporary Emergency Structural Stabilization report with written and graphic treatment and repair recommendations for the temporary emergency stabilization of the Henry House.

- to provide architectural measured drawings that meet NPS Historic American Building Survey (HABS) standards as described in The Secretary of the Interior's Standards for the Treatment of Historic Properties, 1995. HABS standard drawings have been prepared through a separate agreement that was developed for the recording project. A General Agreement between the National Capital Region and the HABS details the scope of the documentation project.

The ultimate goal of this HSR is to present any new findings as a result of the most recent architectural material analysis and to provide a more fully integrated narrative that describes the developmental history of the extant building, including changes made under NPS management. Secondary goals are to verify previous architectural fabric analysis and to provide adequate documentation that meets NPS standards.

Research Conducted to Produce the HSR

Since the NPS acquisition of the Henry Farm and House in the early 1940's surprisingly little information had been collected concerning the developmental history of the structure or the extent of its integrity – either historical or architectural. Although it may have been obvious to the untrained eye that the Henry House was in dire need of structural stabilization by the late 1990's little

effort had been made to understand the significance of the extant building fabric or the nature of its construction.

The research conducted for this HSR attempted to analyze the building fabric and determine what could be learned; this was a primary goal. Other research goals were to complete a visual narrative of the evolution of the structure. Due to its prominent location, the structure has been much photographed over time.

Numerous documents and collections were searched, looking for any information that would verify the appearance of the structure during certain time periods (many photos are undated). Land tax records, wills, deeds, historical newspapers, census records, obituaries, birth and death indexes, insurance records and NPS administrative files were all reviewed. The majority of research was conducted at the Prince William County (VA) Courthouse Archives, Bull Run Regional Library - Virginia Room, Fairfax City Regional Library - Virginia Room and the Virginia State Library in Richmond. Research was also conduced at the National Capital Region Museum Resource Center, where early park administrative files retrieved from the National Archives were reviewed (this was not comprehensive as only certain years were available at the time), and at the park's administrative and maintenance headquarters.

Several photo collections were researched, including the National Archives, The Library of Congress, the Harpers Ferry (WV) Interpretive Design Center - Historic Photograph Collection at Willow Springs, the Manassas National Battlefield Park Library historic photograph collection, the National Capital Region Historic Architecture collections, and the Albert Kern Collection at the Montgomery County Historical Society in Dayton, Ohio.

In addition to the historical research, informal oral interviews were conducted with various members of the Park staff, previous researchers and consultants associated with the project. Members of the Ebhardt family made themselves available after a chance meeting on the battlefield. The Ebhardt family lived in the Henry House while it was owned by the Sons of Confederate Veterans as assistant caretakers under an ailing Mr. A.J. Powell circa the 1930's and 40's.

Architectural field investigations were two-pronged. Documentation of the existing conditions is a primary component of this project as well as a way to gain understanding of the construction of the building. The other aspect focused on fabric investigation, analysis, and interpretation of the material that constitutes the building, also known as "Fabric". Fabric analysis has been described as, "an attempt to reconstruct the logic of people long dead by looking seriously at their houses".[1]

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[1] *Folk Housing in Middle Virginia: A Structural Analysis of Historic Artifacts.* Henry Glassie, University of Tennessee Press, Knoxville, 1975, p. vii.

Fieldwork began at the site during February 2001 and continued through the end of December 2002. Portions of exterior siding were removed along with several floorboards and sections of the plaster and lath in the interior of the house. This process allowed for a better view of the framing system, which in turn allowed a clearer understanding of the construction technologies utilized. During this time period previous architectural findings were verified and new discoveries documented.

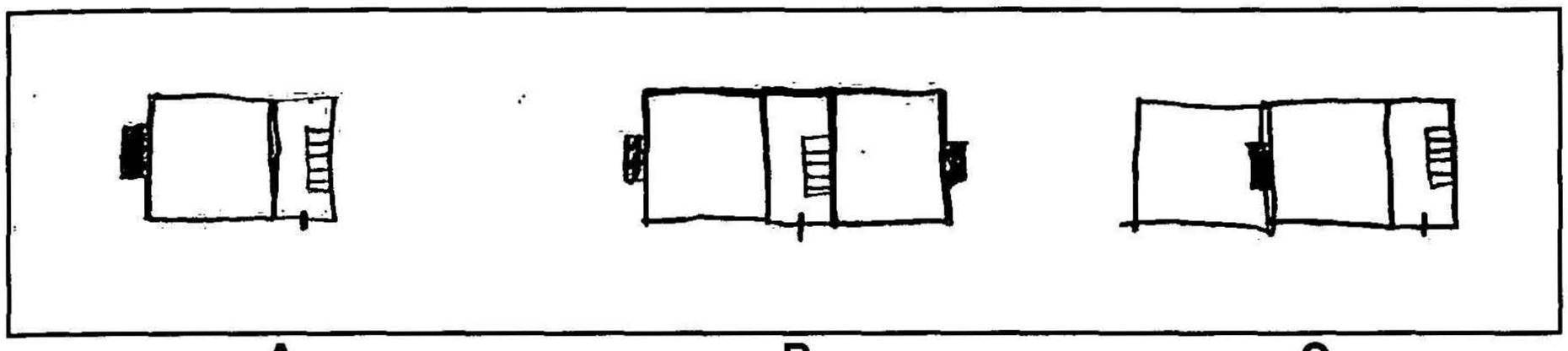
Two sets of architectural measured drawings were produced as part of the process to produce the HSR and are part of the final documentation. These drawing sets are listed here.

- *Henry House, Manassas National Battlefield Park, Historic Structure Report Field Drawings.* Historic Preservation Training Center, Frederick, MD, three sheets, February 2001.
- *Henry House, Sudley Road, Manassas National Battlefield Park, Prince William County, Virginia.* Historic American Buildings Survey, National Park Service, Washington, D.C. Survey number VA-1363, five sheets, Summer 2001.

Research Findings

The Henry House was constructed in two distinct phases readily identifiable in the extant materials of the structure. It maintains a high degree of integrity even though it has been used almost all of its life, until acquisition by the federal government. Periods of dormancy under NPS management were limited until the 1970s when the structure was not regularly used and became a marker on the landscape rather than a functional building. This was more a management decision than a condition-of-the-building decision as the Henry House had been used by the NPS as a caretaker's residence from the 1940's to the 1960's.

The south block of the house constitutes the first period of construction and represents the local Virginia vernacular building form known as the 2/3s I-house (A). The North block was added at a later date but did not complete the I-house typology, which would have added another bay to the south of the main door/ center bay (B); it instead became a saddlebag addition north of the original house (C). Evaluated by noted vernacular architectural folklorist Dr. Henry Glassie, he summarizes the Henry House in a September 2001 letter to the author as *"A piece of Virginia vernacular, it is wholly conventional, though modern alterations obscure it somewhat... As for types: it is 2/3 of the standard I-house with an addition "saddlebagged" to the chimney [north] end. Nothing strange about it at all... For its place or time, but it is a good example of the '2/3' or 'side-hall' I-house, quite common in northern Virginia, 1810- 1920."*



A. B. C.

Typical Virginia I-House Forms. A) Common 2/3 Form, B) Most Typical Completed Symmetrical Form, C) Henry House Form with Eccentric Saddlebag Addition In Lieu of Symmetrical Form.

It is well documented that the Henry House, sometimes called the New Henry House, is at least the second building on the site. Archeological excavations conducted during the period of the HSR project and concluded during the interregnum have identified the foundation remains of an early house, now thought to be Spring Hill Farm, or the Old Henry House – the one destroyed during the First Battle of Manassas. The extant structure appears after 1870 with its northern addition occurring most likely in 1882/83. Some of this information is gleaned from family correspondence and is well documented in other reports. The recently completed *Archeological Resource Study and Clearance for The Discovery Center Project at The Henry House* report by NPS Archeologists Parsons and Ravenhorst (2002) provides the most concise archeological and historical overview of the first house (Spring Hill farm) and the related family history of the Henry's.

The house is also remarkably well documented in historical photographs, sometimes with its most renowned occupant, Hugh Fauntleroy Henry, seen on the porch, especially during the period of occupancy by the Henry family through the very late 19th century.

The house is less well documented during the early 20th century and no specific building information, other than a few postcard images, has come to light concerning the oversight for nearly 20 years (1920 – 1938) by the United Daughters of the Confederacy[2] (UDC) and the Sons of Confederate Veterans (SCV). Although it can be deduced from the physical evidence that certain architectural changes were made, any administrative files or photographs that were generated by the SCV remain with them or with history, as recent attempts to contact that organization for information has not been successful.

The evolution of the building under the ownership and management of the federal government, since 1940, has been pieced together from several sources.

[2] The UDC played an important role in the early preservation of the Henry farm by purchasing an option on the property, totaling 130 acres, around 1920 for $25,000 (Zenzen:1998, pg. 14).

The use of the building as a place where visitors would go to receive an orientation to the battlefield, begun during the life of Hugh F. Henry, seems to have stopped with the era of NPS management and the opening of the Henry Hill Museum & Administration Building in February 1942. This coincides with the death of the SCV caretaker Mr. A.J. Powell.

Although the NPS installed a caretaker at the Henry House, it no longer was the mecca for battlefield enthusiasts that it had been in the past. Attempts to modernization by adding an indoor plumbing in the late 1940's or early 1950's, metered electricity in 1962, and other amenities clearly did not make up for the overexposure that caretakers felt living on the knoll of history within constant view of visitors. Park management's keen awareness of the visual importance of the historic scene anchored by the Henry House directed caretakers on where and when to hang out their laundry. By the late 1960's the house seems to have become disused and entered into a nearly 40 year period of increasing decline. It is uncertain when the last NPS caretaker resided in the Henry House, but by the 1970's it was clearly not up to standards for NPS employee quarters

Issues Identified

This section summarizes issues identified in the investigation of the building as they relate to the Project Agreement (Task Directive) and the scope of work for the HSR project. Use and Condition of the structure are traditional issues identified in an HSR and discussed by the project team.

Extant Condition of Building – While the overall condition of the building must be categorized as "poor", based on NPS definitions, there are many features that are in "fair" or even "good" condition. They are identified in the Condition Assessment section of Part 1. C., Physical Description.

Proposed Treatment of the Building - All historic structures benefit from the NPS management philosophy identified in the Introduction to the National Park Service's *Cultural Resource Management Guideline*. The section titled (3) Stewardship sums it up as follows.

The NPS Management Policies requires that "pending planning decisions, all cultural resources will be protected and preserved in the existing conditions." In reaching decisions about resource treatment, moreover, preservation should always receive first consideration. Data recovery, rehabilitation, restoration, and reconstruction may sometimes serve legitimate management purposes. However, these treatments cannot add to and will likely subtract from the finite material, and sometimes even data sources, remaining from the past. Decisions about them should be based on awareness of long-range preservation goals and interests and concerns of traditionally associated groups.

The Advisory Board on National Parks, Historic Sites, Buildings, and Monuments declared in 1936, "It is well to bear in mind the saying: 'Better preserve than repair, better repair than to restore, better restore than [re]construct'". As a corollary it noted, "It is ordinarily better to retain genuine old work of several periods, rather than arbitrarily to "restore" the whole, by new work, to its aspect at a single period." Internationally accepted historic preservation standards continue to stress the protection and perpetuation of authentic surviving resources.

Future Use of Building – Daily and prolonged use of the structure as the point-of-contact for visitors may cause accelerated wear and tear of the structure and its features. This type of use is often said to be of relatively low impact, but the feet of tens-of-thousands will require continuous preventative maintenance.

The Henry House is easily repairable and preservable to achieve the proposed use. The construction and new use can be implemented while retaining, with integrity, the character-defining features of the exterior and interior envelope. Further description is provided in Part 2, Treatment and Use, Section B., Requirements for Treatment and Use.

Summary of Treatment and Use

This section focuses on the contemporary treatment and use of the Henry House and will not delve into the historic treatment and use as that is accomplished in other parts of the Historic Structure Report. The contemporary period encompasses the years identified in this report as the *NPS Ownership / Mothballed Occupancy Years, 1965 – 2002.* Within that time period the Henry House has been used as a scene setting structure and there has been little active use of the interior. Treatment was mainly in the form of exterior maintenance until 2001 when a temporary emergency structural stabilization plan was implemented.

In the mid-1980's a series of reports were prepared that all contributed to the effort of producing the parks' General Management Plan. The most important of these documents is listed here:

- 1983. "General Management Plan, Manassas National Battlefield Park, Virginia." USDOI, NPS, DSC, September 1983. Malik, Marcus, P., et al., [MANA 379, D1808].

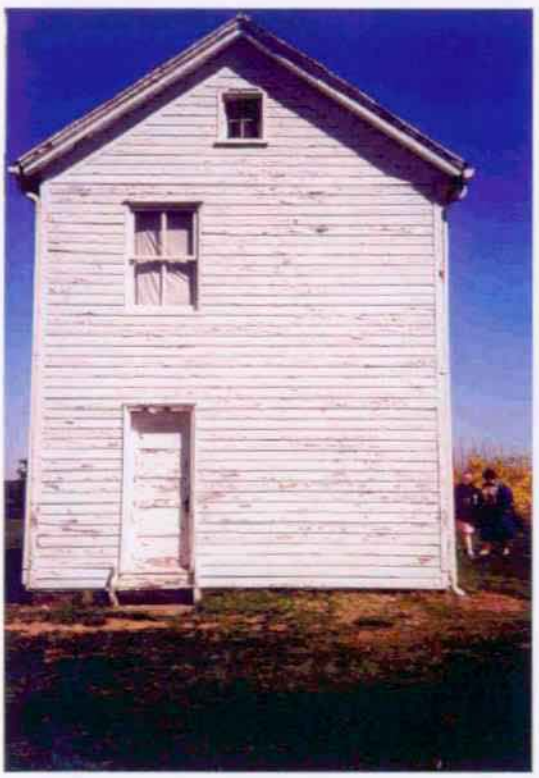
- 1982. McGarry, Thomas E. *Archeological Survey - Manassas Historic Sites Survey, Manassas National Battlefield Park, Virginia.* National Capital Team, Denver Service Center, Washington, D.C.: U.S. Department of the Interior, National Park Service (draft report 11/81 final report 12/ 82). [MANA 379, D2025]

- 1981. *Resource Management Plan, Manassas National Battlefield Park.* Recommended by Superintendent 11/15/1981, Concurred by Associate Regional Director, Professional Services, National Capital Region, 11/27/1981, Concurred by Associate Regional Director,

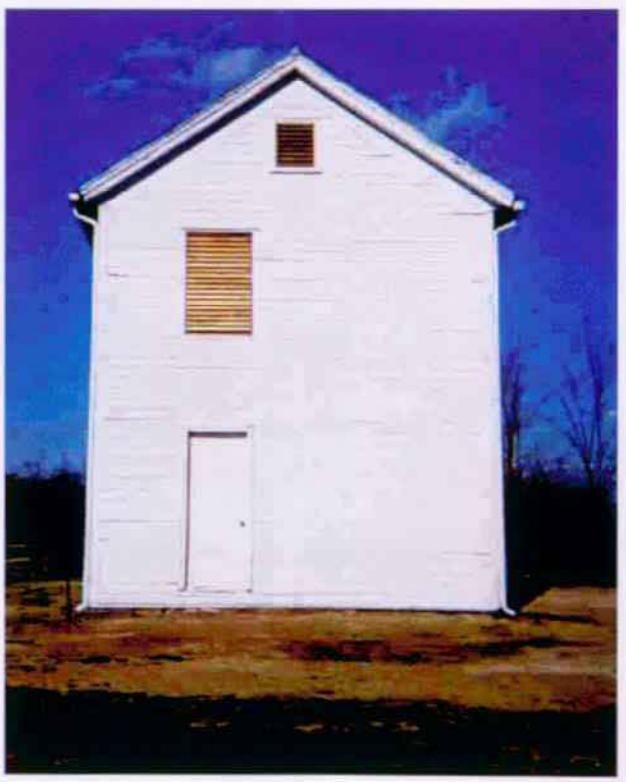
National Capital Region, 11/30/1981, Approved by Regional Director, National Capital Region 11/30/1981. [MANA 379, D-28].

These documents report on the proposed treatment and use of the Henry House from this particular time period. The reader will find they are consistent with the National Park Service philosophy of long term preservation of cultural resources. A more detailed discussion of the record of treatment and use decisions from this time period will be located in Part 2 of the HSR.

As mentioned earlier, during the late 1980's and into the 1990's the Henry House received exterior maintenance while awaiting its then current ultimate treatment of *"stabilize/ restore building exterior"* [GMP, 1983]. As time went by the management philosophy seems to have drifted from the statements in the 1983 GMP to those found in the 1998 Project Management Information System (PMIS) Project description for Package Number MANA-155, Rehabilitate and Maintain Significant Park Resources (PMIS No. 22762). When this package was prepared it stated, *"This proposal will accomplish critical stabilization and preservation work..., including emergency stabilization of...the Henry House"*.



South Elevation Prior to Emergency Stabilization, 1998



South Elevation After Emergency Stabilization, 2002

In 2000-01 a series of discussions occurred between the National Capital Region, the Denver Service Center (DSC) and the park. These were focused on further detailed definition of the new proposed use of the structure and the impact on the fabric of the building based on the current needs of the park.
The decision making process is annotated in a series of reports issued by the DSC in September 2001. Treatment and use decisions for the Henry House were determined through the National Park Service "Value Analysis Study Process" and "Choosing By Advantage" system. This is the system put in place to present projects before the NPS Development Advisory Board (DAB) and to gain approval of the project prior to the allocation of funds for line item construction.

An ultimate treatment and use is determined as part of the NPS line item construction project review process. The primary documents resulting from this process provide the documentation of the decision making for determination and approval of the ultimate treatment and use of the building. Consequently, they are also used as the basis for this section. The following documents have been identified. No records are available from the DAB.

- *Value Analysis Study, Rehabilitate and Maintain Significant Historic Structures, Henry House, Part 2 of 3 of a Project for Manassas National Battlefield, Manassas, Virginia, MANA-155. Study Dates July 31 through August 2, 2001.* John Marsh, Historical Architect, DSC, Study Team Leader. Prepared by: Betty Janes, Value Analysis Facilitator, Denver Service Center, National Park Service, 09/04/01.

- *Project Review Report, Choosing By Advantages – Henry House.* Prepared by Ken Duce, Project Architect, Denver Service Center, National Park Service, 09/04/01.

- *Denver Service Center Class "B" Estimate, Henry House Rehabilitation, Manassas National Battlefield Park.* Estimate by Jack Hagen, 09/19/2001; Estimate Reviewed by Robert Merrick, 10/09/2001, Denver Service Center, National Park Service.

The approved alternative that emerged from this process, and was approved by the National Park Service Development Advisory Board, is *Henry House, Alternative 1–Discovery Center, Shed Used for Restrooms.* According to the Value Analysis Study report, *"The goal of the selected alternative is to restore the exterior and much of the interior to its 1883 to 1896 form. This was the form of the building just before Hugh Henry, the original owner of this structure (sic) died."*

As far as the proposed use, the report continues, *"The building will be used as a Discovery Center. A Discovery Center will bring children and adults into the building in the first floor rooms and in small groups for curriculum based educational programs. When not used as an educational center, the building will be open to the general public for changing interpretive programs. The upstairs (second floor) rooms will be used for offices for the expanded education staff and storage of education materials, props and equipment for outdoor activities.*

Interpretive program materials for changing public programs will also be stored on (sic) upstairs." It is further described in Part 2 of this report.

The approved treatment for the intended approved use, as just described, is interpreted by this report to be "preservation". While "preservation" has a specific definition provided by the NPS, there are always various levels of sensitivity applied to the fabric of a structure while implementing a treatment and use project. This report focuses on Preservation as defined in *The Cultural Resource Management Guideline, NPS-28 (a.k.a. Director's Order 28)* which is summarized in this report.

Preservation of the Henry House is interpreted to mean the following:

- Repair and stabilization of the structural system and exterior architectural features while preserving the existing historic fabric and character-defining features.

- Preservation and repair of the first-floor interior for sympathetic reuse while retaining the character defining features.

- Stabilize and preservation of the second floor interior as-is and retention of the character defining features.

- The least intrusive approach to treatment is recommended.

While there is a section in the *Value Analysis Report* labeled "Preservation Philosophy", the approved treatment statements present more than a singular treatment strategy. Various treatment terms are interchangeably used in the same sentence.

Based on language in the report it appears that while "Preservation" is the selected treatment, the described treatment indicates a return of the exterior appearance to that of what Hugh Henry would have seen prior to his death in 1896; this would be "Restoration" – a different treatment type with different treatment standards.

A specific treatment strategy is not identified for the interior, but the proposed use clearly indicates a modern use of the space and the need for improvements. Descriptive line items taken, directly from the Project Estimate Scope, such as *"replace windows and trim"*, *"install dry pipe fire sprinkler system"*, *"install commercial electrical service"* and *"install electric dumbwaiter"* clearly indicate the interior treatment will "rehabilitation" rather than "preservation".

Rehabilitation, as a formal treatment strategy, is defined in NPS *Cultural Resource Management Guidelines*. It improves the utility or function of a historic structure, through repair or alteration, to make possible a compatible

contemporary use while preserving those portions or features that are important in defining its significance. It acknowledges the need to alter a historic property to meet continuing or changing uses. An emphasis is placed on *"retaining the property's historic character"*, or character-defining features. *"The replacement or removal of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a structure is avoided."*

Concluding Remarks

Change and the history of change are embodied in the fabric of the Henry House. Further modifications to the historic fabric of the house, to meet the modern demands for use, will erase the history of those earlier changes which are important to today's understanding of the past.

The educational values of a well preserved historic building have much to offer and may be the best way to provide enhanced interpretation to the park visitor at historic Manassas National Battlefield Park.

END of SECTION.

INTRODUCTION

Administrative & Cultural Resource Data

Administrative Data

Name and Location Data:

Preferred Structure Name	Henry House (post 1870)
Other Historic Names Used	Spring Hill Farm (Pre 1861 First Battle of Manassas/ Bull Run)
Park	Manassas National Battlefield Park
Structure Jurisdiction	Manassas
Structure County	Prince William
Structure State	Virginia
NPS Region	National Capital Region
Administrative Unit	Manassas National Battlefield Park
Administrative Sub-Unit	South East Quadrant
List of Classified Structures ID No.	010782

Related National Park Service Studies:

The following reports are listed in chronological order starting with the most recent. This is done to point out the number of recent studies that have been completed providing enhanced information about the house, landscape and site.

2002. Parsons, Mia T. and Ravenhorst, John W., Editors. *Archeological Resource Study and Clearance for The Discovery Center Project at the Henry House, Manassas National Battlefield Park, Manassas, Virginia*. Report prepared by the Archeology Program Office, Harpers Ferry National Historical Park for Manassas National Battlefield Park, Manassas Virginia and the National Capital Region, Washington, D.C., National Park Service, U.S. Department of the Interior

2002. Yocum, Barbara A. *Interior Finishes Analysis (Paint and Wallpaper) Henry House, Manassas National Battlefield Park, Manassas, Virginia*. Building Conservation Branch, Northeast Cultural Resources Center, National Park Service, Lowell, MA.

2002. Cultural Resources Bibliography (Report of CRBIB database for Manassas National Battlefield Park). Report obtained from National Park Service, Denver Service Center, Technical Information Center, August 2002.

2001. *Henry House, Manassas National Battlefield Park, Historic Structure Report Field Drawings*. Historic Preservation Training Center, Frederick, MD, three sheets, February 2001.

2001. *Henry House, Sudley Road, Manassas National Battlefield Park, Prince William County, Virginia.* Historic American Buildings Survey, National Park Service, Washington, D.C. Survey number VA-1363, five sheets, Summer 2001.

2001. National Capital Region Chief Historical Architect's Correspondence Files re: Impact of Proposed Treatment of the Henry House; Adverse Effect Implied.

2001. List of Classified Structures Single Entry Report, LCSID No. 10782. National Capital Region, Chief Historical Architect, National Park Service, Washington, D.C.

2001. Thomas A. Vitanza, AIA. *Henry House, Historic Structure Report, Manassas National Battlefield Park, National Capital Region, Manassas, Virginia, Final Review Draft.* Historic Preservation Training Center, NPS, Frederick, MD, October 31, 2001. (See also First Review Draft, 19 June 2001 and Second Review Draft, 31 August 2002.)

2001. *Value Analysis Study, Rehabilitate and Maintain Significant Historic Structures, Henry House, Part 2 of 3 of a Project for Manassas National Battlefield, Manassas, Virginia, MANA-155. Study Dates July 31 through August 2, 2001.* John Marsh, Historical Architect, DSC, Study Team Leader. Prepared by: Betty Janes, Value Analysis Facilitator, Denver Service Center, National Park Service, 09/04/01.

2001. *Project Review Report, Choosing By Advantages – Henry House.* Prepared by Ken Duce, Project Architect, Denver Service Center, National Park Service, 09/04/01.

2001. *Denver Service Center Class "B" Estimate, Henry House Rehabilitation, Manassas National Battlefield Park.* Estimate by Jack Hagen, 09/19/2001; Estimate Reviewed by R, Merrick, 10/09/2002, Denver Service Center, National Park Service.

2001. *Value Analysis Study for Henry House MANA-155 (DRAFT).* Denver Service Center, National Park Service, July 15, 2001.

2001. Index Record – Manassas National Battlefield Park (MANA). Technical Information Center, Denver Service Center, National Park Service.

1999. *Resource Management Plan, Draft,* April.

1998 – 2001. Project Management Information System (PMIS) Project Detail Sheets, PMIS Project No. 22762, Rehabilitate & Maintain Significant Historic Structures, Package No. MANA-155, submitted 07/02/1998.

1998. Reeves, Matthew B. *Views of a Changing Landscape: An Archeological and Historical Investigation of Sudley Post Office (44PW294), Manassas National Battlefield Park, Manassas, Virginia.* Occasional Report No. 14, Regional Archeology Program, National Capital Region, National Park Service, Washington, D.C.

1996. Joseph, Maureen DeLay. *Cultural Landscape Inventory, North East Quadrant, Manassas National Battlefield Park, Manassas, Virginia.* Denver Service Center, National Park Service, U.S. Department of the Interior.

1996. Joseph, Maureen DeLay. *Cultural Landscape Inventory, North West Quadrant, Manassas National Battlefield Park, Manassas, Virginia.* Denver Service Center, National Park Service, U.S. Department of the Interior.

1996. Parsons, Mia T. *Cultural Landscape Inventory, Southern Portion, Manassas National Battlefield Park, Manassas, Virginia.* Ferry National Historical Park, National Park Service, U.S. Department of the Interior, July 1996.

1995. Ziegenfuss, Stephen. *Henry House Preservation Maintenance Plan,* National Capital Region, National Park Service, July 1995, draft.

1994. "General Management Plan, Environmental Assessment for Power Line Relocation", Manassas National Battlefield Park, May 1994.

1992. Maestas, Richard K. *Henry House Work Report, Manassas National Battlefield Park,* September 1992.

1991. Hernigle, Jacqueline L. "Manassas National Battlefield Park Wayside Exhibit Installation, Archeological Investigation and Clearance", National Capital Region, National Park Service, March 1991, Washington, D.C.

1983. "General Management Plan, Manassas National Battlefield Park, Virginia." USDOI, NPS, DSC, September 1983. Malik, Marcus, P., et al., [MANA 379, D1808].

1982. McGarry, Thomas E. *Archeological Survey - Manassas Historic Sites Survey, Manassas National Battlefield Park, Virginia.* National Capital Team, Denver Service Center, Washington, D.C.: U.S. Department of the Interior, National Park Service (draft report 11/81 final report 12/ 82). [MANA 379, D2025]

1981. *Resource Management Plan, Manassas National Battlefield Park.* Recommended by Superintendent 11/15/1981, Concurred by Associate Regional Director, Professional Services, National Capital Region, 11/27/1981, Concurred by Associate Regional Director, National Capital Region, 11/30/1981, Approved by Regional Director, National Capital Region 11/30/1981. [MANA 379, D-28].

1981. *National Register Nomination*, Manassas National Battlefield Park, Barry Mackintosh. Submitted March 27, 1981.

1980. Virginia Historic Landmarks Commission Survey Form, File No. 76-208, Negative Nos. 4370, September 1980.

1979. *Environmental Assessment, Rehabilitation of the Henry Hill, Manassas National Battlefield Park, Virginia*. Prepared by Manassas National Battlefield Park.

Related Emergency Structural Stabilization Reports

All work prepared by Robert Silman Associates (RSA), PLLC, Structural Engineers, Washington, D.C. RSA was hired by HPTC through the regional office using regional funds not associated with the HSR project. All reports were transmitted to the park and region by official memorandum during the project. Copies of these reports will be found in the appendices.

- *Final Punch List Report & Associated Sketches*, 26 October 2001.
- *Punch List Report & Associated Sketches*, 14 August 2001.
- *Henry House - Condition Report & Temporary Stabilization*, 23 April 2001. Additional sketches were provided to clarify certain conditions and forwarded to the HPTC on 17, 24, and 30 May, 2001.
- *Henry House – Condition Report & Temporary Stabilization Recommendations (Preliminary)* 26 March 2001.

Cultural Resource Data

The following information has been collected from a variety of sources and is presented here in a collection. See also the *List of Classified Structures (LCS) Single Entry Report* and the National Register of Historic Places park file.

National Register of Historic Places	
Status	Entered – Documented
Date	10/15/1966
Significance	Contributing
NR Information System No.	66000039

The National Register Form is on file at the park and regional offices. The *Manassas Battlefield National Register Historic District Draft Report* proposal, prepared by Architectural Historian Laura Trieschmann of E.H.T. Traceries, Inc, Chevy Chase, Maryland was submitted to the NPS for review in December 1999. The most recent revision to the National Register nomination was submitted in September 2001 (Ray Brown, 07/21/03, note to author).

List of Classified Structures – Management Information (06/08/1998 Update)	
Legal Interest	Fee Simple
Management Category	Should be Preserved and Maintained
Management Category Date	05/15/1991
Ultimate Structure Treatment	Stabilization
Ultimate Treatment Document	Resource Management Plan
Ultimate Treat. Document Date	06/15/1991
Was Ultimate Treatment Approved?	No
Was Ultimate Treatment Completed?	No

NOTE: Since the last update of the LCS Report in 1998 the National Park Service Development Advisory Board has approved a treatment for the Henry House. As of the date of this HSR (07/2003) no work has been completed at the house although design documents are underway. This effort is headed up by the Denver Service Center Project Management Team, Bonita Mueller, Project Manager.

Cultural Resources Bibliography (CRBIB): The following reports are listed by the National Capital Region in the CRBIB data base as being associated with the Henry House. This list is current as of May 2003. There are many other NPS and non-NPS reports, etc. associated with the Henry House that are not on this list. Several of those are previously mentioned in this section as Related Studies.

NCRO CRBIB List re: Henry House and Other Related Structures

017835 Yocum, Barbara A., Northeast Cultural Resources Center, National Park Service. *Interior Finishes Analysis (Paint and Wallpaper): Henry House Manassas National Battlefield Park Manassas, Virginia.* 2002, NCRO, HPTC, MANA.

017861 Historic Preservation Training Center, NPS, Thomas A. Vitanza AIA, *Henry House Historic Structure Report Manassas Battlefield Park National Capital Region, Manassas, Virginia.* DRAFT 10/2001, NCRO, MANA, HPTC, DSC.

019139 Ziegenfuss, Stephen AIA
Henry House Preservation Maintenance Plan,Manassas National Battlefield. 1995, NCRO, MANA.

450632 Fairweather, Frederic H.
Architectural Investigation of 'The Fanny Lee Henry House': Manassas National Basttlefield Park, Manassas, Virginia [Text]
Published: 03/1941 Park code: MANA Location: MANA
Note: Complete report in park library: verticle file on Fanny Lee Henry House; report includes description of existing conditions (in 1941) and recommendations for rehabilitation or demolition; structure was razed in 1940's

001150 Carroll, Orville W.
Rehabilitation and Restoration of the Dogan House, Historic Structures Report, Architectural Data, Part II, Manassas National Battlefield Park. 1960, NCRO/ WASO

001151 Carroll, Orville W.
Historic Structures Report, Part III on Dogan House, Manassas Battlefield Park, Architectural Data Section. 1962, NCRO/WASO

001153 Staff
William Henry Dogan House Historic Structures Report, Part I, Administrative Data, Manassas National Battlefield Park.
1960, WASO/NCRO

001152 Crowson, Elmer T.
HSR Historical Data, William Henry Dogan House, Manassas National Battlefield Park. 8/1958. Location not known.

Periods of Significance

See Chronology of Development and Use. The selected period of significance includes first and second periods of construction (1870 – 1883) through the life dates of Hugh Fauntleroy Henry (son of Judith and Isaac Henry) died June 30, 1898. This focuses on the years when Hugh F. Henry was in residence at the house and there is photographic documentation of the exterior of the building in its current configuration. This selectively narrows the dates to 1882 – 1898.

There are other alternate periods of significance, depending on the focus of interest. These are presented in the Developmental History and the Part 2 section Treatment and Use.

Recommendations for Future Research:

Archeological

- Conduct additional excavations along the west elevation of the south block to determine the footprint size of the non-extant west porch entrance as seen in the 1896 photographs.

- Revisit archeological field notes from previous excavations and produce detailed "to-scale" drawings of the below grade features.

Historical

- Develop more detailed community context in order to conduct comparative analysis of other structures and to determine commercial availability of certain building materials in the vicinity of the battle areas known as Groveton and/or Manassas.

- Research other properties that are or were (if documentation available) in the area to compare construction techniques.

- Research available Civil War collections at United States Army Military Historical Institute at Carlisle, PA for any photos or description of the property.

- Reevaluate historic photographs in park library collection to determine if possible mis-identification has occurred and search for images of the Henry House from 1870 – 1882 time periods showing only south block in-situ.

Architectural

- Conduct dendrochronological tests (tree ring dating) of extant timber frame members of the south and north block and the sill plates of the south block to determine age of trees from which timbers were manufactured.

- Conduct detailed plaster and mortar analysis of the north block and the south block interiors; conduct comparative analysis. Prior to removal during proposed rehabilitation project.

- Conduct further architectural investigation during rehabilitation project to fully document the historic features of the structure before they are removed from the building. Prepare detailed measured architectural drawings to record the construction technique and methodology of the historic house structure.

Recommendations for Documentation, Cataloguing, and Storage of Materials Generated by the HSR Project

Documentary materials including the architectural measured drawings and field notes, the large format black and white photographs produced during the course of this project will be forwarded to the National Capital Regional Office and eventually turned over to the Historic American Building Survey for inclusion in the Library of Congress collection.

Field photographs, negatives, and samples of historic fabric removed for analysis shall be turned over to the park and accessioned into the park archives and/ or returned to the building.

All project materials will be distributed as per *National Park Service Guidelines for Cultural Resource Management (Directors Order No. 28)* and the *Approved Final Project Agreement* for this HSR project.

END of SECTION.

Part 1. Developmental History

A. Historical Background and Context

Overview & Timeline

A.1. Historical Background and Context

The following is an annotated chronological accounting of the events associated with the Henry House. This section briefly explains the people and events associated with the structure.

Overview

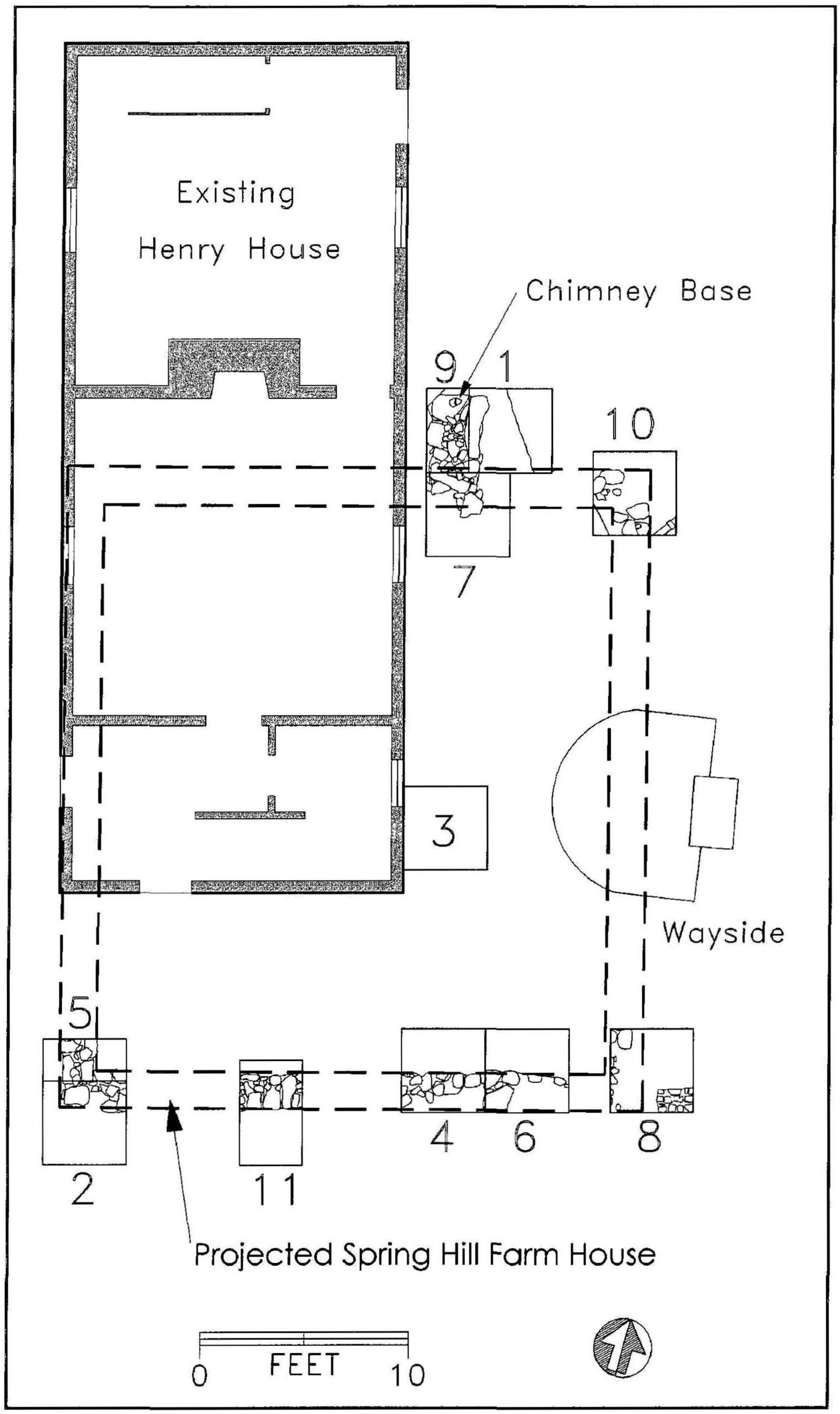
The most basic fact is the extant house is not the house where Judith Henry received her mortal wounds. That house, most commonly known as the "Spring Hill Farm" house, is widely discussed in other recent reports and detailed information about it will not be repeated here. The Spring Hill Farm house was significantly damaged as a result of the First Battle of Manassas in July 1861 and the effects of its aftermath. Ruins of the house may have stood through the winter of 1861-62 but little mention of the house is made after the winter of 1862. The ruins of the Spring Hill Farm house did not play a strategically important role in the Second Battle of Manassas in August 1862, and it is not featured in any documentation known to the author.

It is assumed the remains of the Spring Hill Farm house, as seen in photographs taken after the First Battle, during the winter months, were largely removed from the site within the year. Extensive documentation of the now archeologically important foundation is provided in the *Archeological Resource Study* (Parsons & Ravenhorst: 2003).

This report focuses on the post 1870 traditional Virginia vernacular house that has come to be known as the Henry House, sometimes "The New Henry House" to distinguish it from its predecessor. The previously mentioned recent archeological work has shown the new house was built to partially overlap the footprint of the old house. This work has revealed that contrary to one popular story about the houses, the chimney of the new house is not built on the foundation of the old chimney; they are offset by several feet.

The Henry House is situated on the crest of a gently sloping hill approximately 200 yards east of Sudley Road (VA Route 234) and approximately 1/3 mile south of the Warrenton Turnpike (US Route 29/211). The house is located within the southeast quadrant of the Manassas National Battlefield Park approximately 200 yards from the Henry Hill Visitor Center. It is located in northeastern Prince William County, Virginia, outside and northwest of the corporate limit of the City of Manassas.

The hill on which the house is sited is now commonly known as Henry Hill and was of great strategic importance during the First Battle of Manassas. It is also a significant historical cultural landscape as documented in the National Park Service report, *Cultural Landscape Inventory, Southern Portion, Manassas National Battlefield Park*, by Mia T. Parsons and Maureen DeLay Joseph, 1995.



Plan of the historic Spring Hill Farm House foundation in context with location of extant Henry House. (Parsons & Ravenhorst 2003: 51).

NPS Location Map of Battlefield in 1861 – 1862
(Henry House Site in Circle)

NPS Location Map of Battlefield Today (1995)
(Henry House Site in Circle)

Timeline

The following information was compiled by the HPTC research team in the Spring of 2001 from mostly secondary sources. Rather than repeat what is said in other NPS reports (Parsons & Ravenhorst: 2003) (Reeves: 1998) or delete it entirely from this *Final Revised Edition* of the HSR, it is presented in its simplified and unmodified outline form to give the basic timeline of events. The original report of March 2001 is included in its entirety as the *Resources Documentation Report.*

Every attempt has been made during this update of the text to coordinate the historical background information with that of the other research based reports. The information in *Spring Hill Farm/ Henry House Site History* by Andrew S. Lee, Chapter 1 of *The Archeological Resource Study... at the Henry House* (Parsons & Ravenhorst: 2003) will supercede the information in the following timeline.

Old Henry House – Spring Hill Farm House

1812
Thomas King builds "Spring Hill Farm", a one & a half story timber frame cottage structure with a stone fireplace.
Manuscript: Henry, Elenea H. (Widow of Arthur Lee Henry), "Some Events Connected with the Life of Judith Carter Henry and the Circumstances Surrounding Her Death in the 1st Battle of Bull Run, July 21, 1861", no date.
Thomas King does not appear in the 1799-1887 deed book.
LCS Data sheet; Parsons & Ravenhorst, Chapter 1, pg.5. Illustrations by Fremeaux and others (Figures 1 - 3), photographs c. 1862 (Figures 4 & 5).

1822
Elizabeth Carter dies in the summer. Judith Carter Henry (her sister) and her husband Dr. Isaac Henry obtain possession of "Spring Hill Farm" by paying $3,382 to the estate for the 330 acre property on October 14, 1822
Prince William Co. Land Records, liber 9 folio 118 [DB 9:118-120]; Parsons & Ravenhorst, Chapter 1 by Andrew Lee, pg 8.

1826-6
Henry family established at Spring Hill.
Letter: Isaac Henry to Robert Hamilton, October 25, 1826

1829
Isaac Henry dies of pneumonia at Spring Hill farm and was buried at the Carter family cemetery at Pittsylvania.
Manuscript: Henry, Elenea H. (Widow of Arthur Lee Henry), "Some Events Connected with the Life of Judith Carter Henry and the Circumstances Surrounding Her Death in the 1st Battle of Bull Run, July 21, 1861", no date.

1860
Following members of Henry Family residing at Spring Hill: Ellen (52), Judith (82), John (35) (listed profession – teacher), Mary E. (31), Ida L. (03), Arthur L (01). *1860 Census.*

1861
July 21; First Battle of Manassas, Judith Henry mortally wounded. Spring Hill Farm house is damaged by Union artillery. Following the battle the house is most likely dismantled for raw materials over the winter of 1861-62.
Various accounts, Illustration by Fremeaux and others (Figures 1 - 3), Photographs c. 1862 (Figures 4 & 5). Parsons & Ravenhorst 2003, Chapter 1, pgs 15 – 18).

1862
Photographs by David B. Woodbury and George N. Barnard show a stone hearth and a timber-framed corner still standing among rubble and debris. Patches of plaster are visible on the chimney remnants. Detailed architectural analysis of these photographs of Spring Hill farm House will also be found in *Parsons & Ravenhorst 2003, Chapter 1, pgs 16 – 19, Chapter 2, pgs. 56 - 59. Photographs c. 1862 (Figures 4 & 5).*

The Woodbury photograph (Fig. 4), also attributed to the Matthew Brady Studio in Washington, D.C. is used to illustrate many books; in *The First Battle of Manassas, National Park Civil War Series*, published by the Eastern National Parks Association, copyright 1995, it is used on page 39 with the following caption which offers another theory, "In the eight months that followed the battle, occupying Confederate Troops dismantled the Henry House as they searched for firewood, building material, and battlefield mementoes."

1865
Table of Tracts of Land for 1865 lists "$100 off Buildings Destroyed" for the tax on the Judith Henry property. No reassessment was made until 1870.

June 11, 1865 – The Henry Hill Monument dedication photographs illustrate that there is no structure visible where the Spring Hill Farm House would have stood. *Figures 6 -7.*

New Henry House – Extant Structure

1870
New house built at Henry Hill. Physical evidence indicates the portion of the house on the north side of the chimney (3/5 I-house plan) was added sometime after the southern portion was built. The southern portion, with a footprint which measures approximately 16' by 24' and is two stories in height, partially aligns with the foundations of the old house. This is more than likely the house the 1920's visitor is referring to in the following statement.

Virginia Historic Landmarks Commission Survey

From: Notation in visitor's guest book at the Henry House when it served as the visitor center for the Manassas Battlefield Park operated by the Sons of Confederate Veterans, on site observations. Citation from field notes: "Built in 1870 by Confederate Veteran Norman Andrew, 4th Virginia Cavalry, Prince William Cavalry, book signed in 1920's "I built this home in 1870"". This statement is corroborated by the land assessment tax records for 1871.

Two property tax assessments exist for this year one is recorded in the 1865-1870 book, the other is recorded in the 1870-1875 book. During this time it appears that assessment were made every five years. The first 1870 assessment indicates no value based "on account of buildings on the property". The second 1870 assessment shows a value of $800 "on account of buildings on the property."

1875
The assessed value of the buildings on the Judith Henry Estate as being worth $500, a decrease in value from 1870. This may be a shift in the economy or standard depreciation of buildings for the region.

1880-1882
The assessed value of the buildings on the Judith Henry Estate remains constant a value of $500, no change from 1875.

1883
H.F. Henry Sr. living at new house at Spring Hill (the Henry House). Size of house indicated to be 16' x 40' (its present size). This means that the second campaign of two-part construction described above took place sometime before 1883 but after 1875.
Letter: H.F. Henry to Cousin Mary Carter, May 8, 1883. Figures 14 – 16.

1883 - 1897
H.F. Henry Sr. collecting fees from battlefield visitors
Letter: Edwin Carter to ??, April 15, 1894. Figure 15.

1896
Amateur photographer Albert Kern, an attorney from Dayton, Ohio, visits the Henry Farm and makes multiple photographs of the west elevation of the house with Hugh F. Henry Sr. sitting on the porch. Other photographs were taken of the grounds and the landscape immediately surrounding the house. Photographs now in the care of the Montgomery County Historical Society in Dayton. See Figures 12 – 15.

1898
Hugh Fauntleroy Henry Sr. dies June 30, 1898. Legal title to house and farm passed to his nephew Arthur Lee Henry. In October 1898 Arthur Lee Henry deeded equal shares of the property to his brother (Hugh Fauntleroy, Jr.) and sister (Ida Landon Henry) for an equal sum of one dollar ($1). *(PWC DB 47:37) (Parsons & Ravenhorst, Chapter 1, pg. 26).*

1908
Ida Landon Henry dies, property passes to her two brothers, Hugh F. Jr. and Arthur Lee Henry. *(Parsons & Ravenhorst, Chapter 1, pg. 26).*

1911
Fiftieth anniversary of the Battle of First Manassas, 16 July 1911; the Manassas National Jubilee of Peace.

1914
Henry family no longer lives at the Henry House. An article in the July 26, 1914 Washington, D.C. *Sunday Star* by J. Harry Shannon (The Rambler) *The Rambler Visits Battlefield Monuments, Part 4*, indicates, "the property being in temporary possession of Henry Steen, veteran of the 12th Iowa Volunteers".

1920
United Daughters of the Confederacy, Manassas Chapter, obtain an option to purchase the Henry Farm for $25,000. (PWC DB 75:459).

1921
Manassas National Battlefield Corporation (MNBC) formed by the Sons of Confederate Veterans and the United Daughters of the Confederacy, establishment of the Manassas Battlefield Confederate Park.

1923
Henry's deed the property to the MBCP.
(Zenzen 1998: 15) (Parsons & Ravenhorst 2003: 29)

1934
Property referred to as Henry House for the first time in family correspondence, property described as "in decline".
Letter: Arthur L. Henry to Edward, June 15, 1934

1936
The Sons of Confederate Veterans votes to donate the Henry Hill tract to the Bull Run Recreational Demonstration Area in June. (Zenzen 1998: 24).

July 21, 1936 is the seventy-fifth (75) anniversary of the First Battle of Manassas.

1940
The final transfer of the Henry Farm and the Confederate Park land occurred on February 12, 1940. In May, the former Confederate Park and more than 1,600 acres of the Demonstration Area were designated as Manassas National Battlefield Park. (Zenzen 1998:24).

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End of Section.

Summary of Research re: Sons of Confederate Veterans

Provided by Tim Van Cleave, Cultural Resources Intern, Manassas National Battlefield Park, September 2001.

Because of interest surrounding the Henry Hill House, further research for photographs were needed. The era that was the focus for the research was the pre-park era, specifically when it was used a museum by the Sons of Confederate Veterans.

Research began with the SCV. Their headquarters were contacted and I was directed to a Mr. John Lumsden of Alexandria, VA. Mr. Lumsden informed me that the archives for the SCV for Northern Virginia were at the state library. He also suggested that I contact the Arlington Public Library. Both institutions did not have the photographs I was looking for.

The following people and institutions were contacted, but unfortunately were unable to locate photographs that fit the description. Gary Scott, National Capitol Historian, Bryan Green of the Virginia Historical Society, The United Daughters of the Confederacy, Donna Twersky of the National Building Museum, Francis Moore, Sudley Church Historian and John Alahdas from the Museum of the Confederacy. Also research was conducted at Bull Run Regional Library, where a picture was located of the "bullet ridden" tree beside the house.

The only successful research for a picture came from Manassas Museum. After making contact with Dave Purchwitz, who assured me that, they did indeed have the photographs I was looking for, Jim Burgess and myself made a visit to the museum. The picture was actually from a post card collection. The park already had several of these pictures; this was the only one the park did not have. Dave made a print for the park, which is now in the possession of the Cultural Resources Department.

END of SECTION.

Part 1. Developmental History

B. Chronology of Development and Use

1. Chronology of Development & Use

B.1. Chronology of Development and Use

Introduction

This purpose of this section is to lay out the evolution of the extant (2001) Henry House. It is based primarily on various historical documents, many of which are in NPS collections. Much of this text was developed based on specific historical references to the house found in those documents. This work is divided into two major periods in the history of the extant house, 1870 – 1940, and 1940 – present. These are sub-divided into smaller periods by the major headings found within this section. The descriptions that make up the first period, 1870 – 1940, were collected from many sources that pre-date the involvement of the National Park Service in the management of the Henry House. The second period, 1940 – 2002, is the era of NPS management so many of the records used to construct the chronology for this era are from NPS records.

Two sets of authors have put this section together. The first period was researched by HPTC staff members Michael J. Seibert and Sara Polzin; both were Exhibit Specialists at the time of their research. The second period was researched by Thomas A. Vitanza, Senior Historical Architect at HPTC. Both sections have been edited and annotated by Mr. Vitanza based on comments received from reviewers.

The section is structured in the following manner; content notes concerning the Henry House are followed by their source. These notations are written in the various verb tenses, reflecting their source of origin or the period of construction. The source of origin of the content note should be clear by the *italicized reference* that will follow each specific notation. Many notations refer to specific images, many with reference to historic photographs called out by figure number. Specific elevations, rooms, porches, windows and doors are referred to by number, which can be found on the annotated floor plans, which follow later in this report. Other textual statements do not have references as they are made based on physical evidence or are first party interpretation of the referenced material. Guidance for the structure of this section is taken from Kate L. Turabian, *A Manual for Writers, Sixth Edition* (Chicago: The University of Chicago Press, 1996).

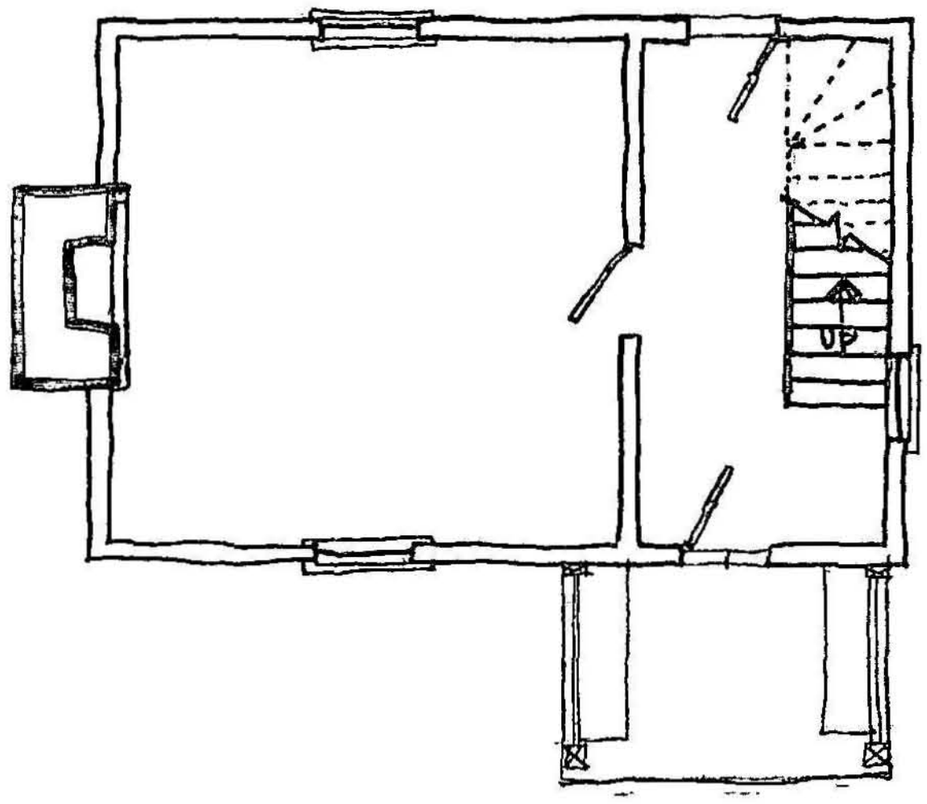
The text is arranged chronologically, in periods of significance, as established by either direct events effecting changes to the built structure or associative events which occurred to the occupants. The annotated chronology documents the physical changes to the Henry House structure.

The Spring Hill Farm house, which preceded the Henry House on the site from approximately 1812 – 1861, is briefly discussed and illustrated in various sections of this report (HSR Figures 1 – 7). It is examined in detailed analysis in various other NPS cultural landscape and archeology reports found listed in the Bibliography but does not figure prominently in this report.

Early Henry Family Occupancy, 1870 – 1883

The South Block of the extant two-thirds (2/3) I-house plan is constructed post 1870 (first period of construction) at Henry Hill, also known as the Spring Hill property. When built, the structure is approximately 24' x 16' and aligned along a north/ south axis. It is two bays wide on the east and west elevations and one bay, or pile, deep. The new structure partially aligns with the foundations of the old house but is not exactly over the old footprint.

The new Henry House is two full stories with a side-gabled wood shingled roof and an external stone chimney centered on the north elevation. The structure is transitional balloon frame, composed of circular-sawn dimensional lumber with hewn corner posts, sill plates and braces. The exterior is clad in 6" wide plain-sawn siding boards that are not painted or whitewashed. The windows are outfitted with slatted shutters.



First Period of Construction First Floor Plan of Henry House

The interior plan consists of one large room with fireplace and a hall with the staircase. It has plain and unfinished surfaces. This is more than likely the house the 1920's visitor is referring to in the following statement.

The notation was found in the visitor's guest book which was at the Henry House when it served as the visitor center for the Manassas Battlefield Confederate Park operated by the Sons of Confederate Veterans. The citation from the field notes states, "Built in 1870 by Confederate Veteran Norman Andrew, 4th Virginia Cavalry, Prince William County, book signed in 1920's "I built this home in 1870"". This statement is corroborated by the land assessment tax records for 1865 - 1870.

Two property tax assessments exist for this year; one is recorded in the 1865-1870 book, the other is recorded in the 1870-1875 book. During this time it appears that assessments were made every five years. The first 1870 assessment indicates no value based "on account of no buildings on the property". The second 1870 assessment shows a value of $800 "on account of buildings on the property."

- Prince William County, Virginia Land Tax Records: 1865 – 1870. Prince William County Courthouse, Manassas, Virginia.

1883

- The North Addition was constructed post 1875 – pre 1883 and represents the second period of construction. As of this date, the size of the structure has increased to approximately 40' x 16'. Physical evidence indicates that the portion of the house built north of the chimney structure (saddlebag addition) was constructed sometime between 1875 and 1883, after the southern portion (3/5 I-house plan) was built. *(Physical evidence).*
- By this date, Mr. Hugh F. Henry Sr. is now living at the new house at Spring Hill (Henry House). *(Letter: H.F Henry Sr. to Cousin Mary Carter, May 8, 1883).*

Late Henry Family Occupancy, 1884 – 1898

A few photographs are attributed to this time period. Most are not specifically dated. One method of organizing undated photographs in chronological order is by analyzing the condition of the building and to note the changes between the photographs. The Henry House looks remarkably similar during this time period with the exception of the exterior window shutters. They begin to deteriorate and are missing from the photographs in/ at various window locations. Given no other method of dating these few images, the lack of shutters may be a way to track the age of the building.

HSR Figures 8 and 9 are illustrations used in Civil War histories.

- Figure 9 is historically captioned in 1884 as, "... from a Photograph taken in 1884".

1884

Figure 10. This is the earliest photograph in the sequence of Henry House photographs; most of the window shutters are in-situ. It illustrates the structure as a three (3) bay[1] wide by one (1) bay deep structure with 6/6 shuttered windows on the west and south elevations. The eastern side of the south gable elevation features a 6/6 shuttered window on both the first and second levels. A small 4/4 window is evident in the gable. All shutters are accounted for except for the south shutter on the central second floor window of the west elevation (W206). It cannot be determined if the east elevation was similarly shuttered, many times it was not for environmental reasons. Eastern light was desired to penetrate the interiors of buildings, whereas shutters would be necessary to block out southern, western and northern light. It would be somewhat unusual to have windows in the north wall.

The entrance door on the south end of the west elevation features a prominent gabled porch elevated slightly above the ground. It is supported by square wood

[1] The term "bay" is used to describe a regularly repeated subdivision in a façade, a window or door unit area.

columns with an engaged spindle rail and a pair of built-in wooden benches flanking the door. The siding appears to be unpainted, as nailing patterns are evident. The joint between the south block and the north saddlebag addition is evident and depicted by the corner board left in place between the old section and the new; it forms a striking vertical line amidst a sea of horizontal siding boards. Plain wide frieze boards are located along the rooflines of both sections. The roof is wood shingles; no seam is evident between the two sections. The chimney is a solid mass and appears to be in good condition, the mortar joints are crisply articulated by the natural light captured in this photograph.

A gutter runs along the west elevation cornice and a downspout is located at the NW corner. Close observation of the southeast corner of the roof will show what appears to be a roof mounted board gutter as a perpendicular projection at the edge of the roof plain above the cornice line. This may also be a hung pre-formed metal gutter, but the fact it is mounted on the roof plain rather than on the plane of the fascia board would seem to indicate a board rather then round metal gutter.

1896

Albert Kern Photographs. In July 1896, prominent Dayton, OH attorney Albert Kern visited Manassas, Va. He brought his large format camera to make these glass plate photographs of the sites where the Ohio troops had fought some 35 years earlier during the war. No. 04 from the Kern Collection of the Montgomery County Historical Society, Dayton, OH (HSR Figure 11) is a remarkably crisp image of the west elevation of the house with Mr. Hugh Fauntleroy (F.) Henry, Sr. sitting in a chair on the porch. These photographs are so clear it is possible to count the number of courses of horizontal siding and the number of courses of shingles on the roof and identify precisely where the siding boards are nailed onto the house frame.

Figure 11, 11a. Three windows on the west elevation have each lost one shutter (W104, 206 and 207). There are no other visible changes to the west elevation of the Henry House in the previous 12 years. A photographic enlargement of this photo shows the door is a 4-paneled type.

Gutter brackets are visible as perpendicular objects above and below the cornice line. Those above the cornice are attached to the roof, those falling below the cornice have broken loose from the gutter and are suspended in mid-air.

Figure 12. This electronic enlargement of the porch area enables a complete and accurate reconstruction of this missing feature. The width of the floor board can be determined from this image as well as the method they were repaired along the front edge. Also seen are the built in benches that flank the front door.

Figure 13. A view of the Henry garden with the Bull Run Monument and the yard shed visible in the distance.

Figure 14. Notice!! By H.F. Henry , Sr. to visitors of the Bull Run Battlefield.

(HSR Figures 11, 11a, 12, 13, and 14. Albert Kern collection, Montgomery County Historical Society, Dayton ,OH).

Post-1896

HSR Figure 15, 15a. *Bull Run, Henry House, 1902(*?). By J. Harry Shannon, a.k.a. "The Rambler" (1869-1928) photographer. Photos of the west and south elevations of house are similar to the Kern photos from 1896. The shutters are missing from the windows on the south elevation of the building. Also, it appears that the gutter and downspout at the NW corner are missing.

Photo No. VIII-63, This Was Virginia, 1900-1927: As Shown by the Glass Plate Negatives of J. Harry Shannon, the Rambler by Connie Pendleton Stuntz & Mayo Sturdevant Stuntz, Hallmark Publishing Company, Inc., Glouchester Point, VA, 1998. Print made from negative loaned by Fairfax City Regional Library, Curator Brien Connelly, Virginia Room.

NOTE: Shannon's date of 1902 is in question as Mr. Hugh F. Henry, Sr. (d. 1898) is seen in the right foreground of the image. Mr. Henry died 30 June 1898.

HSR Figure 16. This colorized postcard view of the house may give some hints as to the early colors used to whitewash the siding, trim and possibly the roof shingles of the Henry House. Evidence of whitewash on the house is also seen in later photos from the 1930's and on the historic fabric within the house walls. The historic shingles have not been examined for red pigments within the grain structure, as seen in this image, although there is no visible trace of color on their surfaces. Windows on the south elevation are now shown without shutters in this image.

Henry Descendents Occupancy, 1898 – 1923

HSR Figure 17. There are several noticeable changes in this black & white photograph from previous images. The house appears generally more weathered. There is more patination on the horizontal siding planes, more visible rusting of the nail heads and streaking of rust along those nailing lines. Also the shutter at the window on the north side of the east elevation (W105) has been removed and the north shutter appears to have several broken or dislodged slats.

A backlit figure in the east doorway (D101) makes it evident that there is another door located due east of the main door. This would provide dramatic natural cross ventilation in the house.

Other changes include the loss of the roof gutter and the downspout and the removal of the porch benches. Due to shadows it is difficult to determine if the south bench is in-situ, it may be obscured. The north bench appears to be gone.

The gabled porch has been removed (though the ghost lines are evident in this photo). The window on the south elevation has been turned into a door and a porch has been added as well. The porch features a simple handrail and balusters and does not have a roof. The space between the ground and the porch floor is open. The building still appears to be unpainted, though trim and shutters now appear to be painted. Visible windows are all still 6/6. The two windows on the north end of the west elevation now appear to be without shutters. There is a 2-story barn/shed in approximately the same location as the current shed. The roof is not visible.

HSR Figure 18. This image is very similar to Figure 17. The shutter pattern is the same between both images. Also damage to the shutter at W105, the first floor window on the north end of the west elevation, seems to be in worse condition. The vegetation appears almost identical between the two images.

1898

- Hugh Fauntleroy Henry Sr. dies June 30, 1898. Legal title to the house and farm passed to his nephew Arthur Lee Henry. In October 1898 Arthur Lee Henry deeded equal shares of the property to his brother (Hugh Fauntleroy, Jr.) and sister (Ida Landon Henry) for an equal sum of one dollar ($1). *(PWC DB 47:37) (Parsons & Ravenhorst, Chapter 1, pg. 26).*

1908

- Ida Landon Henry dies, the property passes to her two brothers, Hugh F. Jr. and Arthur Lee Henry. *(Parsons & Ravenhorst, Chapter 1, pg. 26).*

1911

The Manassas National Jubilee of Peace is held on July 21, 1911 in observance of the 50th anniversary of the first battle.

HSR Figure 18a. This photo became known to the writers in August 2002. It is unique because it has been taken from a point to the far southeast of the house. The east and south elevations are captured along with the Bull Run Monument, the yard shed, and several installations of fence, both vertical picket (defining the Henry Garden – see Figure 13) and the more typical horizontal split rail along the lane south of the house. It is noted that the west gable porch is visible in this later photo at the SW corner and that exterior shutters appear across the second floor windows.

The historic caption of this photo indicates it may have been taken to commemorate the 50th anniversary of the First Battle of Manassas.

1914

- "Hugh (F. Henry) lived for a long time in the Henry House, which was destroyed during the battle and after the war rebuilt on a smaller scale, Mr. Henry dead about 15 years ago. The place is now owned by the grandchildren of the war-time owners, but they do not live there, the property being in temporary possession of Henry Steen, a veteran of the 12th Iowa Volunteers".

The Sunday Star, Washington, D.C., July 26, 1914 – Part 4, The Rambler Visits Battlefield Monuments by J. Harry Shannon (The Rambler). Shannon says that the facts for the article were provided by Lt. (Col.) Geo. C. Round, U.S. Army (Signal Corps) in a Washington Star article, n.d.

Manassas National Battlefield Corporation Ownership, 1920 – 1940 "Museum of the Henry House"

Although not celebrated in 1920, the Henry House is now fifty (50) years old.

- Sometime in 1920, the United Daughters of the Confederacy (UDC), under the direction of Mrs. Westwood Hutchinson, president of the Manassas chapter, obtained an option for the purchase of the Henry Farm, totaling 130 acres, for $25,000. *(Zenzen, 1998:14)*

- The Manassas National Battlefield Corporation was formed sometime after May 1921 by the Sons of Confederate Veterans and the United Daughters of the Confederacy, Manassas (VA) Chapter. It established the Manassas Battlefield Confederate Park and The Museum of the Henry House. *(Zenzen, 1998)*

- The Henry family heirs deed the property to the Manassas National Battlefield Corporation (MNBC) to become a part of the Manassas Battlefield Confederate Park (MBCP) in 1923. *(Zenzen 1998: 15) (Parsons & Ravenhorst 2003: 29)*

- The Manassas National Battlefield Corporation votes to donate the Henry Hill Farm tract of the Manassas Battlefield Confederate Park to the Bull Run Recreational Demonstration Area in June, 1936. *(Zenzen 1998: 24)*

Mr. Adoniram J. Powell and Mrs. Katherine Reeves Powell are caretakers at the "Museum of the Henry House" for the MNBC/ MBCP, after 1920.

HSR Figure 19. This is the first image that depicts some of the architectural changes made to convert the house from the residence to the museum. It is a postcard image probably taken from a photograph. It illustrates several items of interest including: the west gable porch removed from the building – but a ghost outline can be seen on the siding around the door, new entry platform constructed at south elevation with picket railing along the edge, door cut into south elevation at former location of window,

bullet-ridden tree still vertical and unsupported, other vegetation at west elevation removed, old shed is seen in background, to the north of the house.

Post-1923

HSR Figure 20. *"Bullet Riddled Tree on the Bull Run Battlefield" postcard.*

The south elevation now bears a sign reading "Museum of the Henry House". Wooden slats now cover the opening between the ground and the porch floor. The original horizontal siding is still on the building and the building is still unpainted. All shutters have now been removed from the west elevation although ghost lines are evident. Wood screen doors now appear on both the south and west door.

Several changes have been made to the windows, most likely in an attempt to modernize the interiors of the important museum room and offices of the caretaker. The middle window on the west elevation (W104) and the window on the south elevation (W204) now appear to be 2/2. W105 now also appears to be 2/2, though not clearly.

The famous bullet riddles tree is featured in the foreground of the photograph. It is now supported by a diagonal brace. At least two structures are seen in the background to the east of the house, over the hill from the Bull Run Monument.

HSR Figure 20 Rear. View of east elevation of Henry House with the Bull Run Monument in foreground. This image is from the *Manassas Museum, Historic Photograph Collection.*

The view is an unusual photographic perspective. Of primary architectural interest is the view of the door at the lower left corner of the house. This original opening was later changed to a window to accommodate the new interior bathroom that was installed. These changes were probably made by the NPS to accommodate the occupancy of a caretaker family, as early as 1942 or as late as 1949. The white edge of a sign is visible along the left edge of the building at the SE corner. It may be the edge of the Museum of the Henry House sign which was directly associated with the Sons of Confederate Veterans ownership and their use of the building between 1922 and 1940.

Slatted shutters are clearly visible on all of the second floor windows of the east elevation. A wood shingle roof is also visible through the trees. Assuming this is the original roof, it is now about 50 to 60 years old. That is well within the service life of this type of roof material.

HSR Figure 21. "Group of Men on Veranda of Henry House" This photograph, dated to approximately the mid 1930's, shows a close-up view of the south elevation. The door frame of the new south gable door is clearly visible as is the railing and corner post of the veranda. Also clearly seen is the original unpainted exterior siding and the

SW corner board which is still attached to the house. Both appear to be in fair to good condition, although they do look to be heavily patinated.

Also prominent in the photograph is a portion of the Museum of the Henry House sign. Above the block style painted lettering is another banner that has been attached to the sign. The lettering on it is indiscernible, but it may be there to indicate the operators of the Museum.

HSR Figure 22. This off season photograph of the Museum of the Henry House shows the house looking abandoned. The screen door to the south veranda entrance stands wide open, the lower sash of window W104 is either open or missing. The house still sports the original siding, placing it chronologically before the mid to late 1930's replacement of the siding according to Mr. Fred Ebhardt, former occupant during that time period. The wood single roof is in-situ. The photo is captioned, *"The present house, shown herewith from a photograph made in 1931… The picture of the old house was loaned by Mr. and Mrs. Arthur Lee Henry, who lived here for many years"*.

The old shed is just visible to the northwest of the house. The bullet riddled tree is standing; but now supported by a concrete box foundation encasing the tree's lower extremities about 3 feet vertically.

1930's

HSR Figure 23a. Mr Adoniram J. Powell, Caretaker of the Museum of the Henry House, posed in front of the south west corner of the house, c. 1935 - 1942. The original siding has been removed from the house and replaced with the (currently extant) german coved horizontal siding. It has also been whitewashed.
The vertical railing that outlined the edges of the south verandah has been removed and the "Museum of the Henry House" sign is no longer hanging on the south elevation. Powell dies in September 1942 according to Ebhardt family notes[2].

HSR Figure 23b. Mrs. Kathleen Reeves Powell is posed in front of the west elevation of the Henry House, c. 1935 – 1942. This image is similar to the photograph of her husband, as the house is seen with the new exterior siding. The 4-panel door (the old main door – D106) is still in place. New foundation plants are arranged along the west elevation. Shadows are long, it is likely late afternoon.

- Various Ebhardt family members move in to look after Mr. Powell once his wife, Kathleen Reeves Powell, dies leaving him a widower. They remain in residency until 1942 when Mr. Powell dies and the life tenancy clause is terminated by the National Park Service.

[2] Notes received by the author from Valendia Ebhardt Bohon, July 2003.

- Interviews and site visits by various members of the Ebhardt Family in August 2001 reveal additional information about the house. Mr. Fred Ebhardt, who lived in the house with Mr. Powell, remembers the exterior siding being replaced, "sometime in the 1930's", and that the carpenter was a Mr. Hamilton "Ham" Swartz (sp?), a local man. He remembered that an orange paper was installed first and then the weather-boards. The orange paper is still intact under the 1930's siding boards. *(See Ebhardt Family Photograph section of the report).*

NPS Period of Acquisition with Powell/ Ebhardt Caretaker Tenancy, 1940 - 1942

NPS ownership begins with continuation of the Powell/ Ebhardt tenancy. Mr. A.J. Powell dies in 1942 ending the right to life tenancy that he was granted. The Ebhardt family also moves out of the house at this time and relocate to a nearby family residence.

- The Henry Farm tract is donated by Manassas Battlefield Confederate Park, Inc. to the National Park Service on February 8, 1940. The tract consisted of 0.80 acres with the Henry House and two outbuildings. *(Zenzen 1998: Appendix 6, Land Additions to MNBP, see Henry Farm tract).*

It appears the house tract was acquired separately from the farm tract.

- On 10 May 1940, Interior Secretary Ickes, using the authority conferred by the 1935 Historic Sites Act, designated more than 1,600 acres of the Bull Run Recreational Demonstration Area and the former Manassas Battlefield Confederate Park as Manassas National Battlefield Park. *(Zenzen 1998: 24)*

HSR Figure 24. *Mr. Fred Ebhardt Holding His Daughter Valendia, c. 1941/42* (Valendia Ebhardt born in 1941). Detail at the NW corner board indicate that coved boards (german style siding) are used to clad the exterior of the building. There is a very thin application of whitewash possibly indicating it had been 2-3 years since it had been applied, that would indicate a late 1930's date (1938?) of installation since whitewash has a short service life of 2 – 3 years.

HSR Figure 25. *Overview of SW corner of Henry House*. Photo made by Ebhardt family at end of Henry House occupancy, c. 1942.

HSR Figure 26. The building has been painted white, though the paint is fading. The Museum sign is no longer there. The roof now appears to be metal, painted a light color. The south porch railings have been removed. It is unclear if the building has been resided. Windows that now appear to be 2/2: 104, 105, 204, 205, and 206. W207 is unclear.

1941

- The Henry House is described as,"... *a simple frame residence weathered gray..."*

Prince William, The Story of Its People and Its Places, Originally Complied in 1941 by Workers of the Writers Program of the Work Projects Administration in the State of Virginia, Sponsored by The Bethlehem Club, Manassas, Virginia, 1988, Page 130.

NPS Ownership, Undetermined Occupancy, 1942 – 1949 +/-

Henry House is possibly used as Quarters, although no documents were discovered to confirm this statement.

HSR Figure 27. The east elevation is now partially in view. W102 is 2/2, though W203 is still 6/6. W103 is 6-paned with a partial door filling in the space below the window. Some of the slats are missing from the porch apron. The shed now appears to be in its current configuration. Manassas National Battlefield Park interpretive signs are in place. *Photo dated April 25, 1942, by NPS Chief Photographer George Alexander Grant.*

HSR Figure 28. *"Monument in the Henry House Yard", NPS* Photo. The highlight of this photo is the view of the original kitchen door (D101) in situ. It is clearly visible at the NE corner of the east elevation and is a typical 4 panel door used elsewhere at the Henry House; it appears very similar to the original west elevation door, D106. This door is no longer extant. A gutter and a downspout elbow are also visible at the roofline along the east elevation. Windows W101 and W210 are also clearly visible. *Photo dated April 25, 1942 by NPS Chief Photographer George Alexander Grant.*

NPS Ownership, Caretaker Occupancy, 1949 – 1964 +/-

Quarters, Building No. 2, 1949

- The first caretaker family begins residency c.1949; tenants are not identified in NPS reports. They could be the Leonard family, as the Leonard's are the first officially recognized NPS caretakers. This information is taken from the earliest dated quarters report located in the park administrative records.

- The second caretaker family, Elisha Leonard and Wife (and daughter), are in residency at least until 1964, based on subsequent Quarters Reports. They are officially named as caretakers in this report.

NPS Employees Quarters Building File Folder (Standard Form 10-768), Manassas NBP, Henry House, Building No. 2; September 12, 1949. Item (84) File No. D3415, NCR Box 12; Washington National Records Center, Subject Files 1952 -1965, Accession #68-3048; located at the NCR Museum Resource Center, Landover, MD

HSR Figure 29. This is a good overview of the east and south elevations; the house appears in very good condition and is freshly painted white. The south gable screen door is repaired and in place. W202 and W203 on the east elevation still remain as 6/6 type sash. W102 and W204 still remain as 2/2 type sash. W 201 is unclear. The roof is painted a dark color.

A white wood rail fence lines the north side of the unpaved road to the south of the house. A row of low fence pole bollards lines the south side of the road. Two wooden interpretive signs are seen, one along the roadside south of the fence and the other in the background beyond the fence line. *Photo taken by NPS National Capital Region Chief Photographer Mr. Abbie Rowe and dated February 1949.*

HSR Figure 30. Very clear view on east elevation of east cross hallway 4 panel wood door with large 6 light transom (103). It is not clear if the transom is part of the door (which is normal height) or fixed as part of the wall. If the transom is fixed the door would be a ¾ scale door as the door opening matches other full height doors. The door appears to have been a 6-paneled door with the top panels cut off.

Also clearly seen in this view is the old kitchen door still in situ. Door 101 is a 4-paneled door and screen/ storm windows are in place. The house appears in very good condition with exterior storm windows on the second floor windows at both visible elevations. The south porch is still in place although the porch apron appears to have been completely removed.

This view taken more from the southeast includes the Bull Run Monument that is observed in disrepair. *Photo taken by NPS National Capital Region Chief Photographer Mr. Abbie Rowe and dated February 1949.*

HSR Figure 30a. The east cross hallway door with a large 6 light transom window (possibly actually a window sash given its proportion) is seen in this rare rear view of the house. This door was later removed and converted to a window (W103) as labeled on the architectural field drawings associated with the HSR.

This alteration of the building may be directly related to the installation of the bathroom (R104) precisely at this location on the interior. The bathroom was most likely installed by the NPS during the habitation of the NPS Caretaker Mr. Leonard and his wife. The same door is seen in Figure 27, which is dated 1942. *Electronic (non-photographic) enlargement of HFC HPC MANA 430 (Figure 30) by HPTC.*

- The *NPS Employees Quarters Building File Folder* describes the Henry House as being used employee quarters. The Construction Type is described as weatherboard on frame with plaster on wood lath interior walls, pine floors and a tin roof. The interior is described as Walls and Ceilings - Paint on plaster, Floors - Unfinished pine.

- Utilities are described as Water - Well, Sewer – None, Electric – None and Phone – Yes. The Mechanical Equipment is described as Sanitary – Wood Outhouse, Heating – Room heaters, Fuel – Wood, Electric – None, and Hot Water – None. The Existing Condition of the structural and mechanical systems was rated as "Fair".

- A remark indicates the house was "Donated to the United States on March 19, 1938".

- Floor plans of the building (first and second floors) produced using a typewriter are included with the report. The plan shows no indication of an interior bathroom at the location of the current bathroom during the 2001 field work. Also, interior floor to ceiling heights are given as 7 ft. – 6 inches for both floors.

NPS Employees Quarters Building File Folder (Standard Form 10-768), Manassas NBP, Henry House, Building No. 2; September 12, 1949. Item (84) File No. D3415, NCR Box 12; Washington National Records Center, Subject Files 1952 -1965, Accession #68-3048; located at the NCR Museum Resource Center, Landover, MD

HSR Figure 31. Overview of the Henry House and Yard, photo dated January 1956, photographer unknown. Appearance of house is very similar to its look today (2003).

1962

Henry House Water System – Problems with the supply and safety of the water supply at the Henry House was a point of several memorandums in 1962. It is suggested in a Memo dated March 30, 1962 from the Acting Regional Chief of Operations, Region One to the Superintendent that in order, "To correct the depleting potable water supply at the Henry House it is proposed to incorporate the supply for this residence with the Visitor Center water supply".

Superintendent Wilshin responds in a Memorandum dated May 3, 1962 that the contract for the installation of an underground water line has been awarded to a local contractor. The scope of the project is described as,"...the complete job of running the water line 30" (inches) underground for an approximate distance of 690 feet from the Henry House to the Visitor Center and connect with the existing supply at the latter".

He goes on to explain, "The situation has worsened to where it is essential that the transition of the supply of water for the Henry House be completed without further delay and ... that the work is now in progress...The supply from the well at the Henry House is entirely inadequate at times and repeated water samples have proven the water is not potable. Recently Caretaker Leonard and his family, who occupy the building for quarters, have complained of upset stomachs and it is possible that using the water from the present well is the contributing factor".

Based on handwritten notations on the face of the memo the project seems to have been approved by the Regional Office.

Item (117) File No. D5039, NCR Box 12, MANA, 1962-63; Washington National Records Center, Subject Files 1952 - 1965, Accession #68-3048; located at the NCR Museum Resource Center, Landover, MD

- *The Summary of Evaluation Schedules of Quarters (Form 10-372 (Q-1) Schedule No. 11, Date prepared September 29, 1962*, indicates the Henry House being used as Quarters No. 1. It is described as, "Frame, 2 story, with an appraised bi-weekly value of $12.50 NC." (NC may mean "No Charge".)

Item (37) File No. W22, NCR Box 13, MANA, March 1963 – Dec. 1965; Washington National Records Center, Subject Files 1952 - 1965, Accession #68-3048; located at the NCR Museum Resource Center, Landover, MD

1963

- *The Evaluation Schedule for Quarters (Form 10-373 (Q-2) for Quarters No. 1, The Henry House*, provides more information about the condition of the building at this point in time. This form was completed on June 4, 1963 and approved by Superintendent Wilshin on July 7, 1963. It indicates that electrical power is now metered to the tenant and that water was now provided from the main well at the Utility Area. By this time, the house had a few modern amenities including an electric range and refrigerator. An indoor bathroom with toilet, sink and tub had also been installed (date of manufacture stamped on the inside of the toilet tank is April 25, 1943 (maybe 1948). It is not uncommon for an earlier dated fixture to be recycled and installed at a date later than that stamped on the tank. There is no gas service and the tenant is providing heating fuel.

- The description of the quarters is given as: a "two story frame, constructed about 1884. Condition of interior and exterior is fair. Five rooms and bath. Kitchen, living room and bath on first floor. Three bedrooms on second floor. Uninsulated, no central heat. Interior arrangement is poor. Electric range furnished. Outbuilding furnished. Present occupant: Elisha M. Leonard, Caretaker."

The two photographs attached show the house essentially as it looks during the field work period in 2001; perhaps without gutters and downspouts.

- *The Summary of Evaluation Schedules of Quarters, Schedule No. 12,* dated June 6, 1963 indicates the bi-weekly appraised value had been raised from $12.50 to $14.00. This increase is due to water service provided by the park being added into the total cost for the rental.

Item (37) File No. W22, NCR Box 13, MANA, March 1963 – Dec. 1965; Washington National Records Center, Subject Files 1952 - 1965, Accession #68-3048; located at the NCR Museum Resource Center, Landover, MD

1964

- In a memo filed with other park documents in the referenced subject files the following story unfolds. The Park Superintendent is questioned by the Regional Director of the Southeast Region about the purchase and installation of an electric clothes dryer. The park explains the purchase as follows, "In each of these areas (the Henry House and the New York Monument area) where park families live, the drying of clothes on a line constitutes an unwarranted intrusion on the historic scene. This is particularly true of the Henry House yard..." Later in the memo it is explained that, "Before the purchase was made, the subject was discussed with Caretaker Elisha Leonard and his wife and they seemed pleased with this solution of the problem". Later, when it was discovered that the Leonard's could not afford the increased utility bills, they were given permission to "... have a line on the north end along the border with some sheds".

- This memo indicates the house was used for quarters from at least 1949 through 1964 and probably later.

Memorandum from Superintendent MANA to Regional Director, Southeast Region; Subject: Purchase of Dryer and Installation Cost of Same, dated April 27, 1964. Item (76) File No. S18, NCR Box 13, FRED/ MANA, 1962-64; Washington National Records Center, Subject Files 1952 - 1965, Accession #68-3048; located at the NCR Museum Resource Center, Landover, MD

- The following reference to a porch and the front door, found in the *Monthly Narrative Report da*ted April 1964, would apply to the south elevation of the house, as per the photographic evidence as to the location of the porch structure at this time period.

- "The badly weathered front porch of the Henry House was replaced with new materials throughout. Cinder block supports were extended to cover the whole perimeter of the porch. Further repairs included a new door sill for the front door. A wood preservative was applied to both sides of all lumber to insure better permanence".

Monthly Narrative Report for Manassas NBP, Francis F. Wilshin, Superintendent, April 1964, page 8; Item (3) File No. A2823, NCR Box 11, MANA, 1962-64; Washington National Records Center, Subject Files 1952 - 1965, Accession #68-3048; located at the NCR Museum Resource Center, Landover, MD

- "The interior of the Henry House was painted by the park labor force".

- Also in this report it is noted that the Henry House and other park historic structures were photographed by the Viewmaster Company.

Monthly Narrative Report for Manassas NBP, Francis F. Wilshin, Superintendent, October 1964 (10/21/64), page 8; Item (3) File No. A2823, NCR Box 11, MANA, 1962-64; Washington National Records Center, Subject Files 1952 - 1965, Accession #68-3048; located at the NCR Museum Resource Center, Landover, MD

- The south porch (veranda installed for the Museum of the Henry House) has been removed and a small stoop has been installed in its place. The window configuration on the west elevation is unclear. The partial door on the west elevation has been infilled with siding though the 6-paned window is still apparent. Windows on the south and west elevations are in their current configuration. Gutters are now visible.

Contemporary-- Henry House 1940-present folder— MANA Library

NPS Ownership, Mothball Occupancy, 1965 - 2003

During this time period the house is not occupied, but rather used for storage. It is periodically maintained on the exterior but also suffers the ravages of termite infestation. As the condition of the building continues to deteriorate over this thirty year period replacement of exterior features begins. Exterior paint condition and termite problems are dealt with in a cyclical maintenance framework. Beginning in 1990 more attention is paid to the structure as its scene setting importance is realized by NPS management and planners. Trained Exhibit Specialists (Restoration) begin to work on the building and repair features rather than replace them. Major work commences in the mid 1990s' to try to reverse the tide of deterioration. Structural problems emerge in 1999 – 2000 and funding is requested to make permanent improvements to the building and return it to park use. As park works continue serious structural damage is uncovered. Emergency temporary structural stabilization and mothballing treatment is conducted as part of the Historic Structure Report project.

1978

The following quotes are taken from the various referenced documents.

- "The Henry House and Robinson House were painted and some minor stabilization carried out. All historic structures were treated for termite infestation."

Superintendent's Annual Report, MNBP, CY 1978, Maintenance, Buildings & Utilities, issued 03/09/1979 by R. Brien Varnado, Superintendent. NCRO File A2621, MANA Annual Reports (Superintendent's), NCRO HQ, Washington, D.C.

- "Also, I believe we discussed replacing non-period windows in both houses (Henry House and Robinson House) with correct multiple light sashes. Right now we have two different kinds in both structures. I recall, also, that historic photographs reveal louvered shutters."

Memorandum from Superintendent, MANA; To Historical Architect, NCR; Subject: Rehabilitation of Henry and Robinson Houses; dated April 11, 1978.

- "Enclosed are photographs of the Henry House which reveal extensive termite damage to the sills, studs and weatherboards, on all sides of the structure. Without removing all of the siding it is difficult to determine the extent of the damage." Six (6) black and white photographs are attached (copies) to the memo. Original photos have not been located.

Memorandum from Superintendent, MANA; To Historical Architect, NCR; Subject: Henry House Termite Damage; dated May 24, 1978.

The Henry House was inspected as part of an overall park wide project in August 1978. A letter from F.E. Wood, Ph.D., Entomologist to Dr. James L. Sherald, NPS, National Capital Region, Ecological Services Lab, dated August 16, 1978 documents the inspection.[3] A detailed list of treatments is presented. Much of the list is made up of standard preventative maintenance type recommendations; several are structure specific. The report recommend the following:

Henry House – Pest control operator should treat all soil around foundation, around all supports and around chimney base. Here's a list of things:

- Wood should not touch the ground in any case.
- Under supports should be located so they can be treated.
- Use treated timbers for new sills.
- Siding should never touch the ground on outside of sills.
- Use treated siding at bottom of walls if possible (or treat it with PCP).
- Run downspouts away from building in all cases.
- Roof space around chimney needs flashing.
- Remove top two courses of block in basement.
- Remove all wood in basement in contact with ground especially around the window.

[3]. This letter was located in the archived files of former Regional Historical Architect Dr. Paul Goeldner at the NCRO Headquarters Building, Washington, D.C.

The letter is marked with a notation indicating that a contractor would do the soil treatment and the park staff would do all the items on the list. This letter is date stamped at Manassas NBP August 21, 1978. Attached to the letter is a Termite Report from the Paramount Termite Company from Woodbridge, VA. It is dated 09/19/1978 and indicates the house was treated and had a warranty valid through 09/30/1983 (5 years). The Certificate No. 1549 is notated that the warranty applies only to those areas treated.

Former Manassas National Battlefield Park Superintendent R. Brien Varnado was contacted in Charleston, SC where he was serving as the Assistant Director of the Museum of the City of Charleston, SC. He verified that work accomplished during this time period (1977-1980) included minor repair work to the structural framing systems (no details available) to repair termite damage. Also, that some windows were repaired, and exterior termite treatment was performed (see previous description of tasks completed).

During the telephone interview, Mr. Varnado indicated there was an attempt by the park to convince the National Capital Regional office to allow an exterior "restoration" to the 1890s' appearance, but that it was declined. This would have included replacing the extant 2/2 type wood sash with 6/6 type wood sash and putting shutters back on the building. Regional Historical Architect Dr. Paul Goeldner and Regional Historian Mr. Barry Mackintosh would not allow "restoration" to occur due to the lack of knowledge concerning the building. They preferred a less intrusive approach and urged preservation and repair as a treatment until an HSR could be completed. Neither appears to have been accomplished at that time. Mr. Varnado also mentioned the shed was repaired.

Telephone Interview with R. Brien Varnado, former Superintendent, Manassas NBP (May 20, 1977 – April 20, 1980) conducted by HPTC Senior Historical Architect Tom Vitanza on 08/17/01.

1980

- *Henry Hill Restoration Plan* – This proposal calls for the restoration of Henry Hill to a condition more closely reflecting its appearance during the first battle of Manassas in 1861. The Plan called for removal of intrusive vegetation from certain areas and the replanting of trees historically present elsewhere. It also recommends the erection of historically appropriate rail fence along 1861 property lines. (Reference Environmental Assessment and Section 106 Effect Report).

- The Executive Director of the Virginia Historic Landmarks Commission (Virginia State Historic Preservation Officer) concurred on April 4, 1980. The Advisory Council on Historic Preservation concurred on May 8, 1980. The National Park Service marked the package "This completes Section 106

compliance on this project" on May 15, 1980 by "bm" (Barry Mackintosh, Regional Historian at NCRO prior to 1982).

NOTE: These letters were found in the archived files of former Regional Historical Architect Dr. Paul Goeldner at the NCRO HQ Building, Cultural Resources Library, File code L7617 NCR (PHR).

1982

- "Top quality paint job completed by contract on Robinson House, Henry House, and Dogan House. Manassas Historic Sites Survey by Thomas McGary, Denver Service Center, completed in December".

Superintendent's Annual Report CY 1982, MNBP, dated 04/12/1983. NCRO File A2621, MANA Annual Reports (Superintendent's).

1985

- Rebuild exterior ventilation box; replace log floor joists and termite control.

NCRO Compliance File for MANA, 05/ 1985.

1986

- Periodic painting with other park historic buildings.

NCRO Compliance File for MANA, 08 – 10/1986.

- Painting completed on all historic structures in the park.

Superintendent's Annual Report CY 1986, MNBP. NCRO File A2621, MANA Annual Reports (Superintendent's).

1987. Compliance forms could not be located during HSR research.
1988. Compliance forms could not be located during HSR research.
1989. Compliance forms could not be located during HSR research.
1990. Compliance forms could not be located during HSR research.

1991. Compliance forms could not be located during HSR research. The first set of List of Classified Structures (LCS) photographs were taken by the Chief Historical Architect, National Capital Region, Rebecca L. Stevens, AIA.

1992

Exterior painting of the Henry House and the adjoining shed was completed between 07/16/1992 and 07/30/ 1992. The following report, which documents the project, was located in the referenced park maintenance file.

The Henry House was painted using a mixture of 5 pounds USG brand joint compound (Non-Asbestos) to one gallon McCormick Exterior white latex paint. The surface was primed using McCormick exterior latex primer and Benjamin Moore exterior latex paint.

The surface was prepared by scraping all loose paint from the boards. No sanding was done to the surface. The South and West sides of the house needed the most preparation because of the large amount of peeling and flaking paint on those areas. The North and East sides are the least exposed to those elements so this was expected.

The top half of the west side of the house was primed with the Benjamin Moore primer. All other areas were primed using the McCormick product.

Most of the boards on the house were in fair shape, with a few cracked and excessively weathered. These boards were most frequently found on the South and West sides of the house.

The shed was also scraped and painted in the same manner as the house. All McCormick products were used. Painting of the Henry House and the adjoining shed was completed between 7-16-92 and 7-30-92.

NOTE: This formula was apparently developed by NPS Historical Architect Orville Carroll for the Dogan House restoration project in 1962. It is thought that this formula was used because photographic evidence of the Henry House shows evidence of white wash first being applied in the 1930's – 1940's.

SECTION 106 Assessment of Effect Form (AEF) Work Descriptions

The following descriptions are taken from the AEF (XXX) forms on-file at the National Capital Regional Office, Cultural Resources Preservation Services.

The format used for the Assessment of Effect Form reference is as follows: NCR AEF form Compliance Log Number (AEF#), Park Project Number (PPN), Date of Form, and Description of Proposed Activity.

- Replace deteriorated siding, corner boards and soffit boards. Scrape, prime and paint exterior. "Finish coat will be a mixture of waterbased masonry paint and spackling compound (1:5 ratio). This gives the appearance of whitewash but with a greatly increased durability". (Specified by Historical Architect Orville Carroll for the Dogan House rehabilitation in 1962).

MANA 161-92-23, NCR File H4217 (NCR-PCR), 10/08/1992.

Chemically treated for termite activity. Treatments to take place during the summer and fall of 1992. Termite treatment plan developed 10/1992. Equity termiticide concentrate (chlorpyrifus).

MANA 152-92-20, NCR file H4217 (NCR-PCR), 10/08/1992.

Henry House Work Report

Prepared upon the completion of the tasks approved in the Assessment of Effect Forms this report documents the condition of the house in August 1992 and repair work completed at this time. The east side of the house had an active termite colony (note 5 year warranty period of last noted termite treatment expired in 1983). Structural damage required removal of ¾ of the siding on the east side of the house. It was also noted that the corner post in the northeast corner was extensively damaged and needed to be replaced entirely. Various wall studs and studs used to frame out the window and door openings were replaced. "German siding" was used to replace the deteriorated siding removed during the investigation.

Upon completion of the work a building inspection was conducted. A task list was produced based on this inspection. Tasks include:

- All foundation walls need stabilization work done to them.
- Settling of about 1 inch on the north end of the house.
- Stones in the basement were cracking and splitting, possibly from moisture. Stones are in need of repointing.
- The fireplace on the second floor had stones that had fallen from inside the chimney.
- Bricks in the attic chimney have become extremely soft and are turning to powder.
- All the windows need to be scraped and checked for deterioration.
- Door and frame on east side of house needs to be rehabilitated.
- Face boards and soffit need to be replaced.
- Gutters need to be replaced.

Henry House Work Report, by Richard K. Maestas, Park Exhibit Specialist (Restoration), Manassas NBP, September 1992.

See Illustrated Narratives, Chronology of Park Maintenance Projects for project photographs and documentation, as follows:

- August 1992, East Elevation Wall Framing & Siding Repairs, Part I

- August 1992, East Elevation Framing & Siding Repairs Documentation, Part II.

1994

Window and Door Repair Project – A one page description of proposed window repair work prepared by Park Maintenance Foreman Christopher Keeney is attached to the Assessment of Effect Form MANA 431-94-09. It describes the basis of what will become a multi-year park project.

- The windows, doors and frames have deteriorated enough to affect their integrity. These components and their associated trim will be removed, repaired and painted. Where feasible, epoxy will be used, but much of the repair will require new materials. These will match in shape and size as closely as possible. The finish coat will consist of a mixture of joint compound and flat white latex paint.

- Replacement materials will match the existing where repairs are required. The finish coat will consist of a mixture of joint compound and flat white latex paint. This gives the appearance of whitewash but with a greatly increased durability. This mixture is similar to the one specified by Orville Carroll (NPS Historical Architect) for the Dogan House rehabilitation in 1962.

MANA 431-94-09; PPN-94001, NCR file H4217 (NCR-PCR), 10/08/1992.

- The window repair project has been ongoing through 2003. All window units have been repaired with the exception of units W101, W103, W310. This is based on records in the park maintenance files and interviews with current park Exhibit Specialist Richard K. Maestas.

- Basement Wall Repair – Henry House basement walls require repointing. Project will entail repointing of failed mortar joints and dismantling and relaying of sections where wall is bulging (approximately 20 percent of wall). Mortar mixture will match existing mortar in appearance. Mixture will consist of 5 parts sand, 1 part lime, 1 part Type II Portland Cement.

MANA 614-95-02; PPN-94021, NCR file H4217 (NCR-PCR), 12/01/1994

1995

- *DRAFT Preservation Maintenance Plan, Henry House, Manassas NBP*, July 15, 1995, prepared by Stephen Ziegenfuss AIA, Assistant Regional Historical Architect, National Capital Region, Washington, D.C.

This is a very detailed report patterned after an historic structure report. It was prepared, "... to provide guidance for park personnel doing preservation work on the Henry House." Since for lack of information, "... full restoration of the house is impossible at this time." This report, while apparently never finalized due to the departure of Mr. Ziegenfuss from the National Capital Regional Office, has been used

by the park maintenance staff to organize and guide the preservation maintenance that has occurred since this date. The following paragraph is excerpted from that report:

The treatment philosophy for this building will be preservation. Every effort will be made to keep existing conditions and materials. The house will remain a scene-setting building in the landscape and not open to the public. Repairs and replacement of materials will be made in kind except where evidence exists to indicate the specific materials used during 1870 – 1921. This is the period the house was occupied by the Henry Family.

The report includes the following sections: I. Executive Summary, II. Background History, illustrated with park historic photos, and III. Work Areas with sub sections as follows: A. Roof, B. Basement and Foundation Walls, C. Exterior Walls, D. Doors and Windows, E. Interior Spaces, F. The Shed, and G. The Cemetery. Within each sub section is a description of the extant conditions, scaled drawings of the features for some sections, and recommended treatment statements with architectural details called "Required Work" or "Required Repairs". Also provided is a line-item estimate for the recommended treatment statements. The report outlines a comprehensive approach for the preservation maintenance of the house.

1998

- "Emergency Painting of the (Exterior) of the Henry House – The Henry House requires immediate chipped paint removal and painting. The chipped lead paint on the structure will be removed by power washing the structure. The lead chips will be collected along with the contaminated water and will be treated as hazardous materials. The house will then be painted utilizing a power sprayer in order to reduce further paint chipping. The project is necessary in order to prevent lead paint from contaminating the soil as well as preventing further deterioration to the structure. The project will also improve the cosmetic appearance of the structure."

Comments by the Regional Cultural Resource Specialists include the following stipulations with their approvals:

- *Historical Architect* - Recognized as a temporary measure to improve appearance of the building. The methods of lead abatement (paint removal) and repainting are far below preservation standards to assure the long-term survival of the Henry House. Lack of proper wood preparation and repairs to rotted structure and sheathing means that underlying structure, material, and safety issues are not being met. A "proper" repair and painting job on the building in 1999 using base funding.

MANA 789-98-07; PPN-98008, 09/08/1998

- See Illustrated Narrative, Chronology of Park Maintenance Projects.

1999

- Consultation occurred with Architect Peter Dessauer from Harpers Ferry National Historical Park. Correspondence concerning lead paint removal from exterior of building and carpentry repairs including doors, windows, siding and framing, and provides estimates for both contract and day-labor projects.

"Complete Exterior Lead (Paint) Abatement at Henry House – This project entails removal of deteriorated lead based paint from exterior surfaces of the Henry House. Currently the paint coats on the house are peeling and flaking off the siding. As earlier coats are lead-based, this condition presents a hazard to visitor and employee health [not true]. The lead abatement will (remove) the threat to visitor health and provide a lead-safe working environment for conducting further exterior repairs."

"The lead abatement will require wet scraping all exposed painted exterior surfaces to bare wood or to intact paint. Following the removal of the deteriorated paint, exterior surfaces will be primed with one coat of exterior primer, back brushed for sound adhesion. All lead waste from the project will be collected and removed for disposal. This project will require the use of lead-trained and licensed personnel."

MANA 845-00-04; PPN-99027, 08/10/1999.

Note: Documentation of the analysis of the exterior paint for lead content (at that time, 1999) has not been located. Lead paint is not a hazard to humans unless it is ingested or absorbed through the skin.

2000

- Replace Termite Damaged Wood and Paint Exterior Henry House

This extensive project description includes exterior wall siding, wall sheathing, structural components of the floor and wall framing, and lead paint removal.

It describes the plans for rehabilitating the Henry House in FY2000 as follows:

Siding will be carefully removed (with the idea of re-using it whenever possible) to expose the sheathing and structural elements of the walls. If any historic siding is useable, but has peeling lead paint, the lead paint will be wet scraped to eliminate the hazard. Sheathing will be removed. It is suspected the existing sheathing is extensively damaged from termite invasion, and it will likely be discarded in favor of plywood sheathing when the walls are reassembled. Structural elements of walls (studs, crossbeams, sills, posts, etc.) will be examined for damage, and will be repaired or replaced with modern pressure treated lumber. Repair will involve cutting out bad sections and sistering in good wood for structural integrity. All new wood will

be dated with wood punches to establish its provenance. Sheathing will be reinstalled, and siding replaced, using all historic fabric possible. New siding will be identical to existing historical material, and will be used wherever necessary. Once the walls are rebuilt, they will be primed and painted with white latex paint. Door frames and windows have been in the process of rehabilitation, and that will continue as this project continues."

Comments by the Regional Cultural Resource Specialists include the following stipulations with their approvals:

- *Archeologist* – No ground disturbing activity.

- *Historical Architect* – Meets approved Programmatic Exclusion Sections 1 and 9 only if siding match size and shape of existing (siding). Plywood substitute for solid sheathing is acceptable but not a preferred meeting of the standard to "replace in kind". Also question use of felt paper – moisture retention properties, if it absorbs too much moisture it will accelerate deterioration (a building wrap would be more appropriate technology).

MANA 905-00-09; PPN-00004; 05/23/2000

NOTE; The North End Stabilization Project Report had not yet been completed by May 2003. The actual work was interrupted in 2001 due to excessively deteriorated conditions of house structure.

See Illustrated Narratives, Chronology of Park Maintenance Projects for further information.

- 1999/ 2000 Exterior North Elevation Condition Prior to Treatment Repairs (Extant Conditions)

- 1999/ 2000North Elevation Framing & Treatment Repairs/ Project Documentation (Extant Conditions)

- October 2000, Interior Features, Room 102 Historic Floor Framing System In-Situ Documentation (Extant Conditions)

- November 2000, Interior Features, Room 102, Historic Floor Framing System Removed Documentation (extant Conditions).

2001

- Installation of termite bait stations at house.

MANA 989-01-10; PPN-01005; 04/ 11/ 2001

- Implement emergency structural stabilization measures at Henry House. Emergency archeological investigation included. Reference engineering report and design drawings, *Henry House – Condition Report and Temporary Stabilization Recommendations*, by Robert Silman Associates, PLLC, Structural Engineers, Washington, D.C., April 2001, distributed by HPTC to park and regional staff and DSC.

MANA 997-01-14; PPN- 01008; 05/ 01/ 2001

- See Chronology of Temporary Emergency Structural Stabilization project.
  - *First Review Draft Historic Structure Report,* 19 June 2001.
  - *Second Review Draft, Historic Structure Report,* 31 August 2001.

HPTC completes field work and research for HSR project.

2002

- Temporary emergency stabilization repairs are carried out and include replacement of removed wood siding boards with vinyl siding to protect the historic structural frame and remaining interior finishes from weather penetration of the exterior envelope.

2003

- *Final Revised Edition, Historic Structure Report* by HPTC.

SHED

The Shed was built by Mr. A.J. Powell during his occupancy at the house, sometime between1920 and 1935. This information is learned from the Mr. Fred Ebhard, who occupied the Henry House during part of the Powell tenancy. He visited the Henry House in August 2001.

Chronology of Recommended Maintenance Treatments

- Replace cedar shake roof at shed.

12/03/1993; MANA 404 94-06; PPN-93024

- Replace shed door.

MANA 615-95-03.

The shed is extensively chronicled in the draft Cultural Landscape Study of the Henry Hill area.

End of Section.

Part 1. Developmental History

B. Chronology of Development and Use

1a. Visual Narrative for Chronology Section

- HSR Figures 1 – 31
- Ebhardt Family Photographs

B.1.a. Visual Narrative of Chronology, HSR Figures 1 - 31

This section consists of the historical images of the Henry House presented in approximate chronological order and numbered as HSR Figures 1 – 31. Captions give the historical captioned name of the photograph followed by a contemporary (2001-03) narrative interpretation of the image. Bibliographic and reference information is also provided in the annotated caption as well as the location where the image was obtained for this report. This information is placed in brackets [ ] for easy reference.

List of Illustrations used in HSR:

1. Mrs. Henry's House, the Centre of the Battle of Manassas, July 21, 1861. [Fremaux sketch]

2. Mrs. Henry's House (Spring Hill Farm) [After Fremaux sketch]

3. Scene from the Battle Field of 21st July House in Which Mrs. Henry Was Killed [After Fremaux sketch] Shows Bartow Monument.

4. Ruins of the Mrs. Judith Henry House, First Battle of Bull Run [Matthew Brady Studio, Winter 1862]

5. Bull Run, Va. Ruins of Mrs. Judith Henry's House. [George Barnard, March 1862]

6. Henry Hill View Looking North, Soldiers at the Dedication of the Bull Run Monument, June 10, 1865. [MANA historic photo collection]

7. Dedication of the Bull Run Monument, 5th Penna. Heavy Artillery, June 10, 1865. [MANA historic photo collection]

8. The Main Battle-Ground. – No. 1. View of the Henry House. [Battles & Leaders of the Civil War, Volume 1, 1884]

9. The New Henry House and the Monument of the First Battle. From a Photograph taken in 1884. [Battles & Leaders of the Civil War, Volume 1, 1884]

10. New Henry House, Bull Run, VA, c. 1884. [MANA historic photo collection]

11. New Henry House with H.F. Henry on Porch, July 14, 1896. [Albert Kern Collection, Montgomery County Historical Society, Dayton, Oh.]

11a. Electronic Enhancement of New Henry House with H.F. Henry on Porch, July 14, 1896. [Albert Kern Collection, Montgomery County Historical Society, Dayton, Oh.]

12. Photographic Enhancement of New Henry House with H.F. Henry on Porch, July 14, 1896. [Albert Kern Collection, Montgomery County Historical Society, Dayton, Oh.] Photo print of enhanced image provided by MANA.

13. Garden of (New) Henry House – house under trees..., c. 1896. [Albert Kern Collection, Montgomery County Historical Society, Dayton, Oh.]

14. Henry Farm Notice, c. 1896. [Albert Kern Collection, Montgomery County Historical Society, Dayton, Oh.]

15. Bull Run, Henry House, 1902 (?). J. Harry Shannon, the Rambler, photo no. VIII-63, This Was Virginia, 1900-1927... [Fairfax City Regional Library]

15a. Electronic enhancement of No. 15.

16. Postcard. Henry House, Manassas Battle Field, Virginia. – (402), c. 1922-1935. [Manassas Museum System, McBryde Library & Archives]

17. Henry House, c. late 1880's, unattributed. [MANA historic photo collection]

18. Henry House, Bull Run Battlefield, Va. C. 1910 – 1930. [Manassas Museum System, McBryde Library & Archives]

18a. The Famous Henry House on Bull Run Battlefield, American Press Association photo c. 1911 [courtesy of MANA via eBay].

19. Postcard. Henry House, Bull Run Battlefield, Va. Post Sons of the Confederate Veterans, c. 1922-1940. [Manassas Museum System, McBryde Library & Archives]

20. Bullet Riddled Tree on the Bull Run Battlefield, Manassas, Va., No. 13513. [Manassas Museum System, McBryde Library & Archives]

20 Rear. View of Bull Run Patriot's Monument with Henry House (east elevation) in background, Manassas, Va., c. 1922-1940. [Manassas Museum System, McBryde Library & Archives]

21. Group of Men on Veranda of Henry House, c. 1922 – 1935. [MANA historic photo collection]

22. House with "Museum of the Henry House" sign attached, c. 1931. [MANA historic photo collection]

23. Mr. Adoniram Judson Powell, Caretaker for the Sons of Confederate Veterans posed in front of the south west corner of the Henry House, c. 1935 – 1942. [Courtesy of the Fred Ebhardt Family, Manassas, Va.]

24. Mr. Fred Ebhardt with Daughter Valendia at NW corner of House, Spring 1942. [Courtesy of the Fred Ebhardt Family, Manassas, Va.]

25. SW Overview of Henry House, prior to NPS ownership. [Courtesy of the Fred Ebhardt Family, Manassas, Va.]

26. SW Overview of Henry House, by Walter H. Sheffield, 04/10/1940. [NPS Historic Photograph Collection, Harpers Ferry Center, MANA park file]

27. The Henry House and Yard. The Monument to the Right of House Erected by Union Soldiers in 1865 after the Surrender at Appomattox, by George Alexander Grant, April 25, 1942. [NPS Historic Photograph Collection, Harpers Ferry Center, MANA park file # 6]

28. Monument in the Henry House Yard, built by Union Soldiers in 1865… by George Alexander Grant, April 25, 1942. [NPS Historic Photograph Collection, Harpers Ferry Center, MANA park file # 7]

29. Overview of Henry House, South & East Elevations. Attributed to Mr. Abbie Rowe, February 1949. [NPS Historic Photograph Collection, Harpers Ferry Center, MANA park file # 429, negative # 1043 - V]

30. Similar to No. 29, Different view. Attributed to Mr. Abbie Rowe, February 1949. [NPS Historic Photograph Collection, Harpers Ferry Center, MANA park file # 430, negative # 1043 - V]

30a. Electronic enhancement of negative 430.

31. Overview of Henry House and Yard, January 1956. [MANA historic photo collection, "Henry House, 1940 to Present" folder, unattributed.

Ebhardt Family Photographs

This collection of six (6) images was given to the National Park Service in 2001 by Valendia Ebhardt Bohon, daughter of Mr. Fred Ebhardt. They show the Henry House as a backdrop to family photographs taken in the spring of 1942 after the birth of Valendia in November 1941. They are important because they show the house several years after its new siding had been installed and various other improvements made by the Sons of Confederate Veterans.

Revised captions to these photos were provided by Mrs. Bohon in June 2003.

END of SECTION.

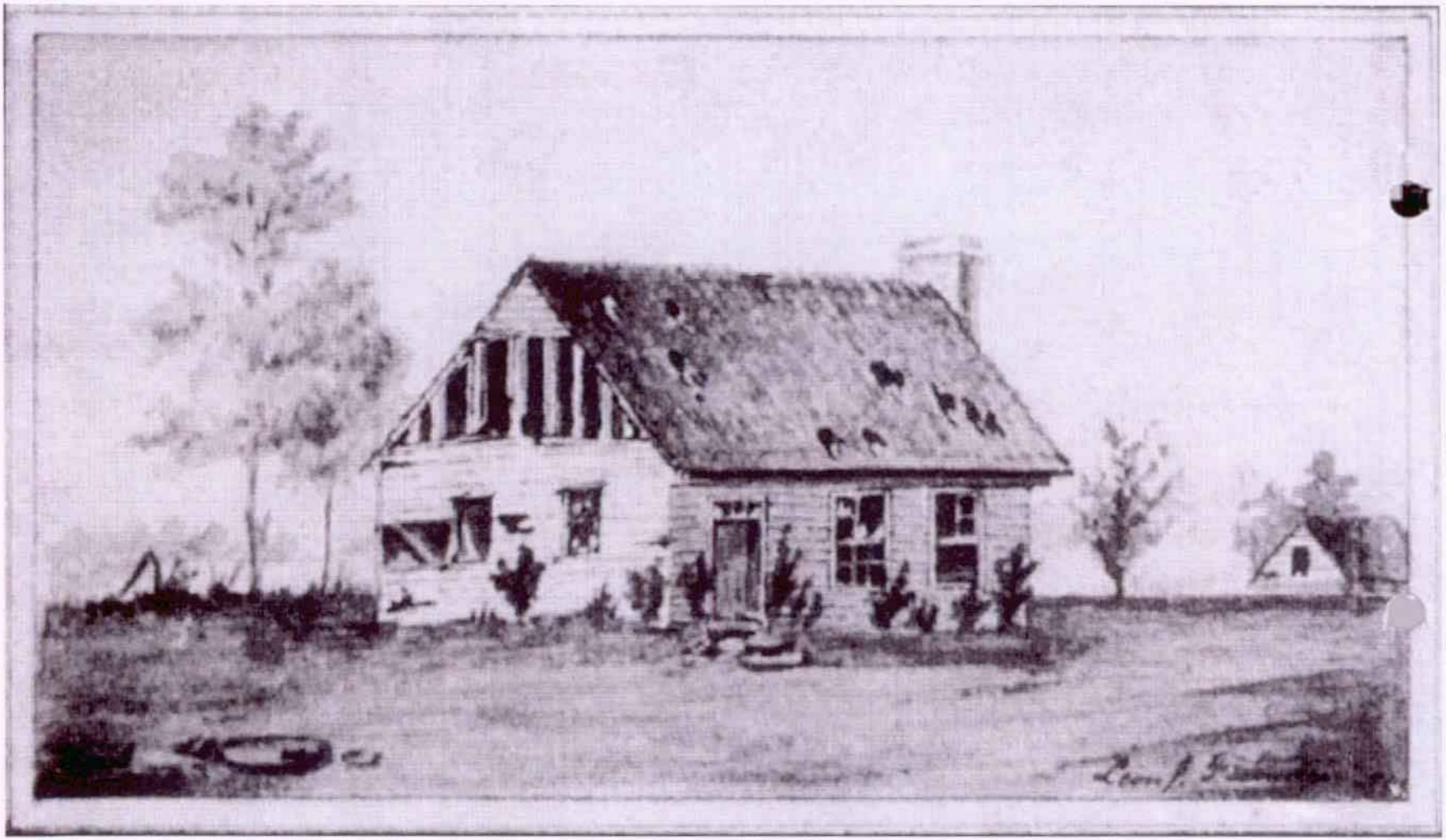


Figure 1. *Mrs. Henry's House, the Centre of the Battle of Manassas, July 21, 1861.* Sketch by Leon Fremaux, (signature in lower right corner) 8th LA Infantry Volunteers, c. 1861. (Mrs. W.C. Nelson Collection) "Henry House Fremaux Sketch" folder, historic photo collection, Manassas National Battlefield Park library.

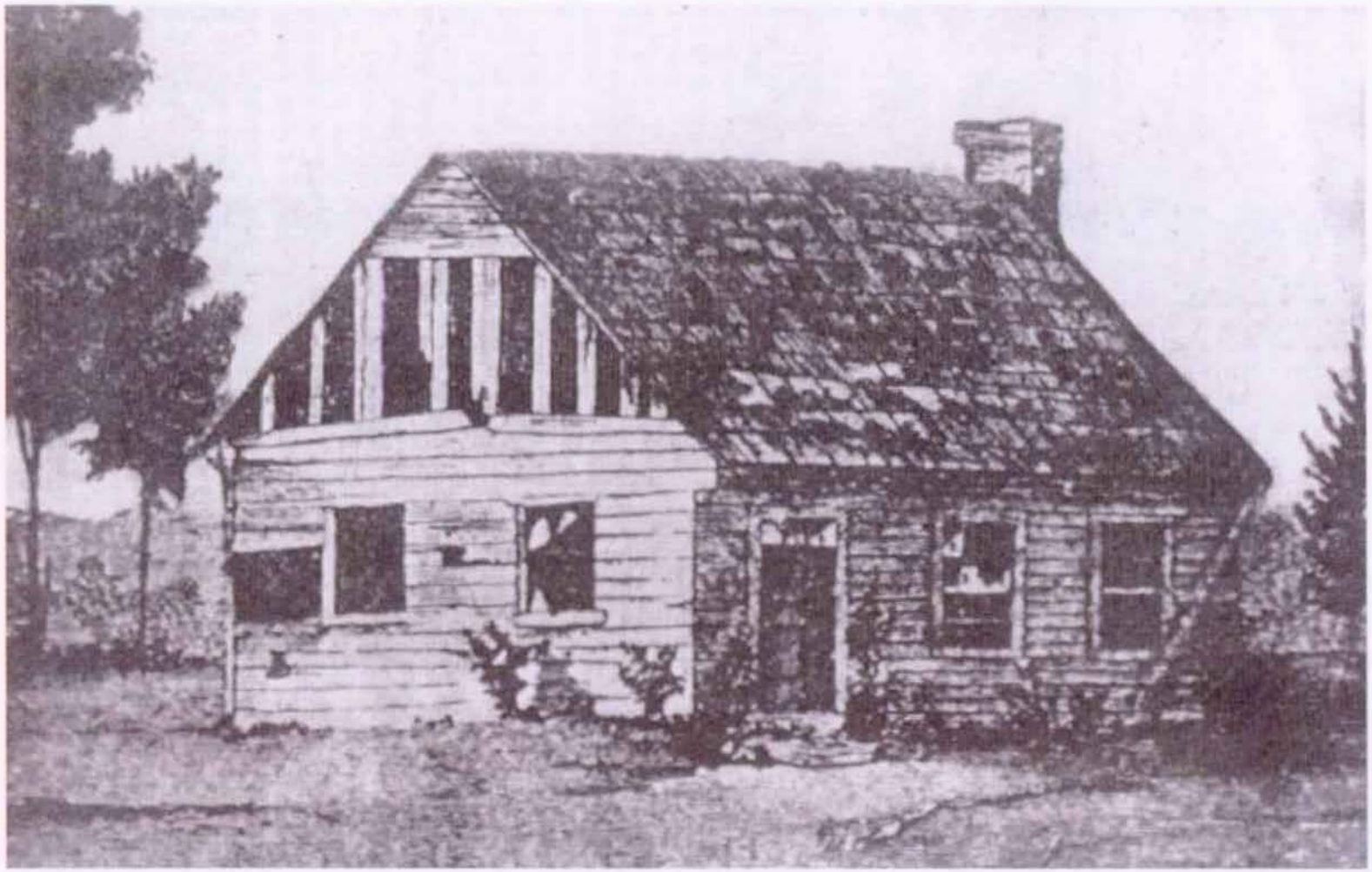


Figure 2. Mrs. Henry's House (Spring Hill Farm). Unattributed, after Fremaux Sketch, earliest known use is in *The 5th Regiment Massachusetts Volunteer Infantry, Boston, 1911, pg. 74.* "Henry House Fremaux Sketch" folder, historic photo collection, Manassas National Battlefield Park library.

Figure 3. Scene from the Battle Field of 21st July, House in Which Mrs. Henry Was Killed (Spring Hill Farm). Unattributed, after Fremaux sketch. "Henry House Fremaux Sketch" folder, historic photo collection, Manassas National Battlefield Park library.

Figure 4. *Ruins of the Mrs. Judith Henry House, First Battle of Bull Run.* Photo by Matthew Brady Studio, attributed to David B. Woodbury, Washington, D.C., circa Winter 1862. Originated at U.S. War Department, U.S. Army, Office of the Chief Signal Officer. National Archives Still Picture Branch control number NWDNS-111-B-1575. Also found in Henry House historic photo collection, Manassas National Battlefield Park library.

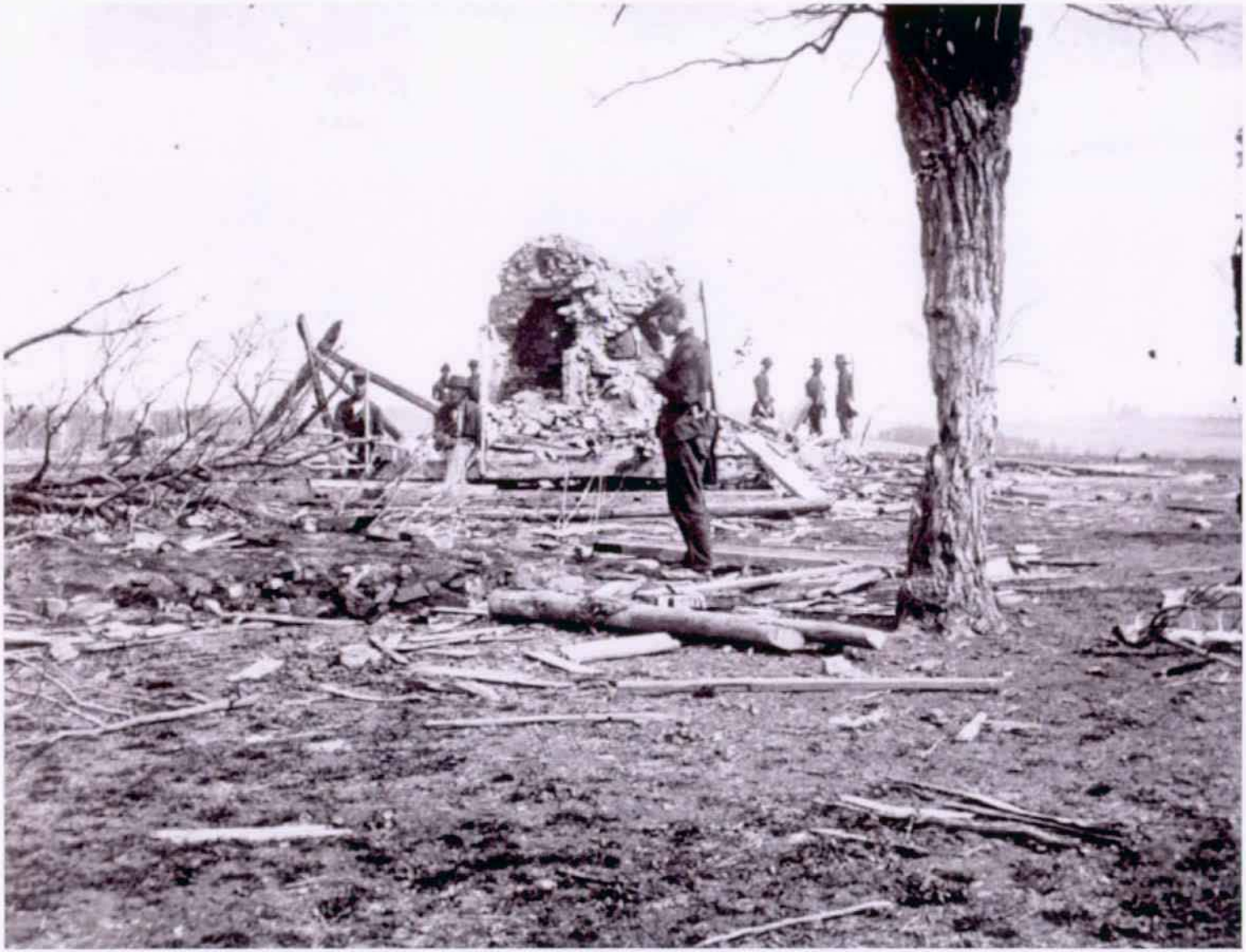


Figure 5. *Bull Run, Va. Ruins of Mrs. Judith Henry's House.* Photo by George N. Barnard (1819-1902, photographer), March 1862. Library of Congress call number LC-B811-0320. Also found in Henry House historic photo collection, Manassas National Battlefield Park library.

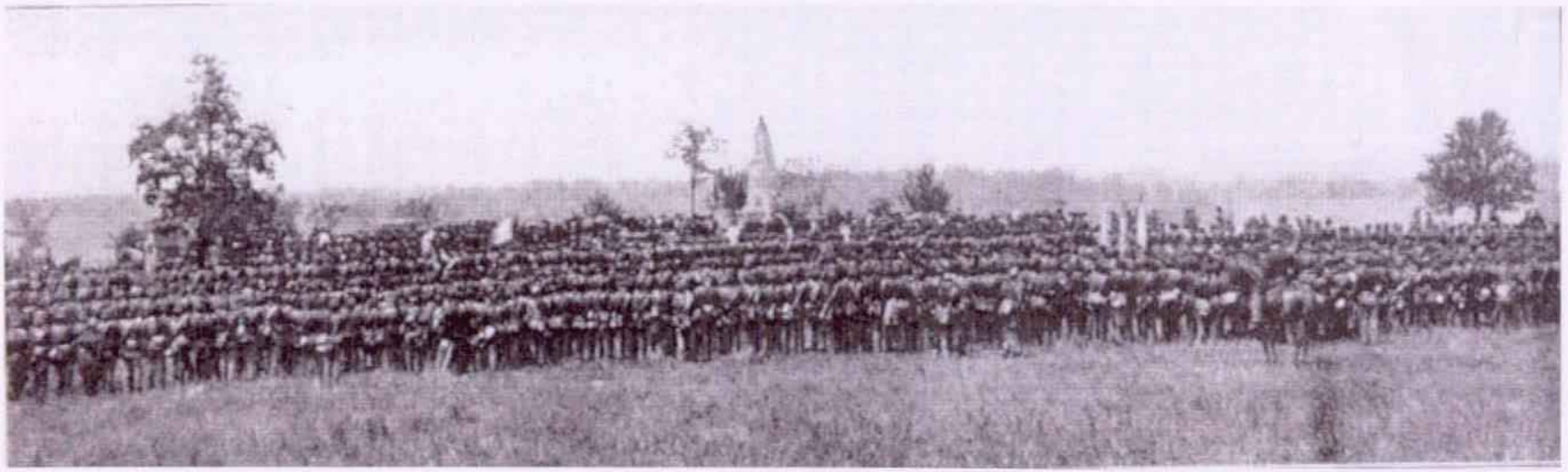


Figure 6. Henry Hill View Looking North. Soldiers at the dedication of the Bull Run Monument, June 10, 1865. Copyright 1911, Patriot Pub. Co.

Troops identified as the 5th PA Heavy Artillery. See Miller, Vol. IX, pg. 263. "Note total absence of the Henry House. It would appear to the left of the monument", handwritten on reverse of photo print, DPK, 09/17/1978. "Henry Hill Monument Dedication", historic photo collection, Manassas National Battlefield Park library.

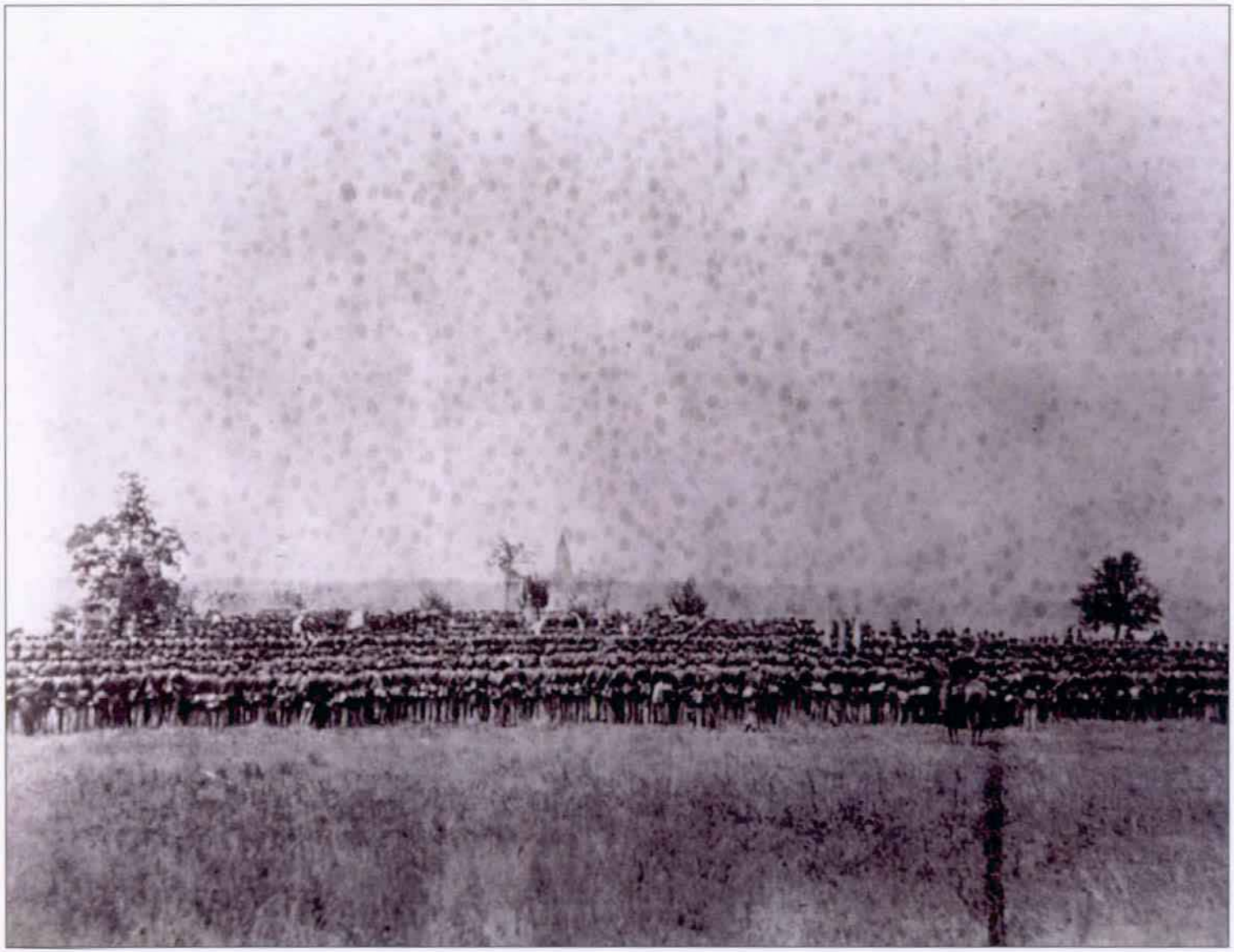


Figure 7. *Dedication of the Bull Run Monument. 5th Penna. Heavy Artillery, June 10, 1865.*

"Henry Hill Monument Dedication", historic photo collection, Manassas National Battlefield Park library.

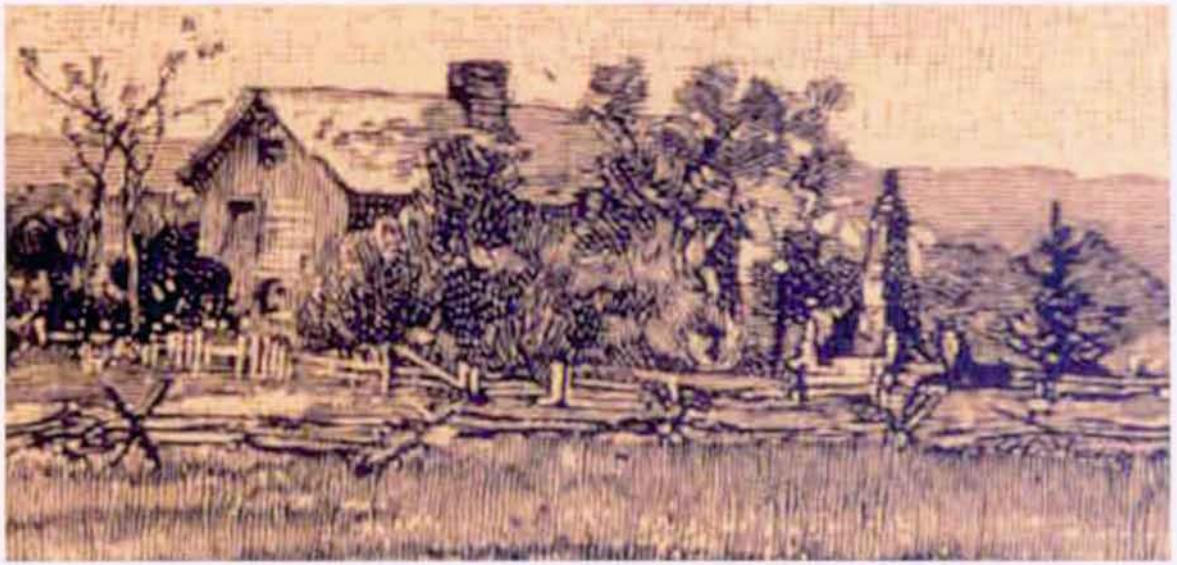


Figure 8. "The Main Battle-Ground. – No. I." View of the Henry House, looking west from the spot where General Bee fell. The Bull Run Mountains and Thoroughfare Gap appear in the distance. The Sudley Road, a few rods beyond the house, under the hill, runs parallel with the fence rail (in the middle ground on the left). Just within the rail fence is where Griffin's and Rickett's batteries were planted. Near the house stands the Union Monument, commemorating the battle".

Caption from *The First Battle of Bull Run. Battles and Leaders of the Civil War, Volume I.* The Century Company, New York, 1884, page 210. "Henry House Historic Photo Collection", Manassas National Battlefield Park library.

Note: Image depicts the south east corner of the Henry House. Chimney is not accurately positioned. Opening shown in south gable end are good representation of actual openings. Building seems to have been shortened to one and half stories from its actual two story height.

Figure 9. "The New Henry House and the Monument of the First Battle. From a Photograph Taken In 1884".

Caption taken from *Incidents of the First Bull Run*, by John D. Imboden, Brigadier-General, C. S. A. *Battles and Leaders of the Civil War, Volume I*. The Century Company, New York, 1884, page 229. "Henry House Historic Photo Collection", Manassas National Battlefield Park library.

This is a very accurate depiction of the Henry House in the mid 1880's. Compare to Figure 10, or 12; photograph taken in 1896 by Albert Kern.

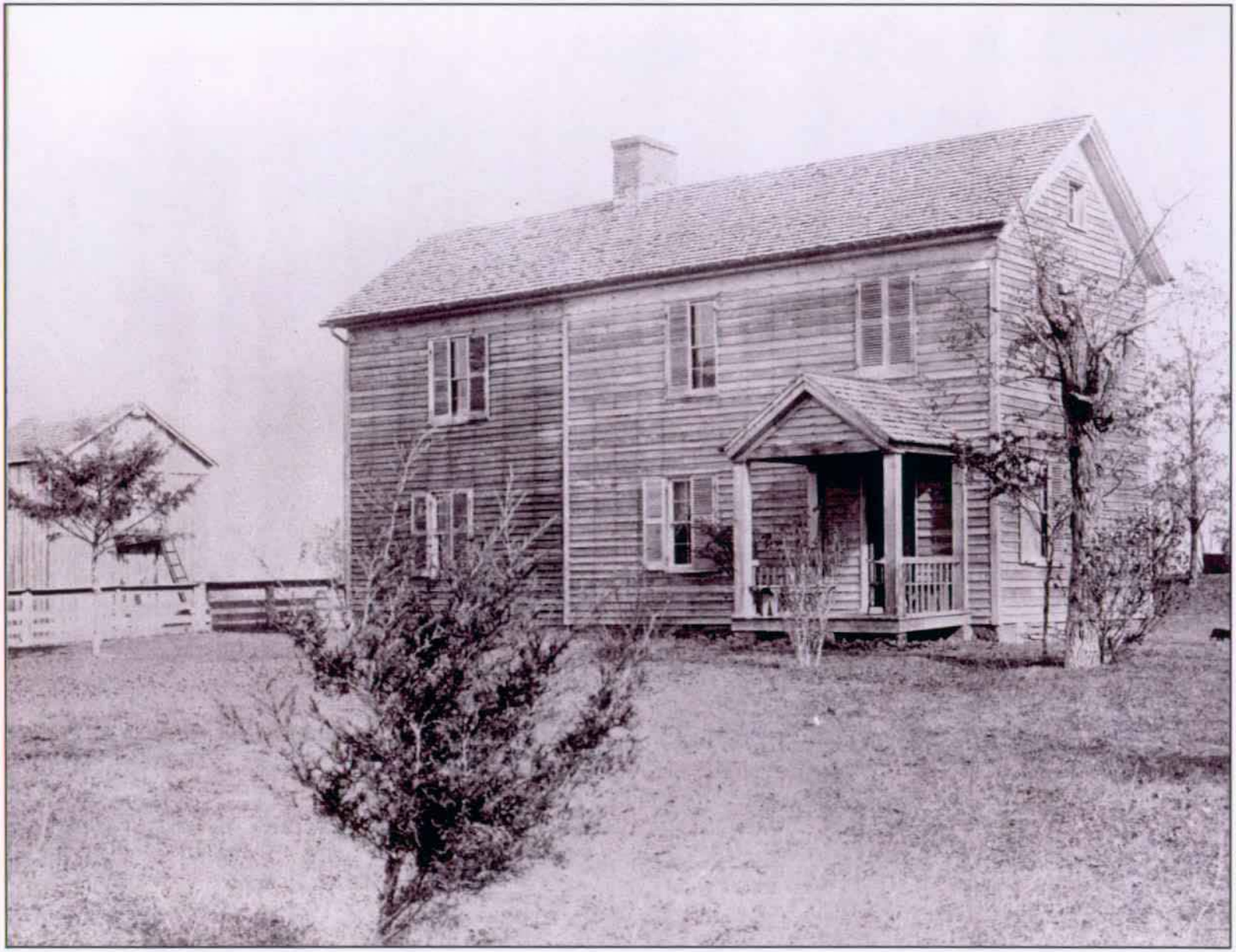


Figure 10. *New Henry House, Bull Run, VA*. Unattributed, date unknown, c. 1884. "Henry House II", historic Photo collection, Manassas National Battlefield Park library.
Note the Bull Run Monument off to the south of the house and the shed to the north.

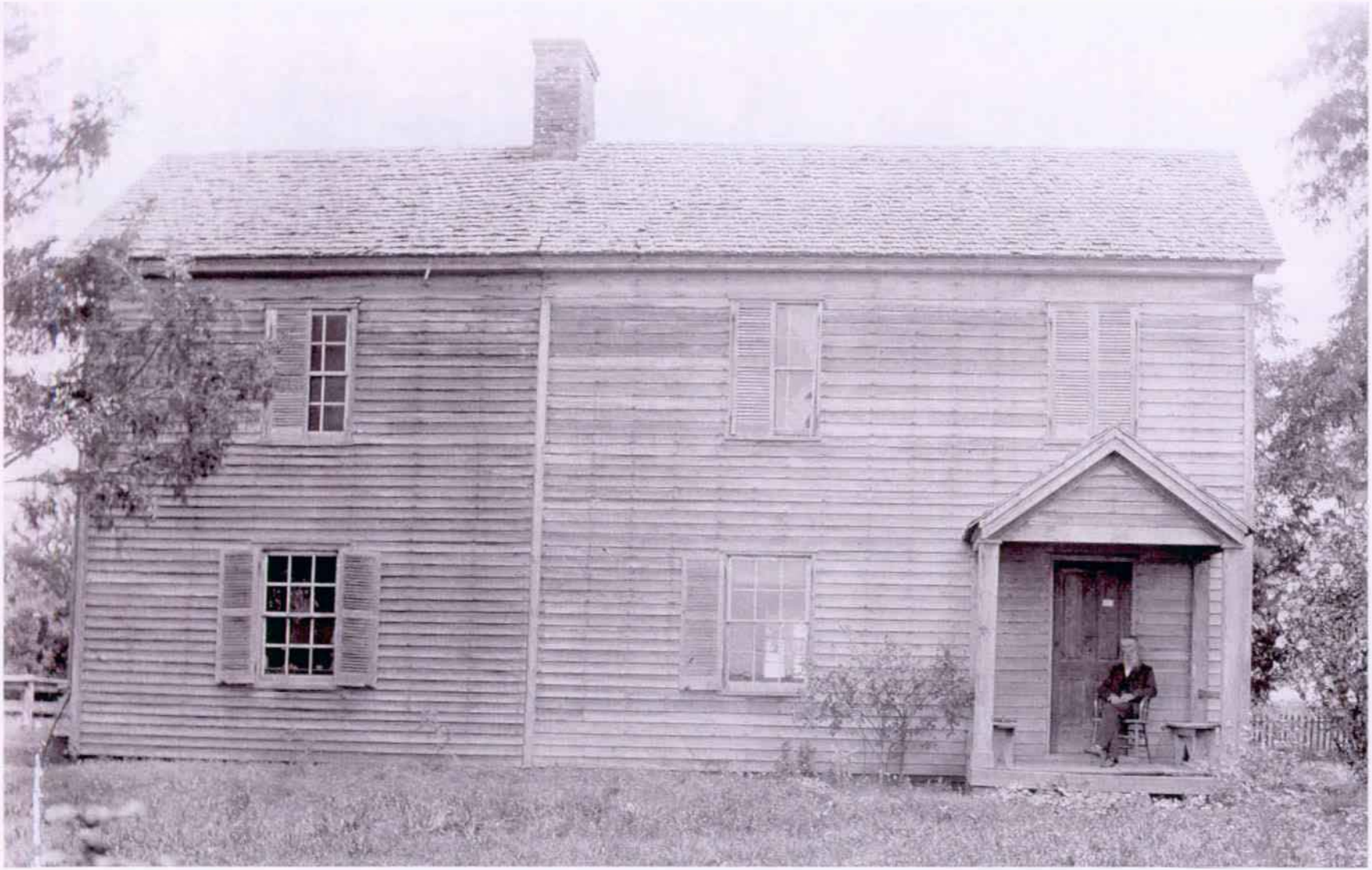


Figure 11. *New Henry House with H.(ugh) F.(auntleroy) Henry (Sr.) on porch.* Photographically enlarged view of Albert Kern's 1896 photo. Caption and dated by Albert Kern, July 14, 1896.

Albert Kern Collection No. 04, Montgomery County Historical Society (MCHS) Dayton, Ohio.

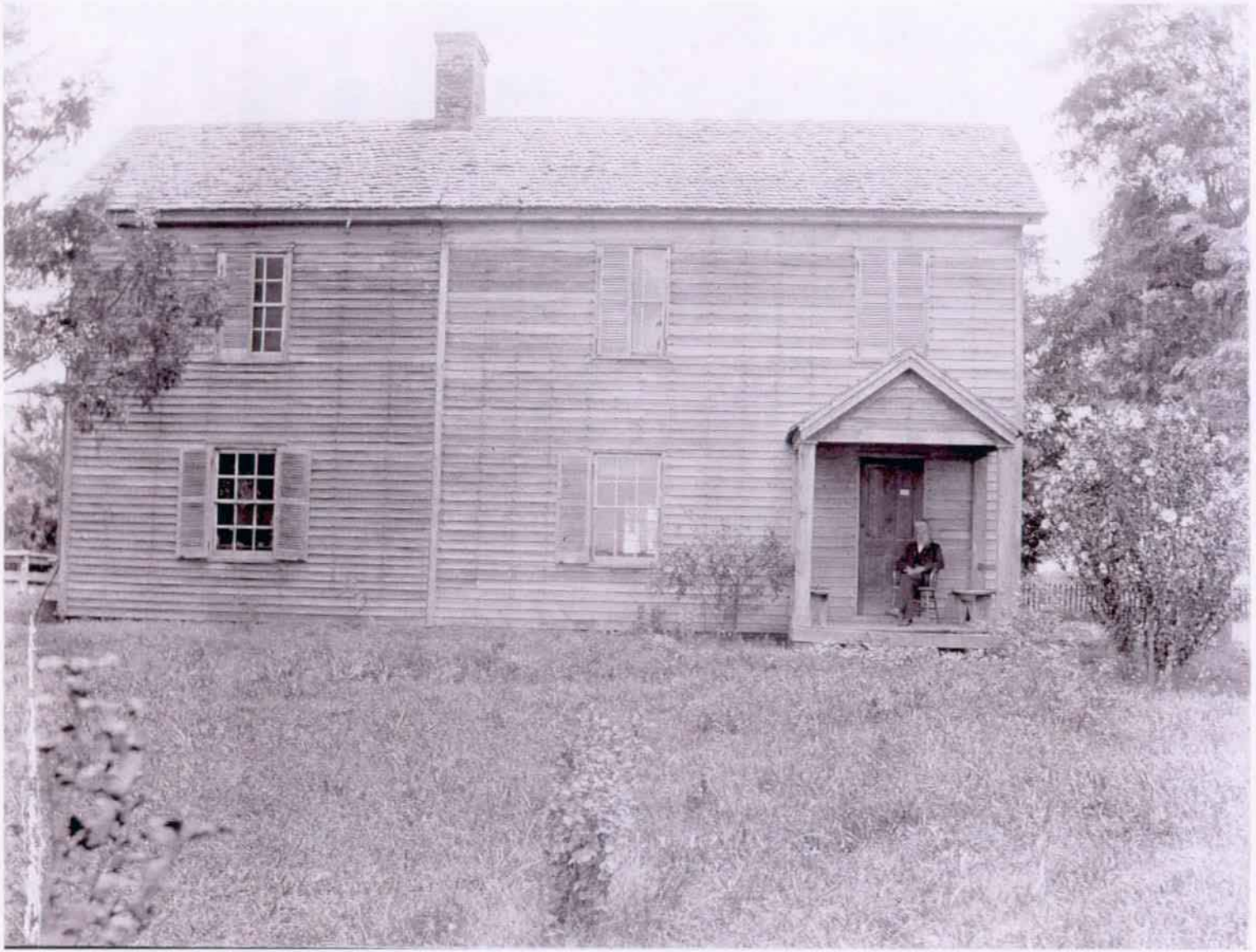


Figure 11a. *New Henry House, H.(ugh) F.(auntleroy) Henry on porch, July 14, 1896.* Caption by Albert Kern.

Albert Kern Collection, Neg. # 4, Montgomery County Historical Society, Dayton, Ohio.

Electronic enlargement and sharpening by HPTC from Kern digital file.

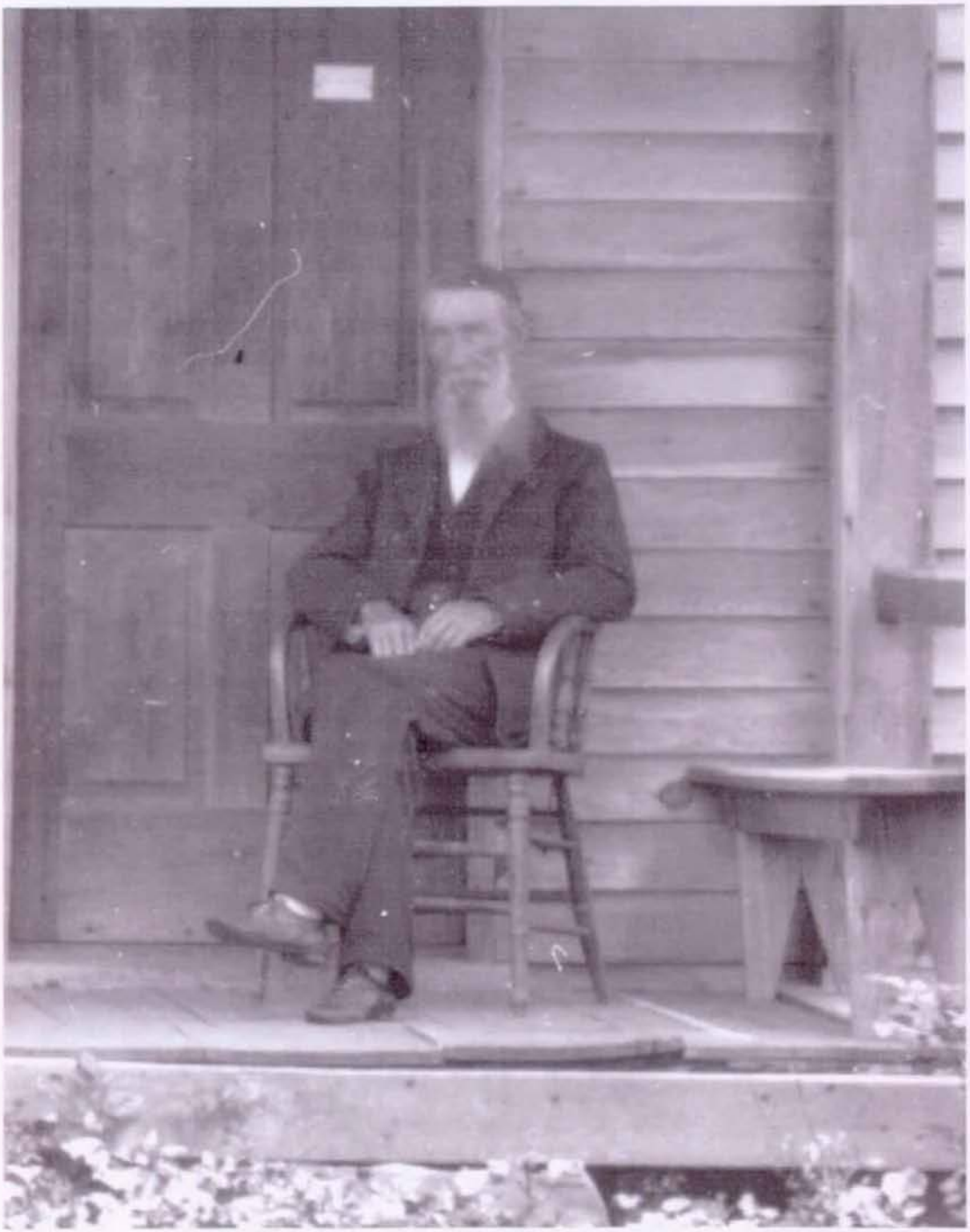


Figure 12. *New Henry House, H.(ugh) F.(auntleroy) Henry on porch, July 14, 1896.* Caption by Albert Kern. Albert Kern Collection, Neg # 4 detail, Montgomery County Historical Society (MCHS), Dayton, Ohio.

Photograph enlarged by Manassas National Battlefield Park from duplicate original print negative obtained from MCHS.

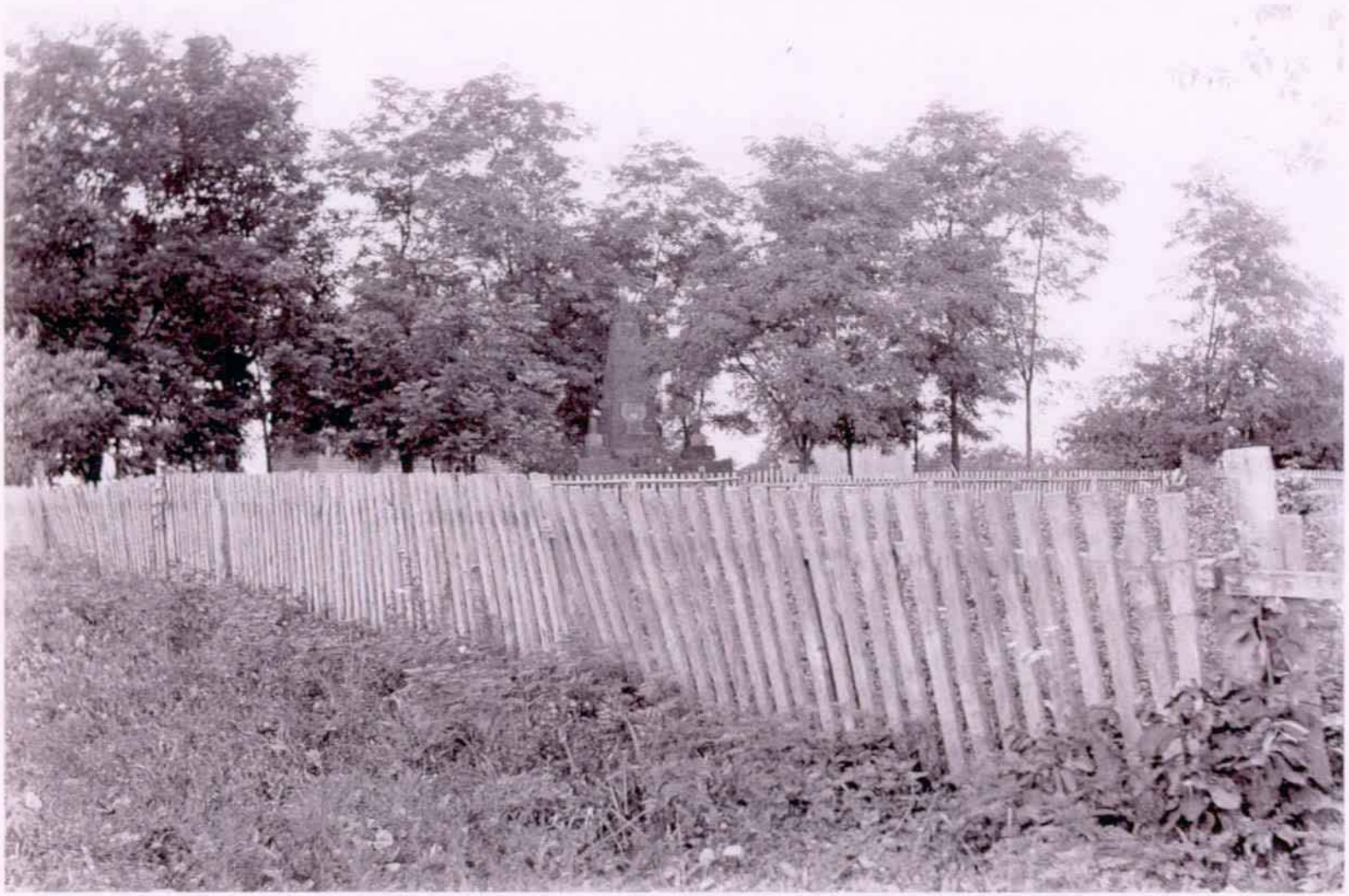
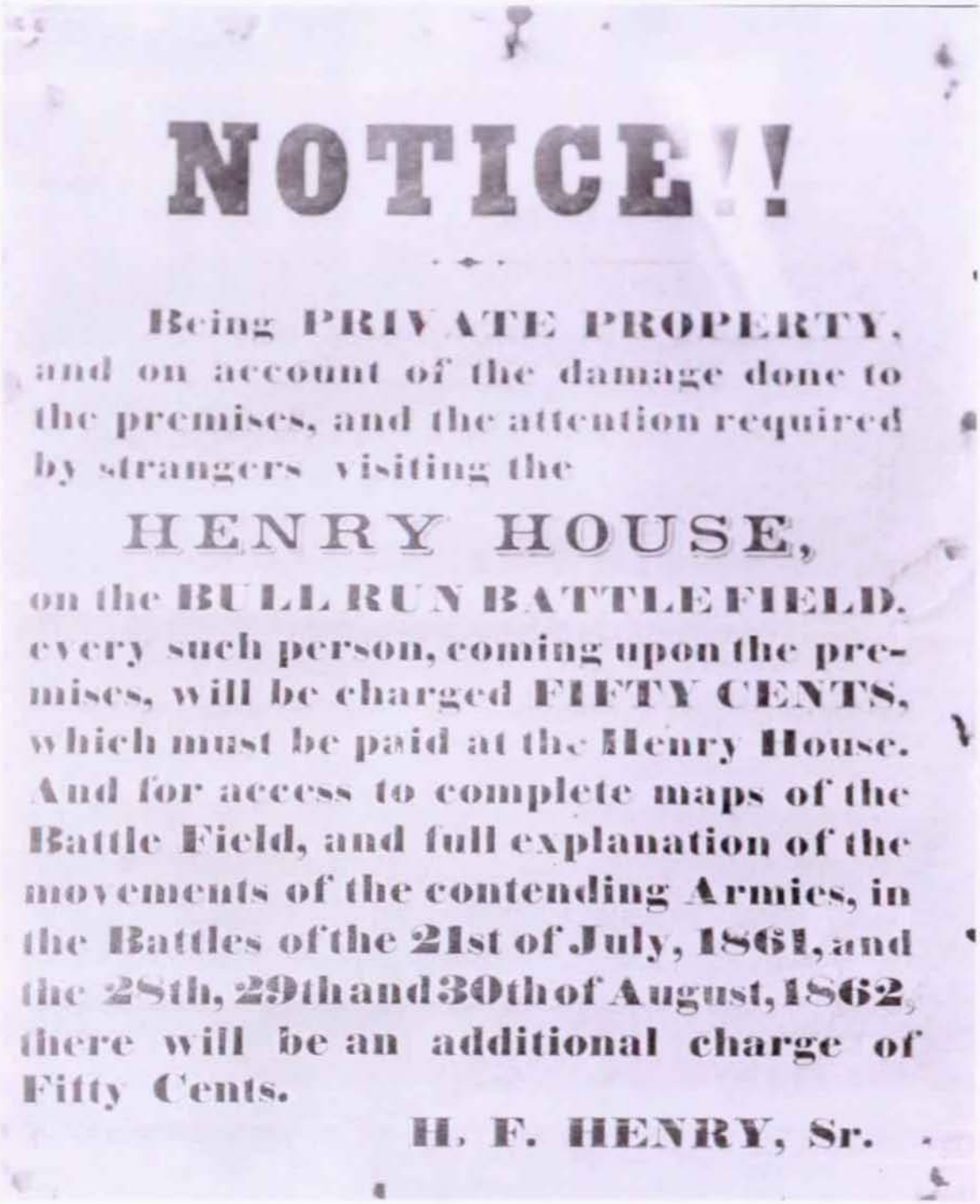


Figure 13. *Garden of (New) Henry House - House under trees, battle monument at edge of trees.*

Caption by Albert Kern, no date. Neg # 76, Albert Kern Collection, Montgomery County Historical Society, Dayton, Ohio.



NOTICE!!

Being **PRIVATE PROPERTY**, and on account of the damage done to the premises, and the attention required by strangers visiting the

HENRY HOUSE,

on the **BULL RUN BATTLE FIELD.** every such person, coming upon the premises, will be charged **FIFTY CENTS**, which must be paid at the **Henry House.** And for access to complete maps of the Battle Field, and full explanation of the movements of the contending Armies, in the Battles of the 21st of July, 1861, and the 28th, 29th and 30th of August, 1862, there will be an additional charge of Fifty Cents.

H. F. HENRY, Sr.

Figure 14. *Henry Farm Notice.* Caption by Albert Kern, undated, neg. # 71.

Albert Kern Collection, Montgomery County Historical Society, Dayton, Ohio.

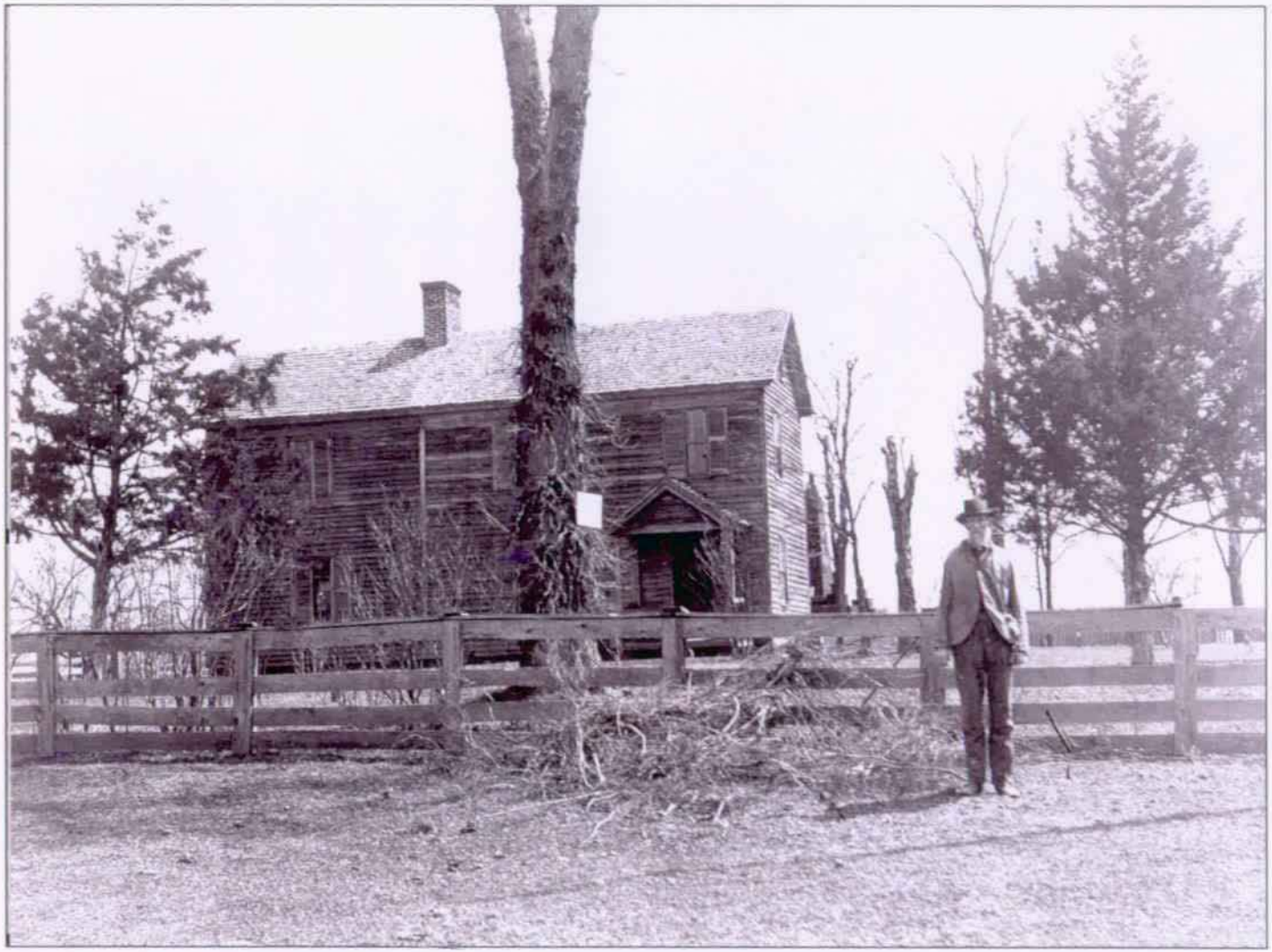


Figure 15. *Bull Run, Henry House, 1902(?)*. By J. Harry Shannon, "The Rambler" (1869-1928) photographer. *Photo No. VIII-63, This Was Virginia, 1900-1927: As Shown by the Glass Plate Negatives of J. Harry Shannon, the Rambler* by Connie Pendleton Stuntz, Hallmark Publishing Company, Inc., Glouchester Point, VA, 1998. Print made from negative loaned by Fairfax City Regional Library, Curator Brien Connelly, Virginia Room.
NOTE: Shannon's date of 1902 is in question as Mr. Hugh Henry (d. 1898) is seen in the right foreground of the image.

Figure 15a. Electronic (non-photographic) enlargement of Shannon photograph showing additional detail. Note: shutters are no longer hanging at windows on south elevation.

Figure 16. Postcard. Henry House, Manassas Battle Field, Virginia – (402).
View of south and west elevations with original gable porch at SW corner. Architecturally places image prior to modification of house by Sons of Confederate Veterans (1922-1935).

Reverse side information includes, "Printed and published by J.P. Bell Company, Lynchburg, VA". Hand tinted undated postcard loaned from Historic Postcard Collection, Manassas Museum System, McBryde Library and Archives, Manassas, VA.

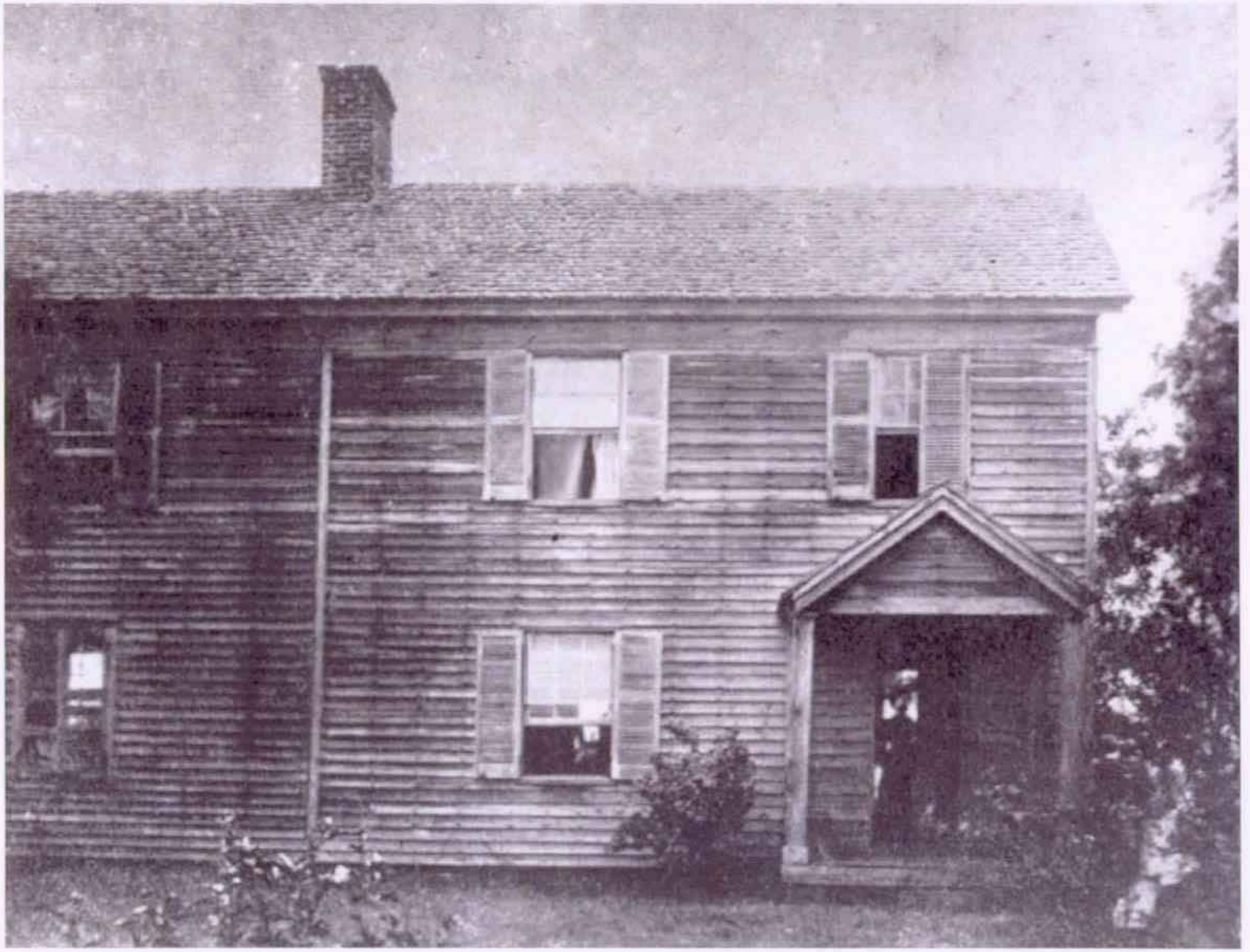


Figure 17. Henry House. Unattributed, date unknown, c. late 1880's, partial enlargement of house photo. "Henry House II", historic photo collection, Manassas National Battlefield Park library.

Note backlit figure in doorway – indication of door at opposite end of hallway, no internal walls to block light from passing through to front; suggests original architectural plan and doorway positions.

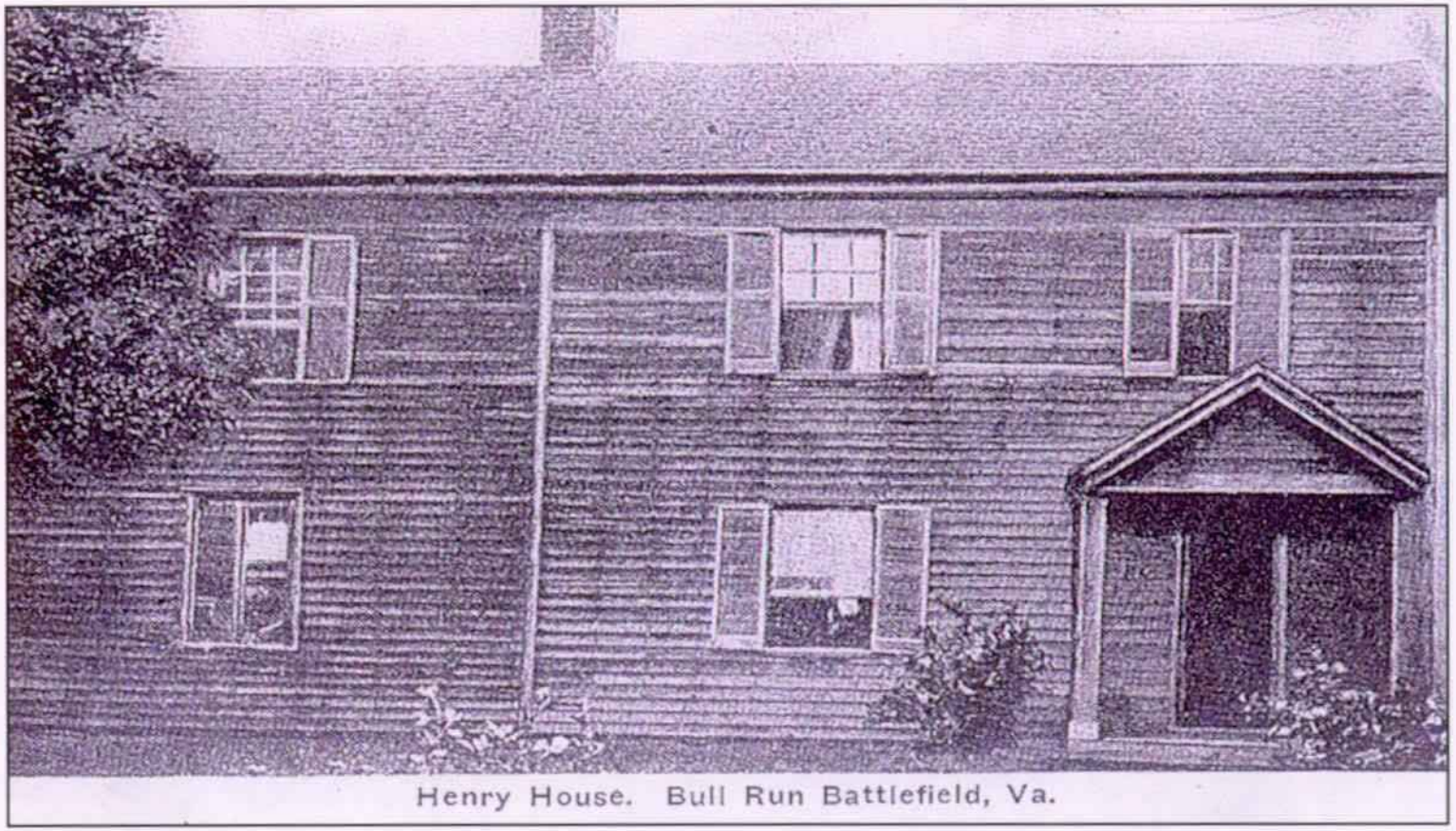


Figure 18. Postcard. Henry House. Bull Run Battlefield, Va. View of west elevation of house with original gable porch. Reverse side information includes, "Published by Dowell's Pharmacy (Manassas Rexall Drugstore) Manassas, Va." (Note that Dowell's Pharmacy was in business c. 1910 – 1930, [Mr. Dave Purschwitz, Curator at Manassas Museum].) Postcard loaned from Historic Postcard Collection, Manassas Museum System, McBryde Library and Archives, Manassas, VA.

Figure 18a. The Famous Henry House on Bull Run Battlefield around which most of the fighting took place July 21, 1861 (sic). The caption was provided on eBay listing by Charlie Snyder. Captioned by The American Press Association, July 16, 1911, fiftieth anniversary year of the First Battle of Manassas. This rare view from the rear shows both the south gable end and the east elevation in view. Note the west gable porch is still in-situ at SW corner of house.

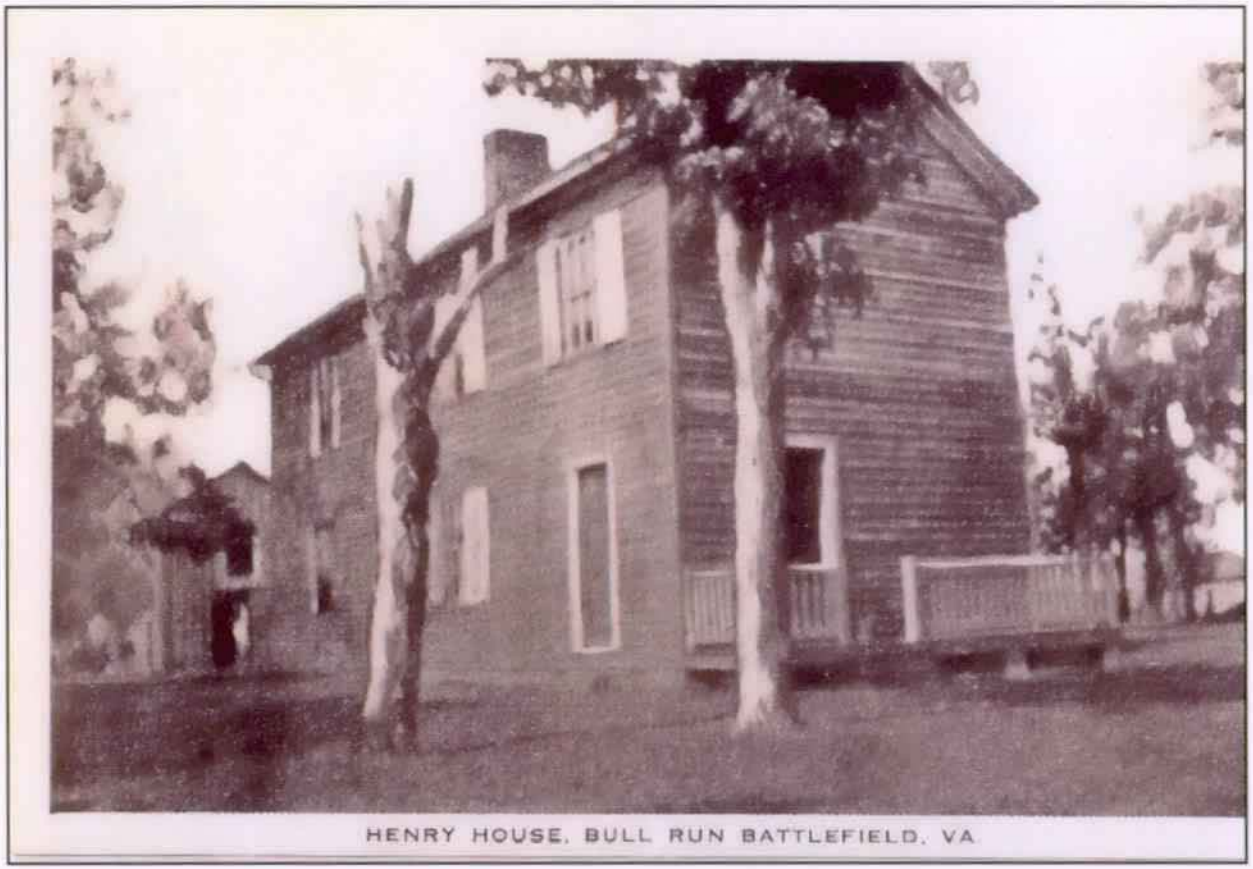


Figure 19. Postcard. Henry House Bull Run Battlefield, VA. Later view of house with original SW corner gable porch removed and new entry platform (post Sons of Confederate Veterans ownership – 1922/ 1940) on south elevation now in place. Note new door cut into south elevation – partially obscured by right hand tree. One and a half story shed seen in background to north of house. Reverse side of card information includes "Eagle Quality – The Eagle Post Card View Company, New York". Postcard loaned from Historic Postcard Collection, Manassas Museum System, McBryde Library and Archives, Manassas, VA.

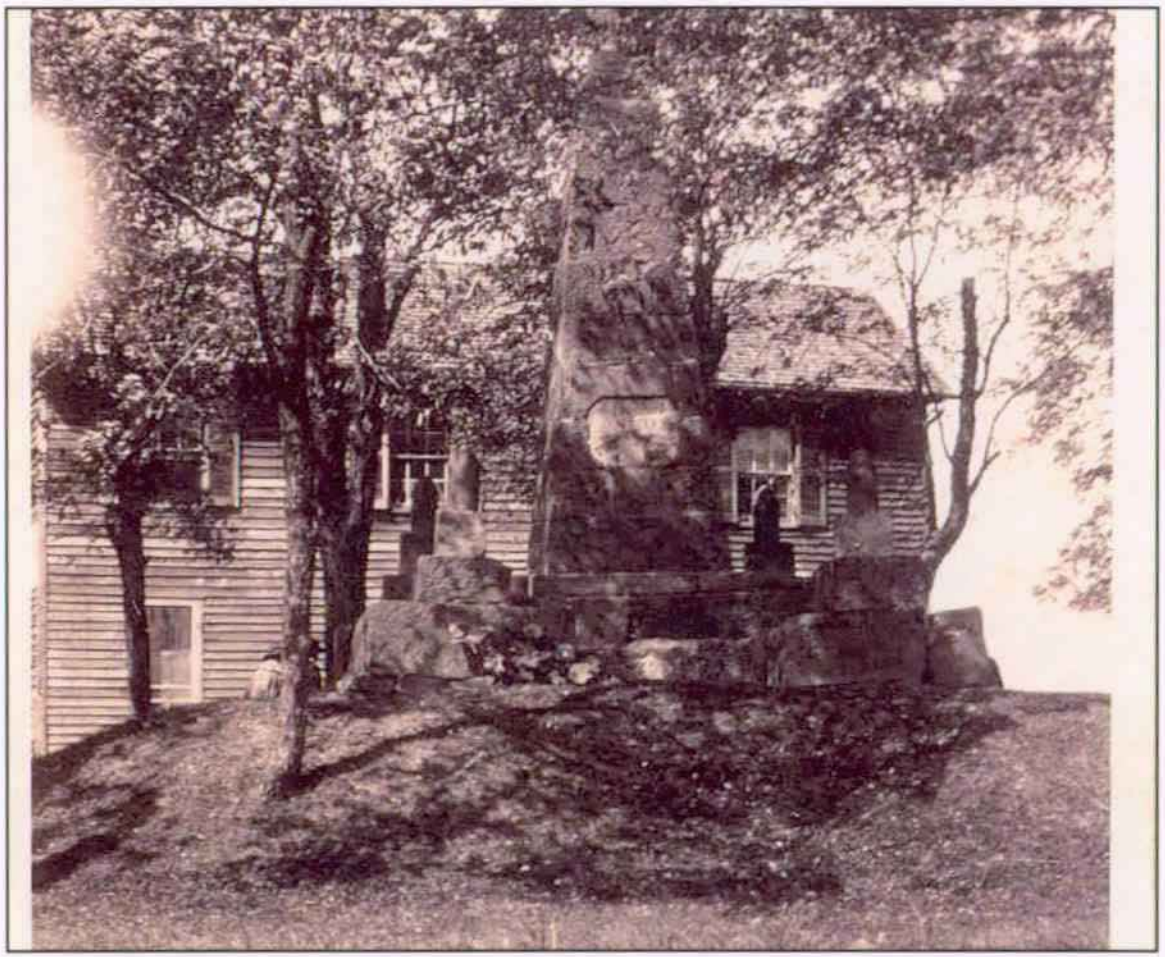


Figure 20 Rear. View of east elevation of Henry House with Bull Run Monument in foreground. Courtesy Manassas Museum, Historic Photograph Collection.

This is an unusual photographic perspective. Of primary architectural interest is the view of the door at the lower left corner of the house. This original opening was later changed to a window, most likely by the NPS once occupied by a Caretaker as early as 1942 or as late as 1949. White edge of sign along left edge of building SE corner – may be edge of Museum of the Henry House sign, directly associated with the Sons of Confederate Veterans ownership and use of the building between 1922 and 1940.

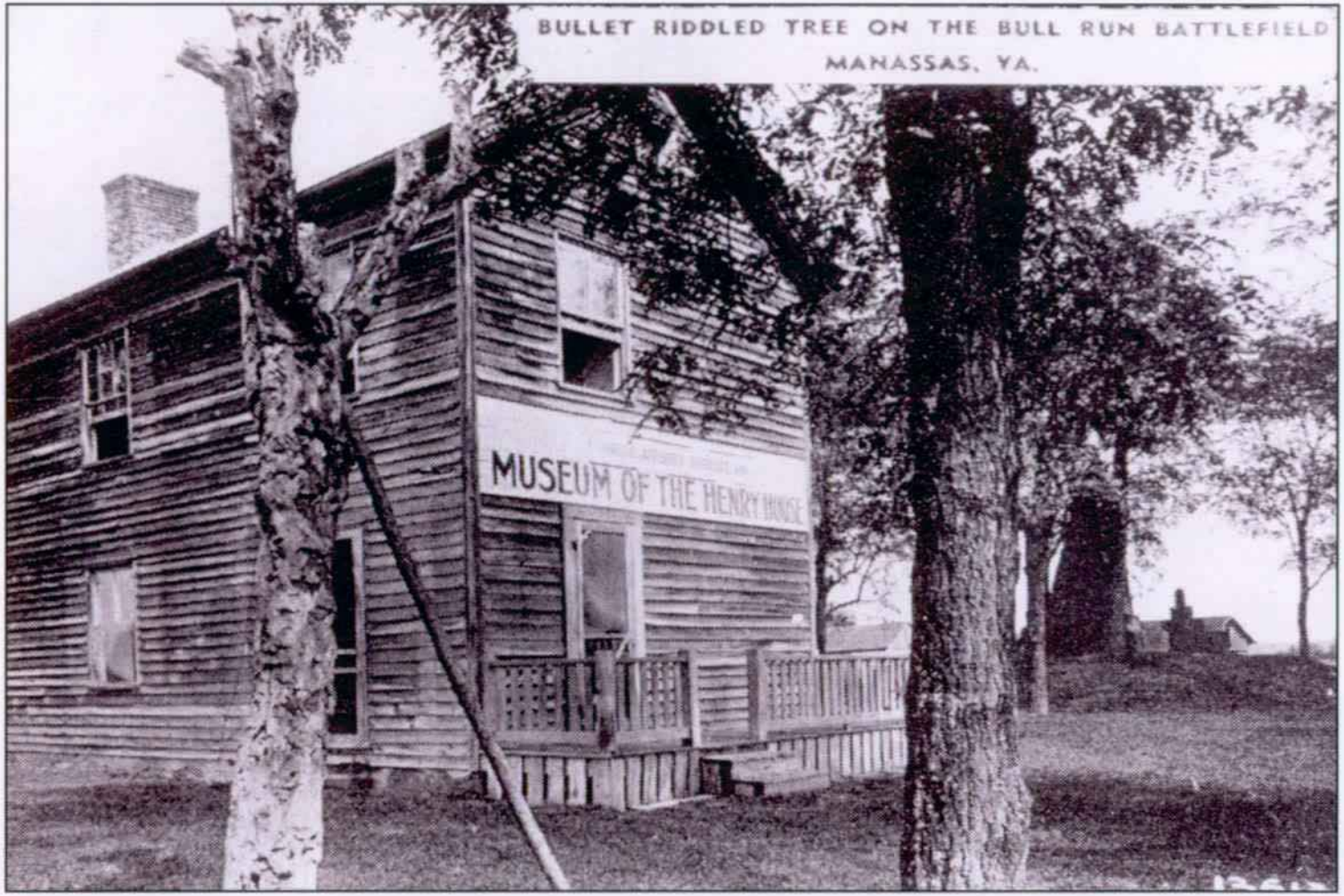


Figure 20. Postcard. Bullet Riddled Tree on the Bull Run Battlefield, Manassas, Virginia. No. 13513. Reverse side information includes, "Silver Craft – Made by Dexter Press, Pearl River, New York". Postcard loaned from Historic Postcard Collection, Manassas Museum System, McBryde Library and Archives, Manassas, VA. Also found in Henry House Historic Photo Collection, Manassas National Battlefield Park library.

Photo taken between 1922 and mid 1930's; note original siding in-situ (vertical nail pattern), siding was replaced in 1930's according to former occupant (Fred Ebhardt, personal communication, 2001).

Figure 21. "Group of Men on Veranda of Henry House". "Museum of the Henry House" sign hangs above their heads on south elevation. Good detail of veranda railing and pickets. Group from left to right: Corporal Tanner, Judge Howry, Mr. Chumbley, Mr. Sherier, and Major Ewing. Photo by R. (or K.) W. Hundley.

Henry House II photos, Manassas National Battlefield Park library, undated (c.1922 – 1935). Date established between purchases of house by Sons of Confederate Veterans (1922) and the replacement of the original siding (mid-1930's). Original period of construction exterior siding boards are observed in-situ in this photo.

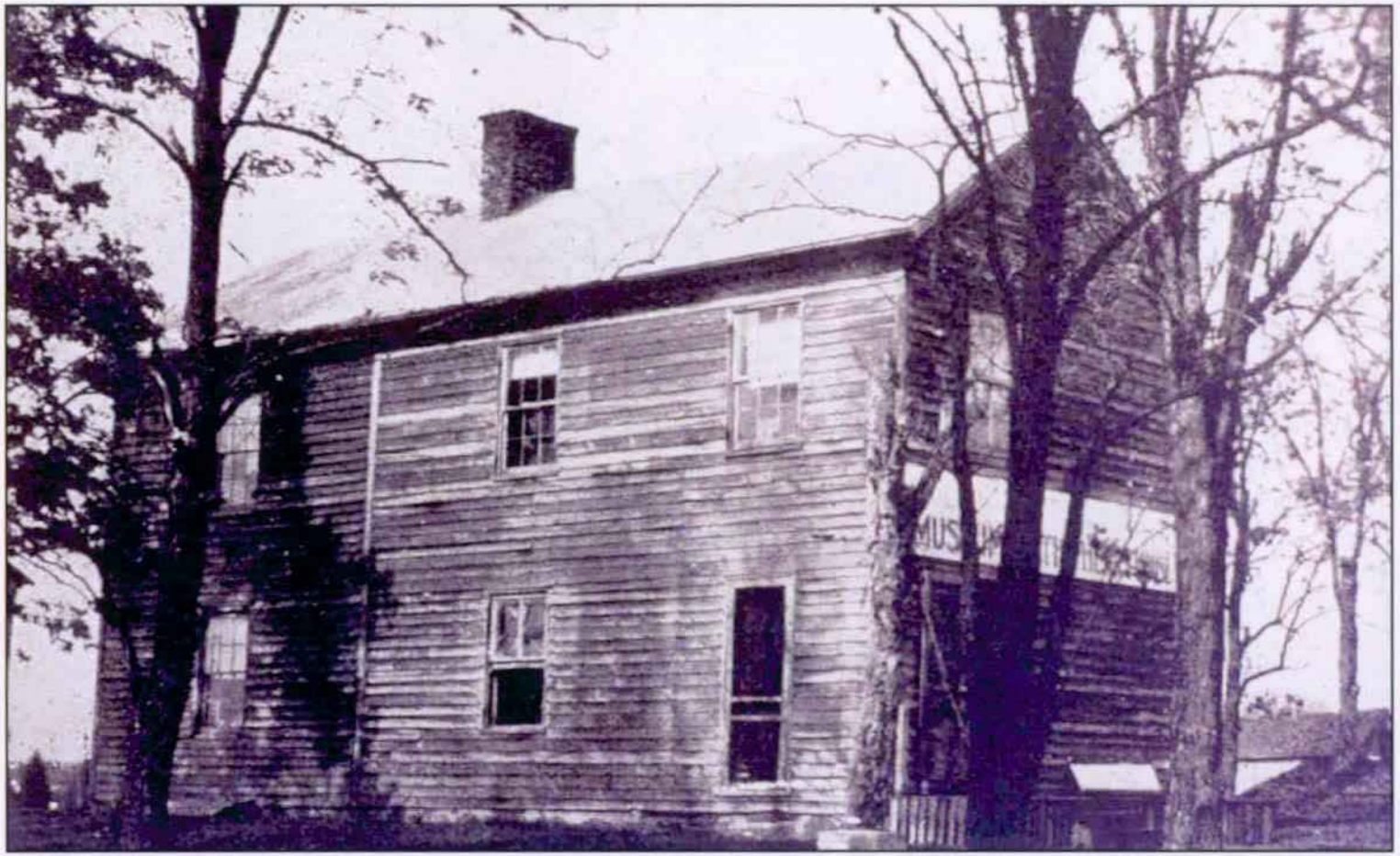


Figure 22. View of Henry House with "Museum of the Henry House" sign on the south elevation. Bullet riddled tree still standing, base now encased in concrete box foundation. Other interpretive signage visible off south end of building. Caption indicates, "The present House, shown herewith from a photograph made in 1931… The picture of the old house was loaned by Mr. and Mrs. Arthur L. Henry, who lived here for many years". *Stonewall Jackson's Way*, by John W. Wayland, 2nd revised edition, Morningside Press, Dayton, Ohio, 1984, page 45.

Date is fairly accurate based on condition of original siding. Photo dated between SCV purchase of house (1922) and replacement of original siding (mid-1930's).

Figure 23. Mr. Adoniram Judson Powell, Caretaker for The Sons of Confederate Veterans (SCV), posed in front of south west corner of Henry House, c.1935 - 1942, during the Museum of the Henry House era. [Courtesy of the Fred Ebhardt Family, Manassas, Va., 2001]

Note that house is seen with german coved horizontal siding. An interview with the Ebhardt family indicates new siding was installed "sometime in the 1930's". Mr. Powell lived at the Henry House from approximately 1929/1930 until he died in 1942.

"Mr. A. J. Powell (who has been the caretaker here for a number of years) is the son of William Powell, who was with General Mosby when he raided the Old Rectory at Fairfax, VA, and took General Stoughton prisoner." [MANA Report].

Figure 24. Extreme NW corner of Henry House seen in this Ebhardt Family photo taken circa 1935 - 1942. Seen in this photo is Fred Ebhardt holding his daughter Valendia (married name, Bohon) born November 1941.

Courtesy of the Fred Ebhardt Family, Manassas, Va.

Photo is from same time period as 23. Exterior siding on house appears to be similar in weathering exposure. Details at the cornerboard indicate that german style coved boards are used to cover the exterior of the house at this time.

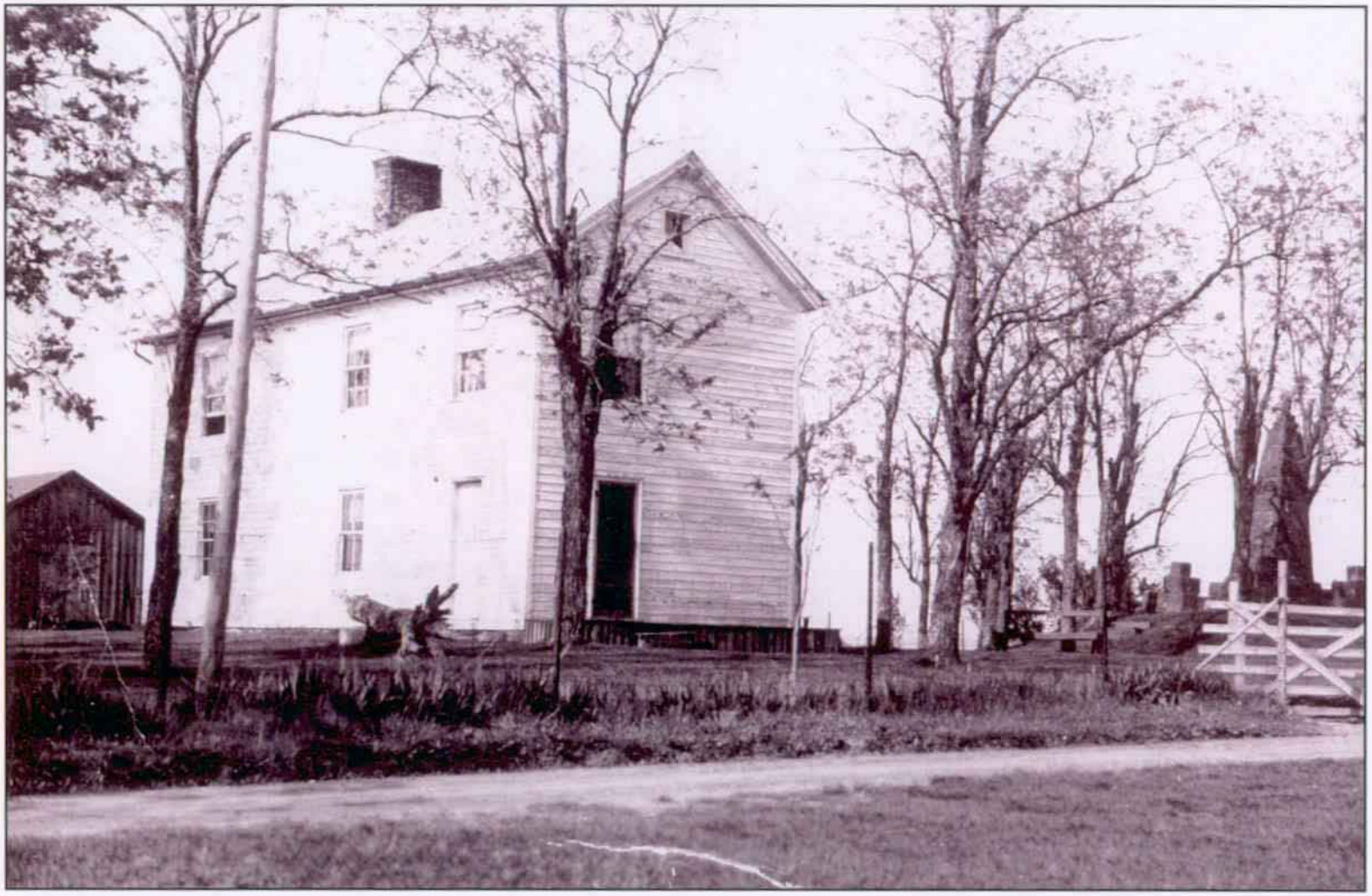


Figure 25. Overview of Henry House SW corner, new shed and monument in background. Bullet ridden tree seen in horizontal position propped up on cement pier previously used as support. South gable "veranda" entry platform in place without railing, "Museum of the Henry House" sign has been removed. Courtesy of the Fred Ebhardt Family, Manassas, Va., circa 1935 – 1942 (prior to NPS ownership).

Figure 26. Overview of Henry House SW corner with person sitting on south gable veranda platform. Very similar to Figure 25, fence gate is in disrepair compared to Fig. 25 and platform skirting boards are in not as good condition. Photo attributed to Walter H. Sheffield, dated 04/10/1940. Located in NPS, Harpers Ferry Center Historic Photograph Collection, MANA park file, Harpers Ferry, West Virginia. "Henry House 1940 – Present", historic photo collection, Manassas National Battlefield Park library.

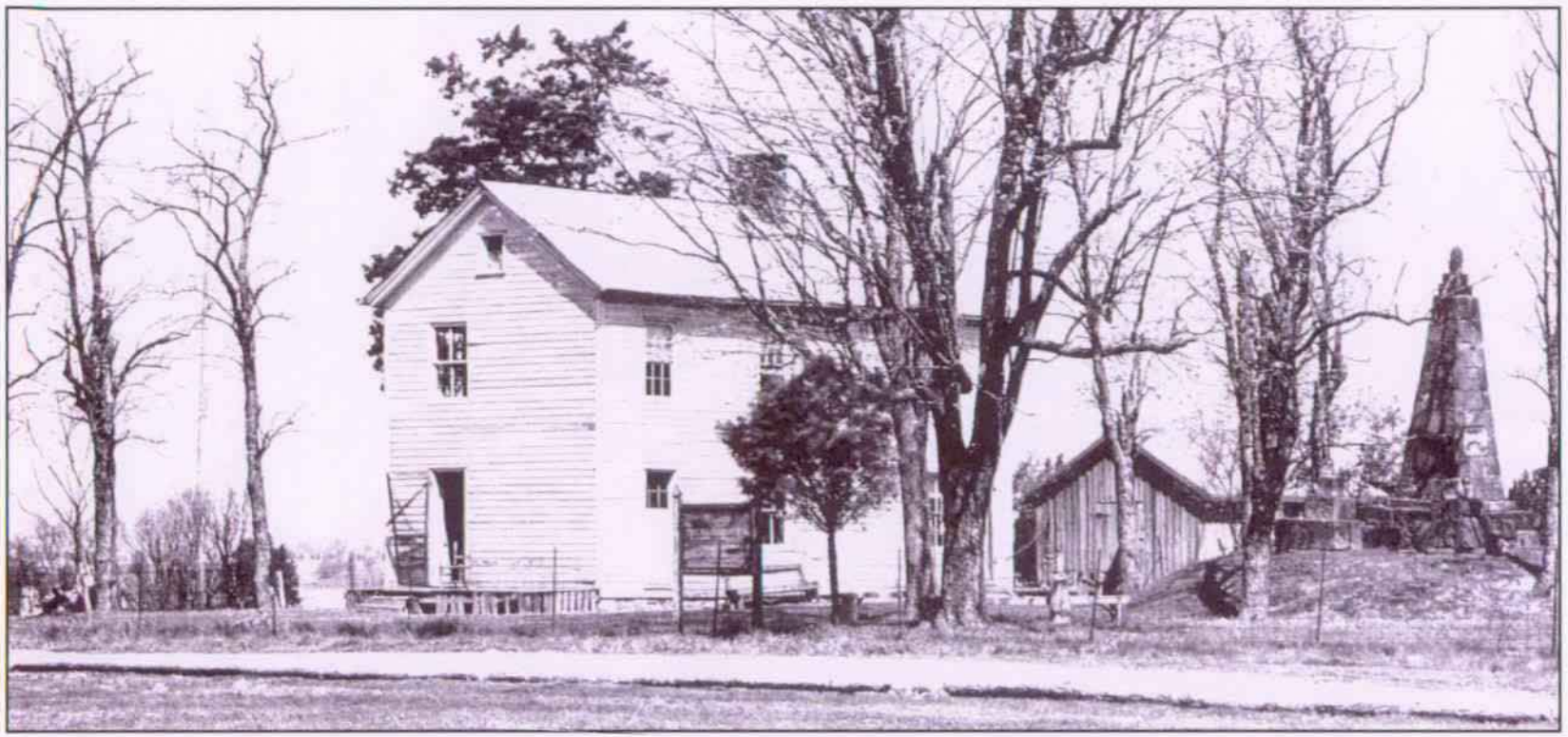


Figure 27. *"The Henry House and Yard. The Monument to the right of the House was Erected by Union Soldiers in 1865 after the Surrender at Appomattox"*. Original caption and photo attributed to George Alexander Grant, NPS Chief Photographer (1929-1954). Photo dated April 25, 1942. Located in NPS, Harpers Ferry Center Historic Photograph Collection, MANA park file #6, Harpers Ferry, West Virginia. MANA park file, "Henry House 1940 – Present", historic photo collection, park library.

Overview of Henry House and Yard. SE corner, full view of shed and Bull Run Monument. South gable screen door is hanging open, south gable veranda platform intact. Clearly visible on east elevation is east cross hallway door with large 6 light transom. Also, large interpretive sign appears along roadside. Other features in the yard include the kitchen water pump head and a few chairs and benches. Bull Run Monument is in disrepair. A tall wood flagpole is visible near the family cemetery that is enclosed with an iron fence.

Figure 28. *"Monument in the Henry House Yard, Built by Union Soldiers in 1865, After the Surrender at Appomattox"*. Original caption and photo attributed to George Alexander Grant, NPS Chief Photographer (1929-1954). Photo dated April 25, 1942. Located in NPS, Harpers Ferry Center, Historic Photograph Collection, MANA park file #7, Harpers Ferry, West Virginia.

The highlight of this photo is the view of the original kitchen door (D101) in situ. It is clearly visible at the NE corner of the east elevation and is a typical 4 panel door used elsewhere at the Henry House; it appears very similar to the original west elevation door, D106. This door is no longer extant. A gutter and a downspout elbow are also visible at the roofline along the east elevation. Windows W101 and 210 are also clearly visible.

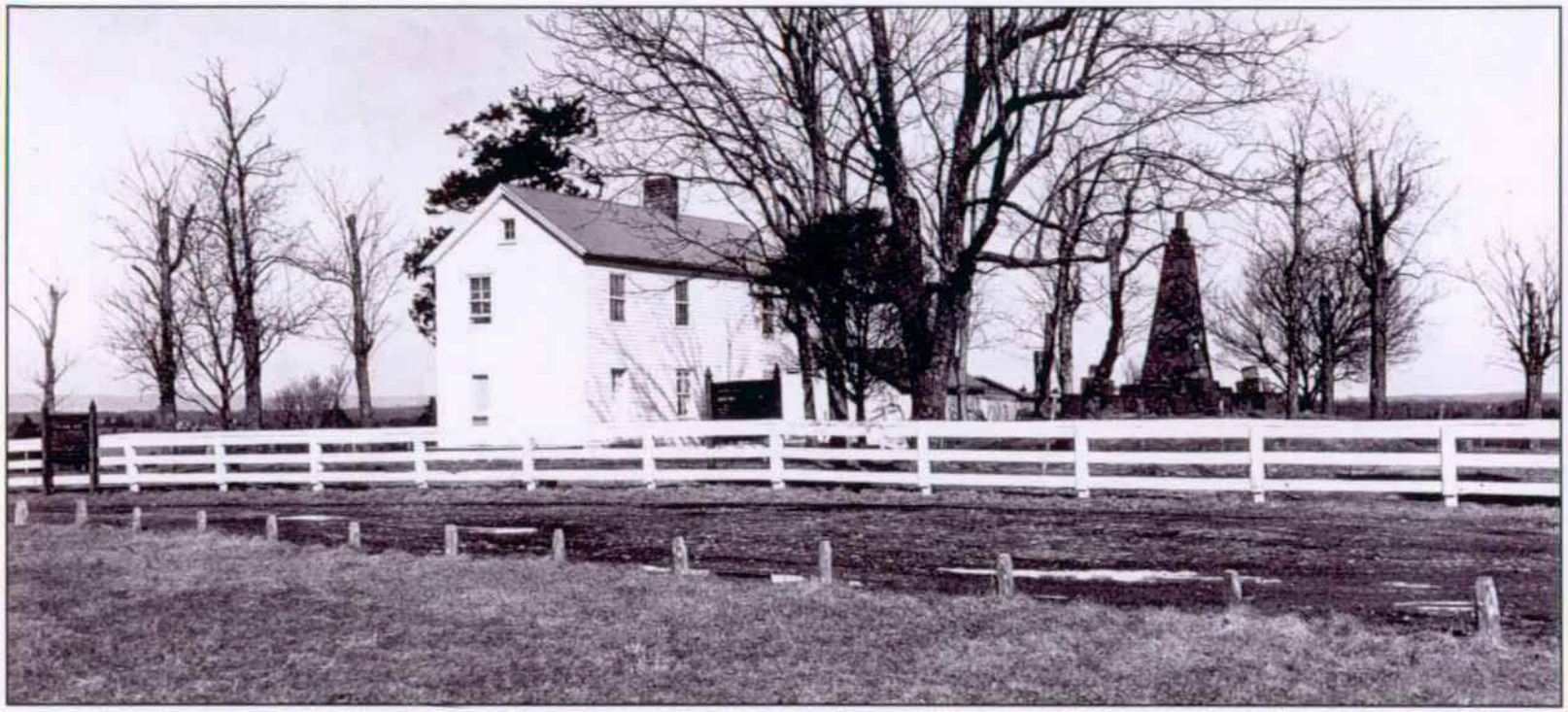


Figure 29. Overview of Henry House, South and East Elevations. Attributed to NPS National Capital Region Chief Photographer (1932-1967) Mr. Abbie Rowe, dated February 1949. Located in NPS, Harpers Ferry Center Historic Photograph Collection, MANA file, negative # 429, Harpers Ferry, West Virginia. MANA park file, "Henry House, 1940 – Present" folder, Park Negative # (1043-V) historic photo collection, park library.

Good overview of east and south elevations, house appears in very good condition, freshly painted white. South gable screen door repaired and in place. Wood rail fence lines north side of unpaved road to the south of the house. A row of low fence pole bollards lines the south side of the road. Two wooden interpretive signs are seen, one along the roadside south of the fence and the other in the background beyond the fence line.

Figure 30. Overview of Henry House, East Elevation and Yard with Bull Run Monument. Attributed to NPS National Capital Region Chief Photographer (1932-1967) Mr. Abbie Rowe, dated February 1949. Located in NPS, Harpers Ferry Center Historic Photograph Collection, MANA file, negative # 430, Harpers Ferry, West Virginia. MANA park file, "Henry House, 1940 – Present" folder, Park Negative # (1043-?) historic photo collection, park library.

Very clear view on east elevation of east cross hallway 4 panel wood door with large 6 light transom. It is not clear if the transom is part of the door (which is normal height) or fixed as part of the wall. If the transom is fixed the door would be a ¾ scale door as the door opening matches other full height doors. Also clearly seen in this view is the old kitchen door still in situ. House appears in very good condition with exterior storm windows on the second floor windows, both elevations. This view taken more from the southeast includes the Bull Run Monument that is observed in disrepair.

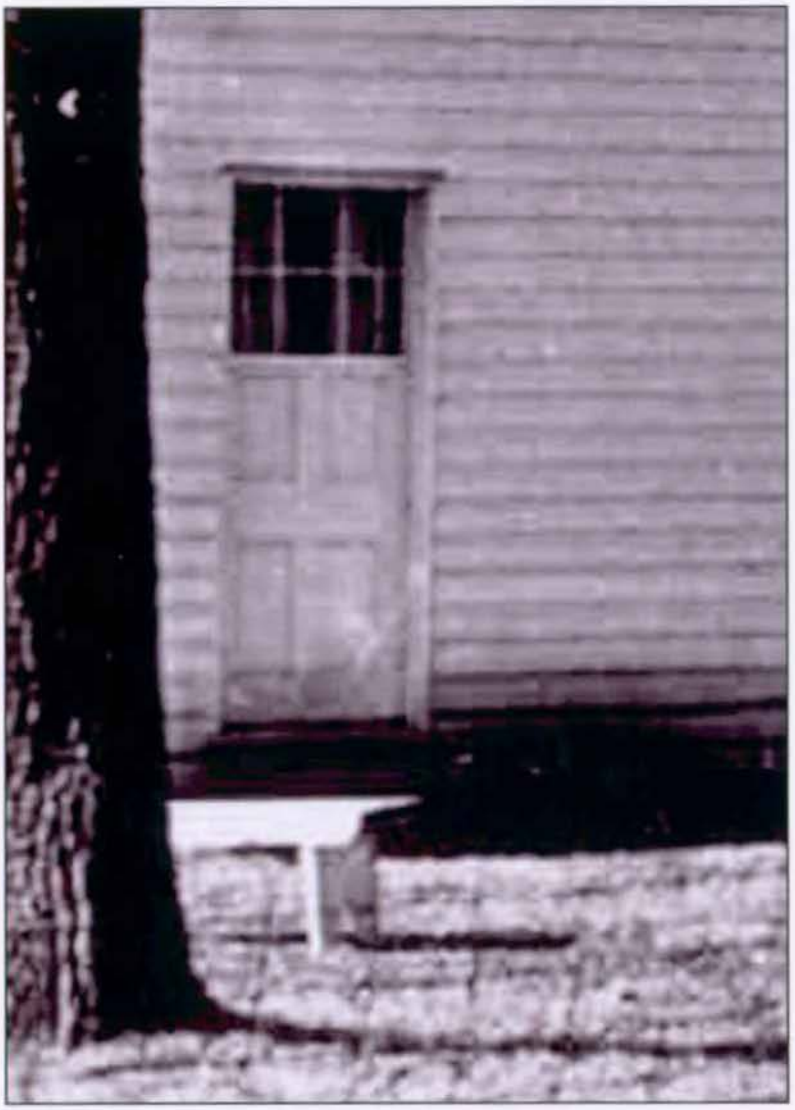


Figure 30a. Electronic (non-photographic) enlargement of HFC HPC MANA 430 (Figure 30). The east cross hallway door with a large 6 light transom window (possibly actually a window sash given its proportion) is seen in this rare rear view of the house. This door was later removed and converted to a window (W103) as labeled on the drawings associated with the HSR.

This alteration of the building may be directly related to the installation of the bathroom (R104) precisely at this location on the interior. The bathroom was most likely installed by the NPS during the inhabitation of the NPS Caretaker Mr. Leonard and his wife. The same door is seen in Figure 27 which is dated 1942.

That seems within the timeline as it is known today although it could be as late as 1949 based on other NPS records.

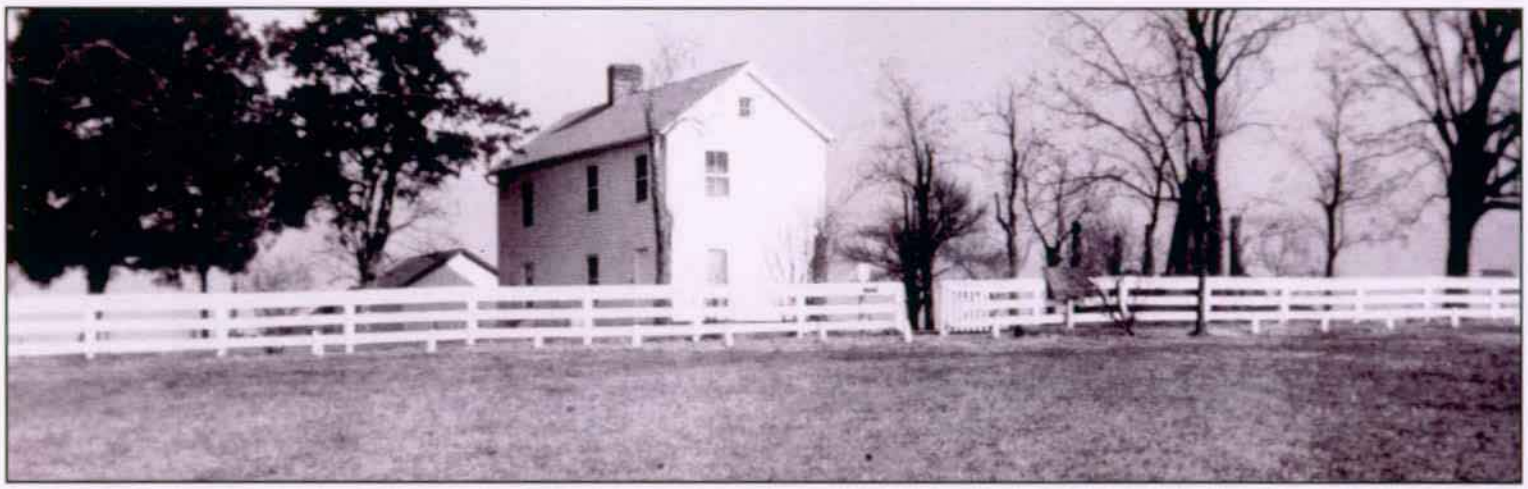


Figure 31. Overview of Henry House and Yard. Taken from Polaroid photograph dated January 1956. MANA park file, "Henry House, 1940 – Present" folder, historic photo collection, park library, unknown photographer.

House seen in good repair with white rail fence running along north side of road. Cast iron interpretive tablet seen located to south of fence line. Tablet is titled "Battle of First Manassas, The Henry House – July 21, 1861". Tablet is detailed in an addition Polaroid photo also dated Jan. 1956 in the same file.

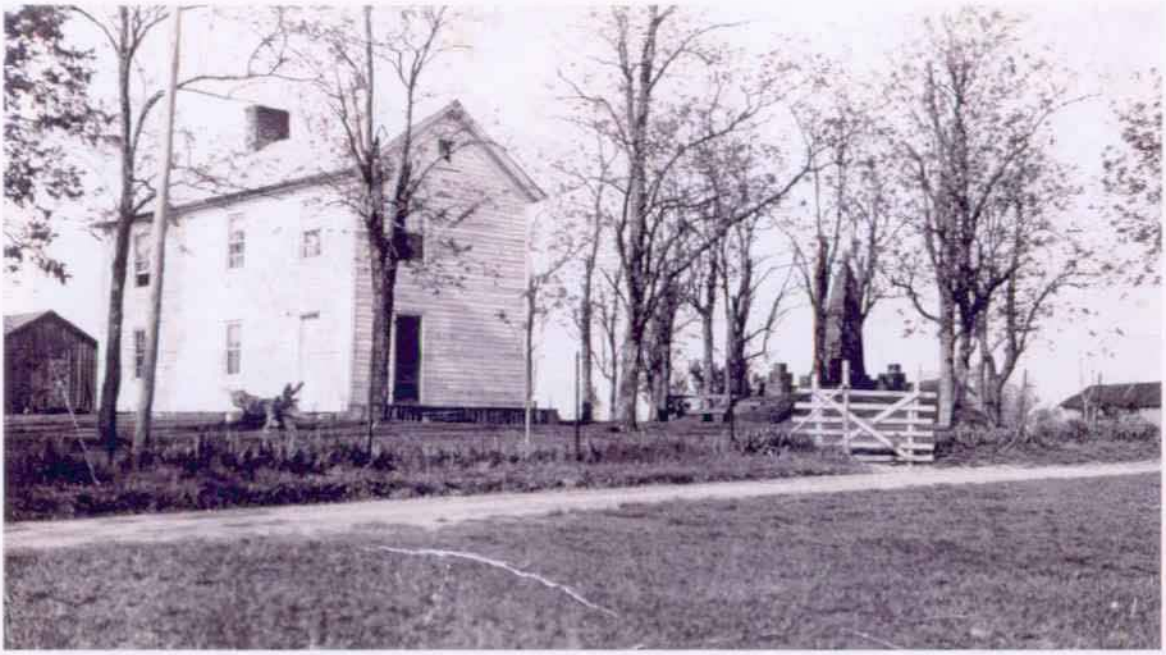


Figure 1. View of the Henry House dating towards the end of the Powell/ Ebhardt caretaker occupancy. The house has been resided, so it is post mid 1930's but probably before 1942 when the family moved out. The wire fence along the dirt road places this photo prior to NPS ownership, as NPS installed at white rail fence in its place. The gate was constructed and installed by Mr. Powell. Note the "bullet-riddled tree" now in horizontal position and supported by concrete pier. Tree can be used as dating tool if chronology of its placement can be determined.

[This caption incorporates comments provided by Mrs. Valendia Ebhardt Bohon, June 2003].

Figure 2. Pauline Ebhardt with her daughter Valendia Ebhardt (Bohon) as an infant near the northwest corner of the Henry House. Note the cellar ventilation frame in-situ, to the right of Pauline. Also note structure was still furnished (chair backs seen in kitchen window). The shadow lines at the NW corner board indicate the coved replacement exterior siding has been installed. This photo is circa 1941-2, the year of birth for Valendia. The family was still living in the house at this time. Valendia was born on Nov. 20, 1941. Valendia was born on the Collin's farm, now part of the parklands.

[This caption incorporates comments provided by Mrs. Valendia Ebhardt Bohon, June 2003].

Figure 3. West elevation of Henry House with mid 1930's replacement siding in-situ. Group photo of Ebhardt relatives who lived at the house includes "Ressie" (rear left), Raymond, older brother of Fred Ebhardt – Henry House occupant caretaker (rear right), Raedelle (front left) and Eunice Olive (born in the Henry House in September 1935) (front right). Eunice moved from the Henry House to her family home in 1937 but returned in 1940 to live with and care for Mr. Powell.

[This caption incorporates comments provided by Mrs. Valendia Ebhardt Bohon, June 2003].

Figure 4. Fred Ebhardt, older brother of Raymond Ebhardt, holding daughter Valendia, shortly after her birth in November, 1941. Photo at northwest corner of Henry House with new shed in background.

[This caption incorporates comments provided by Mrs. Valendia Ebhardt Bohon, June 2003].

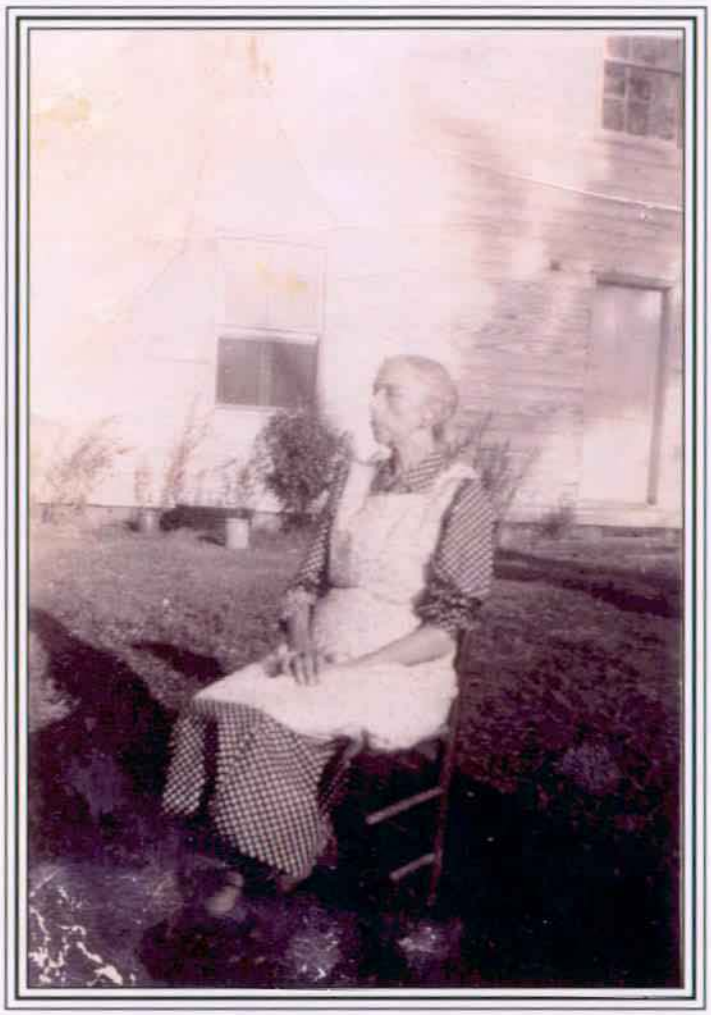


Figure 5. Mrs. Katherine Reeves Powell. Lived at Henry House with Mr. Powell. Preceded him in death.

Note that west elevation of the Henry House is seen in the background. The original flat board siding has been removed and new coved "german style" siding installed. It appears the house has been whitewashed at least once by this time (c. 1935 – 1942), during the Museum of the Henry House era.

[This caption incorporates comments provided by Mrs. Valendia Ebhardt Bohon, June 2003].

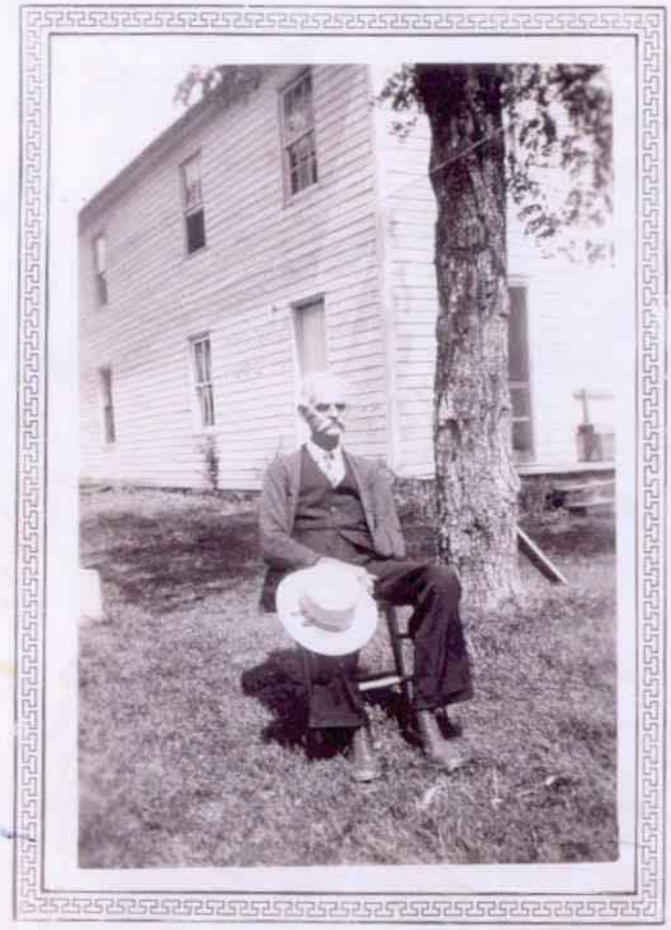


Figure 6. Mr. Adoniram Judson Powell, died September 19, 1942. Caretaker at the Henry House, Seated near southwest corner of the house. House has been resided. Note also that "Bullet riddled tree" is not seen, but the concrete pier that held it up is seen to left of Mr. Henry. Photos with tree (#1 in this series, precede photos with tree removed?.

[This caption incorporates comments provided by Mrs. Valendia Ebhardt Bohon, June 2003].

Part 1. Developmental History

B. Chronology of Development and Use

2. Chronology of Recent NPS Maintenance Projects (1992 – 2000)

B.2. Chronology of Recent NPS Maintenance Projects

Introduction to Illustrated Narratives: The use of the photographic narrative in the historic structure report can serve many purposes. In this particular instance there are two primary reasons. The first is to document physical work that has changed the integrity and structure of the framework of the house, the second is to provide graphic illustration of the condition of the structure at various points in time. Most of the photographic documentation has been generously provided by Manassas National Battlefield Park Maintenance Staff, copies of which are located in the park maintenance files. One group has been provided by the National Capital Regional, Office of the Chief Historical Architect.

These photo narratives fall into two time periods; 1992 and 1999/ 2000. In the first period of time repairs are being made to the east elevation of the building. This was documented both by the park and by the regional office. The Park Exhibits Specialist, Richard K. Maestas, prepared a report, *Henry House Work Report, September 1992*. In this report, Mr. Maestas discusses the extent of the termite damage in the east wall and efforts made to correct the condition. The two narratives dated August 1992 contain photographs from the work mentioned in the report.

A preservation maintenance plan was put together by the Assistant Regional Historical Architect (see reference to 1995 *Henry House Preservation Maintenance Plan*, by Stephen Ziegenfuss AIA, National Capital Regional Office, Washington, D.C.). This report was prepared at the request of park management to provide guidance for the preservation maintenance repair work the park was doing at this time, plus much more. It was, however, not completely carried out. The architectural drawings that are mentioned in the report as being attached are not provided. Research indicates that Mr. Ziegenfuss transferred out of his work position at the regional office at about this time and apparently before the drawings were completed.

Additional repairs to the wood frame of the building were again required in 1999/ 2000 due to extensive termite damage during the intervening years, and, it seems, lack of preventative maintenance measures to deal with the constant influx of termites and the poor drainage situation. Consequently the historic building continued to deteriorated at an accelerated pace and many historic features were lost.

The following Illustrated Narratives are included as part of the chronology section of this report that documents the NPS maintenance projects from the 1990's.

August 1992 East Elevation Wall Framing & Siding Repairs, Part I, provided from park internal building maintenance files, Office of the Chief of Maintenance, Park

Exhibit Specialist, Manassas National Battlefield Park, Manassas, VA. (10 pages).

August 1992 East Elevation Framing & Siding Repairs Documentation, Part II, provided from the internal park files of the Chief Historical Architect, National Capital Region, Washington, D.C. (6 pages).

1999/ 2000 Exterior North Elevation Condition Prior to Treatment Repairs (Extant Conditions), provided from park internal building maintenance files, Office of the Chief of Maintenance, Park Exhibit Specialist, Manassas National Battlefield Park, Manassas, VA. (6 pages)

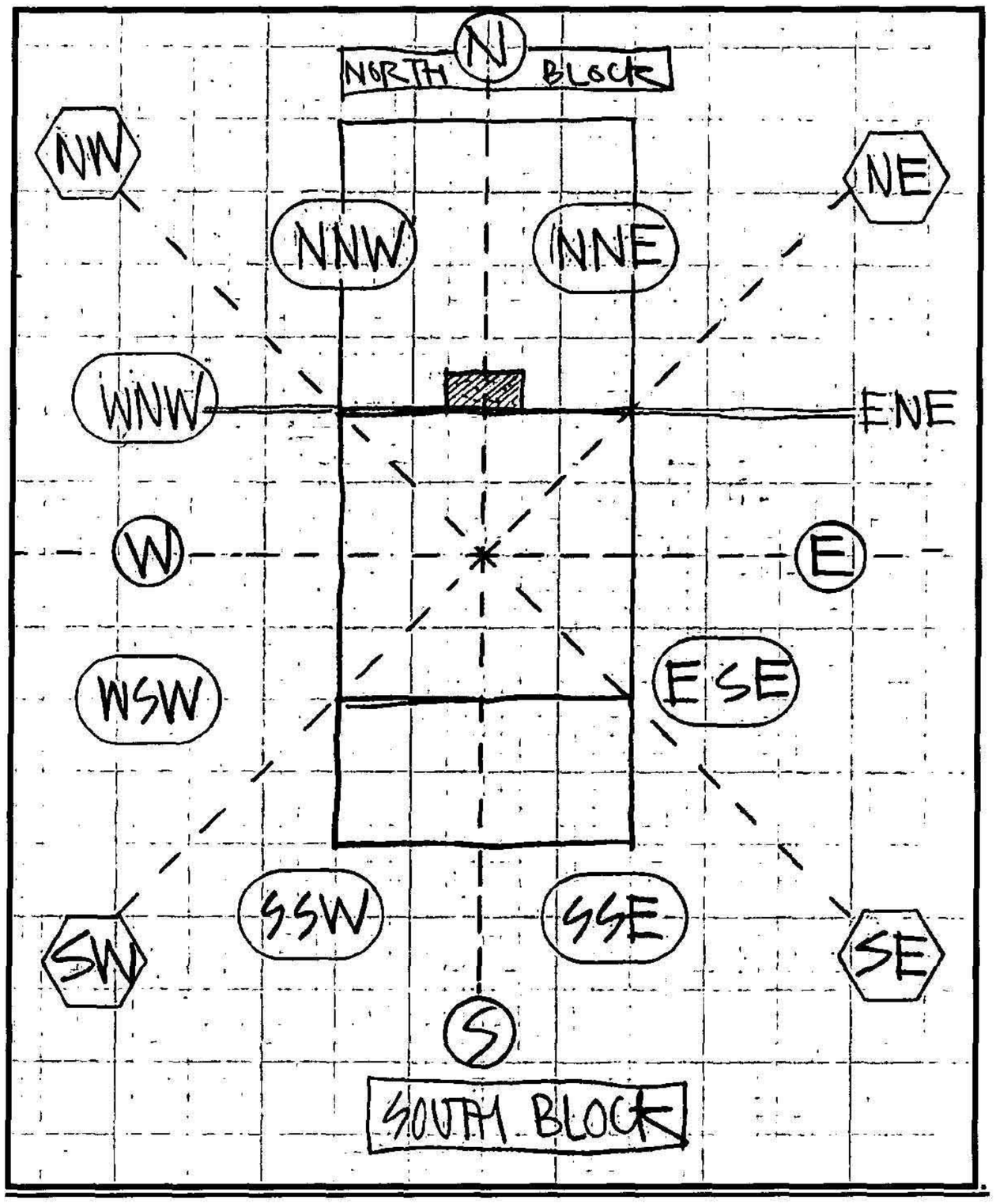
1999/ 2000 North Elevation Framing Treatment Repairs / Project Documentation, (Extant Conditions), provided from park internal building maintenance files, Park Chief of Maintenance, Park Exhibit Specialist, Manassas National Battlefield Park, Manassas, VA. (6 pages)

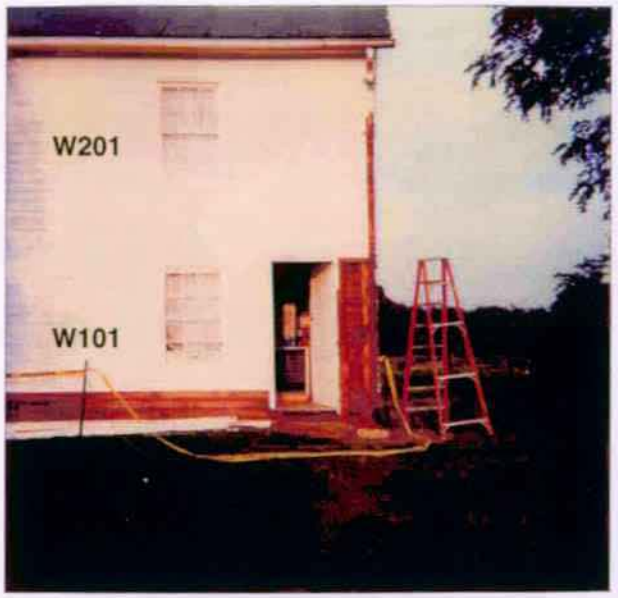
2000, Interior Features, Room 102 Historic Floor Framing System In-Situ Documentation, provided from park internal building maintenance files, Park Chief of Maintenance, Park Exhibit Specialist, Manassas National Battlefield Park, Manassas, VA. (9 pages)

2000, Interior Features, Room 102 Historic Floor Framing System Removed / Documentation, provided from park internal building maintenance files, Park Chief of Maintenance, Park Exhibit Specialist, Manassas National Battlefield Park, Manassas, VA. (1 page)

Preservation and repair of windows has also been ongoing over the past few years. Work has been carried out by the Park Exhibits Specialist and Maintenance employees. Documentation of this work will be found in the Maintenance files at the park and in the condition assessment section of this report.

Note: Many of the photographs have been labeled using a compass coordinate system. To help with this nomenclature the following sketch is inserted for the reader's reference. This quadrant map is applied to the house at this large scale and to individual rooms at a smaller scale.

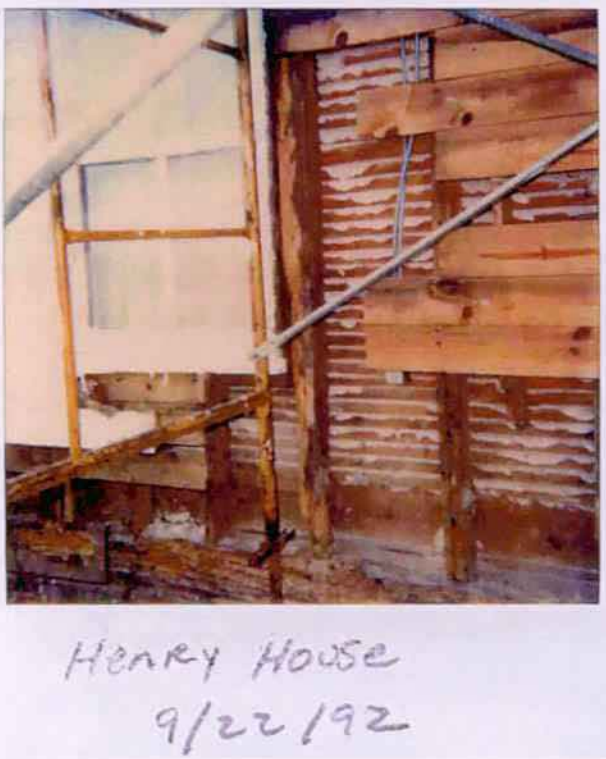




East Elevation @ NE Corner Post and D101
Removal of Extant Exterior Siding.

D101 @ East Elevation, Siding Removed to Reveal Severely Deteriorated
NE Corner Post.

W102, SE portion of south wall, deteriorated sill plate and structural wall frame components exposed.



W102 at South Block, note lath and plaster revealed at interior surface of wall and deteriorated vertical structural element at window frame.

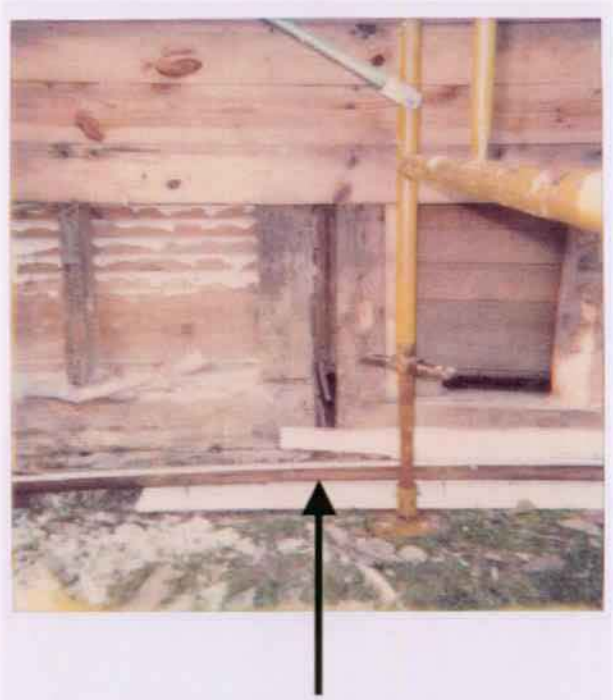
Mid section @ east elevation where south and north block of building come together. Plaster & lath at south block (left) and interior board wood siding at north block (right).

Double posts at center (to left of yellow scaffold brace) indicates the point of juncture between the south and north blocks; each block structure exhibits a different method of construction.

East Elevation, North End during removal of exterior siding and wall sheathing boards.

W201 & NE corner reveal braced frame construction and balloon frame at north block.

Sill Plate with Termite Damage prior to Replacement. Note Sill Plate Sections Butted Together and exterior siding installed over sub sheathing boards. Lath & plaster interior denotes south block construction.



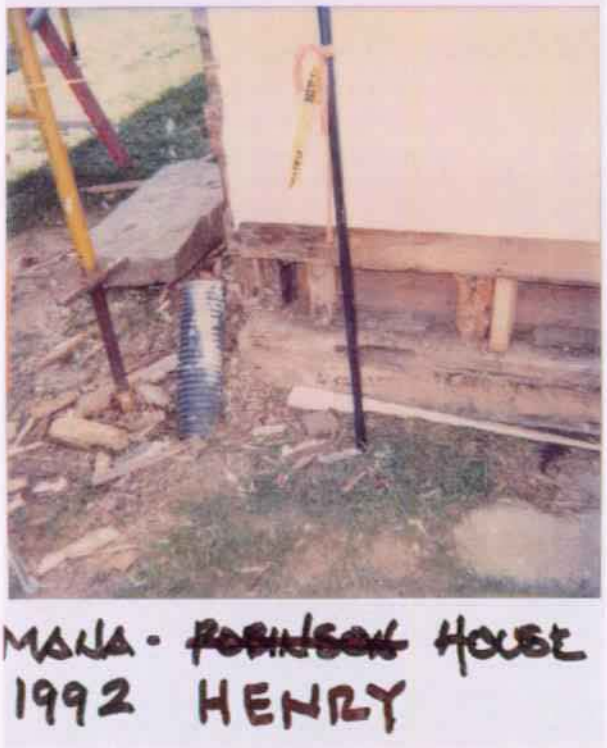
Double posts indicate location of south and north block point of adjoining structures.

East Elevation Sill Plate with Termite Damage Prior to Repair

W101 @ North Block exposed window frame and subsheathing revealed after removal of exterior wall covering.

W102 with W201 above at North Block construction.

NE Corner Post Damage.



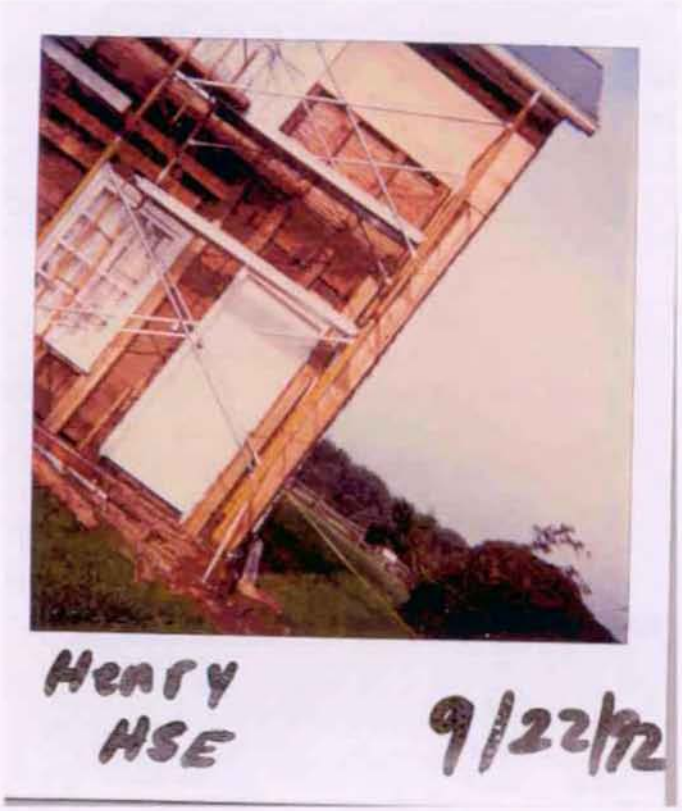
Deterioration of sill plate at corner post visible.

MNA - ~~ROBINSON~~ 48E
1992 HENRY

NE Corner Post Termite Damage Revealed.

Henry HSE 9/22/92

W101 & D101, Replacement SW Corner Post (Hewn from Telephone Pole), Sill Plate Sections and Other Wall Studs Are Seen Replaced.



NE Corner Post replaced.

Figure 1. Siding and sheathing boards being removed to investigate extent of termite damage to the wall framing system at the NE corner (north block).

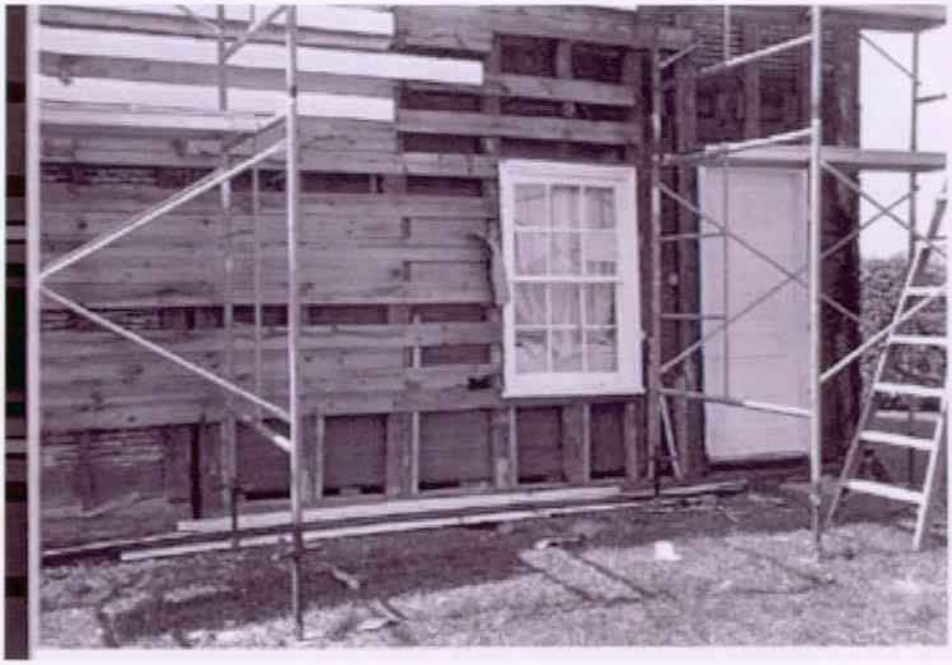


Figure 2. Siding and sheathing boards removed to investigate extent of termite damage to sill plate and wall framing system at NE corner (north block). This photo also documents repairs that have been made to the wall framing – modern dimensional lumber is seen in the wall cavity at the base of the vertical framing members to provide additional support to the wall framing surface in lieu of replacing historic framing members.

Figure 3. Documentation of extent of removal of exterior siding to investigate condition of wall structure and range of termite damage.

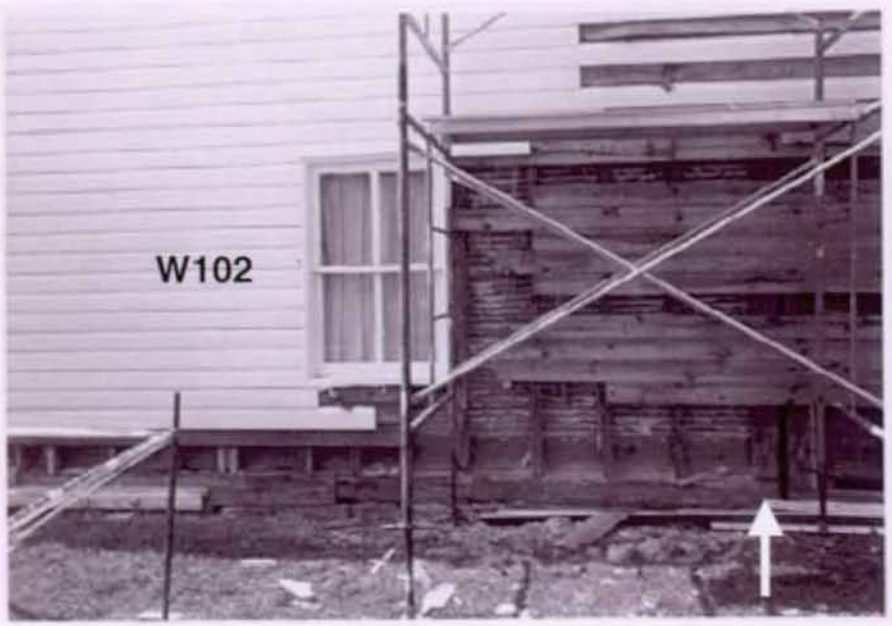


Figure 4. Removal of siding and sheathing boards continues to reveal extent of termite damage to house framing system. Adjacent double corner posts (arrow) are exposed (lower far right) at junction of south (L) and north (R) blocks of house.

Figure 5. Detail photo documenting two outside corner posts at middle of current east elevation marking addition of north block to south block of house. Left post is first period of construction (south block); right post is from second period of construction (north block).

Figure 6. This view of the east wall construction reveals the use of a building paper (at arrow) between the exterior "German Style" shiplap weatherboard siding and the tongue & groove sheathing boards. Overlap pattern of siding boards dates to installation c. 1930's when it was installed to replace the 19th century non-tapered lapped weatherboard siding. Lath and plaster visible at interior of south block. North block is to right of scaffold brace in foreground.

Figure 7. View of upper section of NE (north block) corner reveals diagonal corner post as part of braced frame construction method. Brace is notched (mortise & tenon) into corner post and top of wall frame. Note exposed lath and plaster marks historic interior wall surface.

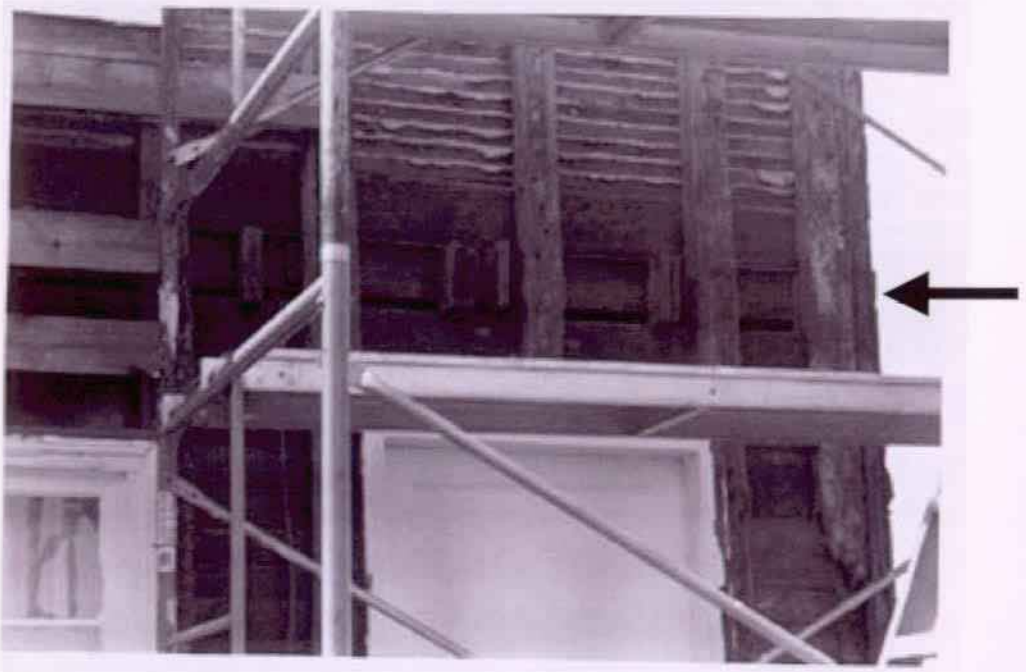


Figure 8. The horizontal ribbon board used to support the second floor joists is clearly visible in this view (arrow). This method of construction helps date the house frame and provides information about the sequence of construction. The ribbon board (riband) is attached to the continuous vertical framing members and the floor joists are notched over it and face nailed to the vertical framing member.

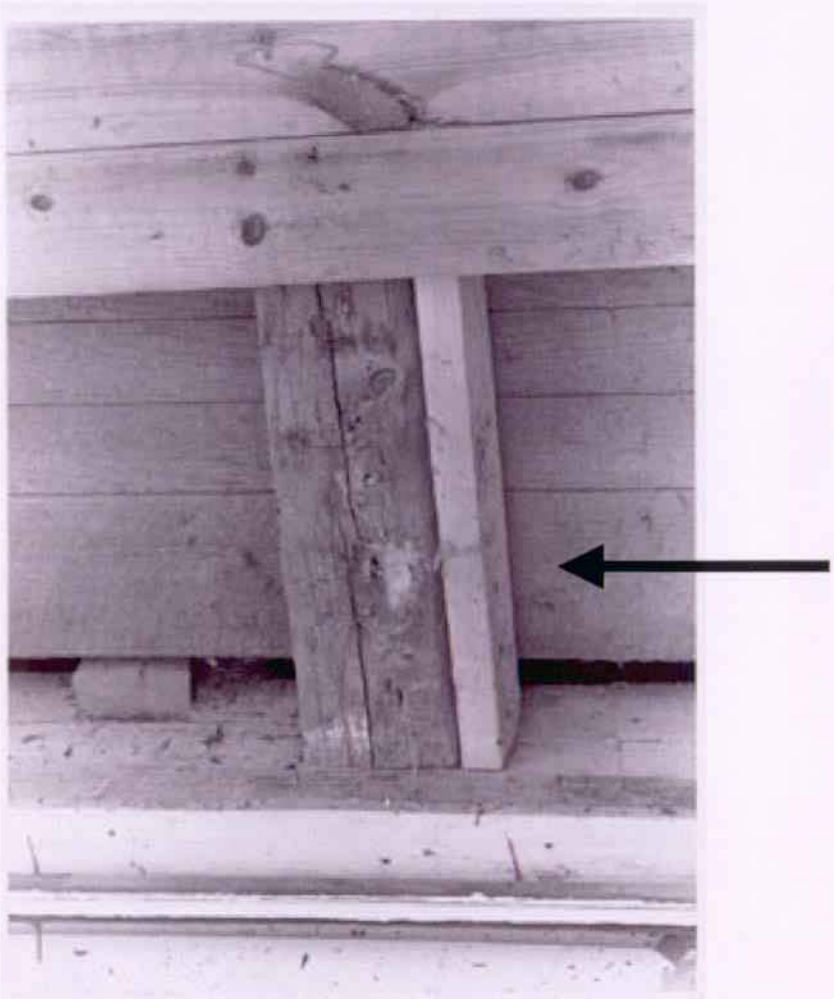


Figure 9. This view of a vertical wall post also shows the installation of a supplemental framing member (arrow) to help support the historic framing member. This is a non-destructive method of structural preservation and is recommended by the National Park Service. It is not known what condition these members are in at the time of this report (04/2003).

Figure 1. North Elevation prior to 1999/ 2000 repair project.

Figure 2. Detail exterior "German Style" ship-lap weatherboard siding, prior to 1999/ 2000 north elevation repair project. 05/31/99

Figure 3. East Elevation prior to 1999/ 2000 repair project.

Figure 4. West Elevation at beginning of 1999/ 2000 repair project. 09/11/2000

Figure 5. North Elevation with T&G sheathing boards exposed after exterior siding has been removed. 07/11/00

Figure 6. North Elevation at NE corner – wall sheathing exposed after exterior siding has been removed.

Figure 7. North Elevation Gable End with Exterior Siding and Sheathing Boards Removed. 07/26/2000

Figure 8. North Elevation Gable End timber frame exposed after removal of exterior siding and wall sheathing boards. 07/25/2000

Figure 9. North Elevation Gable End, vertical stud and horizontal wall plate exposed. Attic floor planking and top wall plate seen above wall lath with plaster keys exposed.

Figure 10. Northwest corner of building with north sill plate exposed with damage.

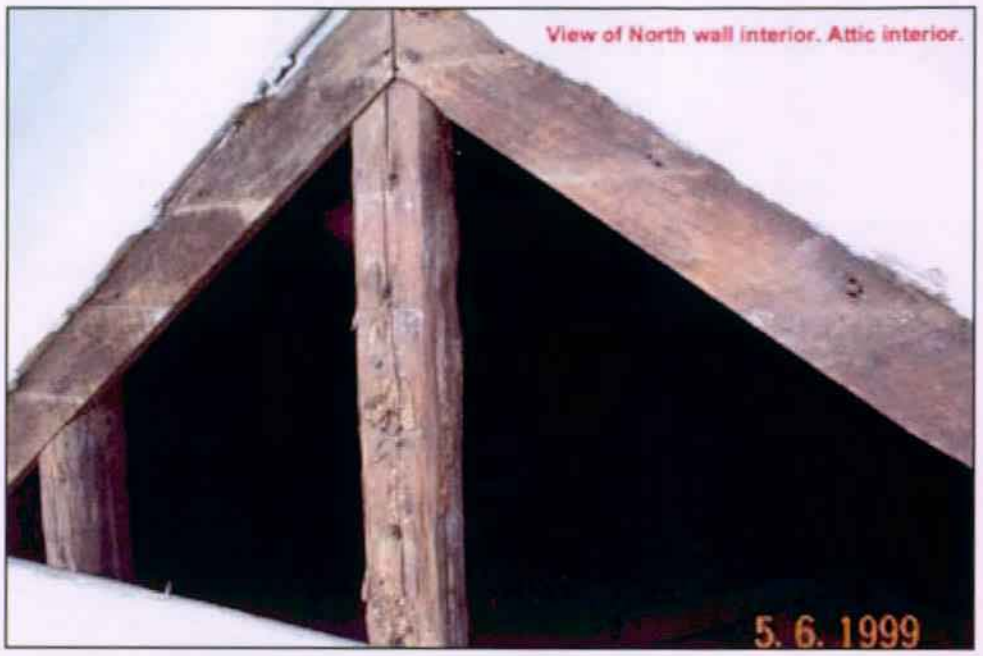


Figure 11. North Elevation Gable End framing at apex of rafters. 05/06/1999

Figure 12. North Elevation Gable End framing exposed, note attic floor planking and top of wall plate over ceiling lath. 05/06/1999

Figure 1. North Elevation Gable End – Exterior Siding Being Removed. 05/31/1999

Figure 2. North Elevation Gable End – Pressure Treated framing Members in place to supplement insitu historic framing components. 08/30/2000

Figure 3. North Elevation Gable End – treated timbers in place. 08/30/2000.

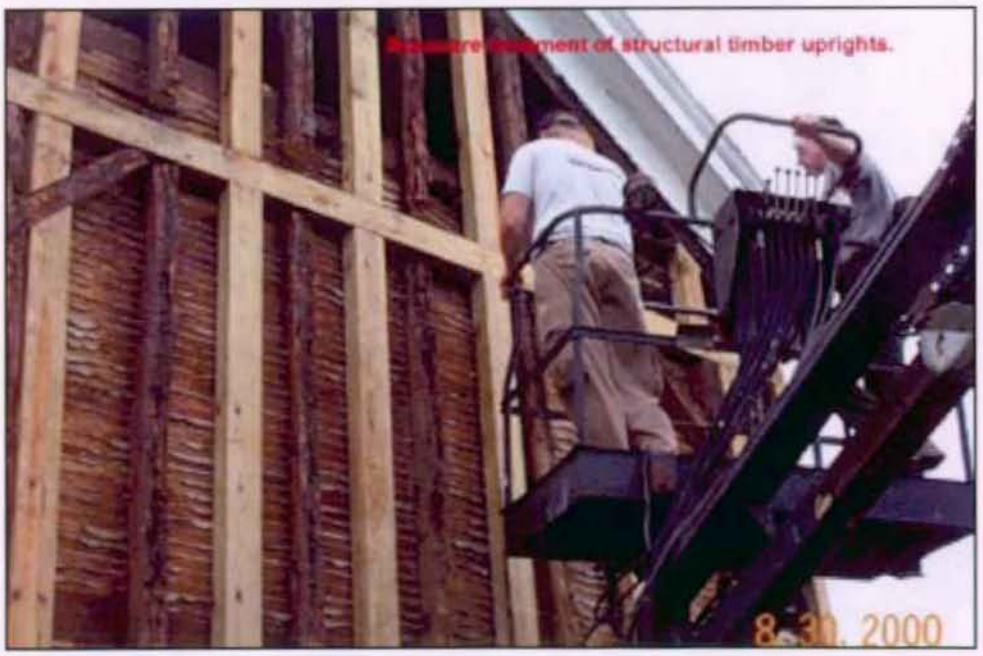


Figure 4. Boracare treatment of structural framing members at north elevation gable end. 08/30/2000.

Figure 5. Boracare treatment (spray application) of structural framing members at north elevation gable end. 08/30/2000.

Figure 6. View of NE corner of building showing damage to original sill plate and vertical framing members. 08/16/2000.

Figure 7. Repairs made to original sill of north elevation gable end at NW corner. Note corner post is not seen in this view. 08/03/2000

Figure 8. North Elevation Gable End replacement sill installed. 08/23/2000

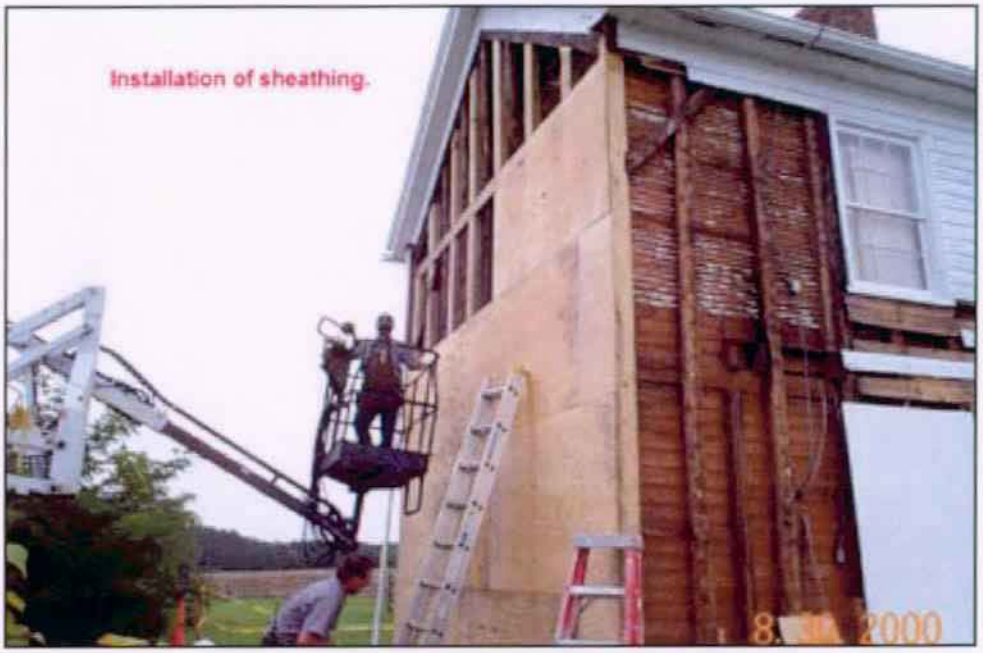


Figure 9. Installation of ¾ inch CDX plywood wall sheathing at north elevation gable end over new pressure treated wall framing system and sill plates. 08/16/2000

Figure 10. North Elevation Gable End – ¾ inch CDX plywood sheathing installed over new pressure treated wall framing members, felt paper installed over plywood.

Figure 11. New exterior siding being installed over felt paper underlayment over ¾ inch CDX plywood wall sheathing. 09/11/2000

Figure 12. Installation of third generation replacement exterior siding at north elevation gable end almost completed, 09/12/2000.

Figure 1. Northwest Corner (Internal caption by Rick Maestas).

Figure 2. West Wall at WNW Quad (Internal caption by Rick Maestas).

Figure 3. NW Corner at NNW Quad (Internal caption by Rick Maestas).

Figure 4. NE Corner (Internal caption by Rick Maestas).

Figure 5. East Wall Near Center, note split in sill plate between joists.

Figure 6. East Wall Near Center, further north, showing empty joist pocket.

Figure 7. NW Overview with North Wall and Fireplace.

Figure 8. NNW Quad with Fireplace Hearth Framing.

Figure 9. NNW Quad with Fireplace.

Figure 10. North Wall with Fireplace and Hearth Framing at center.

Figure 11. NE Corner showing D102 open into Room 101 (Kitchen).

Figure 12. NE Corner with D102 open into Room 101 (Kitchen).

Figure 13. ESE Quad and SE Corner with crack.

Figure 14. SSE Quad and SE Corner with crack.

Figure 15. ESE and SSE Quad Overview with D103 open into room102.

Figure 16. SSE Quad with Joist Bridging at D103.

Figure 17. SSW and WSW Quad with Overview of SW Corner, D103 open into Room 102.

Figure 18. WSW Quad, north of SW corner, view of west wall sill plate and joists.

ESE / SSE Quads – SE Corner

SSW / WSW Quads – SW Corner

WNW / NNW Quads – NW Corner

NNE / ENE Quads – NE Corner

West Wall Interior @ W104

Blank.
Photos dated 11/01/2000.

Part 1. Developmental History

B. Chronology of Development and Use

3. Chronology of Temporary Emergency Structural Stabilization (2001 – 02)

B.3. Chronology for Temporary Emergency Structural Stabilization

This chronology will serve to highlight the evolution of the task that became more critical than the HSR itself, the structural evaluation of the building and the design and construction of a temporary emergency structural stabilization system. It became apparent that if the building was going to survive the duration of the HSR and the NPS/ DSC design and construction processes (forecasted to be a 4 year duration), and their incumbent impacts, than something structural needed to be done, and quickly.

During the initial field investigation of the structure by HPTC in February 2002 it was reported that structural cracking was noticed in the corners of the walls of the central ground floor room in the house, now called Room 102. This room is the primary historical room in the building because of its historical use and associations with the Henry family, HF Henry and the SCV. It was also noted that all of the floor joists had been previously removed and the exterior east and west walls had noticeable outward bulges at their mid spans.

The conditions were verified and crack monitors installed in two locations in RM 102 – on the most significant wall cracks in diagonally opposing corners, in early March. Immediate results could not be expected from the crack monitors but visual observation of the building structure and mapping of the cracks indicated that significant shifting had taken place after the removal of the floor joists. Most likely this initial movement created the fresh wall cracks and the building became comfortable in its new sagged position. Progressive movement of the wall cracks did not occur over the eight month period they were monitored. Recent checking (May 2003) of the crack monitors indicates that some additional movement has occurred since March 2001.

It was decided at this time by the NPS staff involved in the project that a structural engineer better have a look. Using already-in-place contracts made available by the National Capital Region Chief Historical Architect and Regional Contracting Office, and a scope of work provided by HPTC Senior Historical Architect, the firm of Robert Silman Associates (RSA), PLLC, Structural Engineers, Washington, D.C., were brought into the project. Within a week a preliminary evaluation had been made and concurrence received that "something had to be done". While it appeared the building was temporarily stable the unsupported structure was likely to move again at any time, with potentially catastrophic results.

Further investigation of the problem required an all day crawl through at the building and removal of the park's temporary plastic covering over the exterior of the building. Selective removal of exterior siding was also carried out. This process is documented by RSA in their first report to HPTC, *Henry House - Preliminary Condition Report & Temporary Stabilization Recommendations*,

dated 26 March 2001. The report was reviewed by the NPS and comments provided to RSA.

A progress meeting was held at the park on 10 April 2001 and documented in *Progress Meeting Notes* transmitted to the park on 10 April 2001 by HPTC via electronic memo.

The *Henry House - Final Condition Report & Temporary Stabilization Recommendations* was provided to the NPS by RSA on 23 April 2001. Clarifications to the stabilization design and additional sketches were provided by RSA on 17, 24 and 30 May 2001.

24 May 2001 - Reply re: Henry House – *Questions regarding temporary stabilization details.*

The park Chief of Maintenance was also involved in the review of the plan as the park had determined to construct the temporary emergency structural stabilization (TESS) system in-house with park staff.

A full list of the structural engineers sketches are provide in the HPTC transmittal memo to the park Cultural Resource Manager dated 27 April 2001, *Transmittal of Structural Engineer's Final Report and Temporary Stabilization Drawings and Sketches, Prioritization of Recommendations.*

Construction of the TESS system was undertaken by the park during July and August 2001. Exact dates are not known. The structural engineers were invited back out to the Henry House to evaluate the work-to-date and as things were not yet 100 percent completed they issued a *Punch List Report & Associated Sketches* memo on 14 August 2001.

Other temporary protective measures were discussed with park management during the summer, primarily because of the concern over the long "sit time" that would occur before any permanent repair activity would take place at the house. The park Superintendent requested that HPTC provide measures for the short term stabilization of the house. HPTC complied and on 17 August 2001 the Senior Historical Architect provided technical recommendations transmitted via the *Short Term Stabilization Treatment (Mothball) Recommendations for the Henry House* memo. It consisted of two written portions, *Recommended Prioritized Tasks* and *Recommended Materials;* three sheets of drawings, and technical manufacturer's literature.

By October 2001 another punch-list walk through inspection was conducted by the structural engineers, at the request of HPTC. This was to provide the park maintenance staff with clear direction as to what steps needed to be taken to secure the building. This occurred on 16 October 2001.

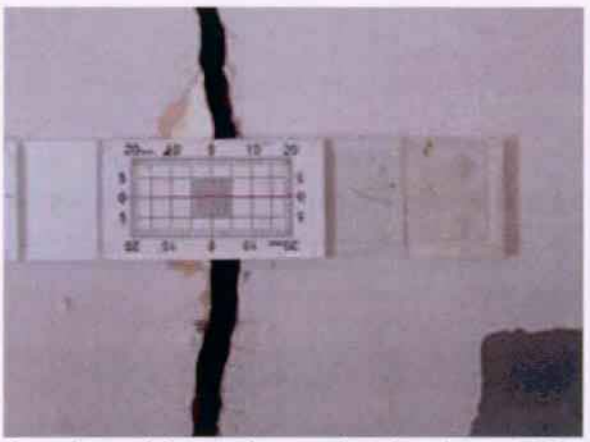
The *Transmittal of Final Version of Prioritized Punch List for Temporary Structural Stabilization Project from Structural Engineers* memo went out from HPTC to the park Superintendent on 26 October 2001. In their final punch list RSA had stated that, *"In order for the temporary stabilization program to be effective, these items must be addressed".* RSA had provided not only numbered prioritized punch list items but also resolution statements that record the decisions made in the field. These resolutions had been discussed and verbally agreed to by all parties while at the house. HPTC concurred with all recommended resolution statements and urged these tasks be completed in a timely manner. Various additional sketches were provided by RSA.

It is not known whether all recommended tasks were accomplished. All work was completed between HPTC and RSA by 30 October 2001.

All photographs by HPTC, March - June 2001.

RM 102. Floor to ceiling crack is seen to west of mantle on north wall of room. Note missing floor joists. Monitored as Crack 1.

RM 102. SE quadrant of room. Floor to ceiling crack is at corner. Monitored as Crack 2.



Crack 1 with crack monitor in place. This is initial placement of monitor in the "zeroed out" position. Note red cross marks centered on black tracking graph.

Crack 2 at SE corner of room supported by wood blocking to measure at bottom of wall to track floor width movement.

Crack 2 detail. Crack monitor with its first graph setting in the center "zeroed-out" position.

RM 102 with beginning of temporary emergency structural stabilization system installed. This system was designed to relieve the load of the building from the building frame.

RM 103, Stair Hall at South Block with Temporary emergency Structural Stabilization system partially constructed. New floor joists and vertical posts provide load bearing capacity for historic framed structure of house.

RM 202, Northwest quadrant. The Temporary emergency structural stabilization system provides lateral and longitudinal support for the house frame through a series of diagonal cross-braced vertical trusses using floor, ceiling and wall supports shimmed tight against the existing wall surfaces or fastened to the historic structure.

Part 1. Developmental History

B. Chronology of Development and Use

4. Graphic Documentation for Chronology Section

B.4. Graphic Documentation

This section presents several collections of graphics that are used to help explain the developmental history and chronology of the Henry House as it is now understood to have occurred.

Manassas Museum Historic Postcard Collection

A collection of seven images, some of which are used as captioned figures. These show historical images of the house in each of its stages; pre battle, post battle ruin of first house, and second house in various stages of development.

Developmental Architectural Sketches

During the course of the building investigation and fabric analysis several schematic developmental scenarios were considered. Many of them have key points of merit that are proved out by the extant fabric. They are also reliant on interpretation of the historical, archeological and architectural information that is inconclusive. Nevertheless these theories persist.

Dating structures is not an exact science. The documentary information, such as the history of the structure and its occupants and knowledge of detail styles and methods of construction of different periods can be crucial to a thorough analysis of a buildings evolution. Where these do not exist or are inconsistent, even more reliance is placed on "reading the fabric".

When a structure has been subject to as much activity as the Henry House a simple conclusive outline can be evasive. The following illustrations are an attempt to graphically represent some of the evidence as it is understood as a result of the research, investigation and interpretation required to produce this report.

To place them in context of the on-going archeological research at the site, these drawings were developed in September 2001, prior to the last phase and conclusions of the archeological investigation [Parsons & Ravenhorst: 2003].

PG 1. First Period of Construction (1870-75 /1883) First Floor Plan

Illustrates the traditional Virginia 2/3 I-house plan articulated by Dr. Henry Glassie in letter re: Henry House. Also follows normal pattern of this type.

PG 1-A. First Period (1870 – 1883) First Floor Plan, 2/3 I-house Plan.

This illustration is based on the documented development of the tradition Virginia I-house as described by Henry Glassie in many of his works. The illustration lays

out the fully developed I-house (dashed lines) based on the geometry of the 4 and/ or 8 foot bay. The first phase of the rebuilt Henry House uses the 8 foot rule in developing the center hall and north bay. Based on the recent archeology, if the east bay had been built over the ruin of the first house foundation it would have been 10 feet in width and void the symmetrical layout of the 4 or 8 foot orthogonal and cubic grid.

PG 1-B. First Period (1870 – 1883) Second Floor Plans, 2/3 I-house Plan (Two Versions – With and Without Secondary Partition Wall Used to Form the South Chamber).

This plan illustrates two variants on the room layout of the second floor of the 2/3 I-house plan that existed prior to the addition of the north block. The project Historical Architect wanted to determine whether or not the room was defined by the east and south partitions or as has been seen in Glassie's work was more of an open hall defined only by the north interior partition. The *Interior Finishes Analysis Report* was not able to provide a conclusive determination about these two partitions *[Yokum 2002: 41, Room 204, Analysis Results].* While the door and the design of the wood trim are similar to other 2nd story features, they may have been added at the time of the addition of the north block (saddlebag).

PG 2-A. Second Period (Post 1883) First Floor Plan, 2/3 I-house Plan with North Saddlebag Addition.

PG 2-B. Second Period (Post 1883) Second Floor Plan, 2/3 I-house Plan with North Saddlebag Addition.

These two illustrations show the 2/3 I-house plan with the north saddlebag addition. The house was extended northward with the addition of a 16 X 16 foot square box. Several interior features are not extant in this plan as paint analysis indicates they were added at a later date by the Sons of the Confederate Veterans.

PG 3-A. Third Period (Sons of Confederate Veterans, 1920 – 1940 +/-) First Floor Plan.

Changes made during the occupancy of the SCV were concentrated to the south end of the first floor and the windows in Room 102.

PG 4-A. Annotated First Floor Plan (HABS), 09/2001.
PG 4-B. Annotated Second Floor Plan (HABS), 09/2001.
PG 4-C. Annotated South Elevation (HABS), 09/2001.
PG 4-D. Annotated North Elevation (HABS), 09/2001.
PG 4-E. Annotated Reconstructed West Elevation (HABS), 09/2001.
PG 4-C. Annotated East Elevation (HABS), 09/2001.

These drawing sheets are used to point out the location of architectural changes from various phases of construction as they may be interpreted based on the extant fabric of the building in September 2001.

Architectural Measured Drawings

Two sets of measured drawings were completed as part of the project. HPTC created a set of measured floor plans and elevations in February 2001 as no other drawings of the building existed at that time. Base drawings were needed to carry out the field investigation and to establish a nomenclature for identification of various building components (Rooms, Windows, Doors, etc.).

This set of field drawings consists of three (3) sheets of drawings and is titled:

Henry House, Manassas National Battlefield Park, Historic Structure Report, Historic Preservation Training Center, February 2001.

Sheet 1. First Floor Plan, Second Floor Plan.
Sheet 2. West Elevation, North Elevation.
Sheet 3. East Elevation, South Elevation.

The other set of drawings were completed by the Historic American Buildings Survey. This set meets the Secretary of the Interior's Standards for Documentation (HABS Standards) as required for a Historic Structure Report.

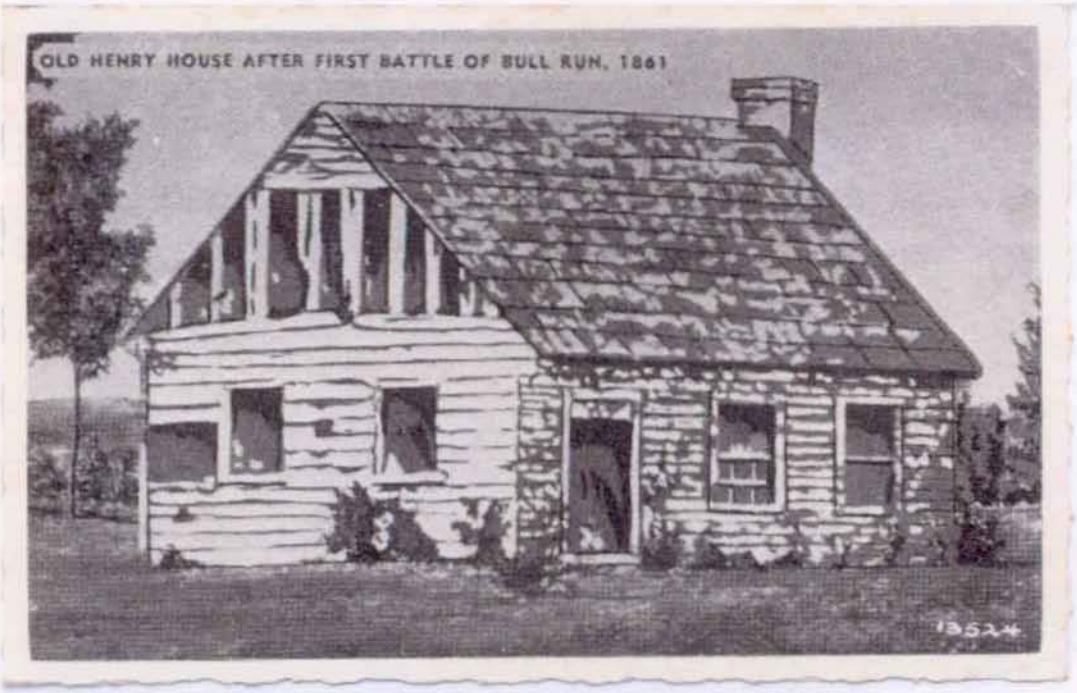
This set is titled:

Henry House Project, 2001. Henry House, Sudley Road, Manassas National battlefield Park Prince William County, Virginia and carries HABS Survey Number VA-1363.

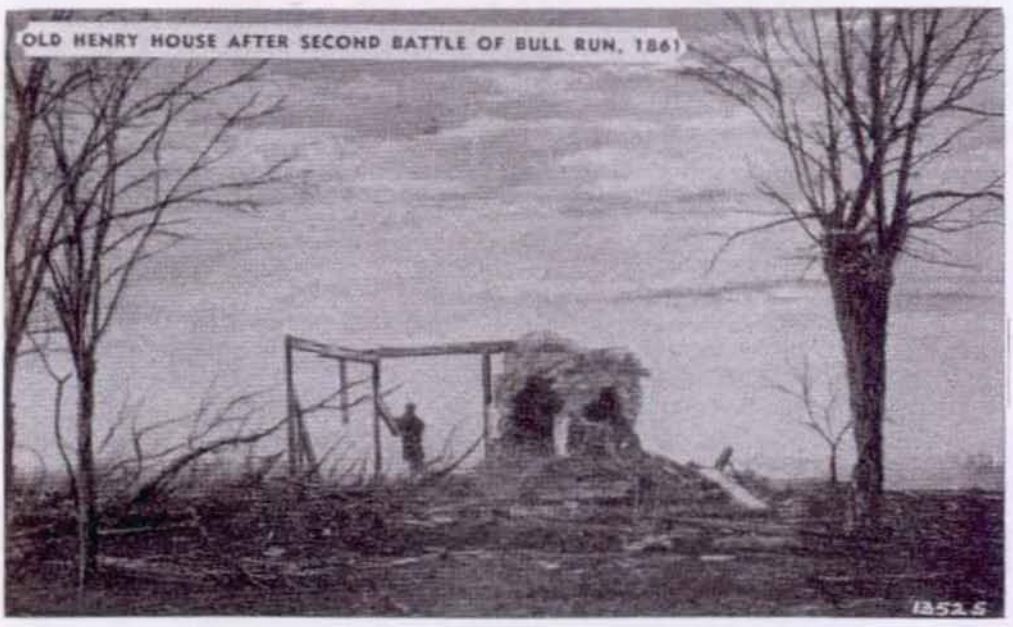
Sheet 1. Title Sheet with Site Plan.
Sheet 2. Cellar Plan, Cellar Reflected Ceiling Plan, First Floor Plan, Second Floor Plan.
Sheet 3. Attic Reflected Ceiling Plan, Roof Plan, Section A-A (Lateral), Section B-B (Longitudinal).
Sheet 4. East, South, North, West Exterior Elevations.
Sheet 5. Cornice Details, Door, Window and Fireplace Details.

Both sets are included with this HSR for reference.

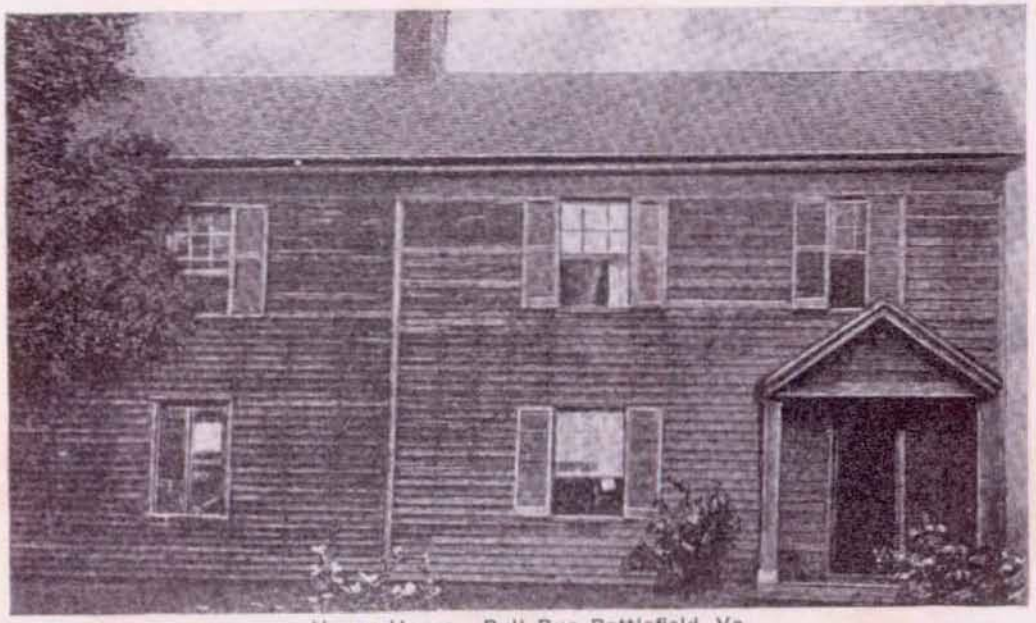
END of SECTION. Drawings Follow.



After the sketch by Leon Fremaux this image represents the battle damage inflicted on the pre-1861 house, also known as Spring Hill Farm. See HSR Captioned Figures 1 – 3.



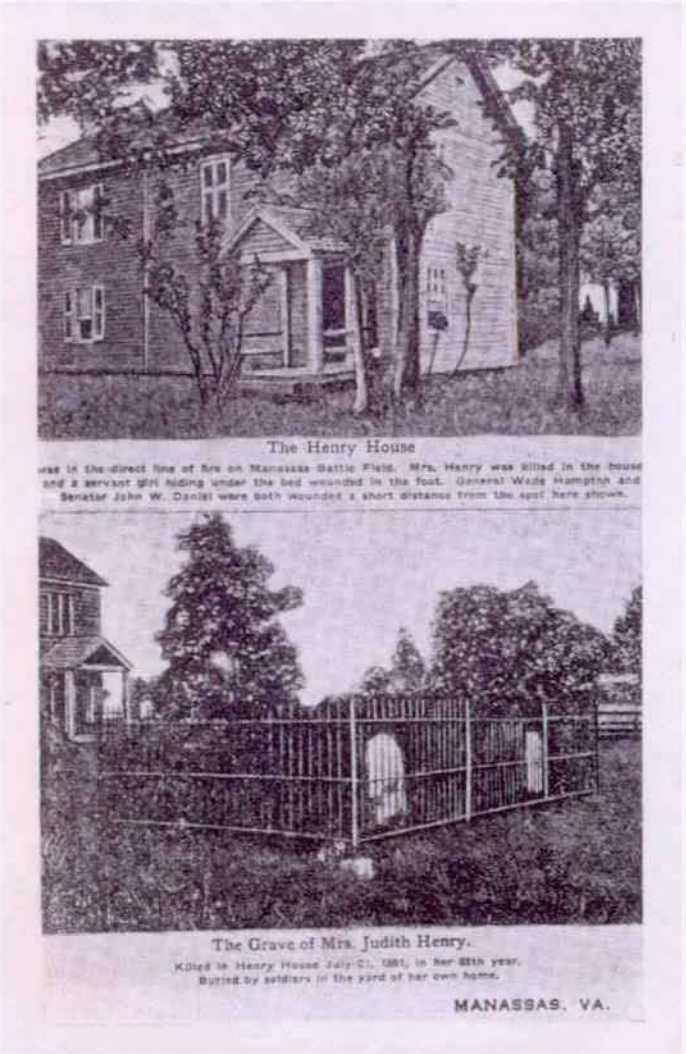
Erroneously titled and/ or dated, this image is known to be that attributed to David B. Woodbury of the Matthew Brady Studio, Washington, D.C. It is dated c. 1862; see HSR Captioned Figure 4.



Henry House. Bull Run Battlefield, Va.

This unattributed image is thought to be from the late 1880's based on the very good condition of the building. Also found in the MANA park file, see HSR Captioned Figures 11, 17 and 18 for more detailed information.

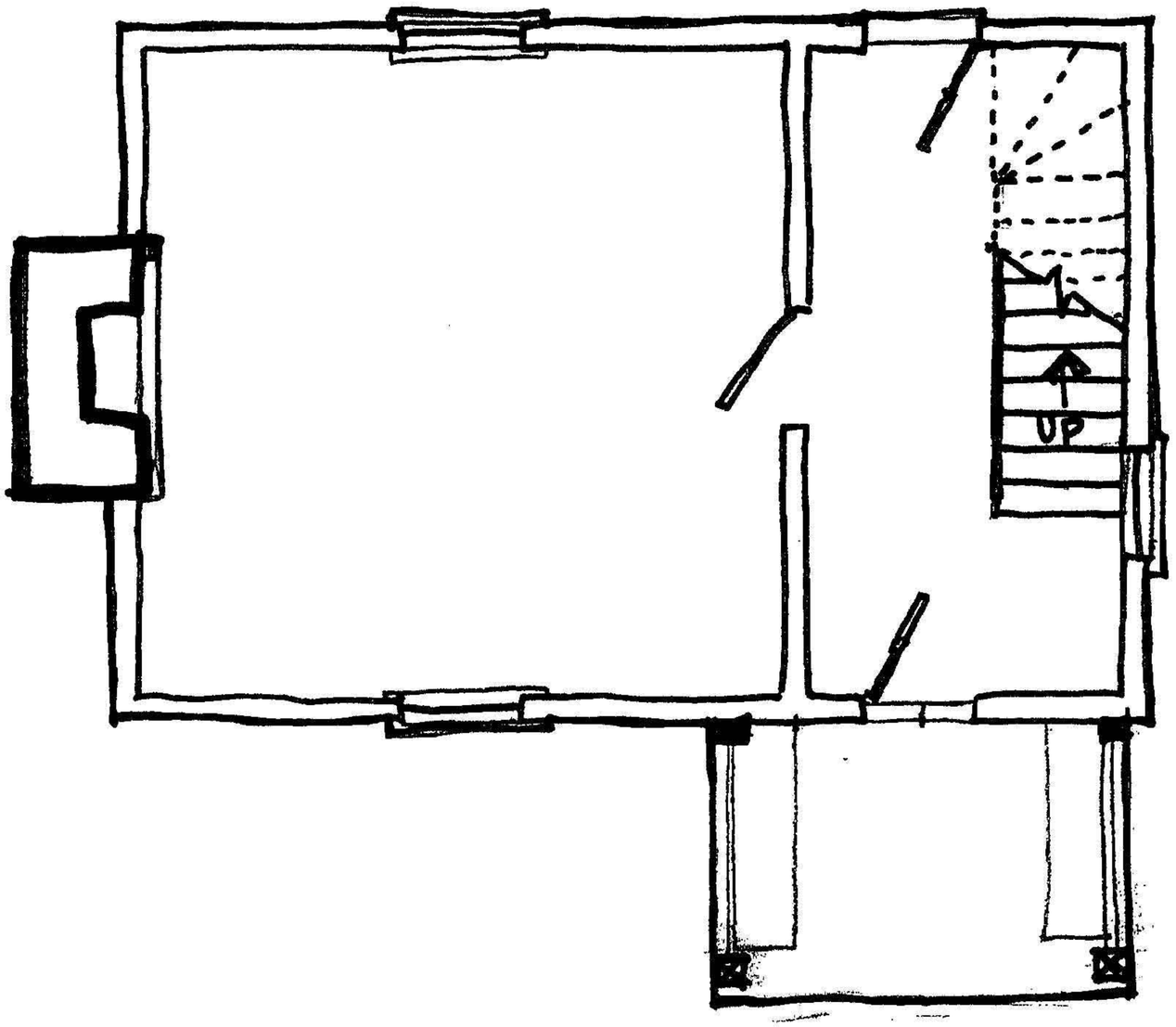
This tinted image depicts the house in very good condition prior to any changes made by the Sons of the Confederate Veterans. The SCV owned the building between 1922 and 1935. See HSR Captioned Figure 16.



This double image postcard is unusual in that it illustrates the grave of Mrs. Judith Henry (and Hugh F. Henry). The upper image is the same as the previous tinted image and appear to be modeled after HSR Captioned Figure 10, an unattributed view of the house estimated to be photographed in 1884 (as dated in the MANA park library historic photo collection).

This undated image shows the house after architectural changes have been made presumably by the Sons of the Confederate Veterans. Note loss of SW corner gable porch, insertion of new door on south elevation and the new elevated entry platform with railings and stair. See HSR Captioned Figure 19.

This image reveals the east elevation of the house with the Bull Run Patriot's Monument in the foreground. While it is also an unattributed photo, the architecture places it between the years of ownership by The Sons of the Confederate Veterans (1922 – 1940). See also HSR Captioned Figures 19, 20, 20 Rear, 21 and 22.



FIRST FLOOR PLAN (3/16" = 1'-0" +/-) for
FIRST PERIOD of CONSTRUCTION (1870-75/1883).

HENRY HOUSE, MANA (HPTC, 2001). PG 1.

16'

8'

12'

10'

19'

7'

WINDOW

PORCH PIER LOCATED

PORCH LOCATION (10X6½)

FOUNDATION SECTION EXPOSED

LIMIT LINE & PROBING TEST for BELOW GRADE FOUNDATIONS - COULD BE FOOTPRINT of OLD HENRY HOUSE (PRE 1870).

SYMMETRICAL LIMIT LINE of SOUTH ROOM of FULLY EXTENDED I-HOUSE PLAN BASED ON DIMENSION of NORTH ROOM (16x16).

N.

3/16" SCALE.

FIRST PERIOD (1870-1883) FIRST FLOOR PLAN.

2/3 I-HOUSE PLAN - HENRY HOUSE, MANA.

(HPC, tax, 09.20.01) PG 1-A.

11'-6"

11'-6"

16'

DN

THICKER WALLS - ADDED LATER? (POST CX)

PORCH LOCATION

1ST PERIOD (1870-1893)

2ND FLOOR (TWO VERSIONS)

HENDY HOUSE PLAN

(WITH INTERIOR WALLS)

OR ?

DN

PORCH LOCATION

(WITHOUT INTERIOR WALLS)

N.

2/3 I-HOUSE PLAN W/ VARIANT LAYOUTS

HPTC · fan · 09.20.01 3/16" = 1'-0" +/-.

PG 1B

R4.11

16'

16'

8'

NORTH
ROOM
ADDED

UP

UP

WINDOW

PORCH
LOCATION.

OUTLINE of WEST PORCH

N.

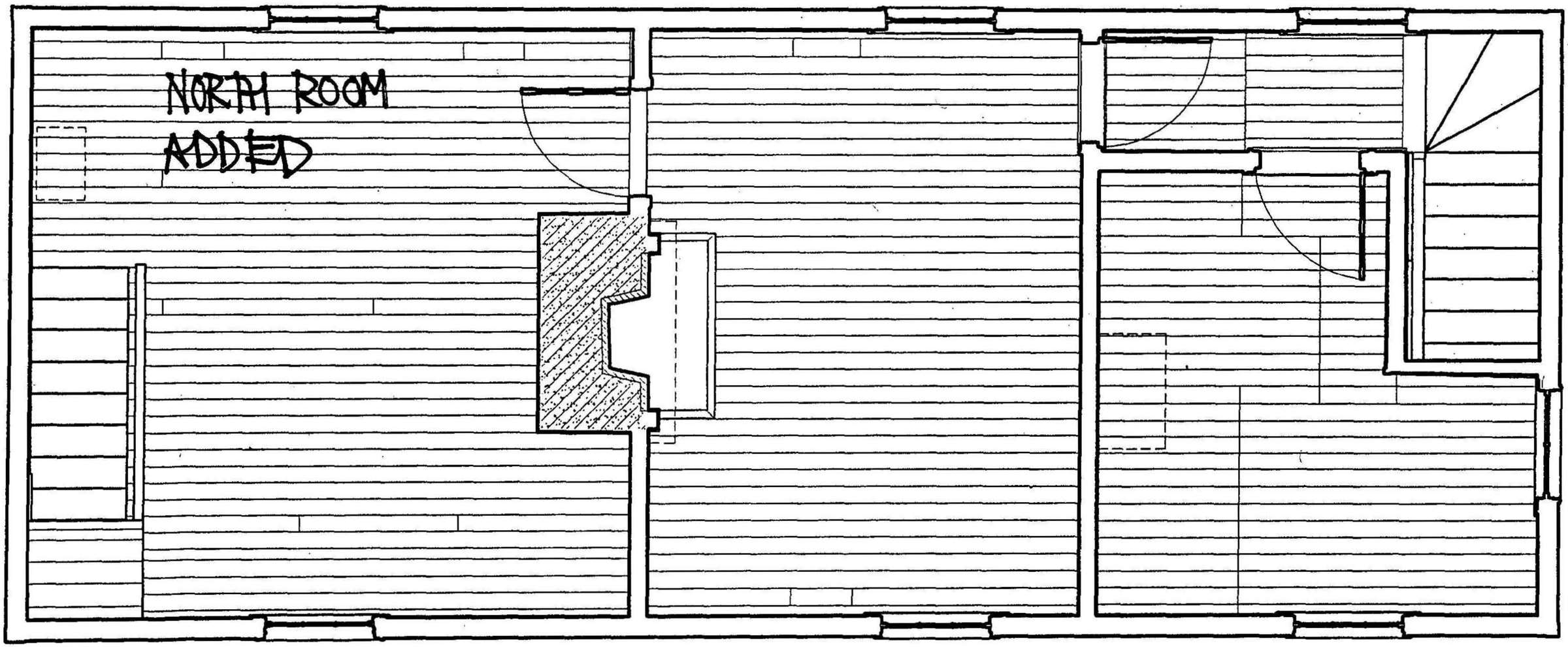
SECOND PERIOD (POST 1883) HENRY HOUSE - FIRST FLOOR PLAN.

2/3 I-HOUSE PLAN W/ NORTH SADDLEBAG ADDITION.

PG 2-A.

HPTC/Tony/09-20-01

3/16" SCALE APPROX



N.

SECOND PERIOD (POST 1883) HENRY HOUSE · SECOND FLOOR PLAN
2/3 I-HOUSE PLAN W/ NORTH SADDLEBAG ADDITION.

1/4" = 1'-0" +/-

PG 2B

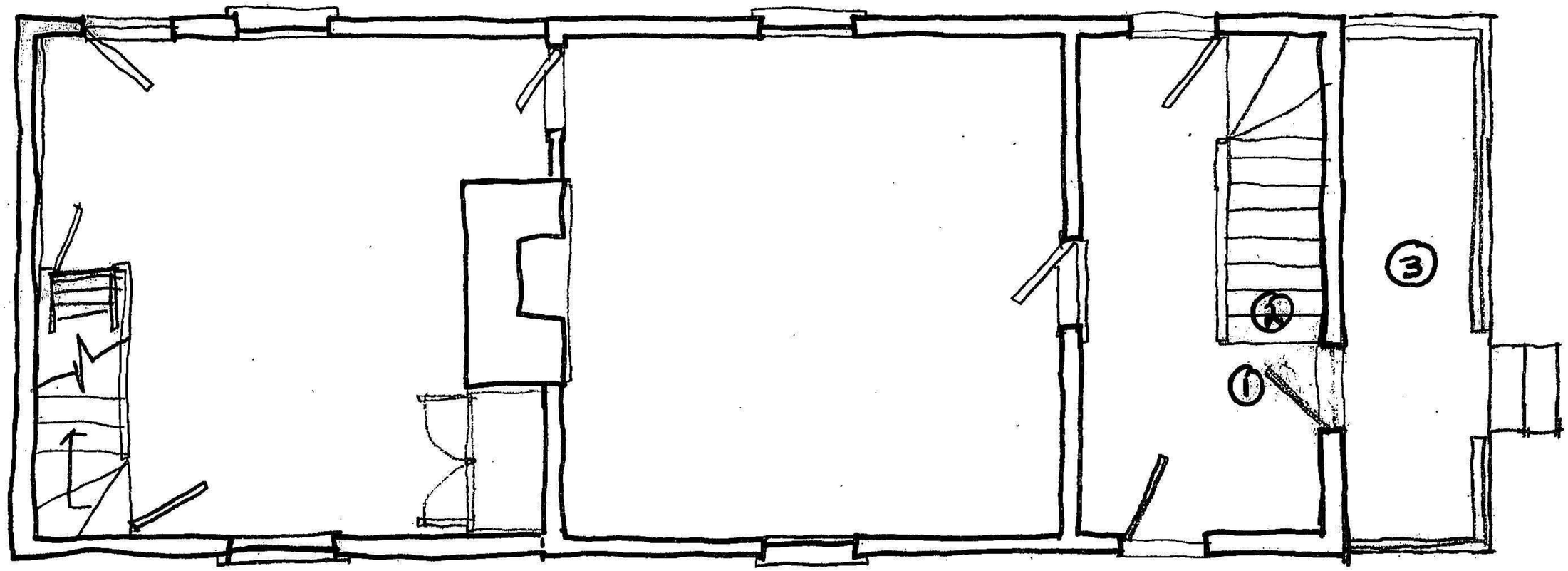
HPTC 09.20.101

JAN 12

① WINDOW CHANGED TO DOOR.

② STAIR SHORTENED TO ACOMMODATE NEW DOOR.

③ SOUTH ENTRANCE DECK ADDED.



THIRD PERIOD · SONS of the CONFEDERATE VETERANS (1920-1940 +/-).
HENRY HOUSE – FIRST FLOOR PLAN W/ ALTERATIONS

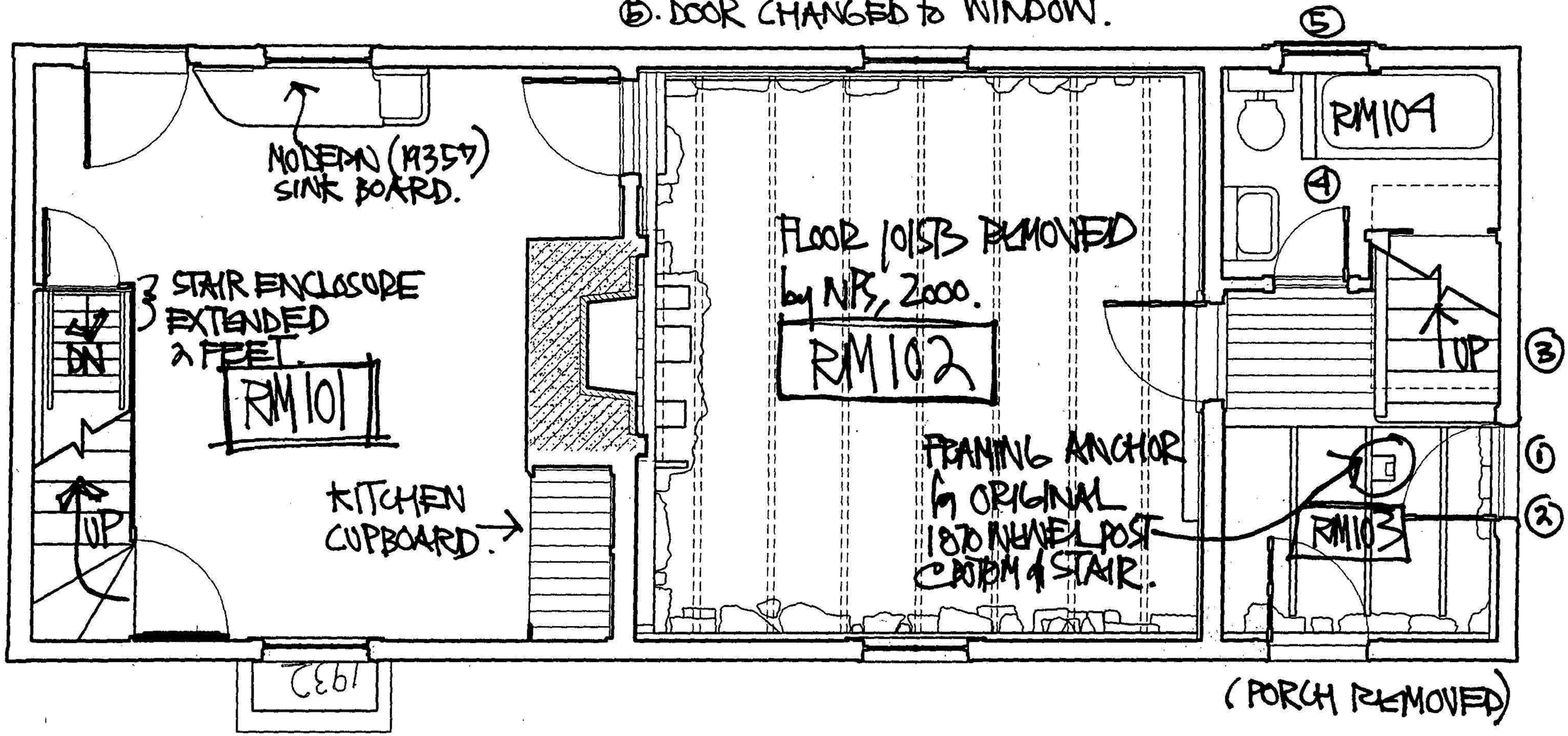
PG 3A

N

HPTC. Jan. 09.21.01
3/16" = 1'-0" +/-.

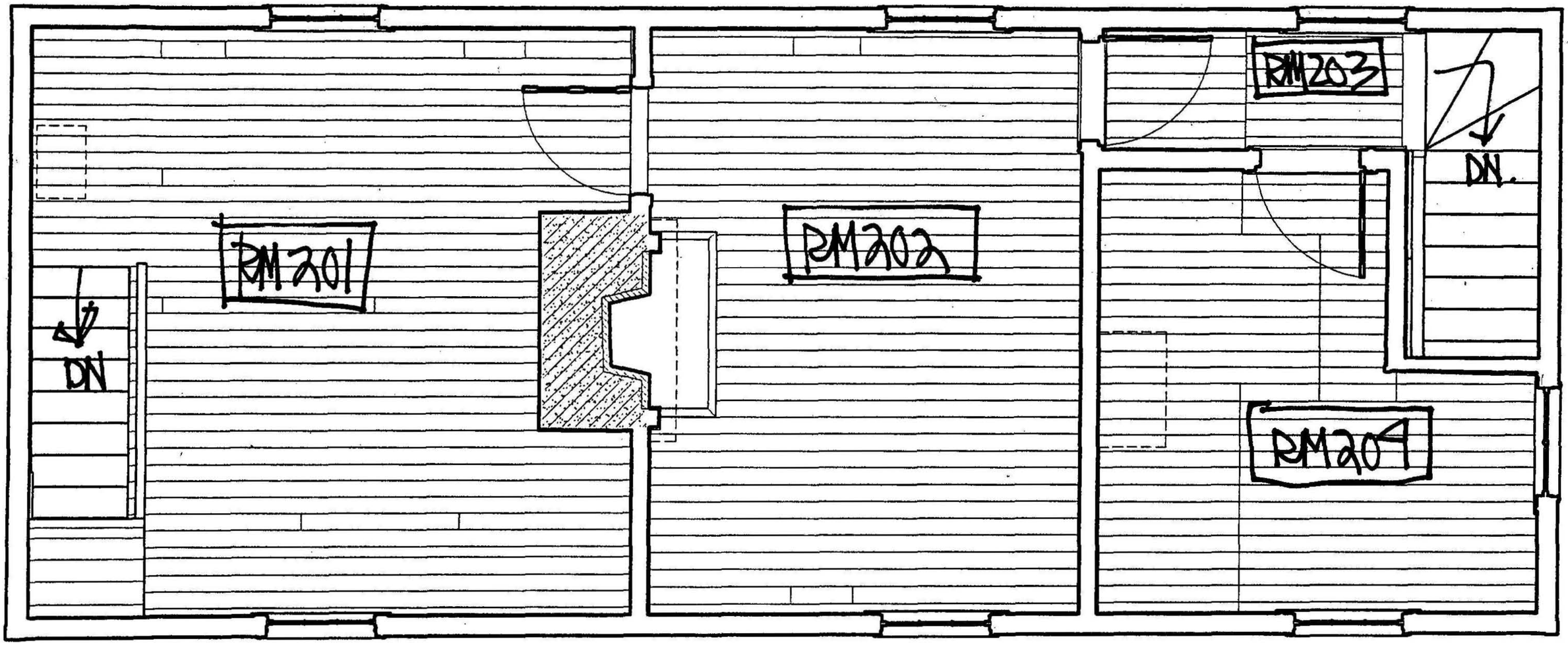
P4-14

① WINDOW CHANGED TO DOOR.
② STAIR SHORTENED BY 2 TREADS.
③ SOUTH "VERANDA" REMOVED.
④ BATHROOM ADDED APPROX. 1995 +/-.
⑤ DOOR CHANGED to WINDOW.



ANNOTATED FIRST FLOOR PLAN (HABS) · HENRY HOUSE.	PG 4A
◀ N. 1/4" = 1'-0" +/-.	09/2001

B.4-15.



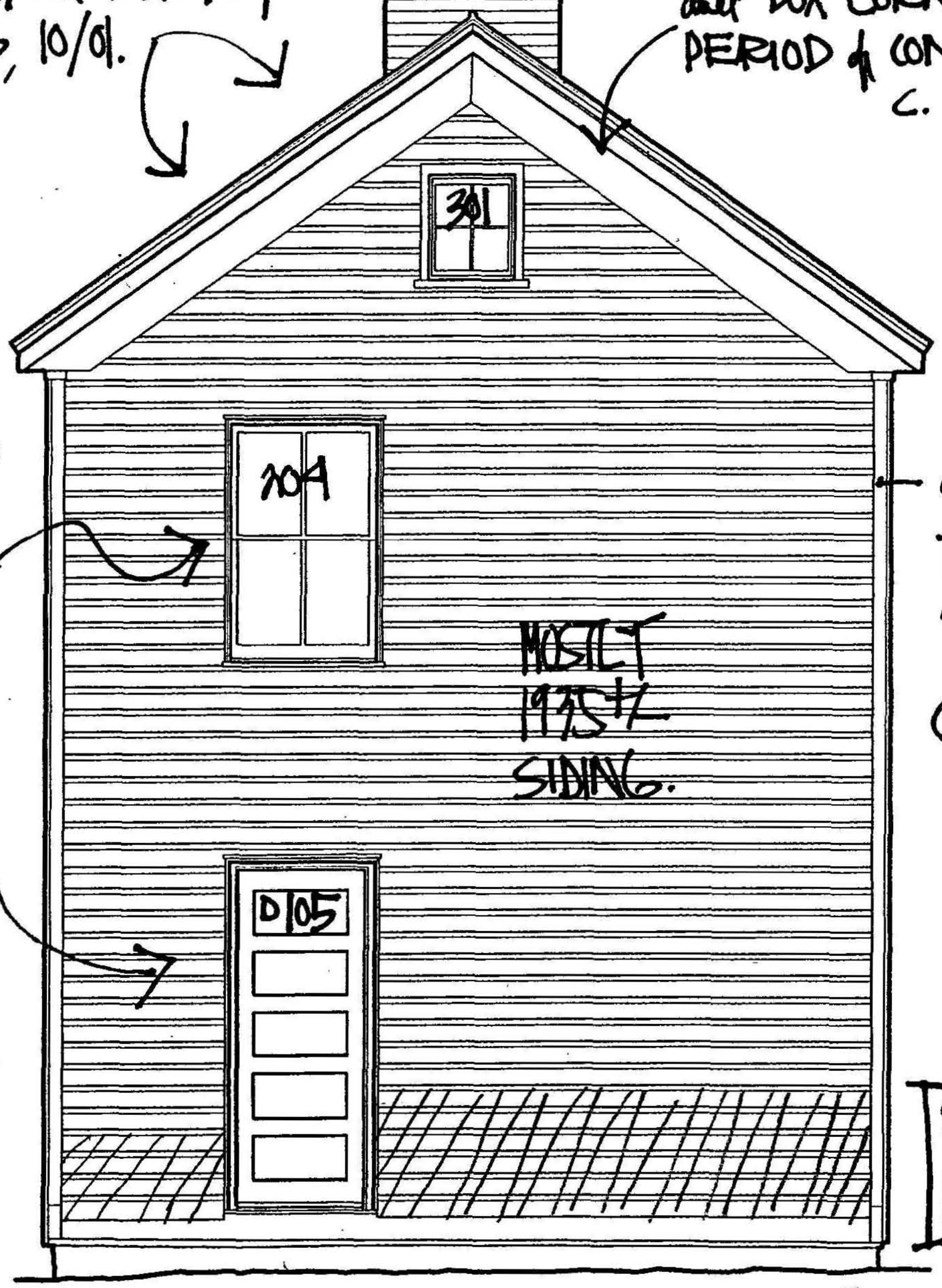
ANNOTATED SECOND FLOOR PLAN (HABS) HENRY HOUSE.	PG 4B
N. 1/4" = 1'-0" +/-.	09/2001

B.4-16.

CHIMNEY by 1885 +/-
COULD BE 1870.

VENTS INSTALLED in W301 and W204 by NPS, 10/01.

GABLE RAKE BOARDS and BOX CORNICE from 1ST PERIOD of CONSTRUCTION, c. 1870



WINDOW CHANGED from 6/6 to 2/2 by S.C.V. c. 1931

CORNER BOARDS from 1ST PERIOD of CONSTRUCTION, 1870. (BOTH SIDES).

MOST 1975 +/- SIDING.

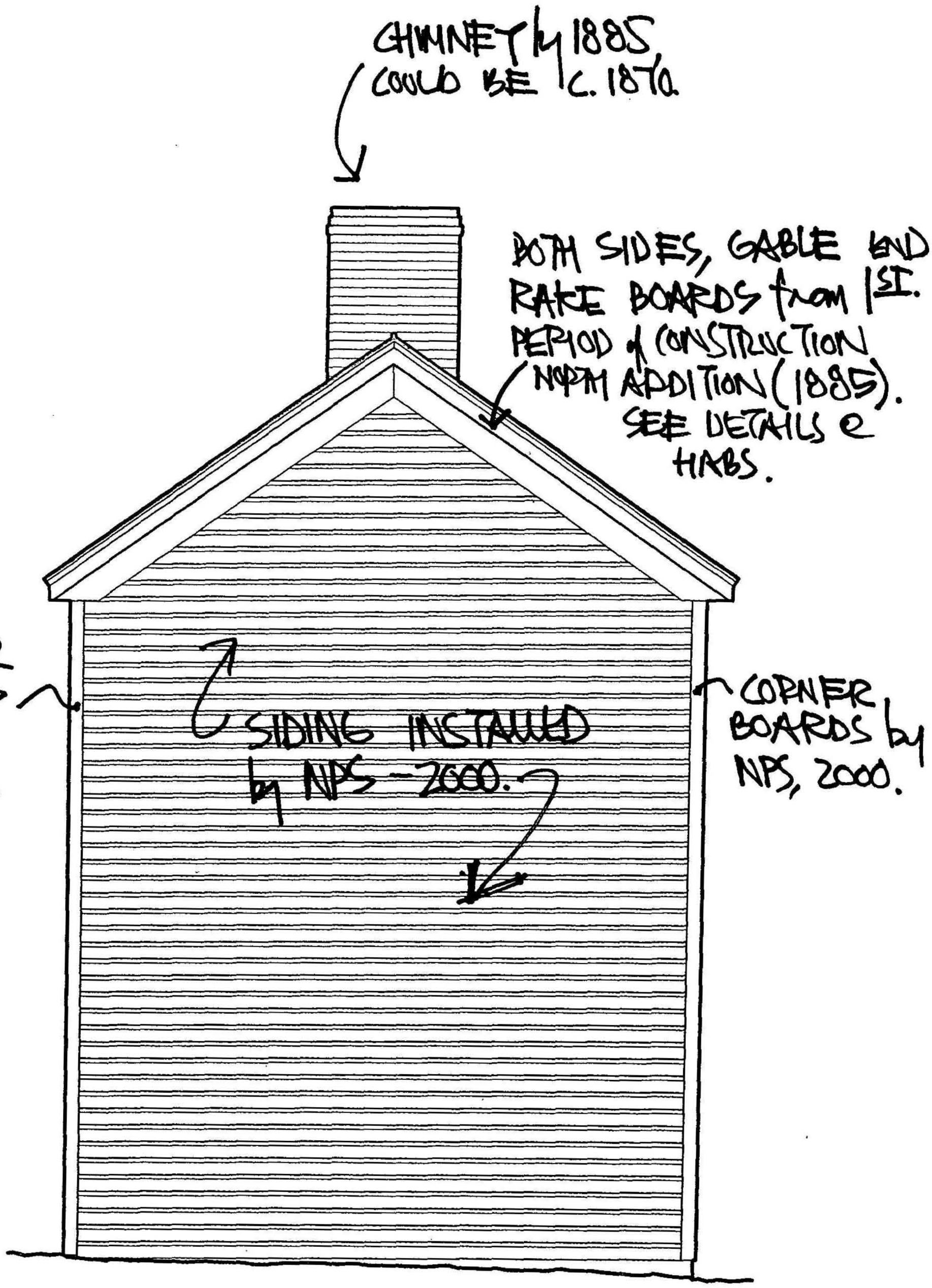
FORMER WINDOW CHANGED to DOOR by S.C.V. c. 1922-1931.

SIDING by NPS. DATE UNKNOWN.

ANNOTATED SOUTH ELEVATION (HABS)
HENRY HOUSE, MANA. 1/4" = 1'-0" +/-

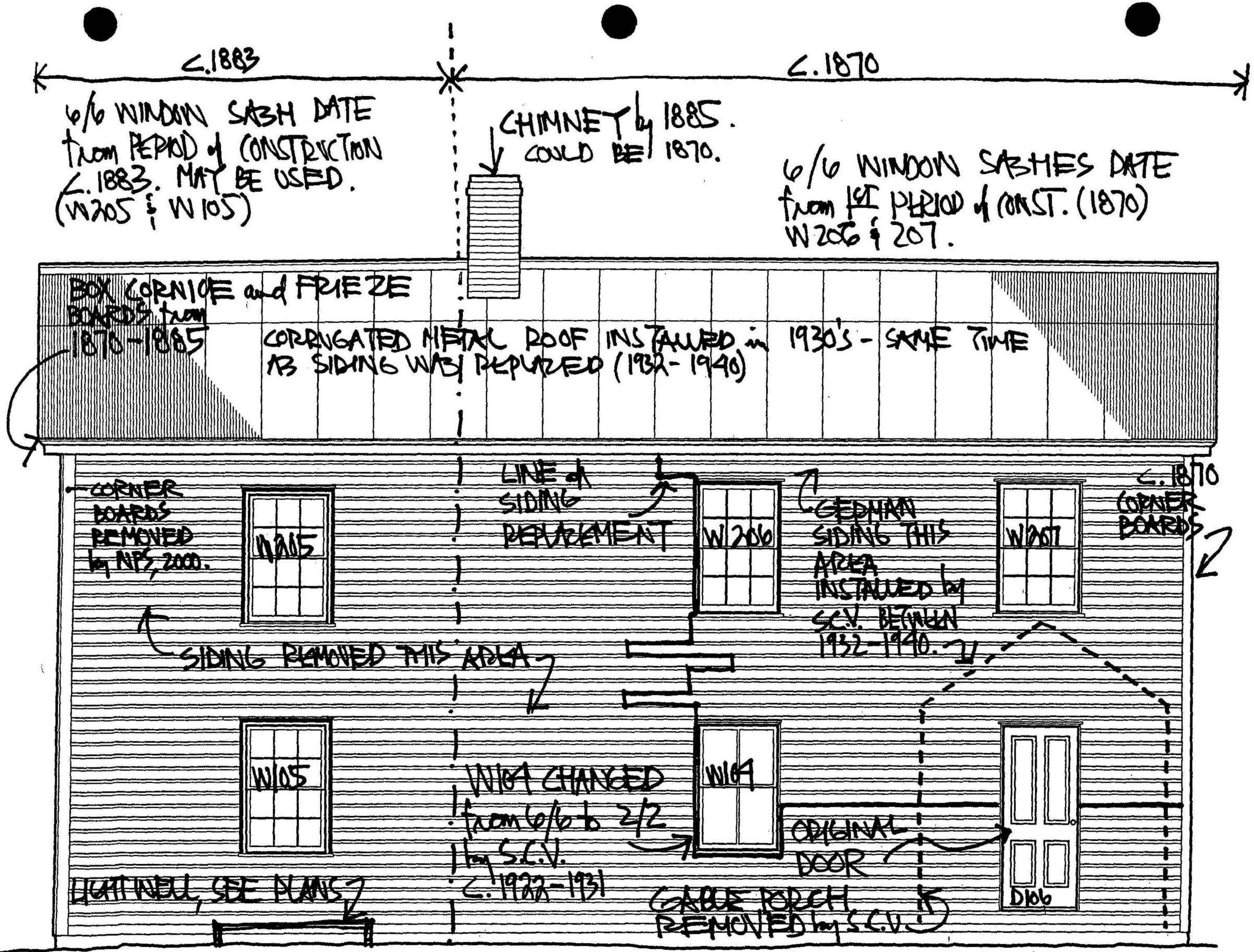
PG 4C

09/2001.



ANNOTATED NORTH ELEVATION (HABS)
(1/4"=1'-0"+/-) · HENRY HOUSE, MANA. ·

PG 4D
09/2001.



RECONSTRUCTED WEST ELEVATION · HENRY HOUSE. MANA (HABS) PAGE

C. 1870

C. 1883

SOUTH GABLE END RAKES, etc
C. 1870 (ORIGINAL)
BOX CORNICE & FRIEZE BOARDS, C. 1870.

CHIMNEY by 1885 ±.
COULD BE 1870.

NORTH GABLE END RAKES, C. 1883
CORNICE & FRIEZE BOARDS

CORRUGATED METAL ROOF INSTALLED in 1930's - SAME TIME AS SIDING WAS REPLACED by S.C.V. C. 1932-1940.

203

SIDING THIS AREA DATES from 1935 ± - RESIDING by S.C.V.

202

201

NEW CORNER BOARDS by NPS, 2000

WIN SEE HSR 9 NOTES

103

1935 ± SIDING

102

SIDING THIS AREA REQUIRED by NPS in 1992

101

PLT-WOOD

D101

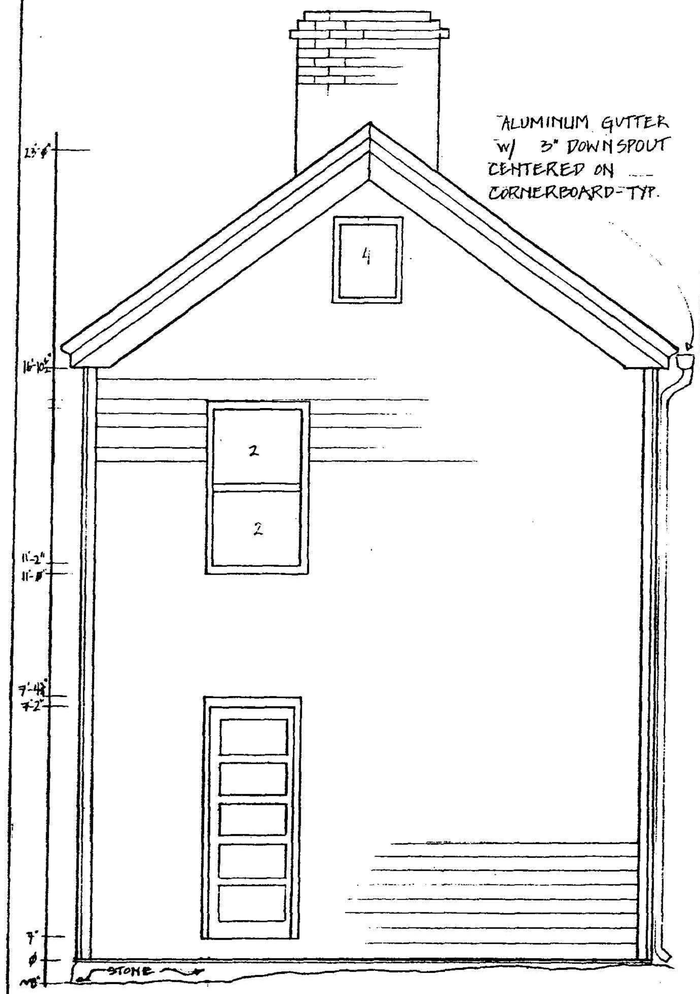
℄ LINE of SIDING REPLACEMENT 09/2001

ANNOTATED EAST ELEVATION (HABS) · HENRY HOUSE; MANA. 09/2001.

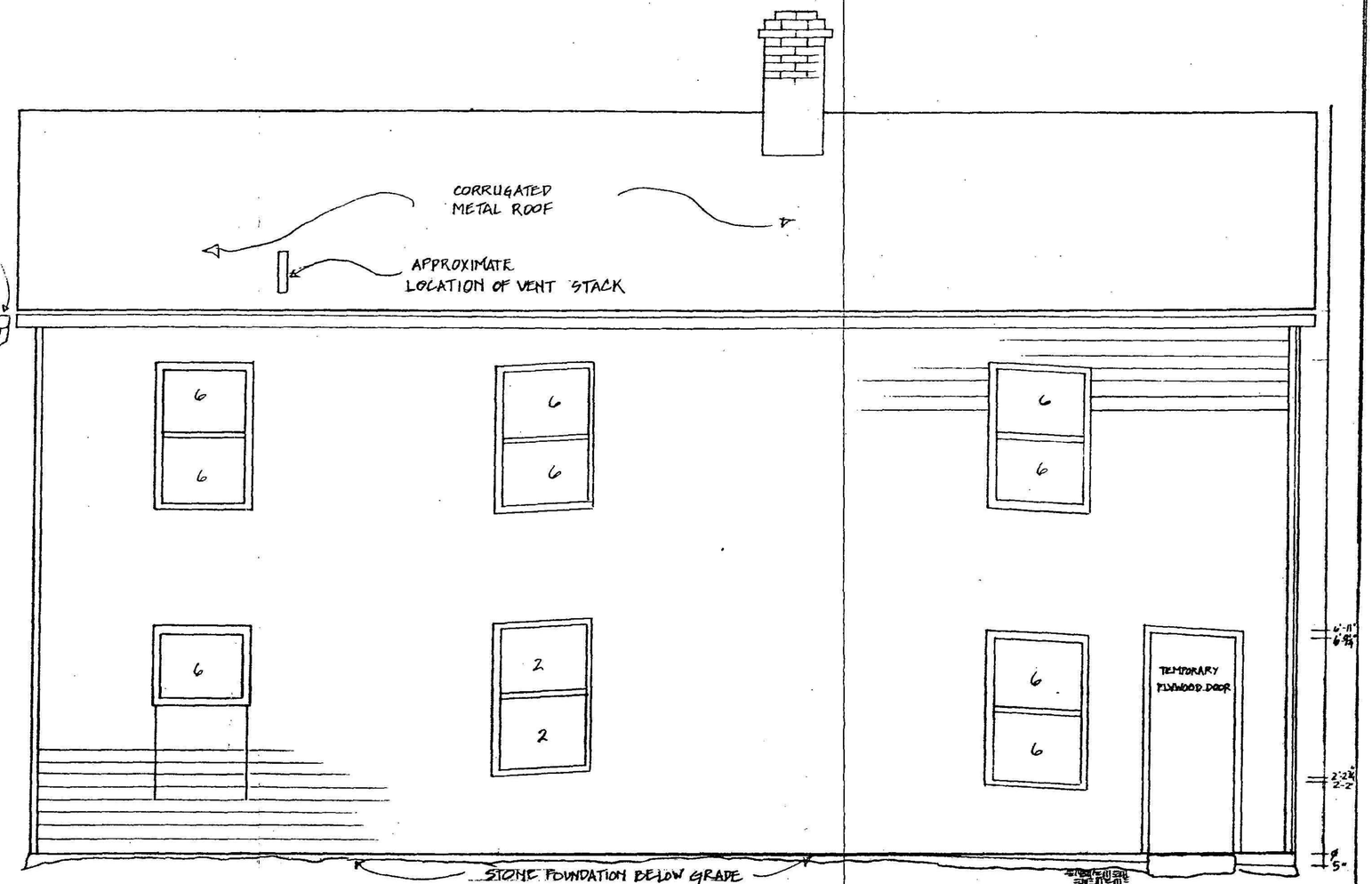
PG. 4 F.

B.4-2(

SOUTH ELEVATION



EAST ELEVATION

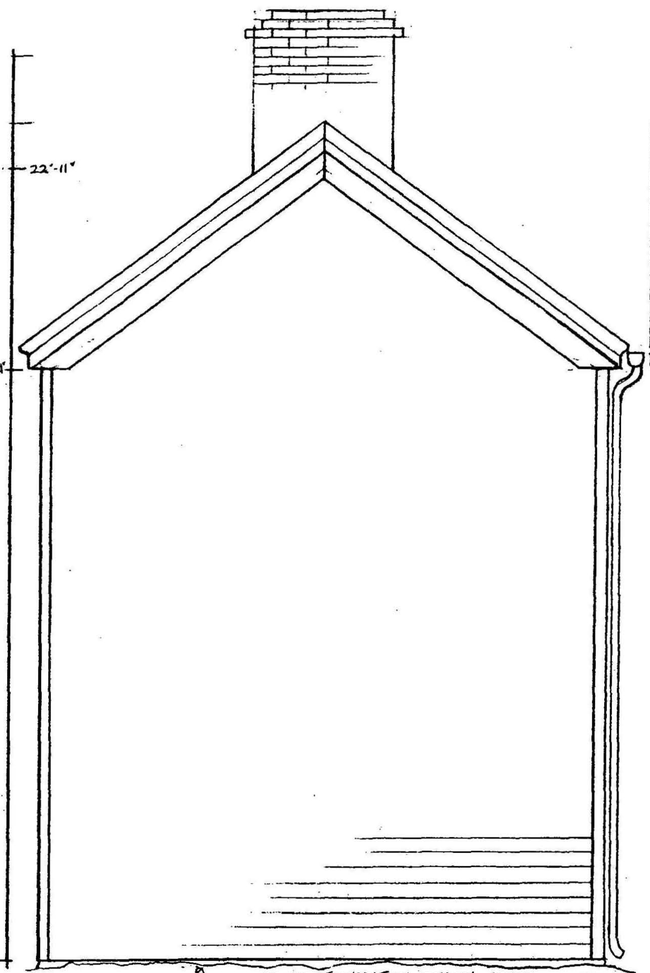


HENRY HOUSE

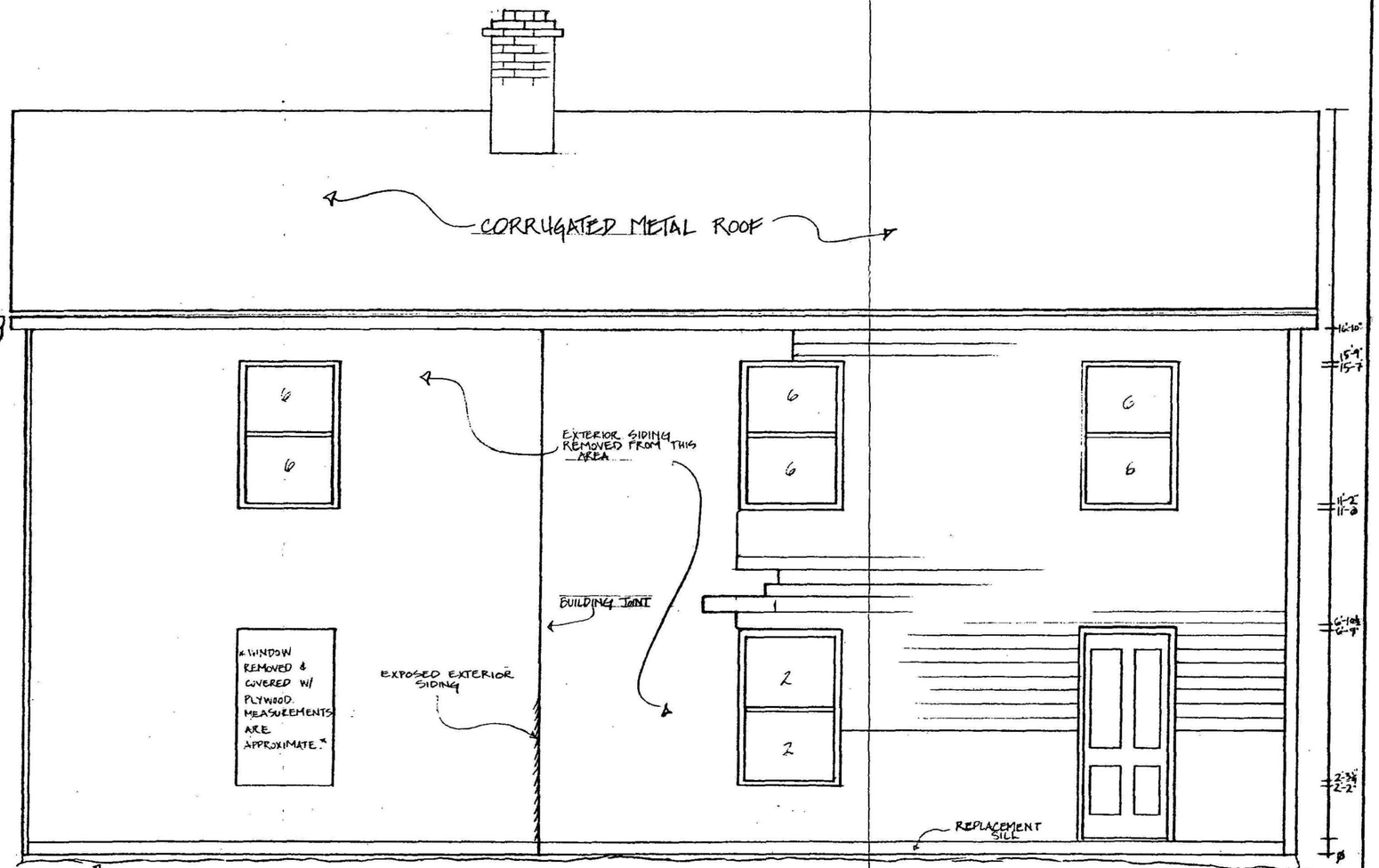
MANASSAS NATIONAL BATTLEFIELD PARK
HISTORIC STRUCTURE REPORT
HISTORIC PRESERVATION TRAINING CENTER
FEBRUARY 2001

SCALE: 3/8" = 1'

NORTH ELEVATION

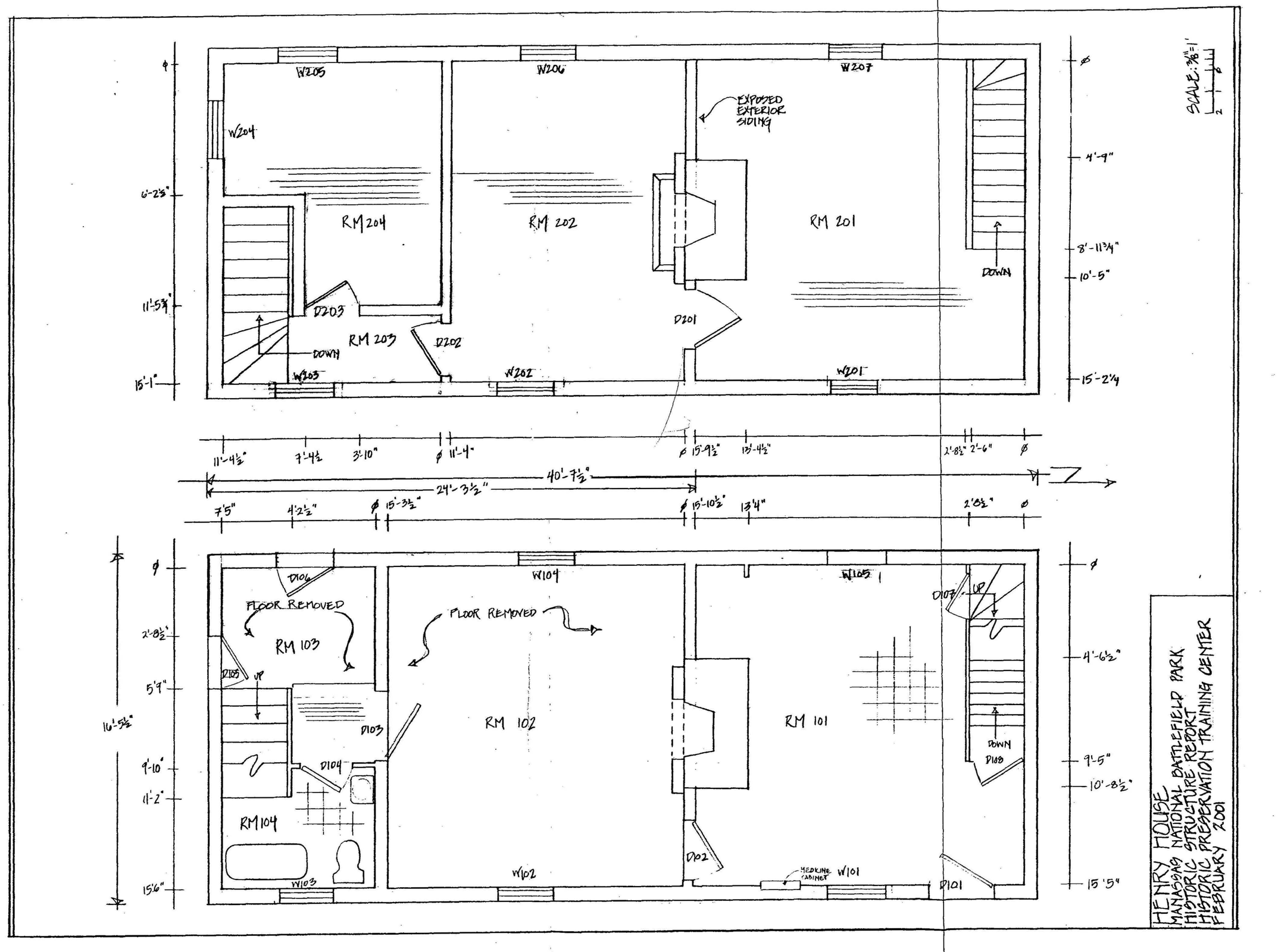


WEST ELEVATION



HENRY HOUSE
MANASSAS NATIONAL BATTLEFIELD PARK
HISTORIC STRUCTURE REPORT
HISTORIC PRESERVATION TRAINING CENTER
FEBRUARY 2001

SCALE: 3/8" = 1'



HENRY HOUSE
MANASSAS NATIONAL BATTLEFIELD PARK
HISTORIC STRUCTURE REPORT
HISTORIC PRESERVATION TRAINING CENTER
FEBRUARY 2001

Part 1. Developmental History

C. Physical Description

1. Character Defining Features

C.1. Character Defining Features of the Henry House

Overview – *The Secretary of the Interior's Standards for the Treatment of Historic Properties* embody two important goals: 1) the preservation of historic materials and, 2) the preservation of a building's distinguishing character. By succeeding at these two goals, it is likely that a building's historic integrity will be preserved. Identifying and preserving a building's character defining features is essential.

Character defining features are defined in Director's Order 28 (a.k.a. NPS 28) *Cultural Resources Management Guidelines* as follows:

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

Character refers to all the visual aspects and physical features that comprise the appearance of historic buildings. Character defining elements include the shape of the building, its materials, craftsmanship, decorative details, interior spaces and features, and the various aspects of its site and environment. Identifying the visual aspects of historic buildings is intended as an aid in preserving a building's character and distinguishing qualities.

This description represents the extant structure in August 2001.

I. Identify Overall Visual Aspects

Shape and Mass – Three bays in length by one bay (or pile) in width, rectangular, wood frame, two-story with attic, 2/3 I-house type with eccentric saddlebag addition north of chimney, plain vernacular Virginia style, side gabled form with a mid-range 30 – 45 degree roof slope.

Roof and Roof Features – Metal corrugated roof, painted /green finish color, panelized corrugated sheet system creates pattern consisting of two horizontal rows of panels with overlapping edges, widths of sheets are approximately 2 ft. x 8 ft. for the bottom row of panels and 2 ft. x 5 ft. for the upper row of panels, roof is capped with a rolled roof ridge component typical of the corrugated roof system. The roof is dominated by the corbelled brick chimney that sits centered on the ridge approximately 2/3 of the distance between the south and north gable ends, nearer the north end. Its position marks the end of the first period of construction, as the chimney was external to the original reconstructed Henry House (1870). The chimney, which is largely constructed of stone, is trimmed out above the attic floor and above the roof line in brick, as are the interior fireplace faces.

Other features of the roof include the roof overhang at the eave and gable end, see *Projections*.

Openings – Simple wall openings dominate the geometry of the elevations. Window openings reflect the location of each room on both floors as each room has one window per exterior wall surface. This pattern is clearly related to the plan and use of the building. Window openings are plain 6/6 pattern double hung window sash; some have been replaced with later 2/2 pattern windows. This modernization from 6/6 to 2/2 signifies the historic change in the use of the building, and in particular the central room on the first floor, from the Henry Family's residential use to the later use by the Sons of the Confederate Veterans as a Museum.

Door entrances are located on the side elevations with the exception of the door that was added during a later renovation of the building. Doors are plain 4 panel construction.

Evidence of earlier configuration of windows and doors, as illustrated in the existing pattern of "cut marks" and short pieced lengths of boards in the siding, should be maintained in future replacement siding as evidence of the early changes to the building.

Projections – Exterior architectural trim includes the closed box cornice (with no returns), the simple built out boxed eave overhang with molded fascia and plain soffit and wide frieze boards used to highlight the side gable ends.

Trim and Secondary Features – Overall plain style trim includes the use of horizontal "drop style" over-lapped siding with double corner boards. Architectural woodwork at the window and door openings is simple, consisting of slightly projecting hoods, jamb and sill trim elements. Some of the original period trim exhibits a routed bead at the edge.

Historic shutters have been removed but would return a significant feature to the building if they were replaced.

Materials – The horizontal "drop style" over-lapped siding contributes to the overall character of the building (both from a distance and at close range) by creating a strong visual pattern. The shadow line created by the concave coving in the over-lapped horizontal siding is more predominant then any other single feature of the exterior.

The corrugated sheet metal panels of the roof surface contribute to the overall appearance of the extant building as viewed from the battlefield. The size, shape, texture and color of the corrugated panels create a strong visual pattern

on the exterior because of the patterning and the color. The roof ridge creates a solid horizon line of the roof against the field of the sky.

The reflectivity and pattern of the window glass also contribute to the overall appearance of the building. Amounting to approximately 35 percent of the wall surface, the quality of the glass plays an important part in the overall appearance and geometry of the building. It is important because of the distinct texture of the historic cylinder glass, i.e., slight bubble inclusions and wave lines created through manufacturing process (as opposed to over distorted replica restoration glass that has been used for modern glass replacement). It is important to differentiate between the two as one is appropriate to the building and the other is not appropriate, i.e., too old.

Setting – The positioning of the building seems to relate strongly to the road trace that crosses the property. Originally a structure located in a primarily agricultural landscape, features of the commemorative war landscape have grown up around the Henry House. The Bull Run Monument and Henry Family Cemetery fencing also contribute to the overall setting of the place.

Vegetation cover has changed over time. In earlier years the war ravaged remains of witness trees were an important vestige of the battlefield. These have been replaced with modern vegetation bearing little or no importance to the cultural landscape of the battlefield, as they are all recent growth, most likely during NPS tenure of the property. The significance of the cultural landscape has not yet been evaluated in this area of the park.

Historically, the unpainted appearance of the building would have blended into the natural surrounding. The whitewashed/ painted exterior of the building has made it more of a highlight on the landscape, but only since the 1930's when it was first applied.

II. Identify the Visual Character at Close Range

The surface qualities of the building materials are important because they illustrate the craftsmanship and age that distinguish the authentic historic buildings from others. These qualities can be damaged or obscured by work that affects those surfaces if they are not recognized and properly considered and treated. The rich variety of surface materials, textures, and finishes that are part of a building's character are fragile and easily lost. If the materials, features and spaces that give a building its character are not recognized and preserved, than essential aspects of its character may be damaged in the process of change.

Materials at Close Range – Materials that have an inherent texture that contribute to the close range character of the building include the lapped horizontal coved siding, the window and door opening trim, the window sash and

the sash glass, the exterior (historic) doors, and the exterior architectural wood work (trim).

Exterior Finish – The house is finished with a heavy white paint to simulate an opaque whitewash. This treatment is not authentic to the Henry House as historic photographs indicate that during its early years it was unpainted. Since the time of the second generation siding it was originally coated with a thin translucent application of whitewashed (wood grain can be seen through the whitewash). Opaque paint been applied only since NPS ownership. The heavy white paint used in recent years was developed for use on buildings of much earlier origin and is not an appropriate treatment for the Henry House.

Craft Details – Aspects of the surface qualities of the materials seen at close range that contribute to the character defining features of the building include: machine made horizontal lapped siding with visible saw production marks in contrast to handmade elements of the exterior trim; the weathered appearance of the older lapped siding contrasted to the sharp edges of the new replacement siding, and the built up layering of exterior finishes (a recent addition) creates a false sense of age for the siding. Original craft details would have included the effect of natural weathering on the siding, since, per historic photographs, it was not painted or whitewashed.

Other details include the windows and door units and the associated trim that are some of the few vestiges of the historic material used to construct the Henry House in 1870 or later repairs made in the first or second quarter 20th century. Window glass, as described in *Materials*, also contributes to the close range character of the building.

III. Identify the Visual Character of the Interior Spaces, Features and Finishes

Individual Spaces – All three first floor rooms are significant individual spaces in their own right. Each room contributes to the understanding of the pattern of use and evolution of the house. Size, interior floor to ceiling height, proportion, configuration and location, and interior finishes are similar, yet each room has special features which distinguishes it from the others. Another important feature is the location of windows – each room has a window on every exterior wall except the north wall. This allows for light from two directions (or on two sides) in most rooms, an important early design feature.

Second floor rooms, while less important, also play an important role as character defining features of the house. They help establish the house type and age.

Related Spaces and Sequences of Spaces – While each room is individually important, the flow through circulation is also an important aspect of the pattern of the interior spaces. This sequence of spaces from the entry hall through the parlor to the kitchen is important in understanding the pattern of use of the house. Likewise on the second floor, the hierarchy of the spaces created a passageway into the center chamber that allows it to maintain some privacy. Stairs at either end of the building make all three of the second floor rooms usable as private bed chambers.

Interior Features – While all the rooms contribute as a suite to the understanding of the house, many of the rooms contain interior features that help define the character of the building, i.e., shape, location of doors and windows, stairs and handrails, fireplaces and mantles, wall and ceiling finish, etc. A more detailed account of each space will occur in the architectural description and interior finish schedule portion of the HSR.

The entry hall (RM103) contains the stair to the second floor and links to the center room on the main level. This room contains original interior trim as well as trim special to the stair, and the stair itself, with stair rail and newel post. It also contains the physical evidence of the previous location of the newel post and indicates the removal of lower stair treads to allow for the insertion of the new south elevation door. Perhaps in conjunction with the remodeling of the stair or the insertion of the bathroom under the stair, a unique cornice trim board was added, seen nowhere else in the house. Also, historically it was entered through an exterior porch identifying it as the place to enter (date of porch removal is unknown at this time).

The center room (RM102) contains a fireplace and mantle, as well as the suite of interior architectural woodwork including baseboard, window and door surrounds. The windows in this room were upgraded from 6/6 to 2/2 in the 1920's for its use as the Museum Room. This room also has the most layers of interior finish of any room in the house. See *Interior Finishes Report*. This signifies its importance as the public room in the house.

The new kitchen (RM101) has features different from the old part of the house. Interior trim is plainer but used in all the same places; baseboard, door and window trim, and stair enclosure. The stair travels both to the basement and the second floor. The interior of the second floor stair is sheathed with horizontal planks. Other special features include the double beaded tongue and groove ceiling used in this room to cover the previously exposed structural framing.

The bathroom (RM104) contains plumbing fixtures that relate to one of the later periods of occupancy, perhaps prior to NPS management of the property.

The second floor rooms also contain character defining features such as the mantle in RM202, the open stair and remnants of original reconstruction exterior horizontal siding used as the wall finish on the south wall in RM201. Other features include the continued use of matching architectural woodwork going up the south stair into the passage (RM203) and into RM204.

Surface Finishes and Features – Architectural survey of the interior surface finishes and features ids documented in the *Historic Interior Finishes Analysis (Paint & Wallpaper) Report* produced in January 2002.

Survey work indicates that wood plank floors and plaster walls and ceilings impart the essential character of the interior such as hard, durable, simple finishes used throughout the house. Suites of hardware on the doors suggest an attempt to coordinate this element. Variations in the style of the hardware suggests a sequence of construction.

Exposed Structure – Spaces that currently exhibit exposed structural elements that define the interior character are the two adjoining attic rooms, where all sawn and hewn pegged structural roof system framing is exposed, and the north cellar, where the peeled log and hand hewn timber floor framing system for RM101 is exposed.

Architectural fabric analysis and structural investigation has discovered that RM101 also had exposed ceiling joists for a long enough period of time that the joists and the underside of the RM210 floorboards (the ceiling) are whitewashed. Selected investigative probing may determine if wall framing was also originally uncovered.

Conclusion – This concludes the three-step process of identifying the visual aspects of the historic Henry House and is intended as an aid in preserving its character and other distinguished qualities. It is not intended as a means of understanding the significance of the property, nor the events or people associated with it. That will be done through other sections of the HSR where further research and architectural fabric investigation will help document the significance of the structure.

Procedure and form taken from National Park Service Preservation Brief 17, *Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character*, by Lee H. Nelson, FAIA, 1982 – 1988.

Prepared by:

Tom Vitanza, HPTC
06/18/01/, revised 09/04/01.
Revised 21 May 2003.

Part 1. Developmental History

C. Physical Description

2. Physical Description & Fabric Analysis of Extant Building

Includes Architectural Field Drawings of Features

C.2. Physical Description & Fabric Analysis of Extant Building

This section contains results of the field-based architectural fabric analysis and the physical description of the extant building. It is an interpretation and analysis of the building materials and construction techniques found within the Henry House, also a documentation of the field work. The goal of the investigation was to determine the relative ages of the materials and to determine the extent of historic authenticity (Integrity) and to document the evolution of the structure.

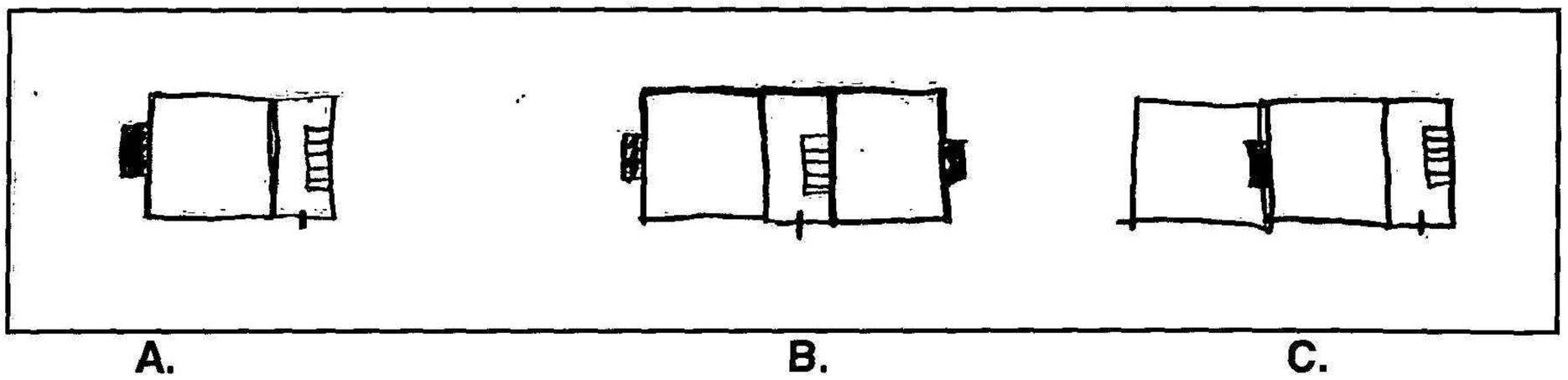
Fieldwork was conducted simultaneously by the National Park Service Historic American Building Survey (HABS) team and the Historic Preservation Training Center (HPTC) in 2000-01. The structure of the building was partially documented by the HABS team, noting the major construction technologies. Further investigation was undertaken by HPTC and the structural engineer consultants, Robert Silman Associates PLLC, Washington, D.C. The structural investigation required temporary removal of additional exterior german style weather boards, interior plaster and floorboards. This exercise allowed greater access to the structure, revealing additional information regarding the sequence and method of construction. The building exterior was protected from the elements in 2002 by park maintenance.

Analysis of the cultural landscape is not complete at the time of this report.

Overview

The Henry House is a three bay[1] in length by one bay (or pile) in width, rectangular, two stories with attic, wood frame building with a gabled roof. It is located along the north/ south orientation line on Henry Hill so that its rectangular footprint is primarily exposed to the east and the west. This position represents taking full advantage of the vernacular environmental siting knowledge available at the time of construction in the 3rd quarter of the 19th century. The east, west and south elevations contain all of the windows and doors, the north has no openings.

The House, as it is now seen in its fully evolved form, derives from at least two major building campaigns and two campaigns of remodeling.



A. B. C.

Typical Virginia I-House Forms. A) Common 2/3 Form, B) Most Typical Completed Symmetrical Form, C) Henry House Form with Eccentric Saddlebag Addition In Lieu of Symmetrical Form.

[1] The term "bay" is used to describe a regularly repeated subdivision in a façade; a window or door unit area.

The south block of the Henry House constitutes the first period of construction and represents the local Virginia vernacular building form known as the 2/3s I-house (A). The North block was added at a later date but did not complete the I-house typology which would have added another bay to the south of the main door/ center bay (B); it instead became a saddlebag addition north of the original house (C).

The chimney was built on the exterior of the north wall of the house allowing for minimum retention of cooking heat in the summer and acceptable heating conditions in the winter. In Virginia, the chimneys of the I-house, like those of the hall-and-parlor house, were built externally on the ends, in the western English manner. (Glassie 2000:126) It is now encased in the later north block addition. The Henry House exhibits many characteristics of the classic I-house typology and is more fully described in this report.

The Henry House is a simple vernacular Virginia style house. The importance of its elevations is first the west, with its primary door opening, then the east with secondary door openings, then the south, and finally the north. The house is built three bays across the east and west elevations and one bay (pile or room) deep. It is rectangular in plan as well as elevation and section. The gabled roof overhangs the four elevations; this allows a simple closed box cornice with an ogee style molding to be placed all around the house and provide some shading.

West Elevation, 03/01.

South Elevation, 03/01.

Southeast Corner, 03/01.

East Elevation, 03/01

North & East Elevs., 03/01.

Assessing the West El., 03/01

This description also classifies the Henry House in its earliest iteration as the building form known in vernacular architecture as an I-house. The first phase of construction represents a common form known as the 2/3, or fractional, I-house.

The fractional I-house form solved the problem of limited resources in the countryside, providing less prosperous people with a way to participate in the big architectural change [from 17th to 18th century styling (Georgian)]. People of modest means built houses in the countryside that were one-third or two-thirds of the whole and sometimes the heirs got lucky and added to the house completing the scheme (Glassie 2000:129), or not, such as at the Henry House, where an eccentric saddlebag addition was added to the original composition.

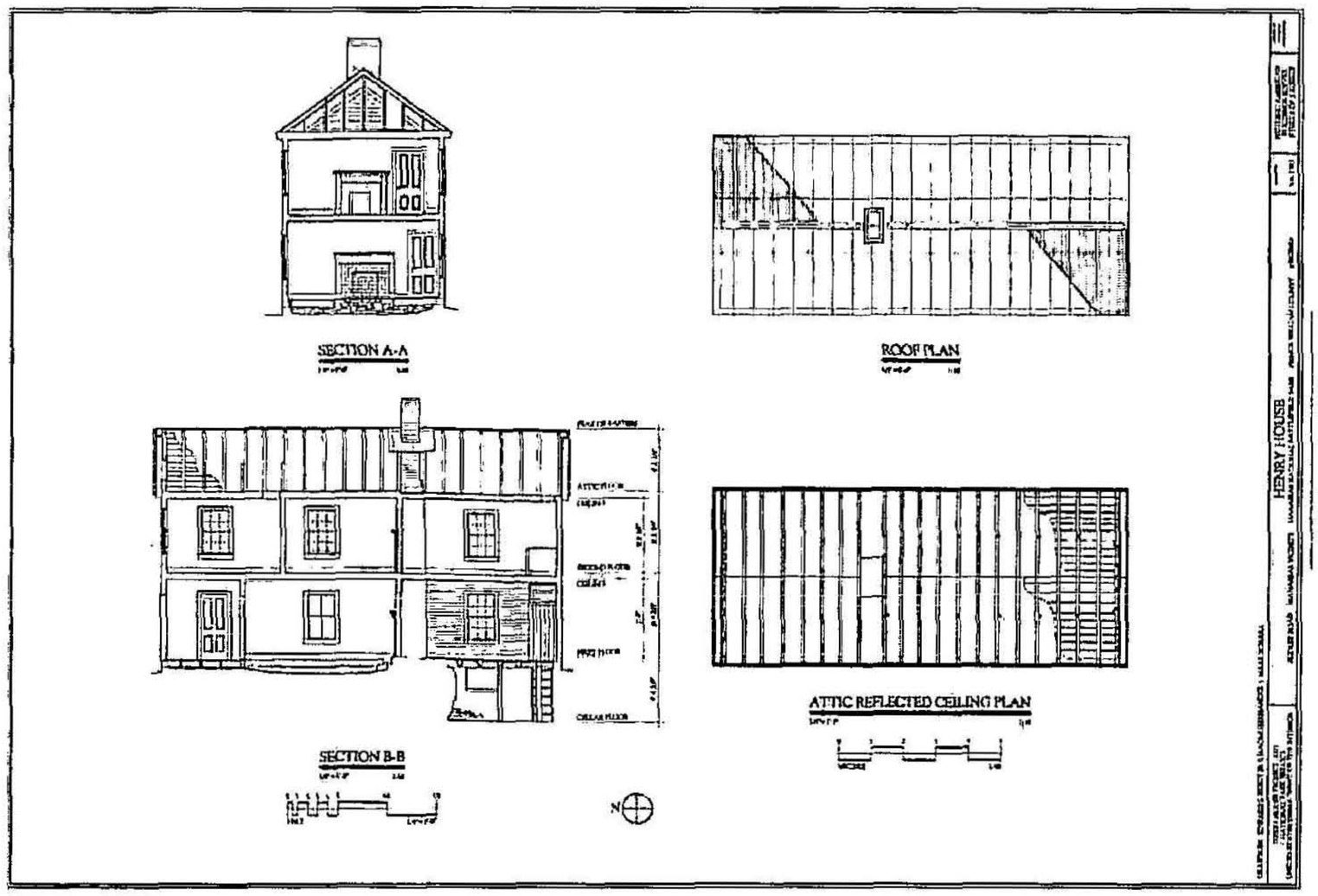
The I-house, at its most basic, is traditionally described as a structure that exhibits one-room depth, two full stories, and entrance in the long side (Kniffen 1965:5). The earliest I-houses had external chimneys at each end (Glassie 1975:146). In his most recent definition of the term Henry Glassie says, "... the I-house is... two-stories high, but only one room deep, the I-house is tall and slender in profile, like the letter. The I-house presents a bilaterally symmetrical façade that hides the interior. Upon entering, you do not stand in a room where people sit. You are in an unheated, unlit corridor – a hallway, a way to the hall – out of which you must be led to the sociable place" (Glassie 2000:117).

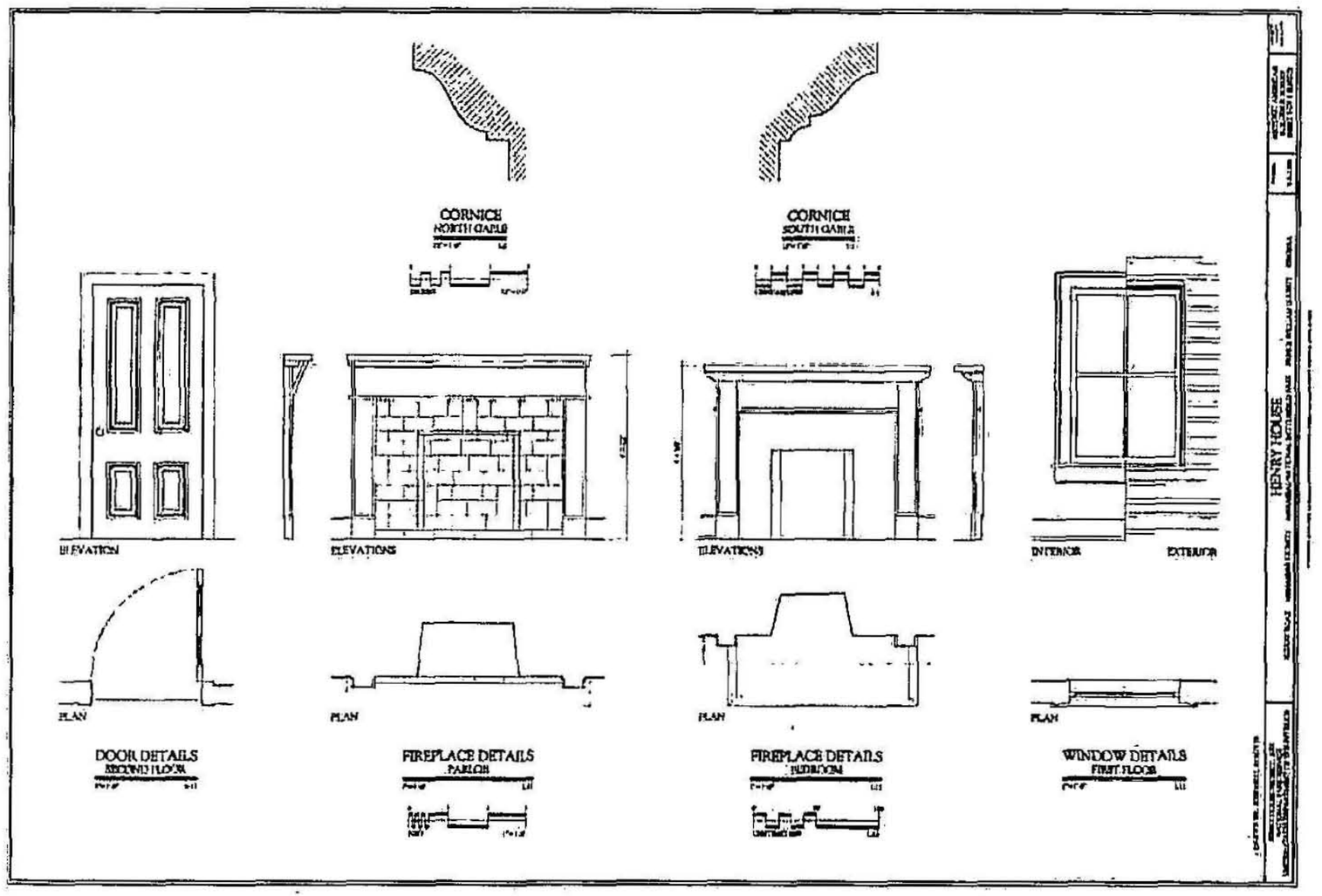
Specific evaluation by noted vernacular architecturalist Dr. Henry Glassie summarizes the Henry House in a September 2001 letter to the author as *"A piece of Virginia vernacular, it is wholly conventional, though modern alterations obscure it somewhat... As for types: it is 2/3 of the standard I-house with an addition "saddlebagged" to the chimney [north] end. Nothing strange about it at all... For its place or time, but it is a good example of the '2/3' or 'side-hall' I-house, quite common in northern Virginia, 1810- 1920."*

The bulk of the house sits on a roughly coursed shallow foundation wall made of coarsely dressed local red sandstone. These walls are extended under the north addition to make a cellar in this section of the house. The exterior is clad with coved horizontal siding and is trimmed with double corner boards and a wide frieze board just below the roofline; the entire exterior is painted white. The roof is covered with a panelized corrugated sheet metal system coated with an applied bright green finish. The house contains a full half story attic.

Constructed in two distinct phases (south block house and north addition) the completed house retains a uniform appearance by the use of common design elements that matched or complemented those of the original building. Most evident among those features are exterior walls covered with matching siding, double hung windows with 6 over 6 sash units, an overhanging roof with a closed box cornice and plain frieze, and simple exterior architectural trim at the wall openings. Replacement of roof material, exterior siding material, exterior architectural trim (removal of original corner boards at north end of south block), changing wall openings, removal of porches, painting of the exterior and modernization of the interior represent the primary changes to the building over time.

While the exterior has been subject to the greatest number of these alterations, the interior has retained much of its original appearance and fabric. The entire exterior surface of the building has been extensively replaced over the years, most of it during the first half of the 20th century. The interior, while modernized, has very few irreversible alterations and maintains a high degree of construction period fabric integrity. The frame of the building also retains a moderate degree of integrity to the two construction periods, although it has been impacted by substantial intervention to repair or replace structural elements over the years.





HABS Drawing Set VA-1363, Henry House, Sheets 3 and 5

Building Feature Outline

Site
- General Description
- Overall Site Drainage
- Perimeter Conditions
- Building Drainage

Structure
- Overall Building Structure
- Comparative Notes on Framing of South Block Structure and North Addition Structure
- Foundation/ Cellar Walls
- Floor Framing System
- Wall Framing System
- Roof Framing System

Exterior Envelope
- Roof Surface Covering
- Roof Overhang / Cornice
- Roof Drainage System
- Chimney
- Wall Surface Covering and Finish
- Architectural Trim

Wall Openings
- Windows
- Doors
- Cellar Wall Well
- Cellar Ventilation Hood
- *See separate survey lists for all openings*

Interior Envelope
General Description

South Block Rooms
- Floor Surface and Finish
- Wall Surface and Finish
- Ceiling Surface and Finish
- Windows & Doors
- Architectural Woodwork/ Trim
- Architectural Features

South Block Room Inventory
- Room 102, Museum Room
- Room 103, Entry and Lower Stair Hall
- Stair 101, South Stair
- Room 104, Post 1949 Bathroom
- Room 202, Middle Room
- Room 203, Hallway
- Room 204, South Room
- Room 302, South Attic

North Addition Rooms
- Floor Surface and Finish
- Wall Surface and Finish
- Ceiling Surface and Finish
- Windows & Doors
- Architectural Woodwork/ Trim
- Architectural Features

North Addition Room Inventory
- Room 001, North Cellar
- Room 101, Kitchen
- Stair 102, North Stair
- Stair 103, North Cellar Stair
- Room 201, North Room
- Room 301, North Attic

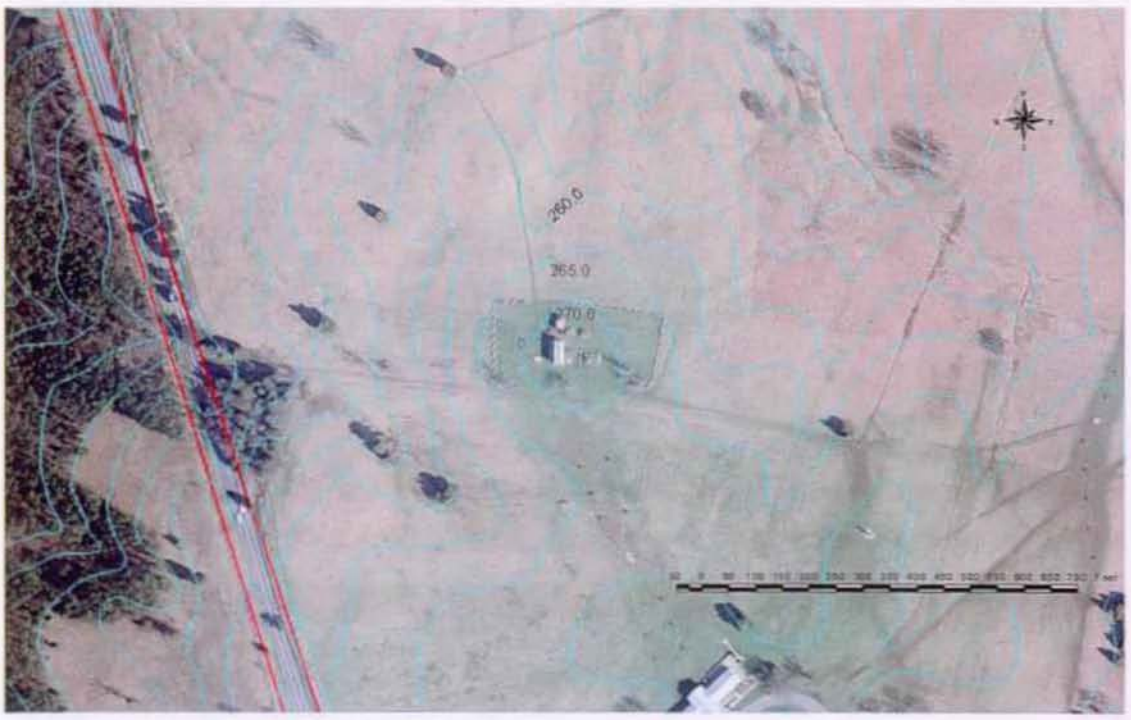
Utilities
- Water Supply
- Plumbing
- Sewer/ Septic
- Electrical Supply
- Electrical Internal
- Heating System
- Lightning Protection

Notes on Non-Extant Historic Features
- Wood Shingle Roof Covering
- Exterior Window Shutters
- Transom Window
- Exterior Siding and Exterior Architectural Trim
- West Porch
- South Entrance Deck (Sons of Confederate Veterans - Museum of the Henry House , c. 1922 – 1938/ 40)

Site

General - The site and features of the site are fully described in the *Cultural Landscape Inventory, Southern Portion, Manassas National Battlefield Park*, report completed by National Park Service Archeologist Mia Parsons. This report discusses spatial organization, vegetation, structures and small-scale features, and identifies contributing and non-contributing features of the landscape for the Henry Farmstead. It also discusses site history, spatial organization, response to the natural environment, topography, land use, views and vistas, circulation, vegetation, structures, archeological sites and small-scale features for the southern portion of the park.

Manassas National Battlefield Park is segmented into four parts for management purposes. The two major boundaries separating the quadrants are U.S. Route 29 (Warrenton Turnpike) and State Route 234 (Sudley Road). The Southern Portion includes Henry Hill and the Henry Farmstead. The land encompassing the park is part of the eastern portion of the Piedmont physiographic zone. Low hills and ridges and deep narrow stream valleys found within a broad undulating surface characterize this area of the Piedmont[2]. Henry Hill, the location of the Henry House is one of the higher elevations within the park. The elevation at the Henry House is located 270 feet above sea level.



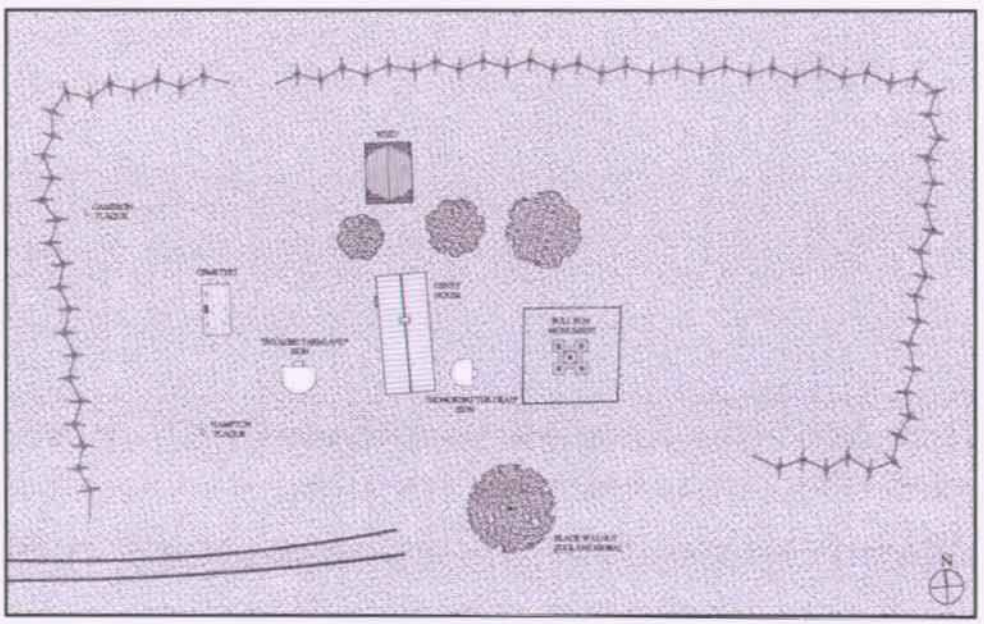
Topographic aerial view of the Henry Hill area provided by Natural Resource Management staff at Manassas National Battlefield Park in 2001.

[2] *Cultural Landscape Inventory, Southern Portion, Manassas National Battlefield Park*, National Park Service, Mia Parsons, Harpers Ferry National Historical Park, July 1996, pg. 2-2.

Overall Site Drainage - The house is built on the flat plateau at the top of Henry Hill. While there is generally positive general surface drainage away from the building, the house sits in a slight depression, or swale, with small areas of negative drainage toward the building. Most of the water that accumulates at the base of the house is roof runoff. This is especially noticeable at the immediate location of downspout outlets at the four corners of the building. Water ponds at the foot of the north elevation of the house after a rain of moderate intensity and the area between the house and the shed generally remains wetter than the surrounding area because water from the northeast downspout is not being carried off to a drainage collection system.

Perimeter Conditions - Existing topography is relatively flat in the area immediately surrounding the house. An open field surrounds the house and there are no foundation plantings or any encroaching vegetation that is currently damaging to the structure. The open field is mowed regularly. Nearby vegetation includes a shrub off the northeast corner and a tree to the south of the house. A build up of soil has occurred on the east and north elevations of the house allowing it to come in contact with the wood framing members and siding.

A narrow concrete apron slab abuts the north cellar walls and house foundation near the cellar ventilation well at the northwest corner. This slab may allow water to drain back toward the house foundation walls.



Site Plan taken from HABS Drawing Set No. VA-1363, Henry House, Sudley Road, Manassas Vicinity, Manassas National Battlefield Park, Prince William County, Virginia, Cover Sheet, 2001.

Building Drainage – A formal underground drainage system or foundation waterproofing system has not been discovered at the Henry House. Roof runoff from the downspouts is discharged directly at the base of the building. At the northeast corner the downspout discharges into a short section of flexible piping that has been buried and has an outlet approximately 8 to 10 feet from the corner of the house. (See also Gutters and Downspouts section).

The location of previous porch structures near the southwest corner and along the south elevation has also created minor depressions that tend to collect and retain moisture and water. The archeological units that have been excavated along the perimeter of the house also create shallow pits of disturbed soil that collect moisture and water. Other localized depressions occur at the northeast kitchen door area where repeated foot traffic has eroded and compacted the soil level.

Photo by author, 11/ 2002.

STRUCTURE

Overall Building Structure

Comparative Notes on Framing of South Block Structure and North Addition Structure -

The temporarily exposed wall frame of the west elevation (summer 2001) has allowed more detailed investigation of the construction techniques and methodology used to construct the house frames. There are two distinct building frames that make up the Henry House. These are the frame of the south block house - the first section of the structure to be erected, and the north addition - the section to the north of the chimney that seems to have been added later in the occupancy of the building.

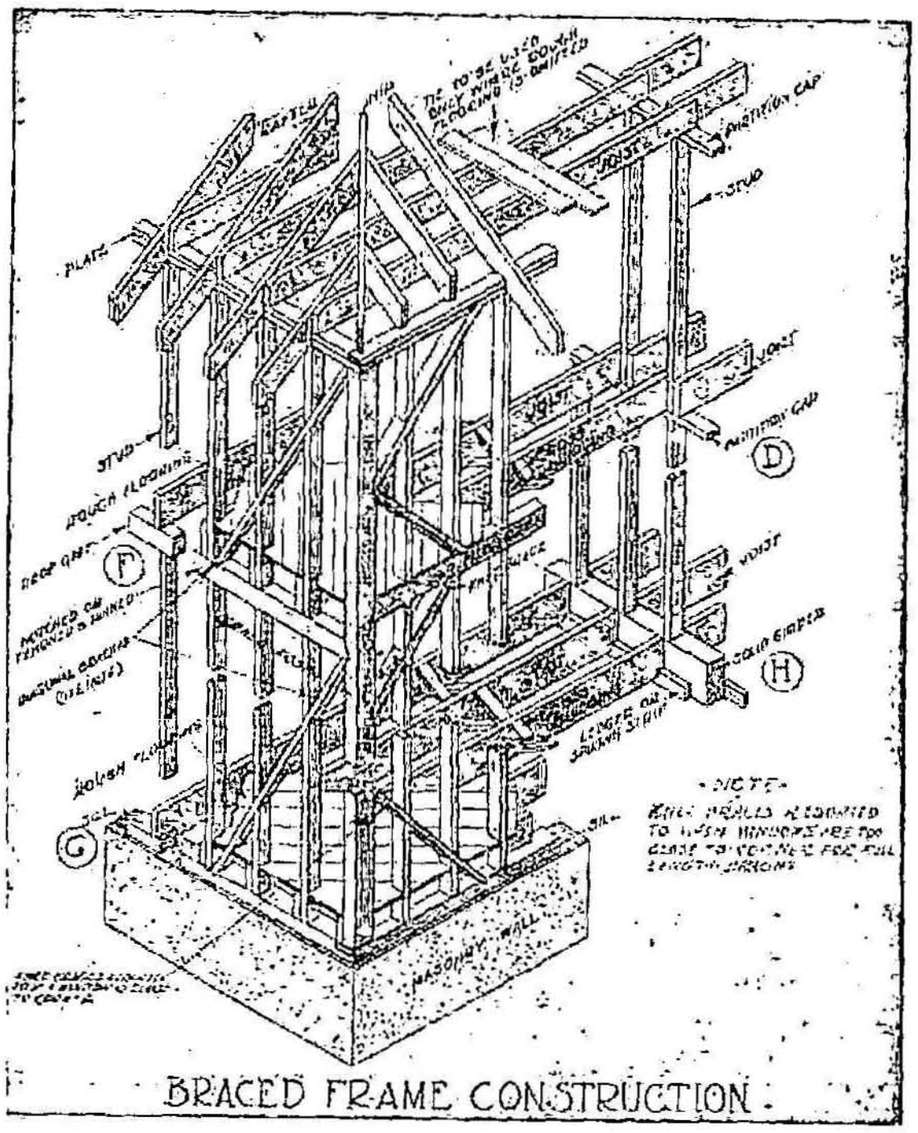
Both frames are generally constructed using a transitional type of framing, meaning it does not fit precisely the definition of any of the major house framing systems (post and beam, braced frame, balloon frame, platform frame). The type of construction seen at the Henry House incorporates elements of the lightweight balloon frame technology with more traditional details from the era of heavy timber framing (or post and beam).

In the case of these two frames the balloon frame typology is exhibited primarily in the wall construction systems, secondly in the floor framing system, and thirdly in the choice of materials used in construction. The vertical structural elements of the walls, the studs, are continuous from the sill plate at the bottom of the wall to the wall plate (or rafter plate – it serves both functions) at the top of the wall. This is a defining feature of the balloon frame system. In the floor framing system, the connection of the floor joists to the wall studs using a ribbon board is also a defining feature.

NORTH ADDITION: Lower West Elevation; sill plates, corner post, wall studs and interior sheathing exposed.

MEETING POINT between south block (right) and north addition (left), tow corner posts are visible in the center of the photo.

Elements of the traditional post and beam frame are exhibited by the mortise and tenon joinery and pegged connections of the main frame of the house, portions of which are constructed using "heavy timbers". The hewn corner posts with their diagonal bracing, the solid one piece sill plates, the pole rafter roof framing system, are all holdovers from the more traditional type of frame. In a true balloon frame these elements would be constructed of the same type of dimensional material as the floor joists, the wall studs, etc.



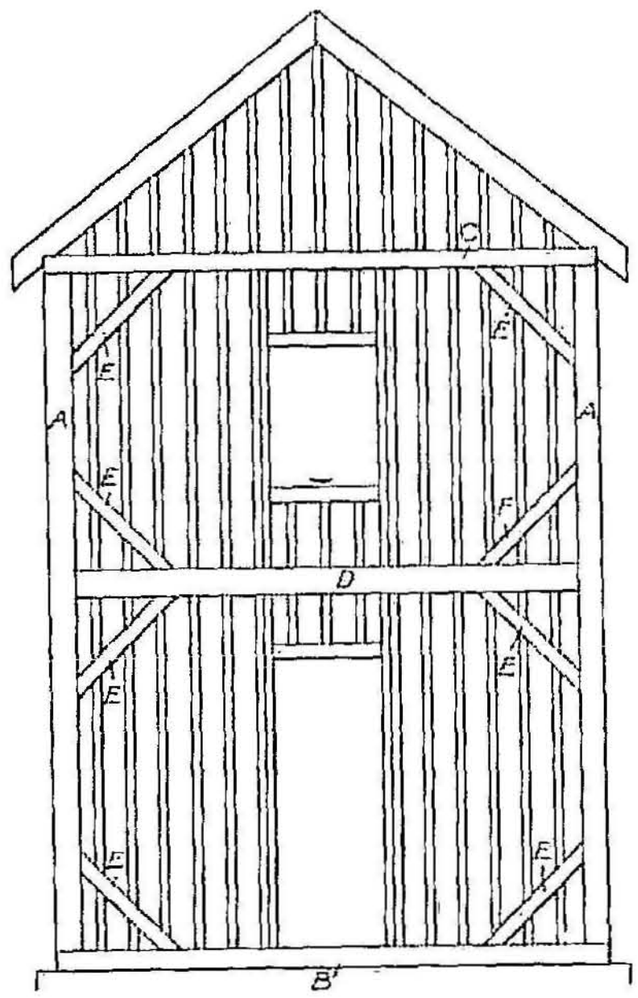
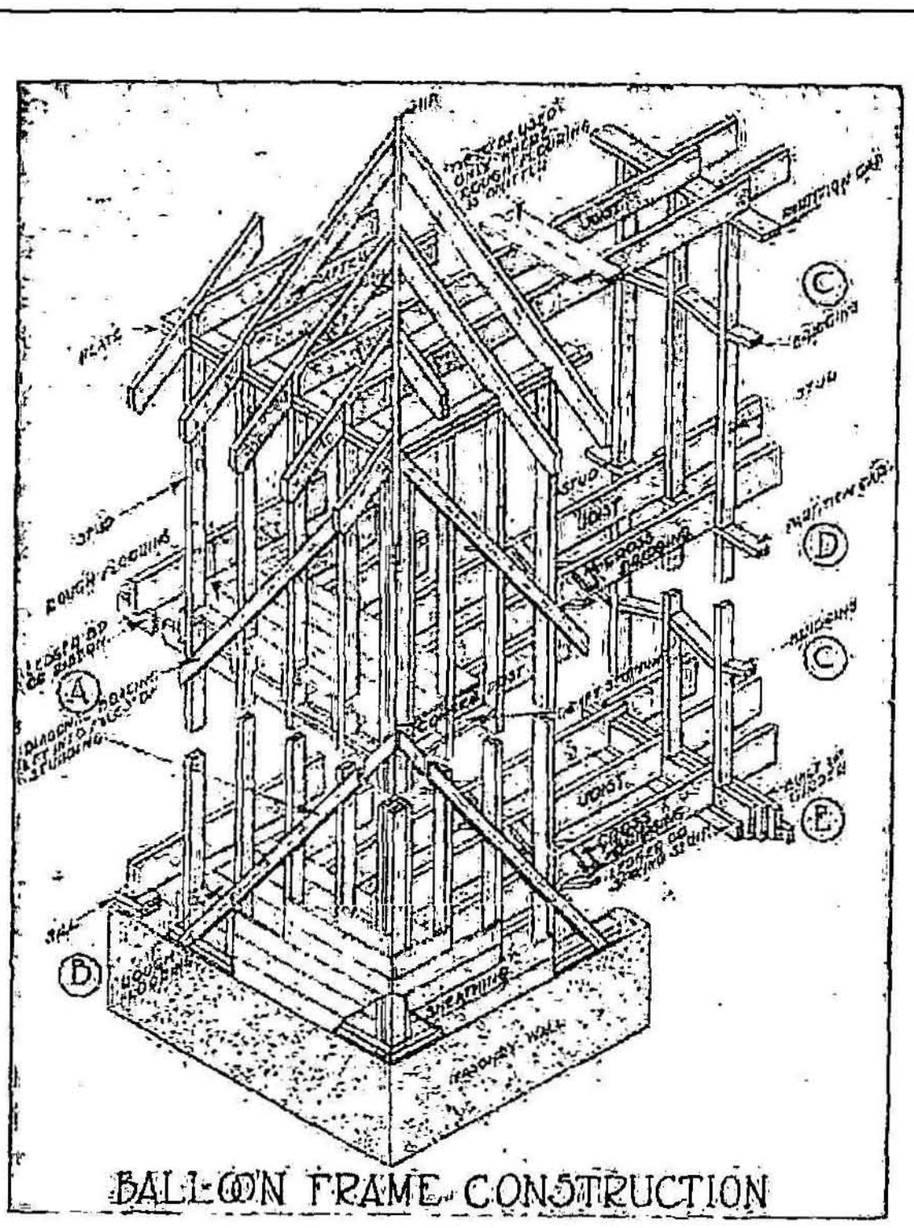


Fig. 90. Example of Braced Framing

(Left) Plate 874-3, Braced Frame Construction. Published in Audel's Carpenters and Builders Guide No. 3, Theo Audel & Company, New York, 1923. The Braced Frame Construction is said to be the oldest method of framing in this country having been imported from England in Colonial Times. Although in a somewhat modified form, it is still being employed in certain states notably the East. Originally this type of framing was characterized by heavy timber posts at the corners, often with intermediate posts between, all of which extend continuously from a heavy foundation sill to an equally heavy plate at the roof line. At the second story were introduced heavy timber girts running from post to post, carefully mortised and tenoned with pins.

(Right) Plate 90. Example of Braced Frame. Published in Carpentry and Contracting, Volume I, American Technical Society, Chicago, 1920. Chapter One, Carpentry by Gilbert Townsend, S.B., Montreal. In a full braced frame all the pieces should be fastened together with mortise-and-tenon joints, but this requirement is much modified in common practice, a so-called "combination" frame being used in which some pieces are mortised together and others

fastened by means of spikes only. A framework is constructed consisting in each wall of the two "corner posts" [AA], the "sill" [B], and the "plate" [C], together with the horizontal "girt" [D] at each story to support the floors, and a diagonal "brace" [E] at each corner, which, by keeping the corner square, prevents the frame from being distorted.



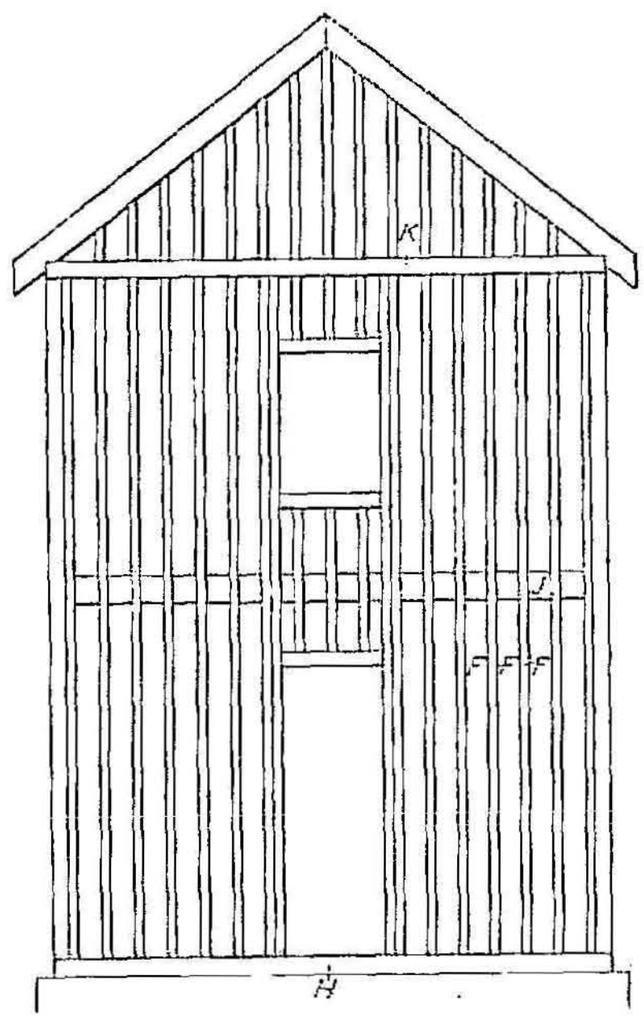


Fig. 91. Example of Balloon Framing

(Left) Plate 874-2, Balloon Frame Construction. Published in Audel's Carpenters and Builders Guide No. 3, Theo Audel & Company, New York, 1923. The principal characteristics of balloon framing is the use of studs extending in one piece from the foundation to the roof; the joists ends being nailed to the studs and also supported by a ribbon or ledger board let into the studs. It should be particularly noted that the spacing of studs should be 16 inches center to center to receive wood lath. The joists are spaced similarly unless furring strips or strapping are used.

(Right) Plate 91. Example of Balloon Framing. Published in Carpentry and Contracting, Volume I, American Technical Society, Chicago, 1920. Chapter One, Carpentry by Gilbert Townsend, S.B., Montreal. In a balloon frame there are no braces or girts, and the intermediate studs [FFF] are carried straight up from the sill [H] to the plate [K], with a light horizontal piece [J] called a "ribbon" or "ledger board", set into them at each floor level to support the floor joists. This frame depends mainly upon the boarding for its stiffness, but sometimes light diagonal braces are set into the studs at each corner to prevent distortion. The various pieces are framed together with nails of various sizes and types.

The Henry House is a mix of technologies reflected in the materials selected and their method of fabrication; sill plates are both hand hewn and sawn, wall studs are both dimensional lumber and peeled poles, floor joists are dimensional lumber and hewn logs, etc. The progression of this mix at the Henry House is seen in both the frames of the south block and the north addition, as they both exhibit a mix of framing member types, methods of construction and method of connection (nails vs. mortise and tenons with pegs).

Corner Brace at northwest corner post in north addition.

In the south block there are many examples of this mixing of technologies. Some of these are: the sill plates are hand hewn and connected with mortise and tenon joints; the floor joists are sawn dimensional lumber and toe nailed to the sills; the floor boards are manufactured in a saw mill, the corner posts and the diagonal corner braces are connected using a mortise and tenon system; the wall studs are dimensional lumber; the framing members around the window and door openings are also dimensional.

In the north addition, "There was a notable simplification in labor and materials employed during the [construction] of the second phase [of the house].[3] Erected using the guiding principles of the techniques used in the south block less formal building materials were selected for construction. Sill plates are hand hewn, floor joists are logs with the tops adzed flat to allow for the floor boards, wall studs are peeled poles, corner posts and opening braces are also hewn timbers, and the roof framing system consists of roughly hewn pole rafters with waney board[4] roof sheathing. There is little use of dimensioned sawn lumber in the north addition frame.

[3] *Condition Report and Temporary Stabilization Recommendations, April 2001*, Robert Silman Associates, PLLC, Structural Engineers, Washington, D.C., 04/23/01, pg. 1.

[4] Waney boards are the irregularly shaped flat scraps left over from the milling process of sawing large diameter logs into flat stock sized boards. Bark is usually still attached at the curved edges of the boards.

Balloon frame construction also uses the framing technique known as the ribbon board to support upper story floor joists. Henry House builders employed this method and installed an inch thick (4/4) 1 x 6 inch ribbon board. The ribbon board (or ribband) forms the support for the upper-floor joists. It is a square edged board that is let into the vertical load bearing studs so that the top of the ribbon board is at the elevation of the bottoms of the joists. The joists are set on, or notched into, the ribbon board and nailed to the studs[5]. This construction detail is clearly seen in both the south block and the north addition frames. The floorboards are installed over the floor joists with the floor notched into the studs.

View of ribbon board and notched wall stud at south block west elevation.

View of floor joists in north addition notched over the top of the ribbon board. Note edge of floorboards on top of joists.

Another demonstration of balloon frame technology is seen in the detail of running the floorboards to the edge of the framing system. The interior partitions and baseboards are then installed over the floor boards rather than stopping the floorboards at the baseboard.

With the siding temporarily removed from portions of the west elevation other details of the construction history are seen:

- Nail holes from previous siding is visible, one set of nail holes indicates only one previous siding system
- Wall studs in the north addition at the west wall are peeled pine poles with hewn front and back surfaces; average size is 4 inches in depth and 5 ½ inches width. Spacing is random but averages 24 inches on center.
- Sawn lumber tends to be circular sawn with the exception of the 2nd floor baseboards – these appear to be resawn (twice through the blade).

[5] Description of ribbon board based on definition in *The Penguin Dictionary of Building* by John S. Scott, Penguin Books, New York, NY, [1964] 1974.

The viewing of the extant frame of the Henry House also allowed a photographic documentation of structural repairs that have been made to date. This repair work has also most likely improved the load bearing capacity of the framing system until such time as permanent repairs are made. This will be discussed in more detail in the section on Condition Assessment.

Hewn post with sawn ribbon board.

Hewn corner posts from both frames with sawn siding attached to north side of nw corner post.

Foundation and Cellar Walls - The bulk of the house sits on a roughly coursed shallow foundation wall made of coarsely dressed local red sandstone set in a local clay mortar. This wall is placed directly on the flattened soil of Henry Hill and has no below grade spread footing. It is generally one stone in width averaging 10 to 14 inches in depth. Walls are located directly under the sill plates of the walls and extend to either side of the stone chimney forming a solid wall passing to the south of the chimney.

These walls are extended under the north addition from the north wall of the south block frame to make a cellar north of the chimney. The cellar walls are more substantial construction and are on average 12 to 16 inches in depth and are constructed of multiple stones laid in mortar. Stones in the north cellar are laid in rough courses and set with a lime-based mortar. The cellar walls are brought down to 5 feet-6 inches on average below the sill plate, this is approximately the same depth below grade as the sill plates are essentially at grade level.

East stone foundation wall in north cellar represents typical mortared construction for this part of the house.

Floor Framing System - In general a one-piece heavy timber sill plate rests on the foundation and cellar walls. The sill plate supports the floor joists that are connected to it. Joists are installed across the width of the house, or east to west. The type of joists and the method of connection vary. In the south block the joists are dimensional 2 x 8 circular sawn lumber. Physical evidence indicates they were connected to the sill plate by mortise and tenons at the first floor and are supported by the studs and ribbon board on the second floor. Mortise pockets are 2 x 4 inches in cross section and 4 inches deep; they are positioned approximately at 24 inches on-center. This method of framing is also used in the north addition rooms; and joists for the first floor are unpeeled 6 to 7 inch diameter logs rather than dimensional lumber; they are located at 24 inch centers. The second floor joists are dimensional sawn lumber and attached directly to the frame. Many of the first floor joists have been removed because they were deteriorated.

Floorboards are nailed directly to the floor joists and run perpendicular to the joists or north to south. On the first floor more than one layer of floorboards has been installed over time.

East wall sawn sill plate is notched for floor joists.
Sill plate sits on shallow stone foundation.
Floor joist is not connected to sill plate at this location.

Sill Plates at South Block (SEE SKETCHES and HABS DRAWINGS)

This section calls out the various sill plate configurations of the house. As pointed out in a structural assessment of the framing system[6], the sill plates are discontinuous around the perimeter of the building and are structurally unstable. This will be discussed further in the Condition Assessment section.

North Interior Wall (Same as south interior wall for north addition) – there are two unconnected fragments, one on either side of the stone chimney mass: West of chimney, 9 x 7 ½ in. hewn w/ 6 ½ in. tenon connection to west wall sill; East of chimney, 9 x 8 in. hewn with tenon connection to east wall sill.

East Wall – three segments, not connected. North segment is 8 ft. long, 9 x 8 in. in cross section, and is hewn and notched for floor joists. The center segment is 7 ft. 4 in. long, also 9 x 8 in cross section, notched for floor joists, but sawn. The south segment is 6 ft. 9 ½ in. long and is sawn on the exterior. It is not accessible for inspection.

West Wall – A pressure treated sill plate has been installed, it is 7 ½ in. in cross section and was installed in two pieces. The two segments are half-lapped with a 2 ft. 6 in. overlap and the joint has been adhered with an epoxy mixture.

South Wall – A continuous sawn sill, 6 ½ inches square in cross section spans the entire width of the south wall. It is not connected at either end to perpendicular sill plates.

[6] *Condition Report and Temporary Stabilization Recommendations, April 2001*, Robert Silman Associates, PLLC, Structural Engineers, Washington, D.C., 04/23/01, Pg. 4.

North Addition Sill Plates

West Wall – A pressure treated sill plate runs the length of the north cellar from the northwest corner to the intersection with the sill plate at the chimney. It has been notched for floor joists and also to clear the window well side walls.

North Wall – A two piece pressure treated sill plate spans the width of the north wall. It is half-lapped in the middle with an 18 inch overlapping half lap splice joint that has been epoxied. The cross sectional area is 7 ¾ inches square.

East Wall – There are two separate pieces in the east wall. The north segment is a 5 ft. 4 in. long and circular sawn 5-1/2 in. x 6 in. beam. It is butt jointed with a 6 in. x 7 in. beam that spans the remaining length of the wall approximately 10 ft.

South Wall (same as north interior wall for south block).

Wall Framing System – The structural load-bearing wall studs constitute the basic wall framing of the house. They are overlaid on the exterior with a shiplap siding used as wall sheathing. Horizontal siding has been installed over the sheathing with building paper installed between them (see *Wall Surface Covering & Finish*). On the interior plaster and wood lath are applied directly to the wall studs (see *Interior Wall Surface & Finish*). The average wall thickness is 6 inches.

Roof Framing System – The roof structure consists of roughly semi-circular peeled pole rafters that are approximately 4 – 5 inches in diameter. They are spaced at approximately 24 inches on-center. Rafter pairs are nailed together at the peak without a ridge beam. The ends of the rafters are supported on the attic floor framing such that they overhang the exterior walls (as do the floor joists).

South Attic, south gable wall

South Attic, north gable wall

Vertical wood posts (3 x 3 inches) are provided in the south attic only to support the pole rafters. They are nailed to the rafter and the attic floor joist approximately 46 inches from the lower end of the roof rafters and are located at every other pair of rafters. The attic floor framing consists of full size 2 x 7 inch joists spaced at 24 inches on-center.

South Attic Rafters at Top of Wall Frame

South Attic Rafters at Ridge

North Attic, south gable wall

North Attic, north gable wall

Spaced roof sheathing boards are nailed directly to the pole rafters. The metal roof panels are nailed to the sheathing boards. The sheathing boards are an inch thick and 10 to 16 inches wide, they are spaced about 4 inches apart. At the ridge two boards are butted together to form a solid overlay at the peak of the rafters (typically seen in lieu of a ridge beam).

Inch thick flooring is installed directly over the attic floor joists in both sections of the attic. Many of these boards are over 12 inches in width. Some have been removed to allow for the installation of electrical cable.

Exterior Envelope

Roof Surface Covering – A panelized corrugated sheet metal system covers the roof framing system. It is painted with a green finish. The panels are installed in two horizontal rows across the field of the roof. Panels are approximately 2 ft. x 8 ft. in size and the half round corrugations are approximately 2 inches in diameter. Full sheets are used for the bottom row while the upper row sheet panels are approximately 2 ft. x 5 ft. The ridge is capped with a half round rolled metal ridge component with flanges typically used in panelized sheet metal systems.

Birds eye view of west slope field sheet metal roof system, 08/01.

The panels are installed with overlapping edges in two directions, most likely based on prevailing wind directions. On the east slope of the roof the panel edges are overlapped from the south to the north. On the west slope of the roof the panels are overlapped from the north to the south. In both cases the upper row overlaps the lower row of panels with the ridge piece overlapping the roof panels at the ridge line. Panels overlap one or two corrugations (2 to 4 inches) from side to side and approximately 4 to 6 inches from row to row. Panels are installed to overhang the roof framing structure at the eaves and gable ends. Metal panels are nailed directly to the roof sheathing boards.

The roof is penetrated by the brick chimney at the ridge line and by a vent pipe in the lower southeastern corner. The chimney flashing consists of the edges of the cut roof panels turned up into a mortar reglet joint. This is positioned just above the roofline in the brick masonry of the chimney; the roof panel edges are either screwed into the brick masonry joints or covered over with a small piece of metal

counterflashing. The vent pipe is seated in a pre-manufactured flashing flange. An opening has been cut through the metal roof panels and the flashing flange inserted from the underside of the roof. The up-slope portion of the roof panel is folded over the flange for positive drainage.

Roof Overhang and Box Cornice - The roof overhangs the sidewalls of the building on all four sides. This configuration has generally been described as a boxed eave with an ogee profile crown molding and a raking cornice at the gable end. A roof which overhangs all four elevations on gable roofed building at the eaves (side elevations) and at the rake (gable end elevations) is more precisely known as a simple closed box cornice. It consists essentially of three members.

They are the fascia, a vertical piece fastened to the outer ends of the overhanging attic floor joists, the soffit, a piece which fastens directly to the underside of the overhanging joists, and the frieze, a vertical piece which fastens to the building wall directly under the soffit. The fascia projects down beyond the outer end of the soffit to form a drip. The soffit runs from the fascia to the building wall, and the frieze is brought up against the soffit to make a tight joint against the wall and covers the top plate of the wall frame.

A piece of double curvature ogee crown molding (cyma reversa – convex at outer edge and concave at inner edge) is attached to the fascia boards on the gable ends just below the level of the overhanging corrugated metal roof panels.

South gable cornice and frieze board.

SW corner detail of cornice, gutter and downspout.

Roof Drainage System – Gutters and downspouts are used to collect and discharge the roof runoff from the roof surface. A modern type of residential style aluminum seamless gutter is attached to the box cornice fascia boards on the east and west elevations. The gutters are formed to resemble ogee style crown molding in section and are white. They are attached to the roof using straps that are attached to the roof sheathing planks.

Rectangular cross section downspouts are used at the four corners to carry the water from the gutter drop outlet to the base of the building. Downspouts are formed with an inside elbow at the cornice to bring it along the exterior face of the house just below the frieze board. Each downspout has an outside elbow at the base to direct water away from the building. Downspouts are supported with strap brackets that are fastened to the exterior siding.

Chimney – The chimney is constructed using stone masonry from the base on grade just below the first floor level up two full stories into the attic. At the attic floor level the structure changes to brick masonry and it extends 24 brick courses up to the ridge and 14 brick courses above the roof ridgeline. The top 3 courses project slightly outward. The chimney is rectangular in section and contains two flue chambers. It is located external to the north wall of the south block of the house but is within the footprint of the north room addition (R101).

Detail of chimney brick

Stone chimney base with brick throat extending through roof line

The stone superstructure of the chimney is mortared with a lime and mud based mortar. Simple mortar sample analysis and identification determined the constituents of the mortar (see technical appendix). The base sits on the clay shelf visible in the north cellar of the house. It does not appear to have a below grade foundation (conditions are too fragile to determine exact nature of below grade conditions).

The cross sectional area of the stone chimney at the first and second floor levels is approximately 6 feet in width and 2 feet/ 6 inches in depth. The firebox openings are generally about 13 to 17 inches deep and 26 to 28 inches in width. The chimney is carried through the full two stories of the house at this approximate size and up into the attic.

Just above the attic floor line the stone masonry is terminated and the brick chimney flue and head begins. This piece of the chimney construction is not as substantial as the stone section. The brick section of the chimney is unlined and is laid one brick wythe thick. (A wythe is a single brick unit in width or thickness.)

Each of the bottom 3 courses of the brick section is stepped in to form the smaller cross sectional area of the brick chimney. At the exterior of the chimney, the 3rd course from the top is stepped out to form a corbelled band. The top brick course is protected with a layer of mortar placed on the top surface of the brick.

In cross section, the two firebox flues are separated by a single brick wythe that is toothed into the outer wall construction. The space between the flues, when more than one flue occurs in a chimney, is called the wythe (Dietz 1964:152).

West elevation of roof and chimney.

Chimney and roof from east.

This flue divider is a continuation of the stone flue construction, it terminates approximately 6 courses from the top of he stone masonry. The chimney is laid using a common running bond; the only headers are those from the dividing flue wall. The bricks appear to be handmade with irregular sizes, coloration, and hardness. Many of the bricks are soft to the touch. Mortar in the attic section of the chimney appears to a lime based mortar. Above the roofline many mortar joints have been repointed with what appears to be a white portland cement type of mortar. The exterior portion of the chimney was not accessible during the mortar-sampling phase of mortar analysis.

Fireplaces are located in the north rooms of the south block of the house (these are now the center rooms of the house), R102 on the first floor and R202 on the second floor. In these two rooms firebox openings project slightly into the space, but the mass of the stone masonry chimney is held to the exterior of the north wall. Stove pipe flue access may have been added to the chimney by puncturing the north wall from the kitchen at the north addition (R101) and/ or the north second floor room (R201). This has not yet been determined by physical evidence. Further description of the firebox openings and fireplace mantles are found in the Room Inventory.

Birdseye view of top of chimney stack with thin mortar wash.

View down throat of chimney showing one wythe brick flue divider.

Wall Surface Covering & Finish – The exterior of the house is sheathed with tapered horizontal siding that has a concave scallop coved upper edge. This edge fits under the overlapping board above. Typically this is known as "German Siding" but is better defined as ship-lapped weatherboards with a concave top scallop. The current siding was installed sometime in the mid 1930's.

This siding is sawn and milled to give a uniform appearance. It is installed with a 5 inch surface exposed to the weather including the coved upper edge. The siding is run into all exterior trim associated with the wall openings. Adjoining pieces either butt together or are joined with an over lapped splice. Siding is nailed directly to the frame of the building over a layer of inch thick tongue and groove joined sheathing boards. A layer of rosin paper (orange paper) has been used to weatherproof between the two layers of siding. The siding is coated with multiple layers of white paint.

As part of the temporary mothballing of the building in 2002, the purpose of which is to protect the structure from the weather and rodents until permanent repairs are made, a synthetic siding was used to replace the wood siding boards that had been previously removed. This temporary siding is laced into the exterior wall surface to replicate, but not duplicate, the removed historic german siding weatherboards.

Architectural Trim – The exterior of the house has very plain architectural trim. Windows and doors are trimmed with a simple architrave type molding. This is detailed in the window and door survey. Siding is terminated at the corners of the house and double corner-boards (two pieces forming a 90 degree corner covering each face of the corner) are used at each corner. A plain wide frieze board is used at the top of the walls under the roof overhang and is applied on all four elevations; it is also considered part of the box cornice described as part of the roof overhang. All exterior trim is coated with multiple layers of white paint.

This view of the southeast corner of the house illustrates the gutter and downspout system, the corrugated sheet metal panel roof system, the architectural trim at the windows and door openings and the type of exterior siding. It also illustrates the extent of the exterior foundation on the south block and the perimeter and building drainage conditions. 08/01.

Exterior Wall Openings

Windows. All windows are wood construction and framed directly into the structural balloon frame. Simple wooden frames consist of an exterior sill with exterior trim and a narrow hood over the frame header and an interior sill and apron with applied architectural trim.

All windows are double hung sashes that are operated without the benefit of sash cords or sash pulleys. Wooden sashes are typically mortise and tenon construction with pegged corners. Most sashes are 6 over 6 type but three have been replaced with 2 over 2 sashes. The 2/2 sash units are thought to date from the 1920 – 1930's modernization of the house by the Sons of the Confederate Veterans. Many of the extant windows have been repaired by the park maintenance staff within the past six (6) years and are in good condition.

The exterior window frame is constructed with only a single board used to form a simple canted drip edge over the window sash to shed water, it is attached to the top of the frame and placed in front of the siding boards. The exterior window frame is constructed of a trim board that is attached to the face of the framing lumber; it projects slightly beyond the siding. The trim used at the south block openings consists of a simple bullnose curve. The trim used at the north addition openings is only slightly more elaborate consisting of a multiple curve molding. The exterior window sill is the other component that projects beyond the house siding and it is used as a place to terminate the exterior trim piece at all openings.

The exterior frame is detailed with a recessed rabbit cut to allow for the installation of exterior screen and/ or storm windows. Exterior screens are seen in some of the historic photographs. Hardware used to fasten the storm / screen frames in the opening is intact at a number of window openings.

Reference the HABS drawings VA-1363, Sheet 5 for window details, also elevations for placement of window units.

Doors. All doors are wood construction and framed directly into the balloon frame. Simple wooden frames consist of an integral exterior sill, applied exterior trim at the door jambs and a narrow hood over the frame header. Interior features consist of an interior sill (or threshold piece) and applied architectural trim around the frame.

A variety of wood door types are used as exterior doors (all exterior doors are wood construction). Types include the following configurations: plain 2 panel, plain 4 panel, molded 4 panel, batten, 5 panel, and flush. Panel doors exhibit through tenon construction – tenons are exposed at edges of the door. The door types are detailed in the door survey and in the HABS drawings.

Typical plain 4-panel door used throughout the south block for the first period on construction. D106 at R103. 08/01.

Later period door installed at south elevation during remodeling of entry hall, D105 at R103 in the south block of the house. 08/01.

D108 rear, batten type, R108.

D104 front, plain 2 panel type, R104.

Cellar Ventilation Hood & Concrete Window Well. This feature is located on the west elevation near the north end of the building. The concrete well is associated with the stone cellar foundation walls of the north addition of the house. It consists of a rectangular window well opening cut through the stone cellar walls and is made entirely of concrete. The well extends approximately 2 feet below the existing ground level. It is constructed of roughly formed concrete that was cast in place. In plan the well measures 4 ft 2 in. in length parallel to the west elevation and extends out from the wall line of the house 2 ft. 8 in. The bottom of the well is located 3 ft. 2 in. above the cellar floor. The side walls of the well structure are 4 to 5 inches thick with the west wall being 6 inches in thickness. It is open to the interior of the cellar. Scratched into the bottom (or floor) of the well are the figures "1932". Since these figures appear to have been cut into the wet concrete before it had solidified, it is assumed to represent the year of construction.

The wooden ventilation hood is used on the exterior of the building to cover the window well opening. Its purpose (and the purpose of the well) as described by Mr. Fred Ebhardt[7] was to provide ventilation to the cellar. The ventilation hood was constructed with a slatted opening in the west elevation. The hood was made with a shed roof that sloped toward the west – away from the cellar foundation. It was placed against the side of the house over the well opening. There is no evidence of any attachment between the hood and either the concrete well walls or the side of the house.

The extant hood is built with modern nominally dimensioned lumber and is covered with the same style siding as the house but still retains remnants of earlier (possibly original) materials. It is rectangular in plan and measures 2 ft. 5 in. in length (parallel to west elevation of house) and 1 ft. 5 in. in width. The slatted frame that is built into the west wall of the three-sided hood is constructed from material that dates to an earlier time period. It contains mortises for 8 slats, which are still in place. The roof of the hood is also made with wood siding that matches the house. The entire exterior of the vent hood is painted white.

Wood frame cellar vent hood, exterior vent slats are covered with plywood.

Cellar well with "1932" scribed in bottom slab of concrete well casing.

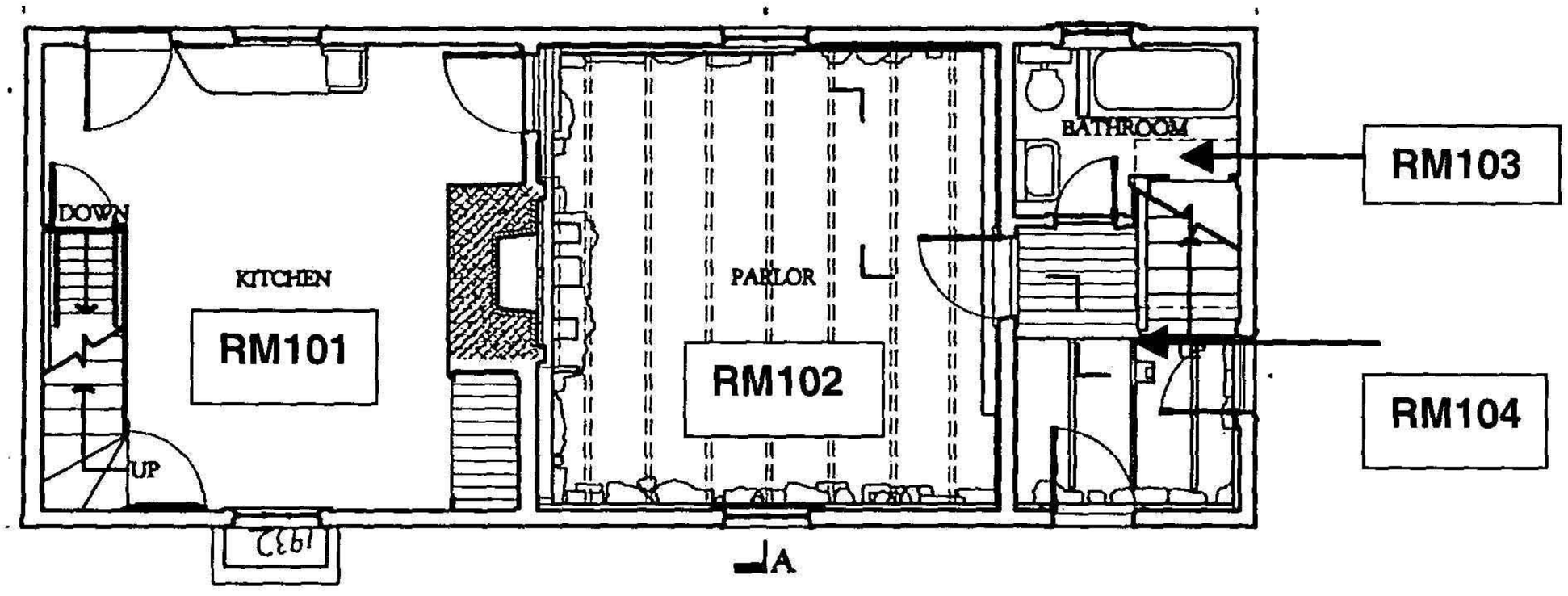
Interior of well vent hood, note mortised grooves for missing vent slats at inner frame.

[7] Interview with former occupant of the house with Project Architect, 08/14/01. Mr. Fred Ebhardt indicates an interior cellar window or cold frame was never used in this location during his occupancy period c. 1929 – 1942.

INTERIOR ENVELOPE (OVERVIEW)

General Description – The interior room arrangement of the Henry House satisfies the basic criteria of the I-house type. As stated earlier, the essential characteristics being, "two stories high, but only one room deep". The interior fabric of the house has a much higher level of integrity and significance than the exterior. While "modernized" over the years, the interior has very few irreversible alterations and maintains a very high degree of construction period fabric integrity. In essence, the interior maintains a higher value to the understanding of the period of significance then do the materials of the exterior. The addition or deletion of any interior features will alter the understanding and interpretive value of the building to the people who are trying to understand it.

The interior layout of the rooms has been described in the Character-Defining Features section of this report and captured by the HABS drawings. The evolution of the house plan is also discussed and illustrated in the Chronology of Development and Use. It is worth repeating that each room contributes to the overall understanding of the pattern of use and evolution of the house. There is a hierarchy of rooms within the house, and the relationship of one room to the next is of great importance in this simple structure.



First Floor Plan of the Henry House, from HABS VA-1363

Significance of Extant Interior Finishes – An interior finishes study was conducted to determine the evolution, significance and condition of the extant finish materials in the Henry House. The *Interior Finishes Analysis (Paint and Wallpaper) Report* was completed by the Building Conservation Branch, Northeast Cultural Resources Center, National Park Service, Lowell, MA by Architectural Conservator Barbara Yocum in January 2002. Additional descriptive information about the room interiors and the chronology of the finish materials will be found in this report.

This comprehensive study evaluated and analyzed existing finishes throughout the house and resulted in eighty-eight (88) paint samples and twelve (12) samples of wallpaper being collected. The report includes an Introduction, Methodologies, Analysis Results, Conclusions, Recommendations and Appendices. It was distributed by HPTC in January 2002 as a separate report and is not included within the covers of the HSR. Interior treatment decisions should consider this significant report. The following text is taken from the General Observations section of the report (Yocum, 2001:48).

Identification of the historic finishes of the Henry House for the period of significance (1896-98) was hampered by lack of both documentary information and conclusive physical evidence. No interior photographs are known to exist for this time, nor have any written descriptions of the interior rooms been found. Physical evidence is also lacking in the form of alterations that may have been introduced at this time. The historic finishes identified here for 1896 – 98 were therefore based exclusively on the available paint evidence.

The interior rooms of the Henry House appear to have remained simply finished for many years with whitewash applied to most of the plaster walls and ceilings, with the woodwork left plain and unpainted except for what may have been a wax-paste finish. One room in the second story, Room 201, was left completely unfinished, with exposed plaster walls, plaster ceiling and woodwork.

Wallpaper, border paper and ceiling papers are obscured by multiple layers of paint. Papers are applied over interesting peach-color paint used as a wall treatment.
R204, SW corner.

The over mantle area in Room 202 shows evidence of multiple layers of finishes as well as the original plaster over lath construction. No fewer than 5 layers of finishes have been discovered in this area.

Physical evidence for the unpainted woodwork and plaster elements includes dirt and grime observed on these surfaces, beneath the first layer of paint. This may also be a contributing factor in the extensive paint failures in every room of the house [seen at the time of the field work, November 2001].

While this interior treatment seems unusually austere, it nevertheless appears to have suited the owner, Hugh F. Henry [Sr.], who built and occupied the house from 1870 until his death in 1898. Henry was equally conservative with the house's exterior finishes, judging by two exterior photographs taken circa 1884 and July 14, 1896 [HSR Figures 10 and 12] that show all exterior elements of the front (west) façade unpainted and exposed to the weather. This included the wooden siding, trim, paneled door, window sashes, and louvered window shutters. It was not until sometime after acquisition by the federal government in 1940 that the exterior began to be painted white. [It had been whitewashed sometime in the 1930's after the current siding was installed to replace the original 1870 material.] (Yocum, 2001:48).

NOTE : Interior Descriptions – Initially written in 2001, this following section has been superceded by the written descriptions included in the *Interior Finishes Analysis (Paint and Wallpaper) Report,* completed by the Building Conservation Branch, Northeast Cultural Resources Center, National Park Service, Lowell, MA by Architectural Conservator Barbara Yocum in January 2002. Additional descriptions in this report will supplement, but not duplicate, those by Yocum. Significant revisions have not been made to alter the 2001 text in the Final Revised Edition.

South Block Rooms *(General Conditions)*

Floor Surface and Finish. The first floor was constructed with wood boards laid directly over the structural floor joists. There is no evidence of a sub floor layer. Floorboards are generally one inch thick (4/4 stock) and vary in width from 4 to 6 inches. Saw marks on the boards indicate that both vertical and circular sawing was the method used to produce the boards. Boards are milled with typical tongue and groove edging to be used to create a solid floor system. Boards are fastened to the floor joists with nails; most nails are square cut nails although a variety of wire nails are also in-situ. Evidence indicates the boards were eventually coated with varnish and later paint. It is unknown if they were finished at the time of construction or at a later date.

Wall Surface and Finish. The interior surfaces of the perimeter walls are constructed of plaster over wood lath. The lath is nailed directly to the balloon frame wall members. There is no evidence of interior wall sheathing. The wood lath exhibits machine saw marks and was cut from various eastern white pine species. Both vertically sawn and circular sawn lath is used in the wall. Lath is nailed to the wall-framing members with square cut lath nails. The lath is spaced

to allow for a plaster key of approximately ¾ inch. Plaster is applied in either one or two coats depending on the location. Exterior walls seem to have a two-coat application totaling approximately ½ to ¾ inch thickness. Animal hair is a prominent constituent member in the plaster mixes.

Interior partition walls are constructed using similar methodology. The plaster is not as heavy on the interior partition walls and averages approximately 3/8 to 5/8 inch thicknesses. It is applied using a two-coat system although in some areas a one-coat system was used.

Ceiling Surface and Finish. Similar in construction to the interior wall surfaces, the ceilings are made of plaster over wood lath. The lath is nailed directly to the floor joists.

The kitchen ceiling is different from the others in that it is not plaster and was not original. The extant ceiling is tongue & groove beaded board nailed to the underside of the 2nd floor joists. The architectural fabric and finish analysis both indicate that the ceiling boards appear to have been installed sometime after 1922.

Architectural Woodwork/ Window and Door Trim. Interior woodwork and trim is minimal. All rooms have baseboard molding and window and door opening trim. The south room on the first floor (R103) contains other wall trim associated with the South Stair and Stair Hall. The north room on the first floor (R101, Kitchen) is sheathed with a double bead repeat shiplap siding on the wall and ceiling. The middle room on each floor (R102 and R202) each have wood mantles on the north wall of the room.

All trim in the south block is matched as a suite, all baseboards match, all window trim and door trim match, and other trim pieces have the 5/8-inch bead at the outer edge. Trim is distinct from that used in the north addition rooms where all window and door casings and baseboards are plain unadorned flat boards.

Baseboard trim used throughout the south block is 7 ¾ inches tall and a full 1-inch (4/4) thick. There is a 5/8-inch bead at the top. Saw marks on the reverse side indicate it is circular sawn. An unusual elongated 1 inch x ½ inch quarter round floor molding is attached at the bottom. At the corners the baseboard and the floor molding are mitered to form the corner joint. Baseboard trim in both north addition rooms is a simple 6 ½ inch x 1 inch board with no quarter round molding. At the corners the boards are simply butted together.

Window and door frames in the south addition rooms are rectangular in section and feature an applied canted strip at the outer edge of all trim elements. The jambs and header trim of the door and window frames are butted together but the applied canted trim is mitered at the corners. Interior apron pieces are beaded at the bottom edge and all windowsills have a half-round nosing profile (bullnose).

Similar window and door frame elements in the north addition rooms are plain rectangular boards. The only "decorative" touch at the windows is a chamfered nosing on the interior windowsills.

Architectural Features. Other than the woodwork associated with the staircases (handrails, railing spindles) and the fireplace mantles, the only other architectural feature is the cupboard in the kitchen. It is described in the North Addition Room Inventory.

Special mention is made of the kitchen cupboard in the *Interior Finish Analysis Report.* Early finishes are preserved within the southwest closet (cupboard), including a whitewash-like finish on the stone chimney breast, and a cream-colored paint applied to the south clapboards and exposed ceiling elements (Yokum 2001: 13-14) found nowhere else in the building.

R102 south wall. Features baseboard, door casing for D103 and telephone shelf. Floor framing system has been removed. 03/01.

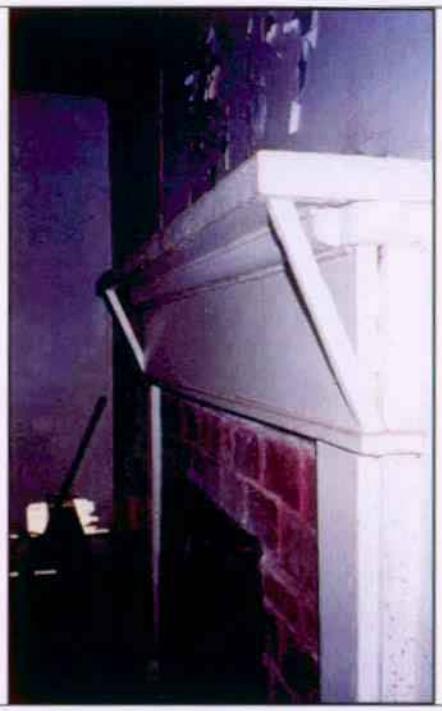
Firebox and mantle on north wall of R102. Center view shows braced mantle shelf and plain frieze and pilasters of the mantle casings.

South Block Room Inventory

Room 102 (Middle Room, First Floor – a.k.a. Museum Room). Interior finishes include white painted finish over multiple paint layers at both the walls and ceilings, (off-white paint) /over white finished plaster. The surface finish for the baseboards is a white paint also over multiple layers. The quarter round trim at the floor is stained and varnished. The floorboards and joists have been removed from the room but remaining samples and physical evidence indicate there were two layers of floorboards. The original floor was made of 5 to 6 inch wide tongue and groove planks; these samples retain a paint/ varnish/ stain finish. The plank floor layer was overlaid with a 3 ½ inch wide wood strip floor system that retains a varnish finish. This required the threshold between R102 and R103 to be reset or replaced.

Slightly off-centered on the north wall of the room is a stone masonry chimney with a fireplace opening dressed with a wood mantle. The mantle is painted white. Brick used to fill in the original stone opening and reduce the size of the firebox has been painted red.

In the northeast corner of the room D102 connects to R101. Centered on the south wall of the room D103 connects to R103. Windows include W102 on the east wall and W104 on the west wall. These two windows are 2/2 double hung sashes; this is in contrast to the 6/6 sash used throughout the house. They represent replacement windows from a post second period of construction remodeling phase (post 1922) and were introduced to represent a modernization of the public rooms of the facility.



Paint analysis of this wood fire place mantle piece in R102 confirms that it is probably an early feature of the room, predating circa 1922 and likely as early as circa 1870. Fifteen (15) layers of finish were counted during the analysis.

The architecture of the mantle is also somewhat unique with the angled braces seen in this view.

Room 103 (Entry and Lower Stair Hall, South Room, First Floor). White painted walls and ceilings continue from the Stair 101 hall. Walls have white paint/ over wallpaper/ over plaster with white finish. The ceiling has a similar treatment. There is evidence of border paper over D105 to the exterior. Doors are painted white. Floor and baseboard have been removed. A section of floor remains intact within the alcove created by D103 and D104; it is painted brown. Baseboard and other trim are painted white. The tongue and groove floor varies in width from 4 ½ to 5 ½ inches and is 1 inch thick.

South Stair 101 (Between R103 and R203) See also R203 description. The configuration of this stair, with a 90-degree turn made up of winder treads without an intermediate platform, is called an ordinary 90-degree closed winder stair[8]. This stair was foreshortened circa 1922 with the addition of the south door (D105) by the Sons of Confederate Veterans. The lower one or two risers, treads, the newel post and a section of handrail were removed to make way for the door opening. The location of the newel post is still documented by the in-situ location of the framing elements within the historic floor framing system. This can be seen in the HABS drawings and documentary photographs within this report and in the building floor frame system.

The wood plank floor, stair risers and treads are painted brown. The stair handrail is painted bright green. Baseboard stringers at the outside wall and other beaded trim is painted white. Plaster is damaged at the top of the wall – ceiling plaster at top of stair is loose. The headwall exhibits possible changes due to odd placement of double trim boards. This anomaly within the trim may indicate the possibility that the stair was partially relocated during the 1922 remodeling, or perhaps with the addition of the north block rooms. See map of floorboards of R204 in HABS drawing sheet of floor plans.

R103 east elevation with D104 and bottom of south stair S101 with newel post.

R103 south wall featuring south stair S101 ascending to second floor.

South stair S101 with R103 at bottom of stair. Note wall trim featured at south wall and bulkhead trim overhead.

[8] Dwelling House Construction, pg. 326.

South stair (S101) at 90 degree turn at southeast corner of south block. Winder treads converge at the top handrail post.

View from top of winder treads to the south wall feature of double baseboard trim. Upper trim aligns with bulkhead.

Top of stair at outside corner formed with R204. Floor feature unpainted top of handrail (sawn-off?) and vertical corner board

Room 104 (Bathroom, First Floor). Interior finishes include a sheet tile wall covering (4 x 4 white tile with black grout line pattern) used as wainscot in the room around the fixtures, up to the level of the bottom of the interior windowsill. This line is consistent around the room.

The remaining walls and ceiling are painted white/ over paper/ over plaster with a white finish. These finishes date to the time prior to the space being converted to a bathroom. A painted masonite type hardboard is used to box in the under-stair closet and over tub cupboard. This is done to conceal the underside of the stair treads and winders. There is a good sample of patterned wallpaper enclosed within the over-tub cupboard, also exposed in this space is the unpainted underside of the stair winders which is similar to the lower portion of the stairs that is exposed in the closet.

Floor tiles (possibly VAT, vinyl asbestos tiles) are laid over an underlayment paper over the wood plank T&G floor. Window and door trim is painted white.

The bathroom is fully outfitted with equipment including a toilet, tub and sink. The white porcelain coated metal tub is placed along the east wall and is anchored on the north end with a half wall used to conceal the plumbing for the tub fixtures. It is made of dimensional lumber and brown masonite type hardboard and is varnished.

The white porcelain toilet is placed in the NE corner of the room. The underside of the tank lid is date stamped April 25, 1949. The toilet is a two piece model consisting of the elevated water tank with lid and the covered lower bowl. The sink is placed along the interior north wall of the room. It is a simple white rectangular porcelain residential sink with separate chrome plated hot and cold water knobs and faucet elements. The sink is supported on two chrome plated legs and is anchored at the wall. There is a medicine cabinet and wall light placed over the sink on the north wall of the room.

Room 202 (Middle Room, Second Floor). This room has 2 windows; one each centrally located on the west (W206) and east (W202) exterior walls. Both windows contain 6 over 6 sashes. As the middle room, this room also has 2 doors, one each at both the north (D201) and south (D202) interior walls. D201 is a typical plain 4 panel door used in the south block rooms. D202 is also a 4 panel door but as a second generation door it sports more decorative curved profile moldings (see door survey).

Centrally positioned on the north wall of the room is the wood fireplace mantle and stone firebox opening of the stone chimney. The stone surround of the firebox is coated with plaster. A small hearth enclosure has been made with brick and outlined with a piece of simple floor molding. The floor is made of unfinished tongue and groove wood floorboards.

The fireplace mantle features a cyma reversa (convex/ concave) double curved molding that supports a plain shelf. Two unadorned jambs (or pilasters) with bases that have a canted top edge support the shelf. The frieze below the shelf is a plain single board with projecting rectangular base trim.

The walls and ceiling are finished with a pale blue paint. On the walls, this is over a dark red or maroon color finish. For both the walls and the ceiling the paint layers are over the finish coat of plaster, a white substrate layer. Baseboards, window and door trim are painted to match the wall color.

R202, East wall, W202. Temporary emergency structural system bracing seen along wall.

R202 SE corner, W202, D202 reverse side, metal firebox covering leaning against south wall of room.

R202, west wall, W206.

R202, plaster lined stone firebox at chimney and wood mantle centrally placed on north wall of room. 07/01.

R202, with D201 to east of fireplace in NE corner of room. 03/01.

Profile view of west side of fireplace mantle in R202. Mantle is mounted against plaster wall (installed after wall was plastered).

R202. Hearth area located at mouth of firebox. Bricks are laid out into room and area is trimmed with elongated quarter round wood trim. Floor in room is wood strip flooring.

Room 203 (Hallway, Second Floor). The hallway runs along the eastern wall of R204. It connects the south stair (S101) with the central room on the second floor (R202). There is a window along the east exterior wall (W203); it is the typical 6 over 6 double hung window found in the south block of the house. There are 2 doors located on the interior walls. One door (D203) opens into R204 and the other (D202) opens from R202.

The walls are finished with a pale blue paint/ over paper with a pinkish finish (paper pattern is not seen)/ over plaster with a white substrate. The ceiling is painted a light grayish color/ over paper with a pinkish finish (paper with undermined pattern) / over plaster substrate. This treatment transitions to the stairwell (S101) where the wall area below the floor stringer of the staircase trim are painted white/ over paper. For both the walls and the ceiling the paint layers are over the finish coat of plaster, a white substrate layer. Baseboards, window and door trim are painted to match the white of the walls.

Room 204 (South Room, Second Floor). This room is "L" shaped due to floor area lost to the south staircase (S101) in the southeast corner of the room. It is the smallest room on the second floor. Access to the room is from the second floor hallway (R203) through a door located in the east wall of the room (D203). This door is a typical plain 4 panel door found throughout the south block of the house. As a corner room it has two windows; one near the southwest corner of the room (W204) and another centrally located in the west wall of the room (W205). W205 has 6 over 6 sash units. W204, the only double hung window in the south elevation, has 2 over 2 sash units (second generation replacement sashes). All interior trim, including baseboards, window and door architrave trim and moldings, is consistent with the typical interior trim in the south block rooms.

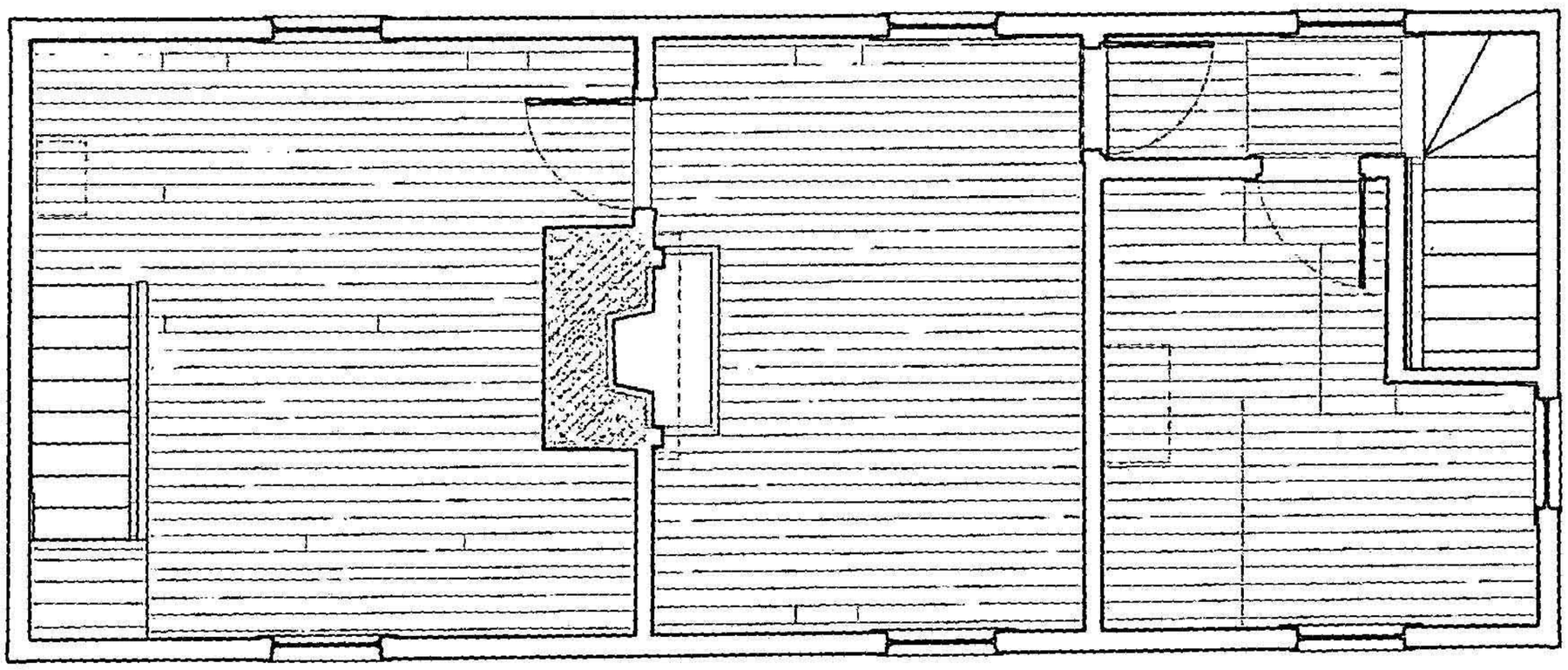
There are several layers of paint/ over paper on the walls and the ceiling. On the walls most of the top color layer is pinkish with the exception of the northeast corner of the room. In this location the finish is light gray with a blue border strip. This anomaly represents an area formerly enclosed by lightly framed interior partition that defined a closet (scars in the wall plaster also indicate location of the closet). A large section of the wall and ceiling plaster in the southwest corner of the room, where wall paper has been removed, is exposed. The color layer exposed in this area is more integral with the plaster - thus an older finish. Its color is best described as "cream-sickle" orange. The ceiling has a light cream paint layer/ over ceiling paper/ over white plaster substrate with a grayish finish.

The floor is unpainted. More detailed information about the floor in this room is contained in the following section, *Notes on Floorboards at R203/ 204.* All interior trim is painted to match the wall color (pink)/ over an earlier layer of white.

A recessed attic hatch has been cut through the ceiling of the room. It is positioned along the north interior partition, centrally located. It is a rectangular opening framed with plain boards that have a beaded nosing run along the bottom edge. The attic hatch is made from two wide boards connected on the reverse side with battens. A small piece of rectangular trim is attached to the top edge of the south trim board and is used to secure the hatch flush with the top of the floor joists (this creates the recessed opening in the ceiling). The attic hatch and frame are painted white.

Notes on FLOORBOARDS at R203/ 204 (see map of floorboards on HABS drawing sheet 2 of VA-1363 and annotated sketch).

Floorboards in this room and section of hallway show a different method of placement than floors in other areas of the house (south block and north addition). Instead of spanning the width of the room across the floor joists in a north/ south direction, these floorboards are placed in groups of random lengths and have a staggered placement in the room. The pattern of the floorboards indicates placement and attachment to the floor joists prior to the setting of the interior partition between the R204 and the hallway R203; the floorboards run continuously under the dividing wall partition. Floorboard widths vary from 5 ¼ inch to 5-5/8 inch, and the lengths vary from 3 ft 7 ½ inches to 7 ft. 7 ½ inches. Floorboards are made with tongue and groove edging.



North Chamber (R201) Middle Chamber (R202) South Chamber (R204)
Hallway along East Wall (R203)

Detailed floor plan of Second Floor of the Henry House, from HABS VA-1363.

Lines indicate pattern of floorboards in each room. Dashed lines in R204 indicate line of attic hatch in ceiling. Paint analysis of the finishes on the partition that separates R203 from R04 and the stair to the first floor indicates they are contemporaneous with the finishes on the other walls of the room. Patterns of floor board placement may indicate changes occurred prior to the application of the first layer of finishes. Original room configuration may have been without the interior partitions on the south end of the south block. More information is provided in the Chronology of Development and Use, Part 1, Section B.

Room 301(South Attic). Located above the south block rooms, the south attic is an unfinished space. A ceiling hatch is cut into the floor framing system from R204. The attic floor is made of large wide 1-inch thick rectangular planks that are nailed directly to the attic floor joists. These planks are circular sawn and the nails are a mix of square nails and wire nails. The north and south walls of the attic are the interior sides of the wall framing as it extends up to form the gable ends. Wall framing is fully exposed and consists of squared posts and mostly unpeeled semi-circular poles. The poles are used as supplemental framing in the gable walls (and in other parts of the house frame) and also for roof rafters.

While the first period construction south gable siding has been replaced, the exterior of the north gable wall still retains the first period siding. The rafters of the roof framing system form a gable truss and are sheathed with roughly sawn planking (a.k.a. waney board). The corrugated sheet metal roof is visible through the gaps in the roof sheathing. Further description of the roof framing system is found elsewhere.

Architectural detailing visible from the reverse side in the south attic is the first period frieze board that has been maintained at both gables. A variety of nails are protruding from the sides of the pole rafters and exhibit a wide range of types, from a round-headed spike to modern anchoring nails.

South attic, view of south gable interior, W310 at center. Note 10 inch wide frieze boards at top of gable and post and pole framing.

South attic, view of north gable wall, attic hatch and attic floorboards. North gable is first period construction exterior wall.

North Addition Rooms (*General Conditions)*

This section of the building consists of two rooms, R101 (Kitchen) on the first floor and R201 (North Room) on the second floor; the specific character-defining features will be described in the respective Room Inventory.

Floor Surface and Finish. Similar in construction to the south block of rooms, the floor construction consists of wood tongue and groove boards laid directly over structural floor joists. There is no evidence of a sub floor layer. The floor in R101 (kitchen) has been overlaid at least two times with wood planks and currently has a 9 in. x 9 in. tiles floor surface. Floors are thought to have been originally unfinished except in the hallways. Here they were later finished with a varnish and/ or wax applied after an initial prolonged period of occupation. Hallway floors were later painted (see Yocum 2002).

Wall Surface and Finish. The walls and ceilings in R201 are constructed with plaster applied over wood lath. The walls and ceiling in R101 are finished with painted double repeat 3 ½ inch beaded board (a.k.a. matchboard or box car siding). This interior double repeat beaded board has been installed directly over the wall framing; there is no evidence of a plaster substrate. The walls of the north stair well (S103) are also covered with a type of interior siding, but it is a plain vertically oriented board. The stair well from the kitchen to the cellar is also partially covered with this type of siding. This use of the north wall as a location for the two interior stairs associated with the north addition allows the interior surface of the wall to be covered with the interior wood siding. Above the level of the second floor the wall is covered with the more typical plaster over lath.

Ceiling Surface and Finish. Similar in construction to the interior wall surfaces, the ceiling in R201 is made of plaster over wood lath. The ceiling in R101 is sheathed with the interior double repeat 3 ½ inch beaded siding.

Windows & Doors. As per the south block of the house, all windows are wood construction and framed directly into the structural balloon frame. Windows are similar in most other details; one difference being no interior architrave trim is used in the north addition. See the Window & Door Schedule for more detailed information.

Architectural Woodwork and Trim. Interior woodwork and trim is minimal. All rooms have baseboard molding and the windows and doors openings have been cased out with simple rectangular boards. The beaded wood strip ceiling in the first floor room has a ceiling molding applied, but this is more part of the interior sheathing of the room than trim.

All trim in the north addition is matched; all baseboards match, and all window and door trim matches. The unadorned rectangular profile trim is distinct from the beaded and/ or splayed trim used in the south block rooms. It helps to

differentiate the two periods of construction. Baseboard molding in the north addition is made from 6 ½ inch by 1 inch boards. Butt joints are used at both inside and outside corners.

Architectural Features. Cabinets and other built-in storage, the stair enclosure at the north wall, the cellar stair and the north stair (S102 and 103) located in R101 are described in the Room Inventory.

North Addition Room Inventory

Room 001 (North Cellar). Descending the south cellar stair from the kitchen provides access to this room. Used primarily for storage, the cellar walls are simply the exposed interior surfaces of the exterior stone foundation walls at the east, west, and north walls. The exposed cut earth bank that forms the south wall of the cellar is the edge of the outcropping that supports the base of the stone chimney, and much of the interior north wall of the house. The exposed floor framing system is overhead. The underside of the kitchen floorboards can be seen between the joists and forms the ceiling. A thin 1 to 2 inch thick cement coating is placed directly over the dug out cellar floor to form the finished floor surface.

There is a rectangular concrete cellar vent and wall well cut through the west stone wall. According to a date scribed into the bottom of the well, it was constructed in 1932. See description in *Wall Opening* section. A steep wood stair descends into the northeast corner of the room from above. A wood post in the middle of the room is used to provide additional support to the floor framing system. The cement floor has been placed around the bottom of the post.

Cellar Stair 103 (Between R101 and North Cellar). This open ladder stair descends into the cellar along the exterior north wall of the kitchen (R101). Called an open stair because there is not a railing or any enclosure along its length into the cellar, it is simply constructed from two side stringer boards and six 5 ½ inch wide treads; it also has open risers. The floor framing has been cut away to allow placement of the stair. The hand sawn split and chopped floorboards and joists, and the lack of a header between the joists, suggests the stair was not part of the original construction of the floor framing but was added at a later time.

Other indicators of this sequence include: wire nails to connect the infill header to the log joists, construction period floorboards passing across the opening at the west end, a change in the type of siding used for wall covering of the stair enclosure, and a change in the pattern of the interior siding at the exterior wall.

Within R101 this is an enclosed stair. It is separated from the kitchen by a vertical board wall constructed on a lightweight frame. In plan, the stair opening is 2 feet wide and 8 ft.- 6 in. in length. The batten door at the top of the stair (D108) swings out and opens against the north wall. The stair enclosure has been altered since it was built. Most of the stair enclosure is made with 5 inch wide boards. At the east end of the enclosure a short section has been added made with 3 inch wide boards, suggesting it has also been altered to create a larger opening. The batten door will fit at either location. The enclosure is made with all tongue and groove boards, all beaded, and all painted white.

See also R101 (Kitchen) description.

North Cellar, west foundation wall with cellar vent well cut into stone wall. Well is concrete.

North Cellar, NE corner of two stone foundation walls at stair (S102).

North Cellar, southeast interior view of earth embankment that supports chimney at juncture with east foundation wall.

North Cellar, southwest interior view of earth embankment that supports chimney at juncture with west foundation wall.

Room 101. (Kitchen). This is the northernmost room on the first floor. It has an exterior door (D101) on the east wall near the northeast corner and a window (W101) to its south. There is also a window (W105) centrally placed on the west wall. There are no openings in the north wall. An interior door (D102) in the south wall (the former north exterior wall of the house) connects with the middle room (R102) of the house.

The stone chimney is centrally located along the south wall and is built externally to the wall construction. It has been covered with a type of lapped gypsum plasterboard. A stove hole penetrates the chimney from the kitchen side. There is a wooden 4 door cupboard (or cabinet) built into the space between the chimney and the southwest corner of the room along the south wall. It is divided internally with boards into an upper and lower compartment. The bottom doors have been removed exposing the unfinished plasterboard interior. The smaller upper doors are intact.

The ceiling is covered with a double repeat 3-½ inch wide beaded tongue and groove siding boards nailed directly to the underside of the floor joists. The walls are covered with horizontal 4-inch wide beaded tongue and groove wood siding. Walls and ceilings are coated with multiple layers of white finish (possibly paint over/ whitewash). The ceiling is trimmed with a 2 inch cornice molding at all walls except around the chimney where a 1 inch quarter round molding is used.

The wall between this room and the adjoining room is the former exterior wall for the first period of construction. The north surface of the wall exposed in R101 is covered with the first period exterior horizontal siding boards. This material is 6 inch rectangular siding with a 5 inch weather exposure. It is further described in *Notes for Non-Extant Historic Features* section.

The floor surface is covered with 9 inch square tiles, possibly vinyl asbestos tile (VAT) composition. It has not been tested. They have been installed over 3 layers of tongue and groove wood floorboards with a layer of black building paper in between. The first layer of flooring nailed directly to the floor joists consists of 5 ½ inch wide T&G boards installed in a north/ south orientation. The second layer of flooring consists of 3 ½ inch wide T&G boards installed in an east/ west orientation. The third layer is made from 2 ½ inch wide T&G wood strip flooring and it is laid in a north/ south direction. The dimension of the plain baseboard varies slightly from wall to wall; at the west and north it is 5 ½ inches tall, at the south interior wall it is 6 inches tall, and there is none along the east wall (possibly removed for repairs).

Fixtures include a cast iron sink with backsplash and wood drain board centrally positioned along the east wall in front of the window. The sink has nickel coated brass hot and cold water handles with faucets. There is an two door undersink cabinet put in over the tile floor.

Two wall cabinets are located in the kitchen. Both have been recessed into the walls. One is located directly over the sink on the east wall, and the other is located west of the door opening into the middle room. Both are located approximately 4 to 5 feet above the floor. An electrical system fuse box is located on the west wall of the room adjacent to the stair enclosure leading to the second floor and D107.

North Stair 102 (Between R101 and R201). This stair is enclosed on the first floor in R101 (Kitchen) by a solid wall of boards from floor to ceiling in coverage. As it opens to the second floor a handrail with square pickets replaces the wall. This is a straight run stair with closed risers.

The north exterior wall of the stair enclosure is lined with horizontal T&G boards. They are 5 – 5 ½ inches in width and run continuously to cover the entire wall up to the 13 foot mark. The interior wall of the stair enclosure is made up of vertical T&G siding of approximately the same dimensions.

Room 201 (North Room). This room has 2 windows; one each centrally positioned on the west (W207) and east (W201) walls. The 6 over 6 sash units from both windows have been repaired, as has some of the exterior trim. There is a door on the south interior wall (D201) that connects with the R202; it is located along the east wall between the exterior wall of the house and the chimney. There is a communicating stair on north wall (S102) that descends to R101 (kitchen); it has a railing along its south edge and is open at the top with a door at the bottom (D107). The walls and ceiling are plaster over wood lath, and the floor is made with 5 inch wide wood tongue and groove connected floorboards. There is a ½ inch step down into the room from adjoining south block R202.

The south interior wall of the room is the former north exterior wall of the house after the first period of construction. The stone base of the chimney is external to that wall and its mass is exposed at the mid-point of this wall. It projects into the room 2 ft. – 6 in. and is covered with plaster. The section of wall to the west of the chimney has not been plastered and leaves exposed the first period construction exterior siding (c. 1870). The exposed face of the horizontal plain lapped siding varies from 4 to 5 ½ inches and has a ½ inch thick butt. It is painted and retains several paint layers (further described in *Notes for Non-Extant Historic Features* section).

The walls are painted a shade of green/ over blue / over plaster with a grayish finish/ over white substrate (finish coat). The ceiling is painted a shade of neutral beige/ over plaster with a grayish finish/ over white substrate (finish coat). The floor is unfinished. The interior window and door wood trim is painted white. The stair railing and the vertical siding within the stairwell are also painted white.

View from north attic through wall opening in north gable wall into south attic. Note 10 inch wide first period frieze board and exterior siding boards – all unpainted. Note also transition of chimney construction from stone to brick just above the finished floor.

Room 301 (North Attic). Located above the north block rooms, the north attic is an unfinished space. A ceiling hatch is cut into the floor framing system from R201 in the northeast corner of the room. The north attic interior is very similar to the south attic (see Room 302, South Attic). Likewise it has a north and south gable end wall formed by the gabled ends of the building. The south gable wall now has an opening cut through to allow passage between attic rooms. The wall is sheathed with first period construction exterior siding. Centered on this wall is the chimneystack. Emerging through the floorboards the stone construction is terminated at one course. The attic portion of the chimneystack is constructed with brick. It carries through the roof and above the roofline as a brick chimney.

The north gable wall has been extensively repaired and is sheathed in plywood with coved siding applied on the exterior. The rafters of the roof framing system form a gable truss and are sheathed with roughly sawn planking. The corrugated sheet metal roof is visible through the gaps in the roof sheathing. Further description of the roof framing system is found elsewhere. Architectural detailing visible from the reverse side in the south attic is the first period frieze board that has been maintained at both gables.

North attic, view of interior south attic wall and chimney stack.

North attic, view to largely reconstructed north gable wall.

UTILITIES

NOTE: Building utilities were non-operational at the time of the field work and were not tested.

Water Supply - Plumbing - Sewer/ Septic – The water supply is provided by a direct line to the Visitor Center. This line was installed in 1964 to provide potable water to the NPS Caretaker family. There is also a well on the east side of the house near the kitchen entrance. Internal plumbing was most likely installed at the same time. The disposition of waste water and gray water is not known.

Electrical Supply – A fuse box is located on the west wall in R101. It is a "Square D" metal box and contains six circuits. The circuits include two paired fuse circuits as follows: 2 @ 60 amps for main fuse, 2 @ 40 amps for range fuse. The remaining four circuits consist of 30, 25, 15, and 15 amp fuses respectively.

Electrical Distribution System - Most rooms contain wall receptacles and switches. A surface mounted ceiling fixture is also located in the kitchen (R101). This room is most improved in terms of electrical service. Electrical wiring was not inspected as the building had no power at the time of the field work.

Heating System – None extant, other than evidence of smoke holes in chimney to provide for free standing stoves. Stoves were used in the kitchen (maybe also for cooking) R101, and R102, R202, and R201. All rooms adjoin the chimney.

Lightning Protection – Non-extant.

FIELD SKETCHES

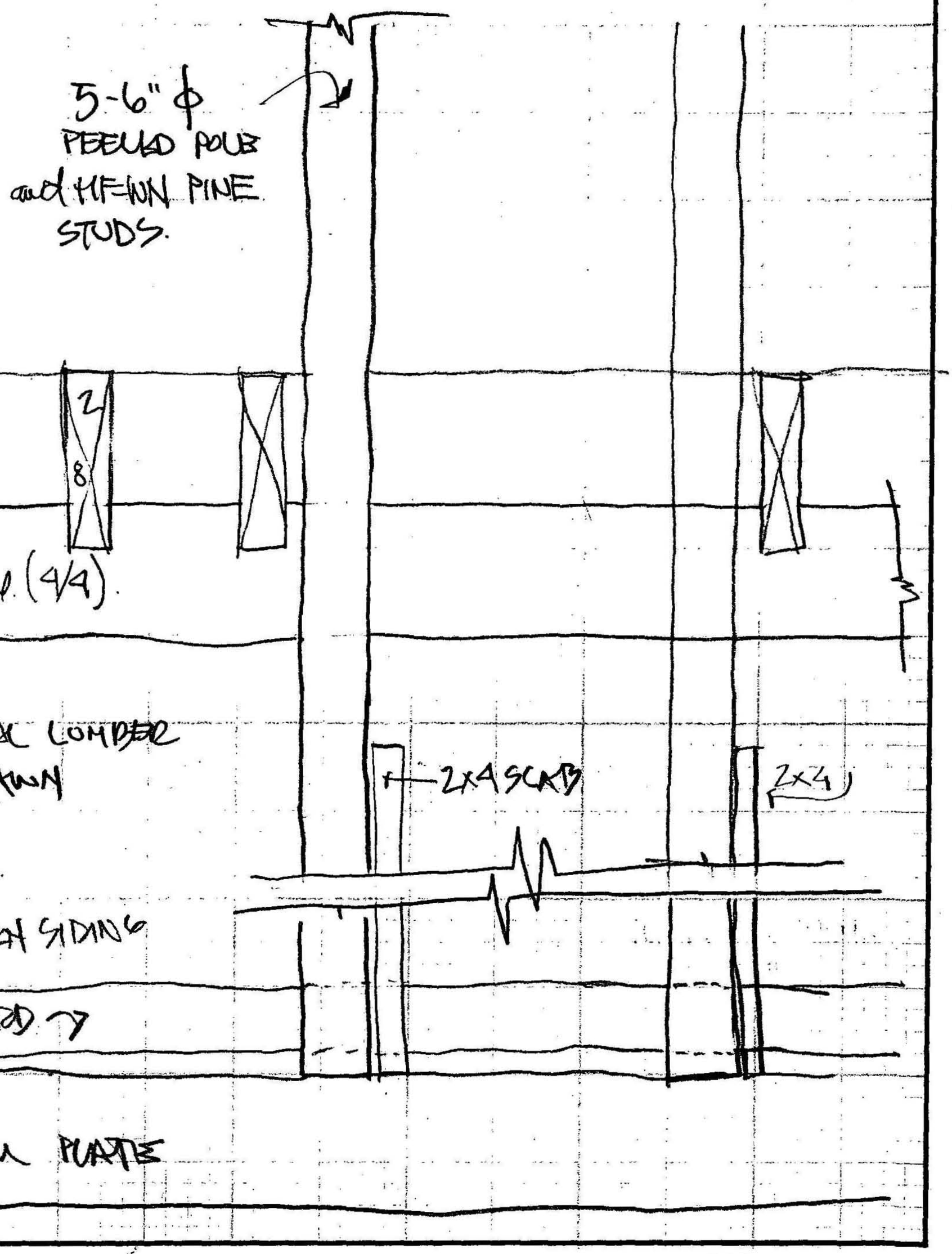
Field sketches illustrate those portions of the extant historic structure not captured in the HABS drawings or by photographs. They document various features of the structure that may be important in the overall understanding of the construction methods and techniques used in the various phases of construction and modification. The following sketches are provided:

SK C2 – 1. Detail of 2nd floor wall frame, north wing, vertical section view.
SK C2 – 2. Interior Window Detail @ W203 – Typical for South Block of House.
SK C2 – 3. Interior Window Detail @ W201 – Typical for North Addition.
SK C2 – 4. Interior Attic Notes – Eave Detail, Side Wall Roof Overhang
SK C2 – 5. Interior Cornice Details, Gable End at Eaves.
SK C2 – 6. Cellar Window Vent, Plan View and Section View.
SK C2 – 7. Plan of Rooms 203/204, Mapping of Floorboard Cut Marks (Pattern).
SK C2 – 8. Interior Baseboard Details, South Block and North Addition.
SK C2 – 9. Room 201 Railing Details and Section.

Sketches continued within next section – Notes on Non-Extant Historic Features.

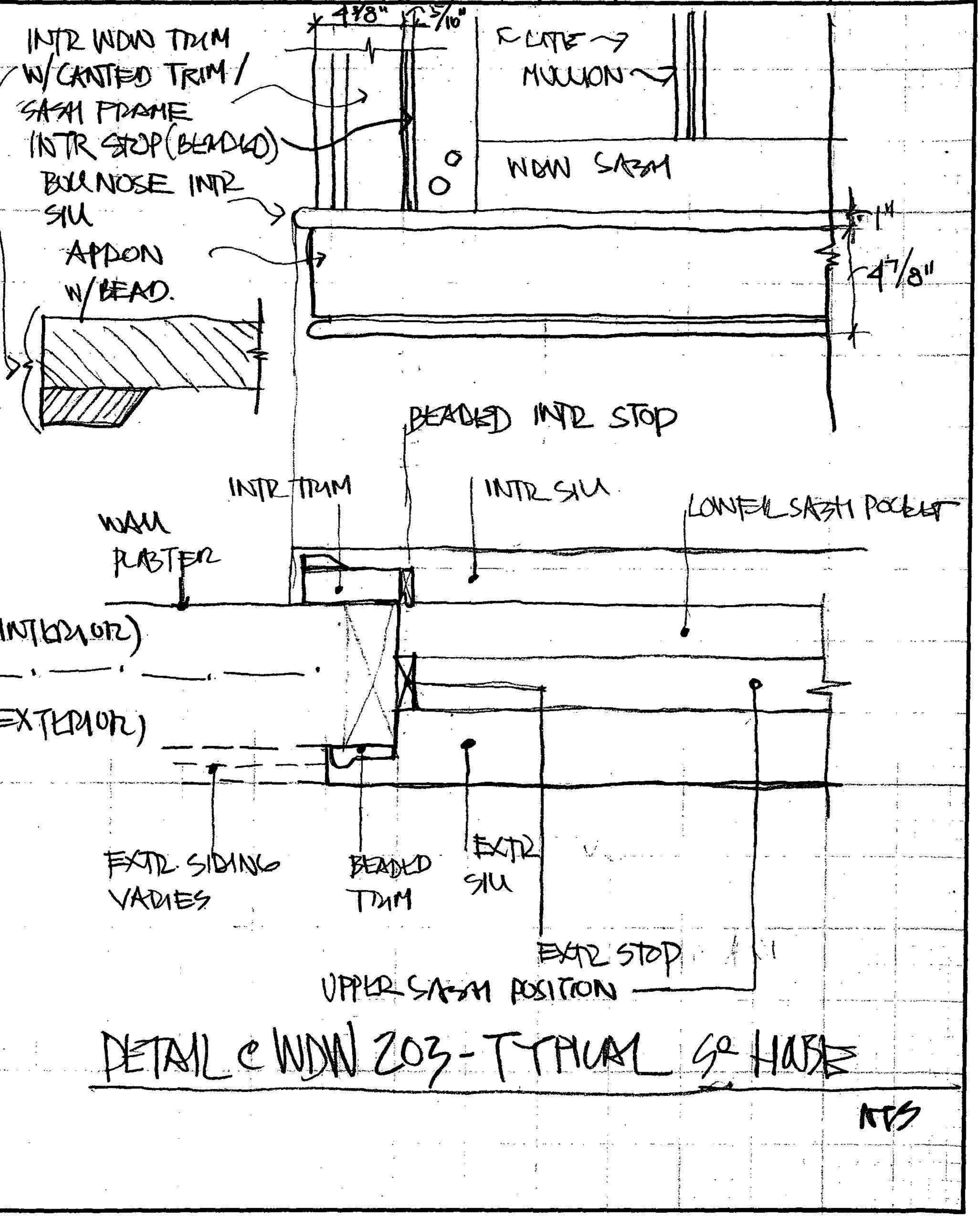
Park	MANA	**NATIONAL PARK SERVICE** HISTORIC PRESERVATION TRAINING CENTER			Sheet SK
Area	HEHO				of C2
Project	DETAIL 1, 2, & 3	By TAV		Checked	Pkg. 1
Feature	FRAMING. NO. WING	Date 07.3.01		Date	Account

VERTICAL SECTION VIEW



*U.S. GPO: 2000-467-092/39519

Park MANA	NATIONAL PARK SERVICE		Sheet SK
Area HEHO	HISTORIC PRESERVATION TRAINING CENTER		of C2
Project INTR	By [illegible]	Checked	Pkg. 2
Feature WDWS	Date 080301	Date	Account

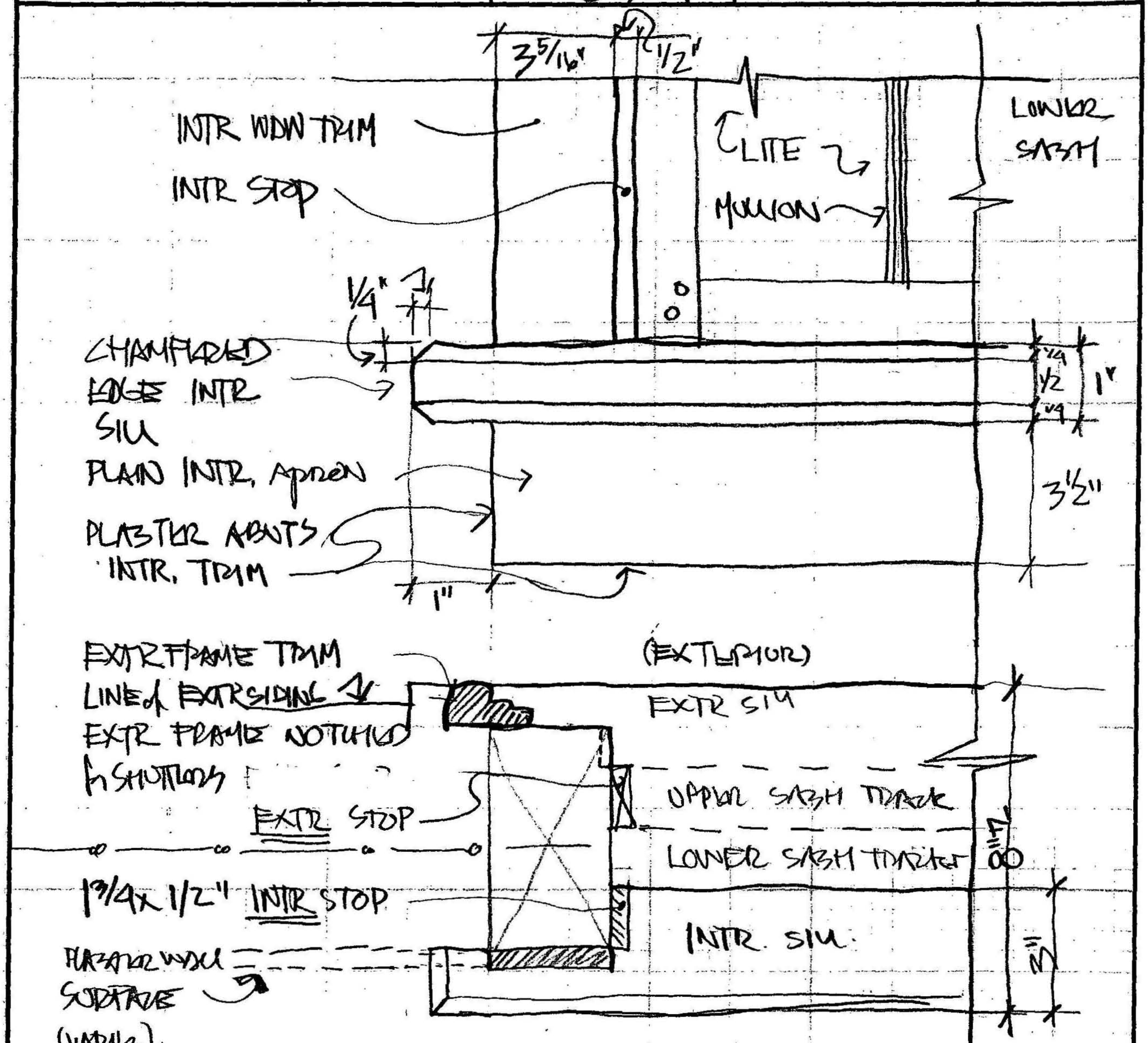


DETAIL @ WDW 203 - TYPICAL SQ HOUSE

NTS

*U.S. GPO: 2000-467-092/39519

Park MANA	NATIONAL PARK SERVICE	Sheet SK
Area MEMO	HISTORIC PRESERVATION TRAINING CENTER	of C2
Project INTR	By [illegible] Checked	Pkg. 3
Feature WDW	Date 08/30 Date	Account



DETAIL e WDW 201 - TYPICAL No. ADD'N.

NTS

NOTE W202 HAS FINGER JOINT WD. REPAIR e TOP RAIL of LOWER SASH - R.M. SAYS PREDATES THIS WORK - COULD BE FROM VARNADO HOUSE REPAIRS / REMOVEMENT of WINDOWS -

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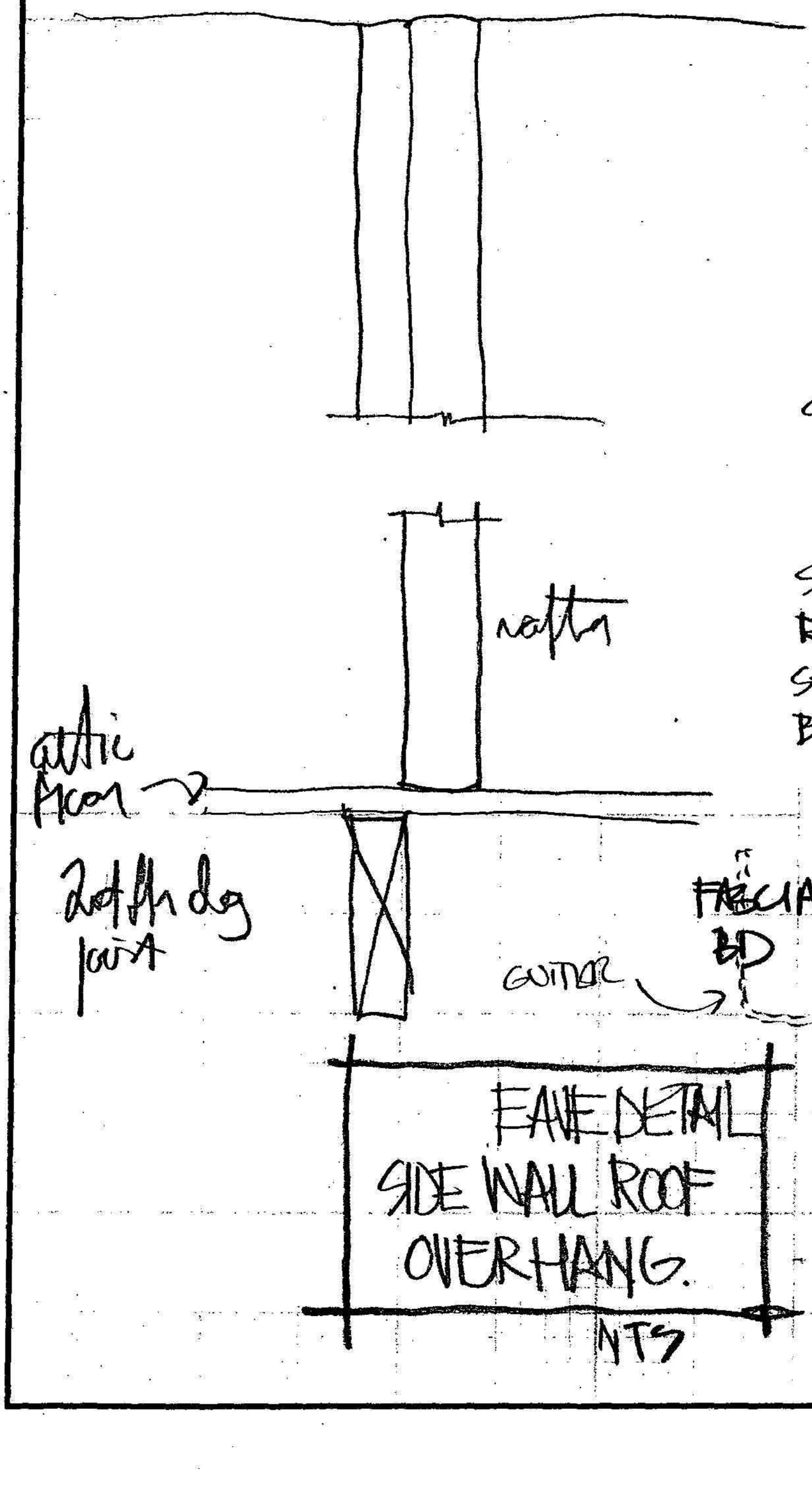
Park MWA	NATIONAL PARK SERVICE		Sheet SK
Area HPHO	HISTORIC PRESERVATION TRAINING CENTER		of C2
Project INTR	By [signature]	Checked	Pkg. 4
Feature ATTIC NOTES	Date 08.03.01	Date	Account

FOR JOISTS: 2x4 3/4 @ 24" O.C.



EAVE DETAIL
SIDE WALL ROOF
OVERHANG.
NTS

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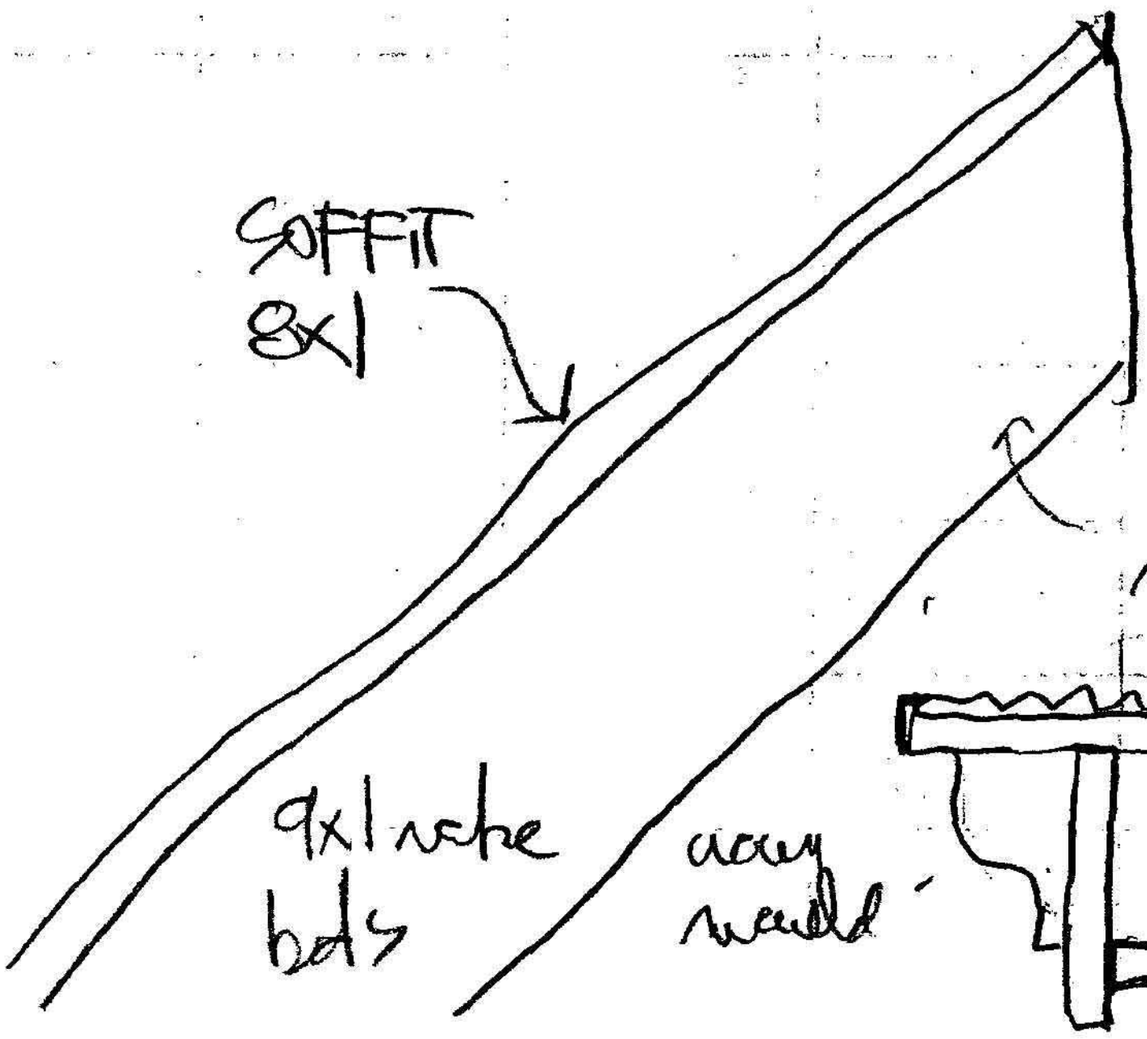
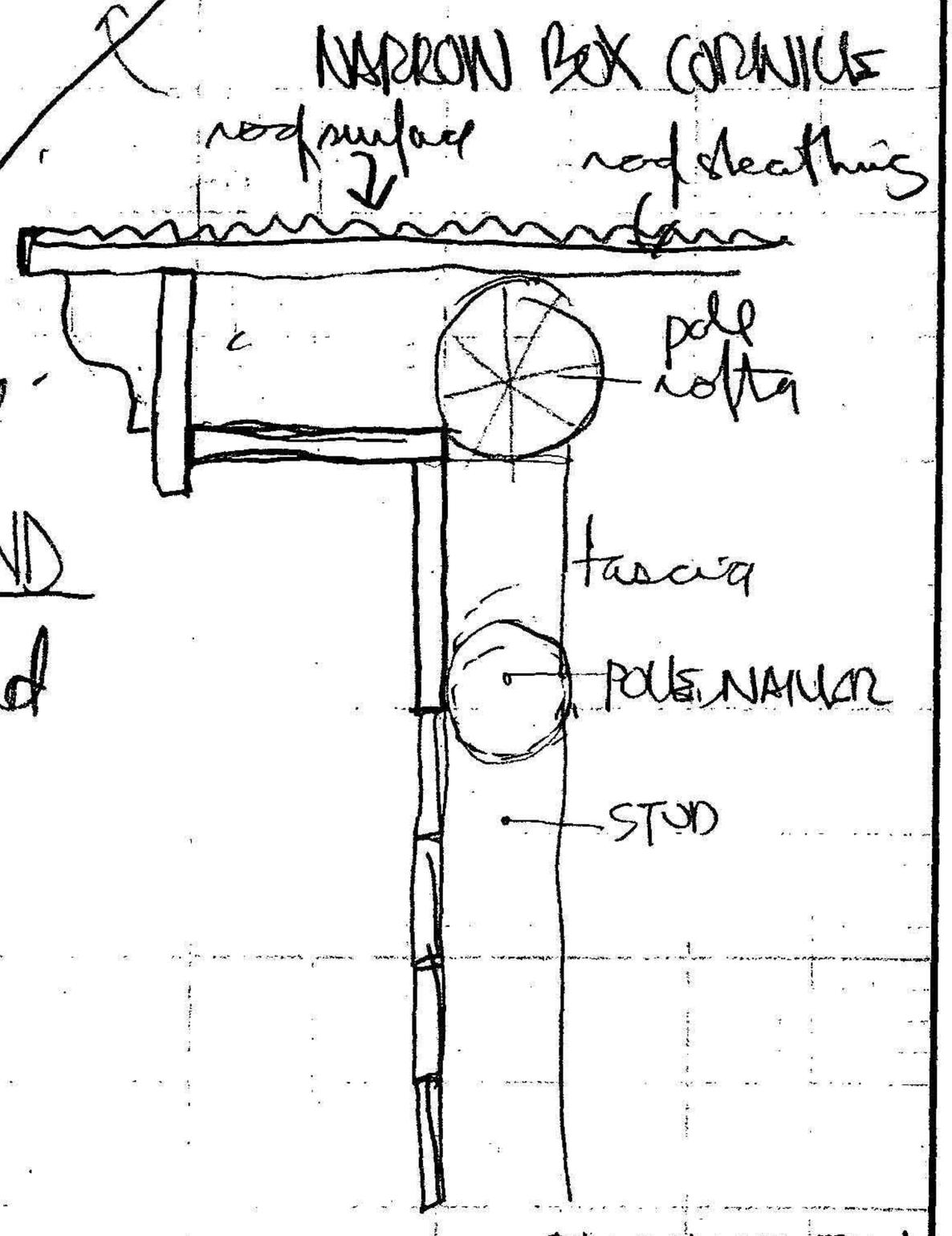
Park MANA	**NATIONAL PARK SERVICE** HISTORIC PRESERVATION TRAINING CENTER		Sheet SK
Area HLHO			of C2
Project INTR	By TM	Checked	Pkg. 5
Feature CORNICE	Date 08-03-01	Date	Account



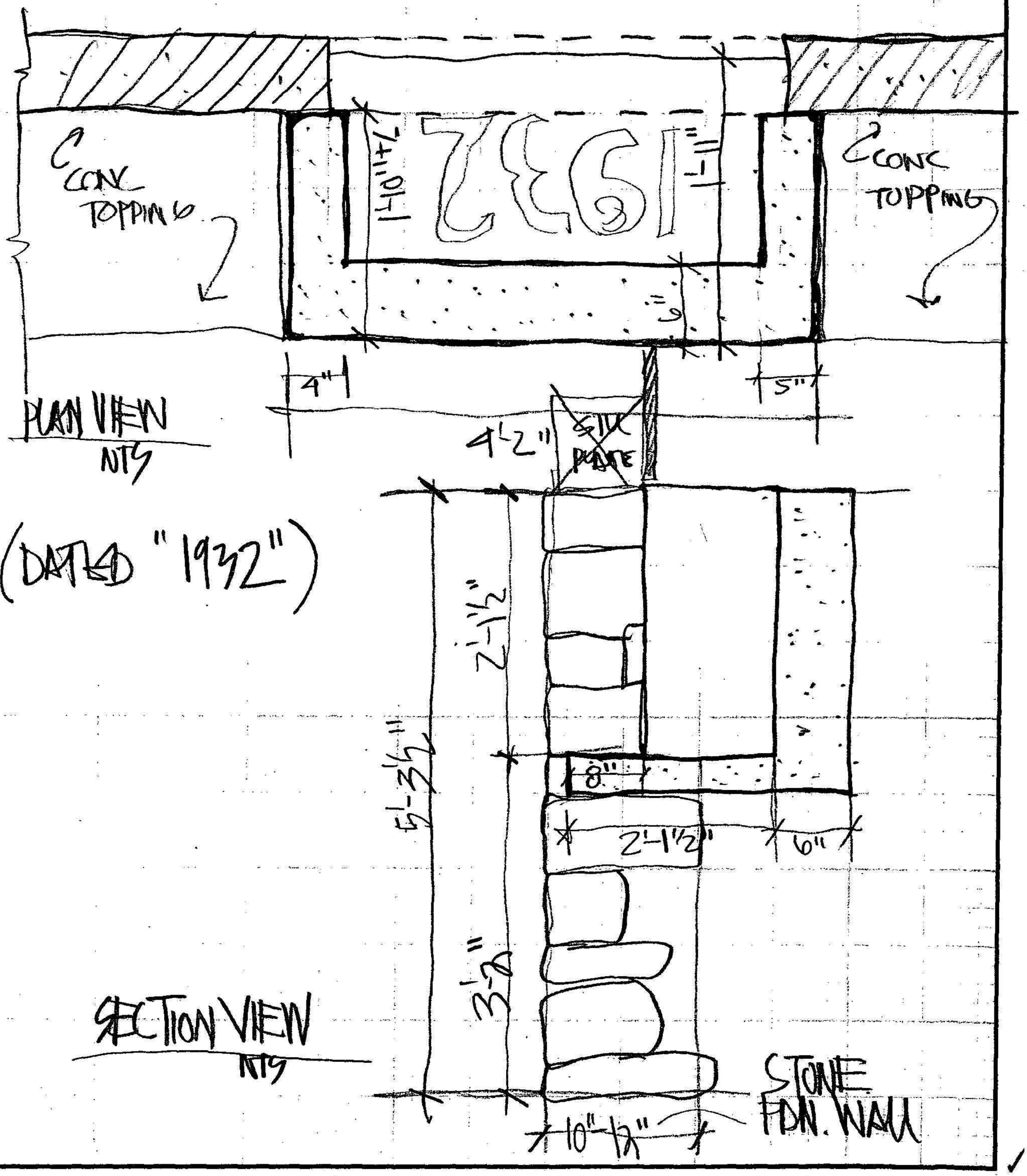
CIRCULAR SAWN and NAILED MEMBERS



EAVES

*U.S. GPO: 2000-467-092/39519

Park MANA	**NATIONAL PARK SERVICE** HISTORIC PRESERVATION TRAINING CENTER		Sheet SK
Area HEHO			of 02
Project CELLAR	By TW	Checked	Pkg. 6
Feature WDW VENT? (COLD PORTAL)	Date 08-01-01	Date	Account



(DATED "1932")

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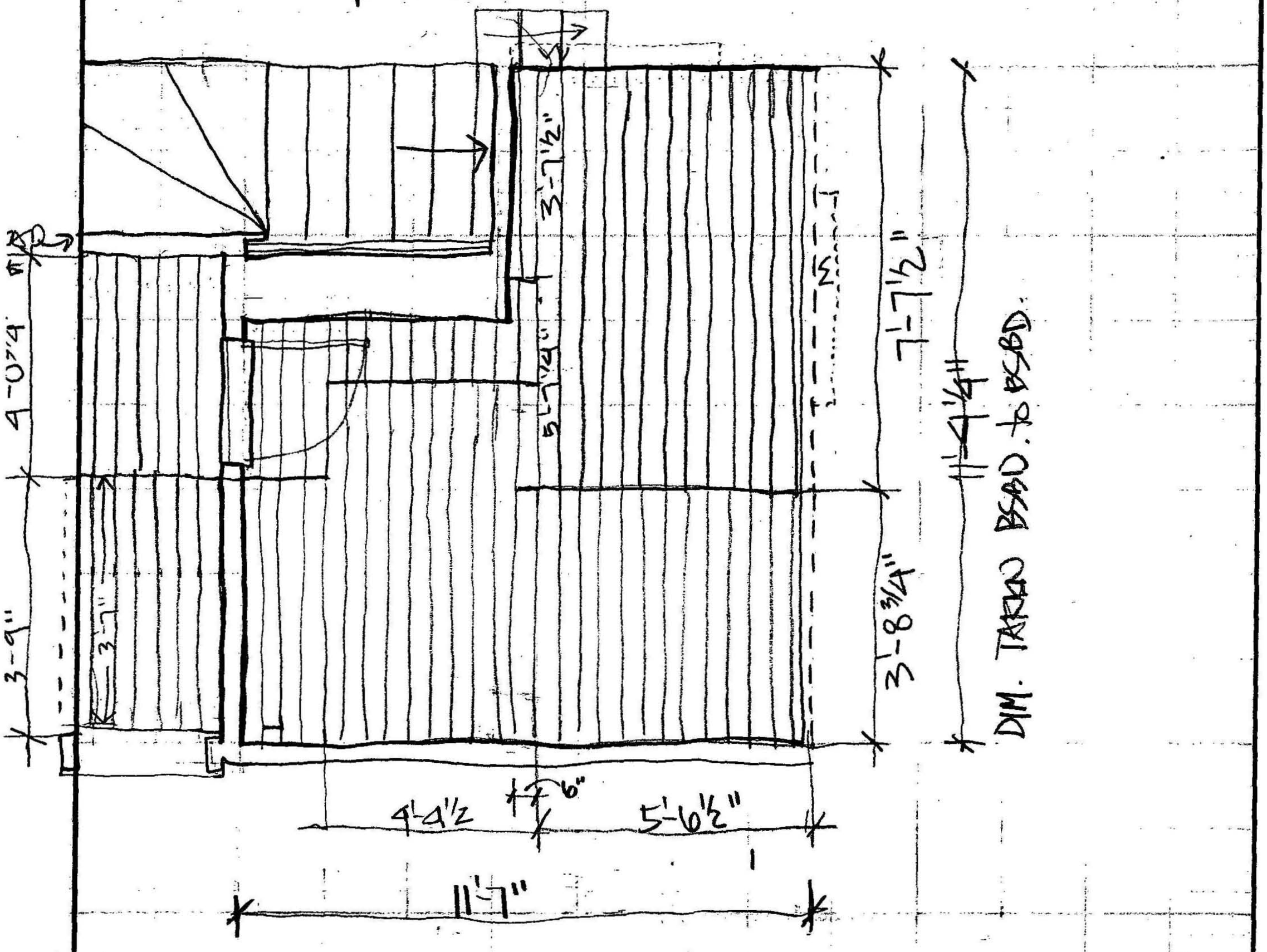
Park MANA	**NATIONAL PARK SERVICE** HISTORIC PRESERVATION TRAINING CENTER		Sheet SK
Area HEHO			of C2
Project PLANK ROOM 203/204	By TAR	Checked	Pkg. 7
Feature MAPPING of FLOORBOARDS	Date 08.01.01	Date	Account ✓



FLOORBOARD WIDTHS VARY from 5¼ - 5½ - 5⅞"

(PLAN of PM 203/204 (MAPPING of FLOORBOARD CUTS))

NOT TO SCALE.

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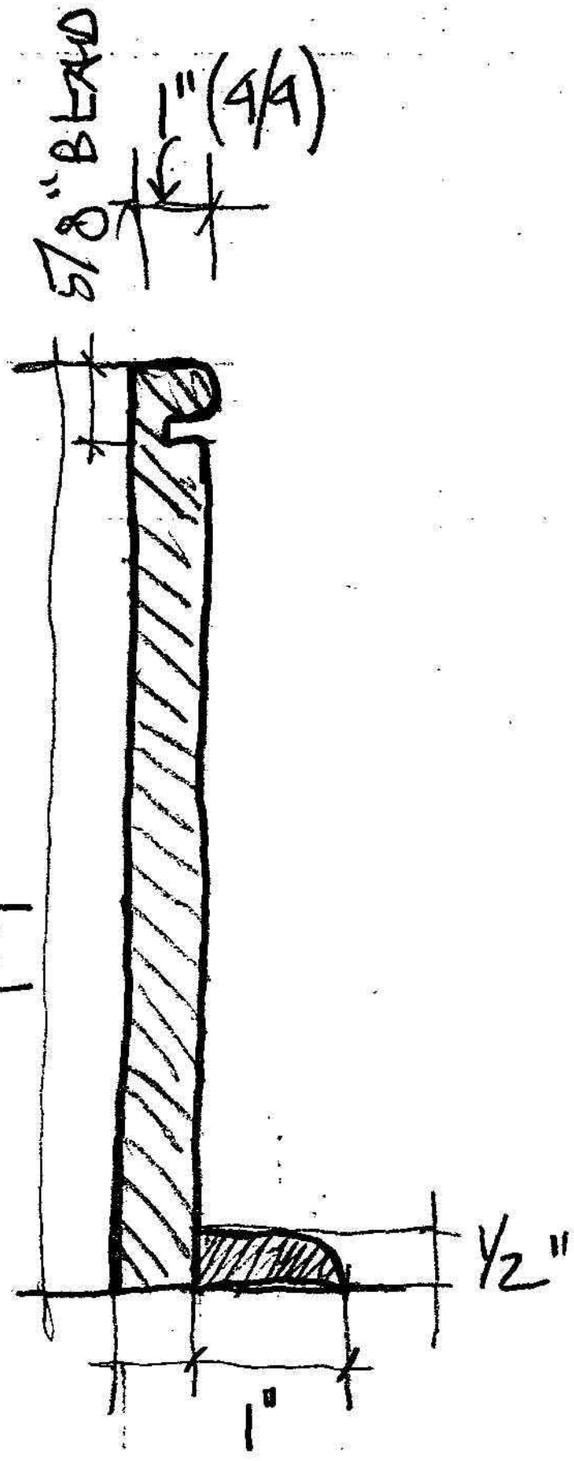
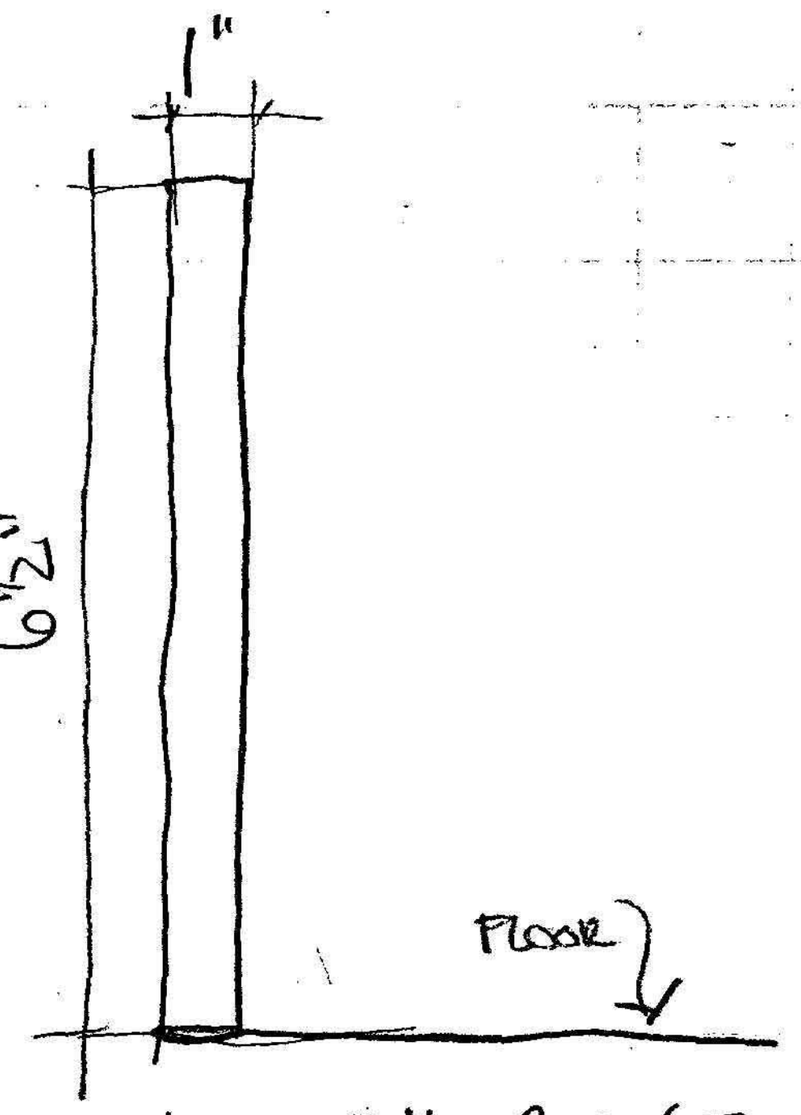
Park NANA	**NATIONAL PARK SERVICE** HISTORIC PRESERVATION TRAINING CENTER		Sheet SK
Area HEHO			of C2
Project INTERIOR	By JM	Checked	Pkg. 8
Feature BASEBOARD	Date 08-01-0	Date	Account



BSBD & QTR RND.
GO WING (TYPICAL).



BSBD. RM. 201 (TYP)
NO QTR. ROUND

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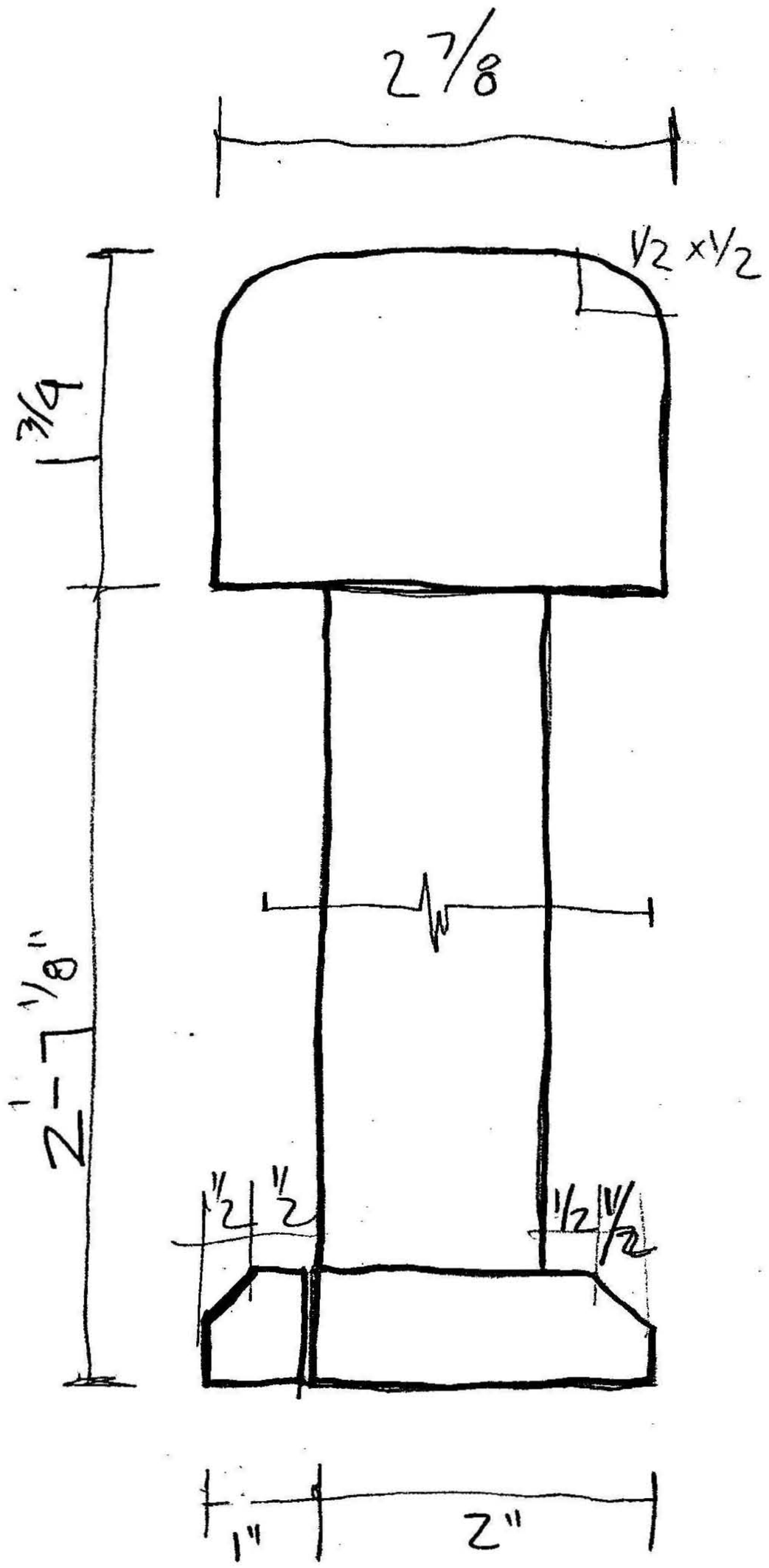
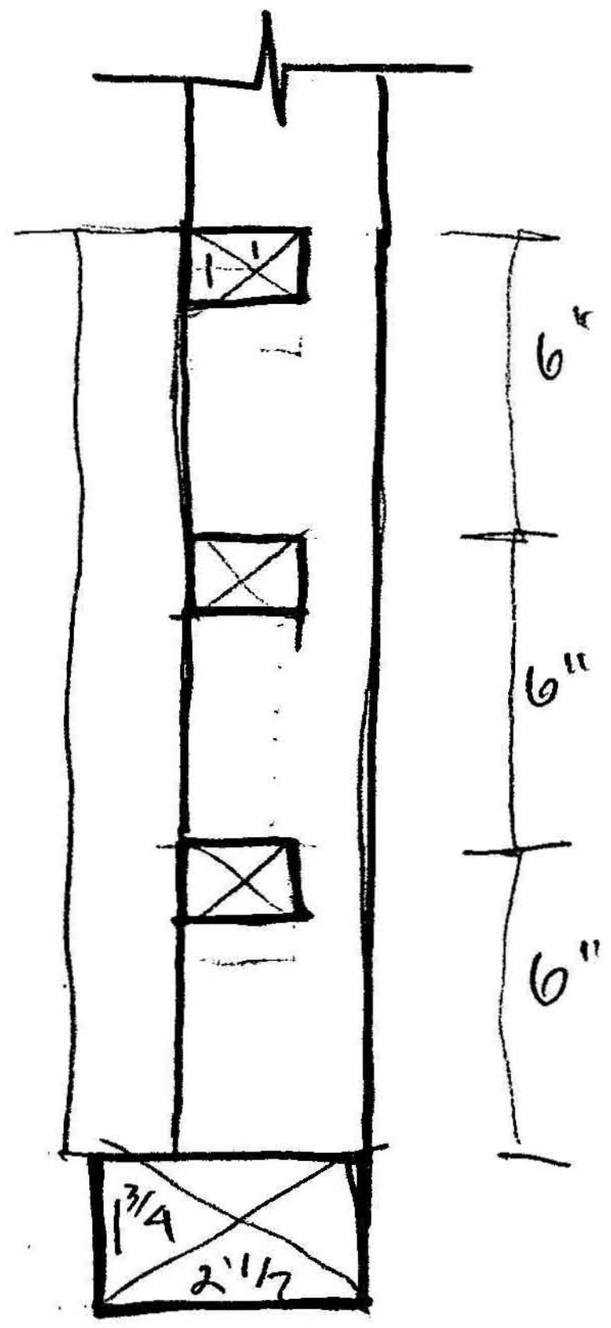
Park	MANA	NATIONAL PARK SERVICE HISTORIC PRESERVATION TRAINING CENTER		Sheet	9K
Area	HE40			of	C2
Project	INTR	By	Checked	Pkg.	9
Feature	RM 201 RAILING	Date 10/6/01	Date	Account	

ROOM 201 STAIR RAILING.



ELEVATION
3/16" = 1'-0"



PLAN VIEW
3/16" = 1'-0"

*U.S. GPO: 2000-467-092/39519

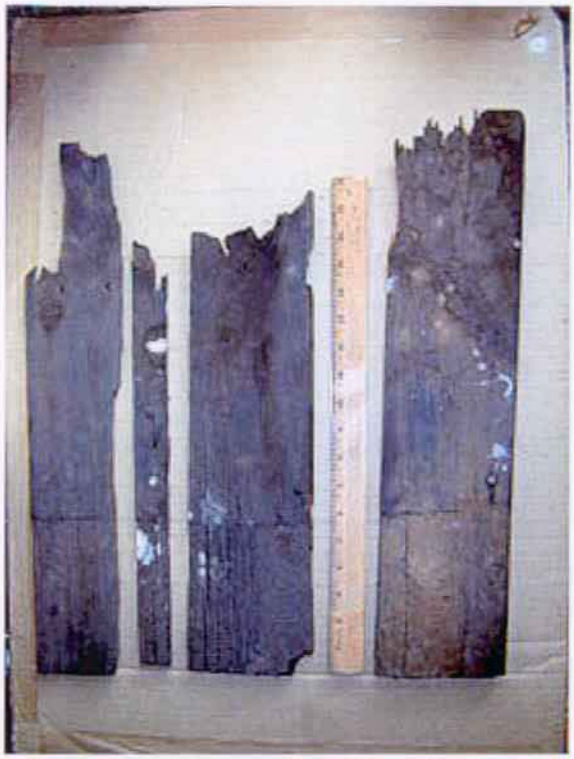
Notes on Non-Extant Historic Features

Wood Shingle Wood Roof Covering – Samples of several wood roof shingles were discovered in the north and south attics of the house. Shingles recovered from both sides of the attic are similar in species, size, and method of fabrication. They are different in the weathering patterns recorded on their surfaces.

All shingle samples recovered from the attic are pine (eastern white pine or red pine, tbd). The sample wood shingles have surface markings that indicate they were fabricated at a sawmill using a circular saw blade. Telltale signs of the wide sweeping circular saw blade marks are located on the reverse sides and upper necks of the shingles. Shingles were sawn to be typically 4 ½ to 5 inches in width and 20 inches in length. The average thickness at the butt end is between 5/16 and 3/8 inch.

The shingles samples recovered from the south side of the attic have a weathering pattern on them indicating that 6 inches of the shingle was exposed to the weather. The weathering and nailing pattern indicates this shingle may also have been installed in a pattern where it overlapped side to side as well as course to course. This may have occurred at the ridge (photographic evidence dated 1896 indicates only a course to course overlap in the field of the roof, and perhaps an overlap pattern at the ridge courses). Assuming a construction date of circa 1870, the weathering of the shingles in the 1896 photo is consistent with that of a 26-year-old wood shingle roof.

Erosion of the shingle surface due to weather exposure and water runoff has left a 2 inch side strip along one edge clearly deteriorated. This could be the result of improper coverage (wide gaps between the roof shingles), due to a lack of properly sized shingles. Shingles appear to have been attached to the spaced roof sheathing with 1 or 2 nails per each. Shingle nails have not been discovered to date, but nail holes in the shingles indicate both square cut and round shank nails were used for installation. One or two nails were used at the top of the shingle positioned approximately 6 inches from the top edge of the shingle. If one nail was used it was placed in the center of the shingle. If two nails were used they were evenly placed across the neck of the shingle.



Examples of wood shingles recovered from Henry House attic; shown with 18 inch ruler.

Detail showing exposure pattern, shown with 18 inch ruler. Note exposure area at lower edges of the shingles, this is the 5 inches to the weather described in the text.

Shingles recovered from the north attic were exposed to the weather 5 ½ inches. This is clearly evident by the weathering pattern on the historic shingles. These shingles have a weathering pattern and nail hole pattern that indicates they were installed overlapping course to course and butt joined side to side, a typical mid-19th century installation technique. Nail holes are located similarly to those of the south attic side shingle.

This difference in the two weathering, nailing and installation patterns between the south block structure and the north addition structure is physical evidence that may indicate two different roof covering periods. These weathering marks and nailing patterns may also indicate a method of shingle installation called "short nailing". This occurs when nails are at a premium and there are not enough nails to provide two per shingle. In this case a nailing pattern of one nail per shingle may be used. This is a distinct possibility for the Henry House.

Also the shingles may date from the period after the construction of the north addition. Several photos are available that show the house after the construction of the north addition. In all of these photographs there is a smooth transition between the south block and the north addition in the field of the shingle roof.

Research to date indicates a post 1870 and pre 1885 construction date for the north addition. The shingles seen in the 1896 photos would then be at least 12 years old. While the weathering in the photo seems excessive for 12 year old shingles (cupping usually occurs only after shingles are severely deteriorated); shingles of medium grade and thickness, such as the samples that have been recovered, may have deteriorated at an accelerated rate.

Exterior Window Shutters – One fully slatted two panel wood shutter was located in the south side of the attic. The frame is mortise and tenon construction and it is pegged. This shutter is unpainted. The slats are mortised into the frame and therefore fixed into position. This particular shutter is called the "locking shutter" as it has the ½ inch beaded overlap on the middle stile typically used to keep the shutters closed. The outside dimensions of this shutter are 4 ft. 6 ¾ in. by 1 ft. 5 ¼ in. width. The framing stock is 1 inch (4/4) thick. There are 16 slats in the upper and lower panels. They measure 1 ¾ in. across the face by ¼ in. to 3/16 in. thick and 13-½ in. in length with a 1/8 reveal for the mortise pocket.

Two panel slatted shutter, obverse elevation.

Shutter in inverted position to view mortise and tenon construction of frame, note pegged connection and thru tenoned detail.

Two cast iron shutter hinges remain attached to the hinge stile of this shutter. The hinges are typical self-closing shutter hinges and are positioned 6 inches from the top and bottom edges of the stile. The portion of the hinge attached to the shutter is only half of the hinge, the other piece being attached to the exterior window frame. The hinge measures 2 9/16 in. long by 7/8 in. wide. It is 3/8 in. thick. It is fastened to the shutter with three 3/8 in. slotted wood screws.

Transom Window – A small rectangular window was recovered from the south attic. The frame of the window is constructed with mortise and tenon joints and is pegged. The outside dimensions are 2 ft.-8 in. by 1 ft.-2 in. It is 1 and 3/8 inch thick. The frame is made of 2-inch stock with a slight rounded interior edge. Glass is intact in the frame. It has white paint over a varnish coating. It is not clear if this window is from the Henry House, as it has not been identified in any of the photographic documentation. It may be an interior transom window that was later removed, as there are currently no interior transoms in the house.

Exterior Siding and Exterior Architectural Trim – Physical evidence remains on the enclosed (original exterior) north face of the original north wall. This evidence is visible in three locations; the south interior wall of R101 in the wall cabinet, the south interior wall of R201, and from the exterior on the west elevation of the building when the siding is not in place. During the investigative period from May through August 2001 a large section of exterior siding and sheathing was removed from the west elevation of the house. This revealed many things about the framing structure (see Overall Building Structure) and also exposed a side view of the exterior siding still attached to the original NW corner post. The opening in the framing between the two corner posts allows the cross section of the original exterior siding to be seen.

Several vertical feet of this siding material are intact allowing thorough investigation and documentation. The siding is on average ½ to 5/8 inch thick and between 5 ¾ in. and 6 in. in width. It is rectangular in cross-section (not coved or tapered) and was installed without an exterior finish (whitewash or paint). It is lapped one course over the next with a 1 to 1 ¼ in. overlap. The thickness of the siding is heavier at the bottom 3 courses and measures ¾ inch.

This siding was fabricated at a saw mill, and was cut using either plain sawn or quarter sawn techniques. It exhibits vertical saw marks on its surface. Although species identification was not conducted by a wood identification lab, it is thought to be pine.

West Porch – No physical evidence remains of the west porch as it is pictured in several photographs taken in the 1890s[9]. The porch was located at the south end of the west elevation at D106, the only door in the west elevation. The porch is clearly seen in the photographs and can be described as a simple rectangular open porch with side rails and a gabled roof.

The porch was approximately 10 to 12 feet wide across the west elevation and 8 to 10 feet in depth. It was supported by four unadorned square posts (possibly boxed columns) one at each outside corner. The two posts adjoining the house at the SE and NE corners flank the door opening and are engaged and about half the width of the two freestanding posts at the west edge of the porch at the SW and NW corners. These dimensions are based on the location of a post support found in 2001 and described in the referenced archeological investigations, Parsons & Ravenhorst, 2001)

A light railing encloses the north and south edges of the porch. The toprail stretches between the two outside columns and is clearly visible in the photographs. Small rectangular pickets or spindles are used to create a railing along these two edges. These pickets appear to be supported either by a flat board used as a bottom rail or are connected directly to the porch floorboards.

Just inside the railings a simple wood bench has been placed, one on either side of the central door opening. The flat bench is supported on inverted "V"-notched legs cut from a plank. It is unclear if the benches are actually fastened to the porch framing or simply placed in those locations. The fact they have not been removed over the years spanned by the photographs may indicate they were attached, since the benches survived whereas the railing spindles have been removed during the same time period.

The porch is elevated above the ground and a 6 to 8 inch skirt board is used to cover the outer exposed edge of the floor framing system. The framing is supported on stone blocks. A large stone block is visible in the photographs centrally positioned at the west edge of the porch to be used as a stepping stone up to the porch and the central door opening (D101).

The porch roof is gabled with a very short overhang on the eaves; it is covered with wood shingles. At the roof ridge the shingles project from north to south forming a typical roof comb detail. The gable end is trimmed with a simple closed box cornice (probably matching the house at a reduced scale). The pediment area of the gable is filled in with horizontal siding boards. There is no evidence any of this material was painted. Nail heads and their rust trails are clearly visible in the photographs.

[9] An archeological feature representing a post support is documented in the – reference Archeological Report, 2001 see Excavation Unit 12.

South Entrance Deck (Museum of the Henry House / Confederate Park Era, circa 1920s – 1930s) - No physical evidence remains of the south entrance deck seen in several photographs taken in the 1920-30s.[10] The entrance deck is clearly seen in the photographs and can be described as a raised platform without a roof with a simply styled handrail with vertically oriented flat board railing pickets around the edges of the platform. The deck appears to have been as wide as the south elevation of the House (16 feet) and possibly 4 feet in width. The estimated width is calculated based on the number of railing pickets and the number of vertical skirt boards (assuming 6 inch width) identified in the period photograph.

This simple platform was elevated above the ground approximately 12 to 16 inches as a two riser and tread stair was used to access the deck. This stair was placed immediately south of the door cut into the south elevation (D105). The deck edge is closed off with a waist high railing made of a top rail, vertical board pickets (slats) and a bottom rail. Square posts have been positioned at the corners of the deck to support the railing. Newel posts also flank the stair opening in the railing. At the interface with the house weather boards it appears a smaller post, possibly "engaged" with the siding, was used. This is typical in porch construction where the posts located adjacent to the building are reduced in width to about half of the post width dimension.

FIELD SKETCHES

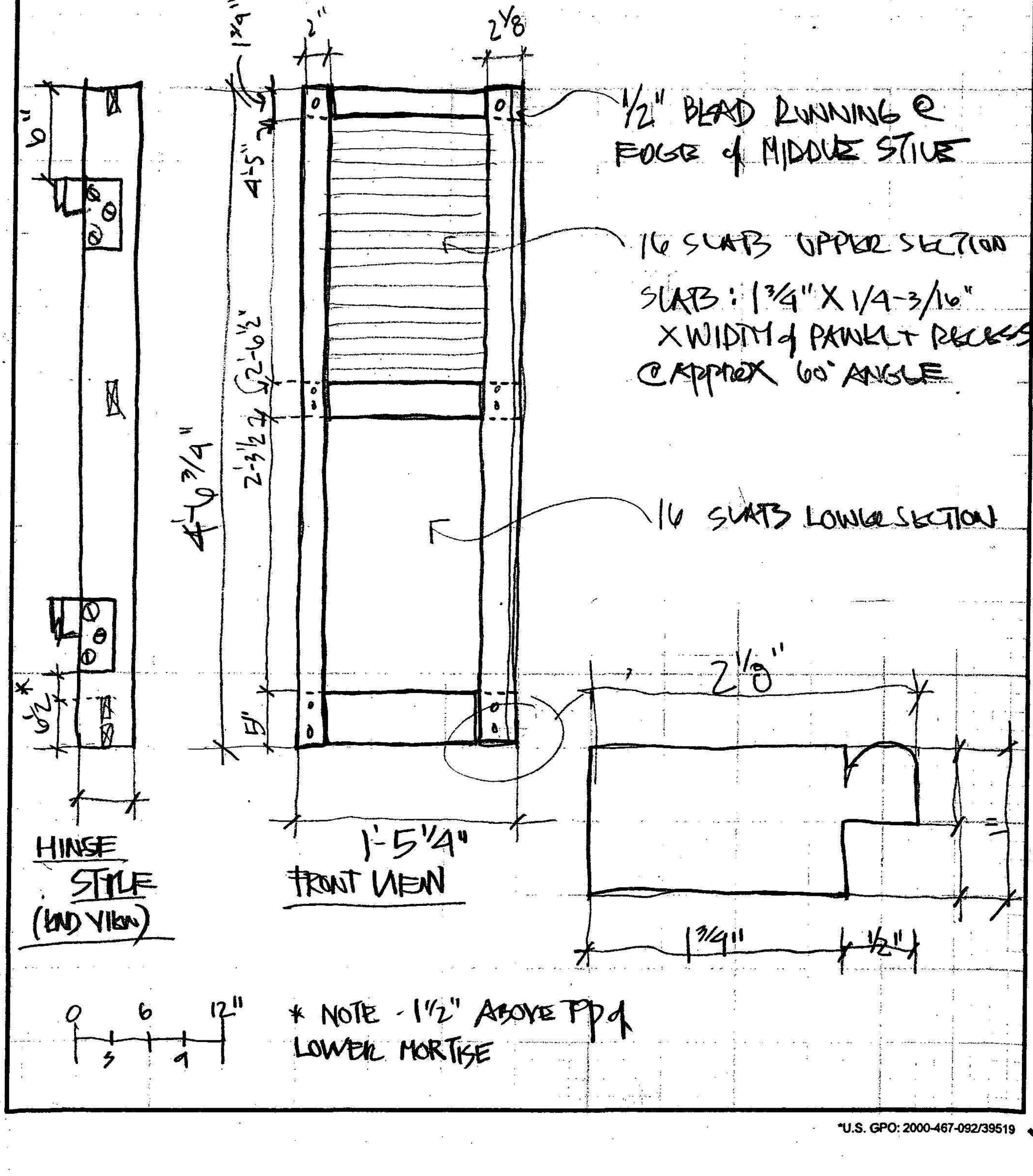
SK C2 – 10. Details of Historic First Period Shutter Found in Attic (South Side).
SK C2 – 11. Detail of Historic First Period Shutter Hinge.
SK C2 – 12, Notes on First Period Exterior Weather Board.
SK C2 – 13. Comparisons of First and Second Period Exterior Weather Boards.
SK C2 – 14. Detail of First Period Exterior Weather Board Installation.
SH C2 – 15, Plan of Transom Window.

END of SECTION.

[10] Archeological investigation discovered remnants of stone foundation in Excavation Unit 11, but nothing specifically identified as related to the deck.

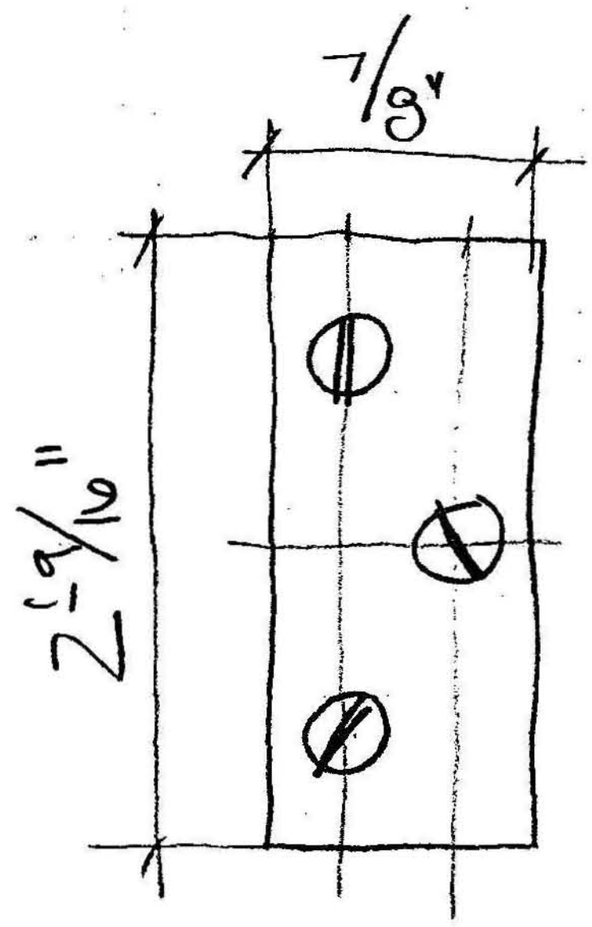
Park	MANA	NATIONAL PARK SERVICE HISTORIC PRESERVATION TRAINING CENTER		Sheet	SK
Area	HEHO			of	C2
Project	SHUTTER	By VITANZA	Checked	Pkg.	10
Feature		Date 08030	Date	Account	

SHUTTER FOUND in ATTIC (SOUTH SIDE). PEGGED FRAME, MORTISED SLATS, UNPAINTED.



*U.S. GPO: 2000-467-092/39519

Park MANA	NATIONAL PARK SERVICE		Sheet SK
Area HEHO	HISTORIC PRESERVATION TRAINING CENTER		of C2
Project SHUTTER	By [illegible]	Checked	Pkg. 11
Feature HINGE	Date 08030	Date	Account

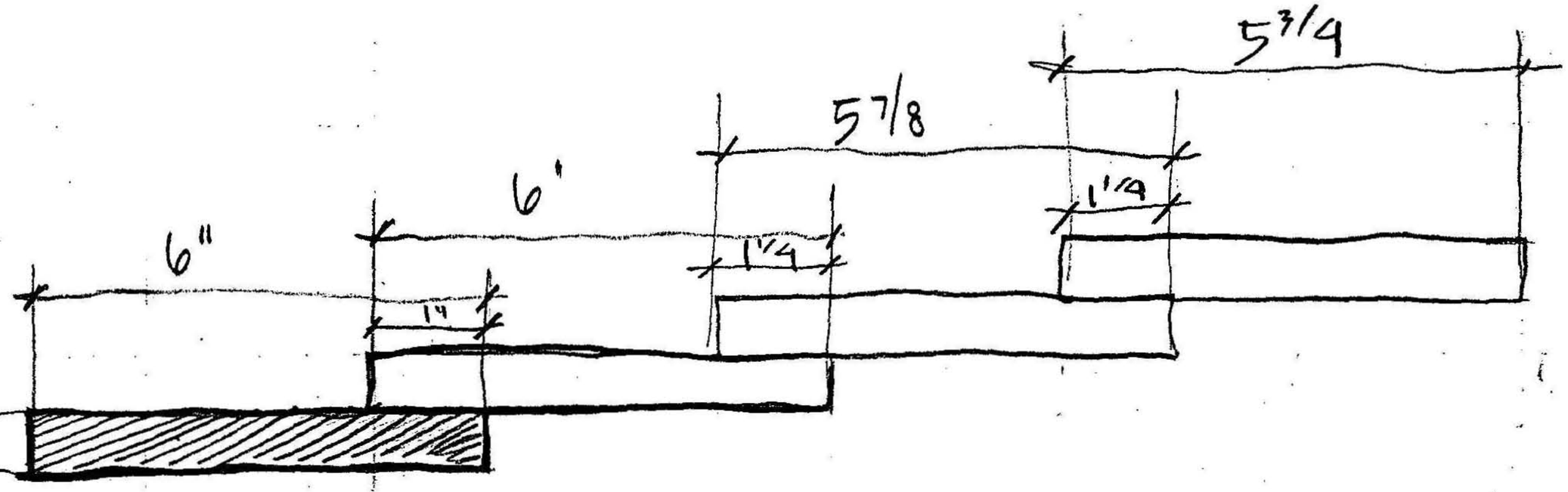


3/8" SLOTTED SCREWS.

SHUTTER HINGE X 1/8" THICKNESS.

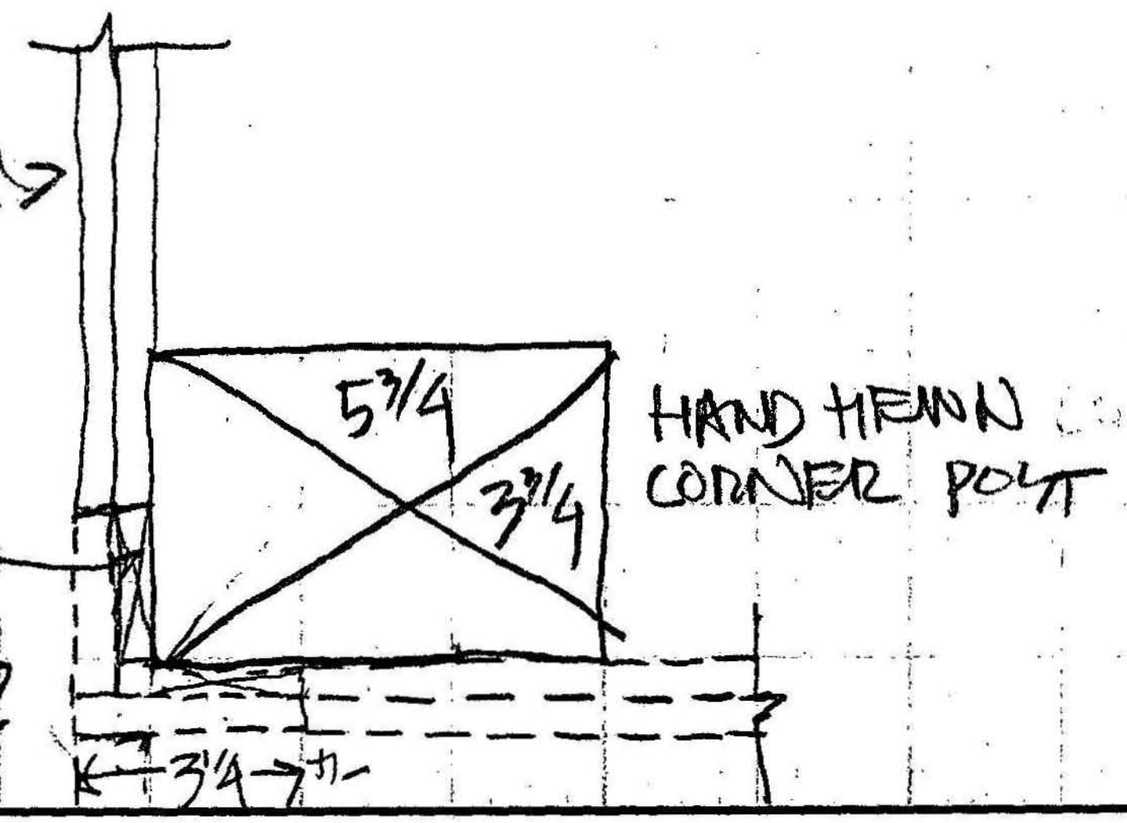
(SEE ALSO PHOTO DOCUMENTATION)

*U.S. GPO: 2000-467-092/39519



1/2" to 5/8" UNPAINTED EXTR. SIDING in SECTION.

NOTE: SIDING IS THICKER @ BOTTOM 2 COURSES. ALMOST 3/4"



(PIPE NO. WING). MISSING CORNER BOARD & SIDING?

Park	MANA
Area	HEAD
Project	NOTCH FRAMING
Feature	FRAMING

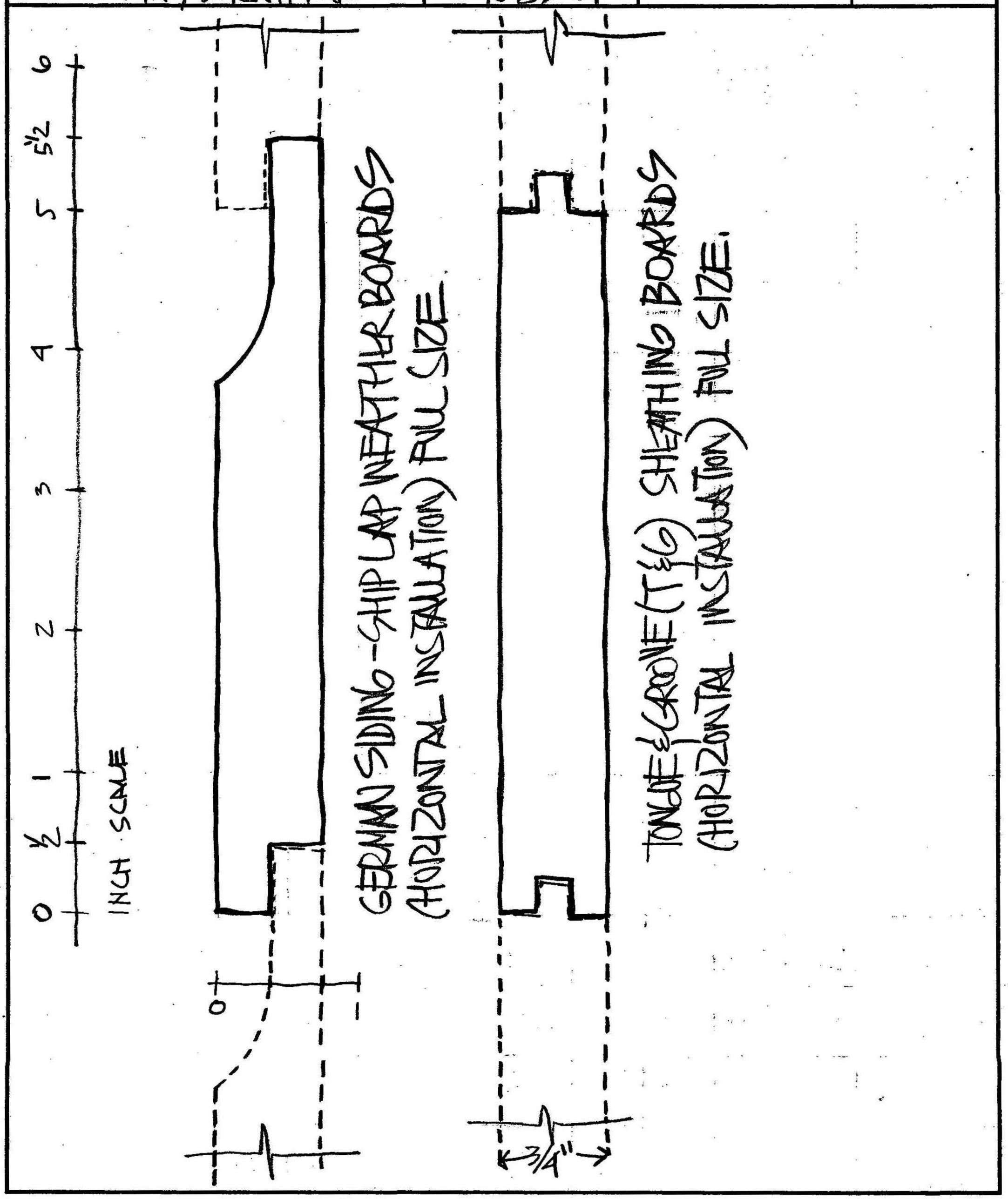
Date	07.31.01	Date	Account
By	TOW	Checked	Pkg.

NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER

Sheet 6 of 23

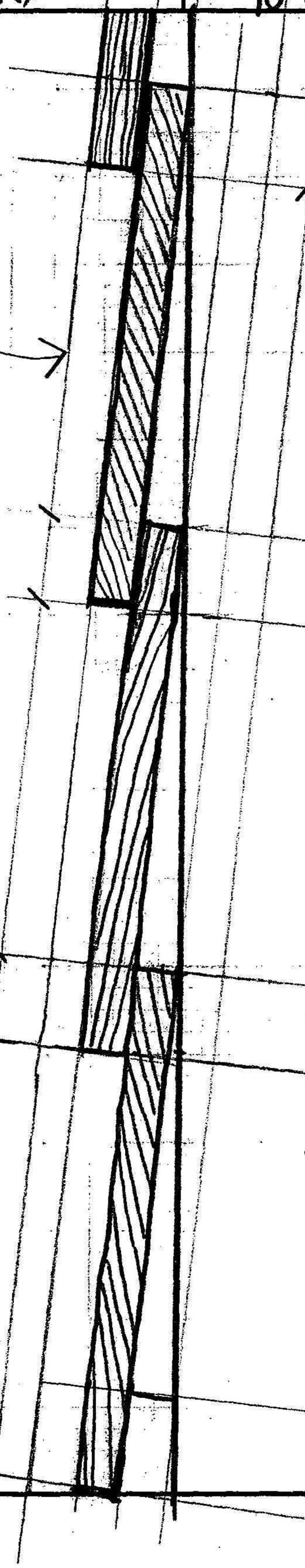
*U.S. GPO: 2000-467-092/39519

Park	MANA	NATIONAL PARK SERVICE HISTORIC PRESERVATION TRAINING CENTER		Sheet	5K
Area	HP410			of	C2
Project	EXTERIOR FEA.	By		Checked	Pkg. 3
Feature	SIDING/SHEATHING	Date	10-23-01	Date	Account



*U.S. GPO: 2000-467-092/39519

Park MANA	**NATIONAL PARK SERVICE** HISTORIC PRESERVATION TRAINING CENTER		Sheet CK
Area HEHO			of 62
Project EXT. FEA.	By JM	Checked	Pkg. 14
Feature HISTORIC SIDING	Date 10-23-0	Date	Account



(EXTERIOR)

(INTERIOR)

1-1¼" TYPICAL OVERLAP

5¾-6" TYPICAL LENGTH

½ to ⅝" TYPICAL THICKNESS @ BUTT EDGE.

NOTE: SIDING IS THICKER @ BOTTOM 2-4 COURSES @ ¾-⅞".

TYPICAL LAPPED WEATHERBOARD EXT. SIDING

(½ SCALE APPROX)

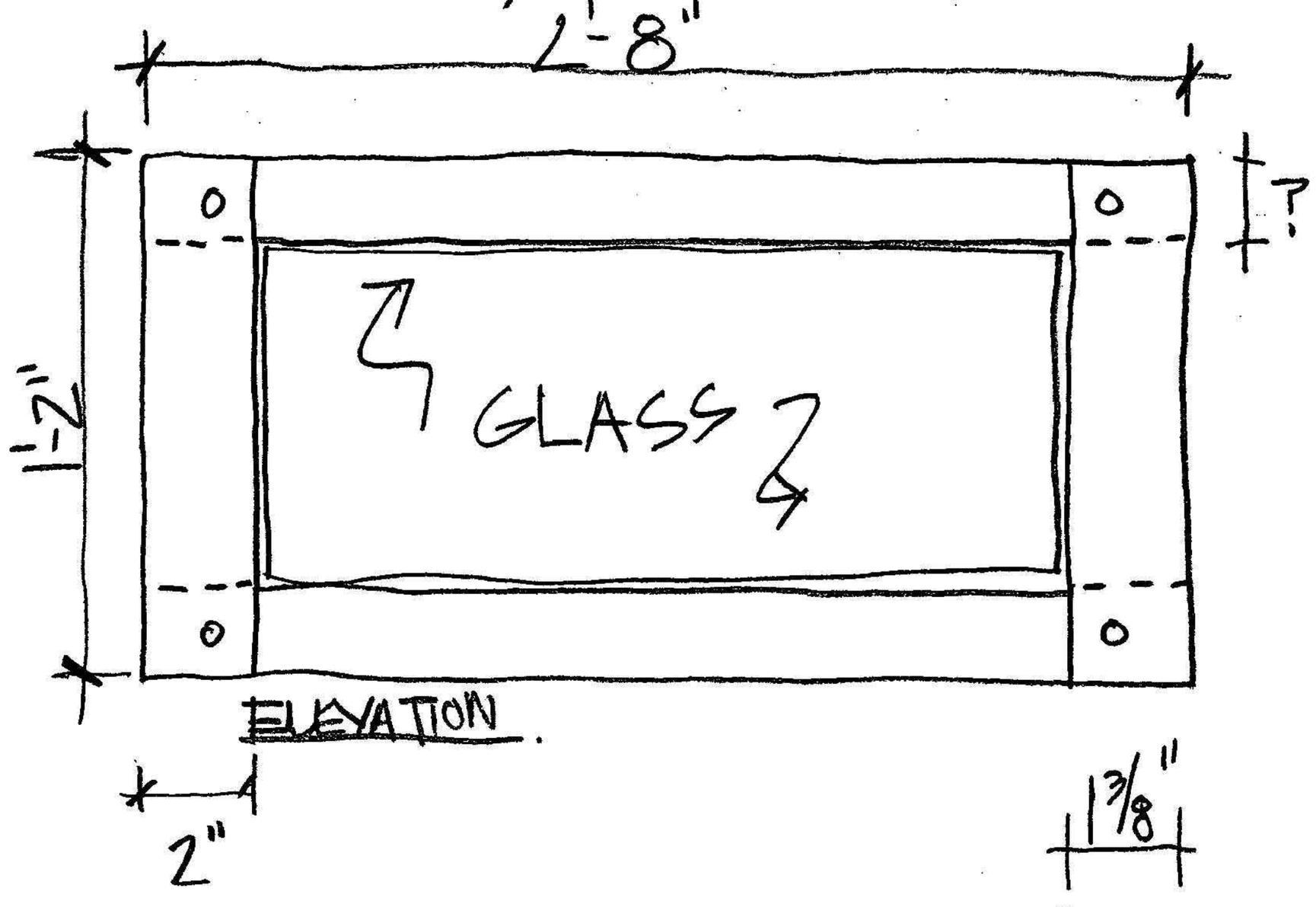
EXTANT @ NORTH INTERIOR WALL of HENRY HOUSE - USED TO COVER EXTERIOR DURING CONSTRUCTION PERIODS (1870 - 1885) REPLACED 1930's.

*U.S. GPO: 2000-467-092/39519

Park	MANA	NATIONAL PARK SERVICE HISTORIC PRESERVATION TRAINING CENTER		Sheet 5R
Area	HENRY HOUSE			of 62
Project	NON-EXTANT FEATURE	By [illegible]	Checked	Pkg. 15
Feature	TRANSOM WDW	Date 080301	Date	Account

TRANSOM WINDOW FOUND in ATTIC (SOUTH SIDE).

(RETAINED c HOUSE, 08.03.01).



ELEVATION.

SECTION

PAINTED WHITE EXTERIOR
VARNISHED INTERIOR
PEGGED FRAME
MORTISE & TENON CONSTRUCTION

(ORIGINAL LOCATION UNKNOWN)

*U.S. GPO: 2000-467-092/39519

Part 1. Developmental History

C. Physical Description

3.Condition Assessment of Extant Building

C.3. Condition Assessment of Existing Building

Overview

Note: This condition assessment was first written in 2001. It has not been updated to reflect conditions in 2003. It is important to understand that while the overall building condition may be rated as "Fair to Poor" individual building features may be rated as "Poor", "Fair", or even "Good". A structure is the sum of its parts, and with condition assessment studies various conditions will exist at various features during the same "snapshot" of time during which the condition assessment is conducted. July 2, 2003.

Overall the Henry House is in Fair to Poor condition. This is based on the fact that it has been partially stabilized through the installation of an emergency temporary structural bracing system. Although the bracing system has not been completed (see *Henry House – Temporary Stabilization Punch List Memo* from Robert Silman Associates, PLLC, Structural Engineers, Washington, DC, August 28, 2001) the Henry House is not likely to suffer any traumatic structural damage, such as collapse. It is likely that significant incremental damage to the remaining historic fabric will occur in the near future if punch list items and short-term stabilization measures are not completed (see *Short Term Stabilization Treatment (Mothball) Recommendations for the Henry House*, HPTC Memo to Superintendent, Manassas National Battlefield Park, August 17, 2001).

Incremental damage includes things such as continued deterioration and loss of historic interior plaster, further degradation of the historic framing system and interior architectural features and spaces through water damage, rodent activity, lack of interior ventilation, and poor perimeter security.

A general condition assessment of the Henry House is included here. A description of the building by feature location and feature type is provided in the *Physical Description of the Existing Building Section* of the report. A summary table is provided at the end of this section.

KEYNOTE: Condition Rating = CR / Priority Rating = PR.

CONDITION ASSESSMENT STANDARD DEFINITIONS

The following condition assessment standard definitions are based on those outlined by the National Park Service Inventory Condition Assessment Program (ICAP). For the purposes of this report, these definitions were rigidly adhered to as a way to qualitatively assess the current conditions of the historic structures part of this project.

ICAP, a computer software program, was developed by the National Park Service and introduced in October 1994. It focuses on gathering inventory and major assessment data on buildings. The Washington Offices (WASO) of Engineering and Safety Services and the Park Historic Architecture Division developed the program. ICAP ultimately is a tool for planning and scheduling work on individual structures and features. It is an instrumental tool to assist with annual or regular inspections. ICAP is widely utilized within the National Park Service to assist managers in identification and organization of feature inventory and condition assessment information for all physical assets. ICAP enables proactive management of assets, with emphasis in the areas of maintenance, operations, and planning.

QUALITATIVE CONDITION RATINGS

Good: This rating indicates that:

(a) routine maintenance should be sufficient to maintain the current condition; and / or
(b) a cyclic maintenance or repair / rehabilitation project is not specifically required to maintain the current condition or correct deficiencies.

Fair: This rating indicates that:

(a) the feature generally provides an adequate level of service to operations, but
(b) the feature requires more than routine maintenance attention.
(c) This rating also indicates that cyclic maintenance or repair / rehabilitation work may be required in the future.

Poor: This indicates that the feature is in need of immediate attention. This rating also indicates that:

(a) routine maintenance is needed at a much higher level of effort to meet significant safety and legal requirements;
(b) cyclic maintenance should be scheduled for the current year and / or
(c) a special repair / rehabilitation project should be requested consistent with park requirements, priorities, and long term management objectives.

MAINTENANCE DEFICIENCY PRIORITY RATINGS

Listed as "Priority Ratings" on the Feature Inventory Condition Assessment Tables. These ratings are based on the condition rating of each feature and a priority rating was established. These priority ratings indicate either a ***critical***, ***serious***, or ***minor*** priority rating.

Critical : *(Immediately / Emergency)*

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

Serious : *(Short Term / Immediately)*

- ❖ This rating defines a deteriorated condition that if not corrected ***within 1 to 3 years*** will result in the failure of the feature; or
- ❖ A threat to the health and / or safety of the user may ***occur within 1 to 3 years*** if the ongoing deterioration is not corrected; or
- ❖ There is ongoing deterioration of adjacent or related materials and / or features as a result of the feature's deficiency.

Minor : *(Long Term)*

- ❖ This rating indicates standard preventative maintenance practices and preservation methods have not been followed; or
- ❖ There is reduced life expectancy of affected adjacent or related materials and / or systems **within *3 to 5 years* and beyond**; or
- ❖ There is a condition with a long term impact **within *3 to 5 years* and beyond**.

HENRY HOUSE, IDLCS – 10782, Park Structure No. HENHSE
Manassas National Battlefield Park

Building Feature Master List – This list identifies all building features of the existing structure and immediate site. It includes the character defining features that are part of the condition assessment report.

SITE

- Overall Site Drainage
- Perimeter Conditions
- Building Drainage

STRUCTURE

- Overall Building Structure
  - South Block Structure
- North Addition Structure

- South Block Foundation
- North Addition Cellar Walls
- Floor Framing System
- Wall Framing System
- Roof Framing System

EXTERIOR ENVELOPE

- Roof Surface Covering
- Roof Surface Finish
- Roof Overhang / Cornice
- Roof Drainage System
- Chimney
- Wall Surface Covering & Finish
- Architectural Trim

WALL OPENINGS

- Window Units
- Door Units
- Cellar Wall Well
- Cellar Ventilation Hood
- *See separate survey lists for all openings*

INTERIOR ENVELOPE

- General Condition
- Floor Surface and Finish
- Wall and Ceiling Surface
- Wall and Ceiling Finish
- Interior Door Units
- Staircases
- Architectural Woodwork/ Trim
- Architectural Features

South Block Rooms Inventory

- Room 102
- Room 103
- Stair 101
- Room 104
- Room 202
- Room 203
- Room 204
- Room 302, South Attic

North Addition Rooms Inventory

- Room 001, North Cellar
- Room 101, Kitchen
- Stair 102
- Stair 103
- Room 201
- Room 301, North Attic

UTILITIES

- Water Supply
- Plumbing
- Sewer/ Septic
- Electrical Supply
- Electrical Internal
- Heating System
- Lightning Protection

Prioritized Preservation Maintenance Deficiencies Report				
Feature Factors			Maintenance Deficiency Ratings	
Feature Location	Feature Name	Material Type	Condition Rating	Priority Rating
SITE	Building Drainage	Various	Poor	Critical
STRUCTURE	South Block Foundation	Stone Dry Laid Walls	Poor	Critical
STRUCTURE	Wall Framing System – Lower Extremities	Wood Sills and Studs and Corner posts	Poor	Critical
STRUCTURE	First Floor Framing	Wood Sills and Joists	Poor	Critical
EXTR ENVLP	Roof Drainage System	Metal Gutters & Downspouts	Poor	Critical
EXTR ENVLP	Architectural Trim	Wood w/ Paint Finish	Poor	Critical
WALL OPGS	Door Units	Wood w/ Paint Finish	Poor	Critical
WALL OPGS	Cellar Vent Hood	Wood w/ Paint Finish	Poor	Critical
STRUCTURE	Overall Building Structure	Wood Framing Systems	Poor to Fair	Critical
EXTR ENVLP	Roof Overhang & Cornice	Wood w/ Pain Finish	Fair	Critical
EXTR ENVLP	Chimney	Stone & Brick Masonry	Fair	Critical
EXTR ENVLP	Roof Surface Finish	Paint over metal	Poor	Serious
SITE	Perimeter Conditions	Various	Poor to Fair	Serious
SITE	Overall Site Drainage	Various	Fair	Serious
STRUCTURE	North Addn. Cellar Walls	Stone Masonry	Fair	Serious
STRUCTURE	Floor Framing System	Wood Sills and Joists	Fair	Serious

Prioritized Preservation Maintenance Deficiencies Report				
Feature Factors			Maintenance Deficiency Ratings	
Feature Location	Feature Name	Material Type	Condition Rating	Priority Rating
STRUCTURE	Wall Framing System	Wood Studs, Posts & Braces	Fair	Serious
INTERIOR	General Condition	Plaster, wood, paint, paper	Fair	Serious
INTERIOR	Floor Surface & Finish	Wood Floorboards	Fair	Serious
INTERIOR	Wall & Ceiling Surface	Plaster over wood substrate	Fair	Serious
INTERIOR	Wall & Ceiling Finish	Paint / paper over plaster substrate	Fair	Serious
WALL OPGS	Window Units	Wood, glass, putty	Fair	Serious to Minor
STRUCTURE	Roof Framing System	Wood rafters & plates	Fair	Minor
EXTR ENVLP	Roof Surface Covering	Corrugated metal panels	Fair	Minor
EXTR ENVLP	Wall Surface Covering & Finish	Wood horizontal lapped siding w/ paint	Fair	Minor
INTERIOR	Architectural Woodwork	Wood molding	Fair	Minor
INTERIOR	Architectural Features	Wood mantles & cabinets	Fair	Minor
WALL OPGS	Cellar Wall Well	Concrete	Good	Minor
INTERIOR	Interior Doors	Wood w/ painted finish and metal hardware	Good	Minor
INTERIOR	Staircases	Wood	Good	Minor

Site

Overall Site Drainage: CR – Fair / PR – Serious
There are small areas of negative drainage toward the building and other areas where the soil level has encroached at the base of the house. In locations where this has occurred there are localized areas of severe deterioration of exterior siding and the building frame, as well as general deterioration of the foundation wall.

Perimeter Conditions: CR – Fair to Poor / PR – Serious
Negative drainage conditions at base of building allow continued deterioration of foundation, framing and exterior siding materials. Lack of a downspout leader at the northwest corner and lack of leader extensions at the other three corners of the building allow roof runoff to be discharged at the base of the building. This has allowed erosion of the soil in these areas and water accumulates in these lower locations. This has a direct effect on the condition of the foundation and the lower framing of the structure. This condition also encourages insect attack, as the wood contains high moisture content.

Building Drainage: CR – Poor / PR – Critical
Gutters and downspouts are discussed as Roof Drainage System. There is no building drainage system at the Henry House. Such a system should include either a foundation drainage system around the perimeter of the house, positive drainage of surface water away from the house, or a roof run-off water collection system that directs water away from the base of the house.

Structure

Overall Building Structure: CR – Fair to Poor / PR – Critical
See various structural reports and stabilization memos from Robert Silman Associates, PLLC, Structural Engineers, Washington, D.C., March – August, 2001 and HPTC *Project Reports Nos. 1 – 5, 2001* for a discussion of the overall structural condition of the house. The structure would be considered stabilized (even though in fair to poor condition) after all punch list items are completed for the emergency temporary structural bracing system, see Overview.

South Block Foundation: CR – Poor / PR – Critical
The shallow stone wall that serves as the foundation for the south block of the house is essentially in a failed condition. In many areas there is no integrity to the wall. Stones are loosely positioned with no mortar, stacking integrity or load bearing capacity. The random construction and misaligned stones of the foundation provide limited support for the sill plate and other load bearing members of the house frame.

North Addition Cellar Walls: CR - Fair / PR – Serious
While in overall good condition, several areas of the north cellar stone foundation walls are in poor condition. Sections that have been reconstructed appear to be in good condition. Several other areas exhibit bulges and out of plumb conditions that may indicate structural problems. As with the south block foundation, the top of the wall is not completed and provides little or no solid bearing for the sill plates that support the house frame.

Floor Framing System: CR – Fair / PR - Serious
The first floor framing system is in very poor condition and has been removed in some areas. Where joists still exist they appear to be in fair to good condition and are still usable. Joist ends may be deteriorated due to water or insect damage. All structural material in close proximity to the ground should be evaluated by a structural engineer familiar with historic preservation structural engineering practices to make a final determination as to their individual treatment.

A complete discussion of sill plates is in the Physical Description section of the report. As per the floor joists, all sill plates should be evaluated for continued use or replacement. While many sill plates have recently been installed, they are discontinuous and provide little structural integrity to the building framing system, in their current condition (08/01).

Wall Framing System: CR – Fair / PR – Serious
Deterioration at the lower extremities of the walls is severe. The building frame has been subjected to extended periods of water damage and insect (termite among others) infestation. Without the installation of the temporary structural stabilization bracing, it is questionable if Henry House would still be vertically oriented.

Framing above the two-foot elevation is in much better condition. Examination of the limited framing available to inspection through non-destructive investigation indicates that it is solid and in good condition. Framing techniques are discussed in the Physical Description section; they appear to be adequate to support limited loads on the structure. Other areas of the concealed framing may be damaged from insect infestation; a thorough non-destructive examination is recommended.

As demonstrated on the north elevation and in other selected areas of the wall framing, this type of wall framing system is very easily repaired. Replacement of deteriorated material should be limited to totally destroyed elements. All other wall-framing members may be stabilized with the use of supplemental framing added into the wall cavity.

Roof Framing System: CR – Fair / PR – Minor
Deterioration at the outer extremities of the pole rafters and some surface damage from insects was noted during field inspection. Overall pole rafters appear to be in good condition with the exception of the outer 12 to 18 inches, the precise location where they provide structural support to the roof. Supplemental vertical squared posts were added to provide structural support and may carry the roof load at times. Other members of the roof framing system appear to be in good condition; very little additional structural water damage was seen.

Exterior Envelope

Roof Surface Covering: CR – Fair / PR – Minor
The corrugated sheet metal roof covering and the ridge piece are in relatively good condition; all sheets are intact with no penetrations. Good mill thickness is still evident at the edges of the metal panels. Panels have been slightly damaged along the roof eaves where they have been folded down into the gutters, an inappropriate treatment. This however does not affect their performance as a roof covering.

The nails used to attach the metal panels and ridge piece to the roof sheathing are in fair condition; heads appear intact with little rusting. Approximately 30 percent of the roof panel nails have begun to elevate above the surface of roof panels. This is a minor maintenance issue as all nails could be refastened. Observation during a moderate intensity rainfall of approximately 3 hours revealed no significant water leaks.

Roof Surface Finish: CR – Fair / PR – Serious
The exterior paint finish on the non-galvanized sheet metal roof panels is beginning to fail within the corrugations. This has allowed small pockets of surface scale oxidation (rusting) to occur on the sheet metal panels. The painted surface must be in good condition to maintain the roof surface covering. Where rust has occurred, special preparation must be made prior to touch-up painting or total repainting of the roof.

Roof Overhang / Cornice: CR – Fair / PR – Critical
The wooden box cornice has many areas of deterioration. Sections of fascia and soffit have fallen away and provide openings for birds, bats and other rodents to access the eaves. Nests are built within the cornice and into the attic and wall framing; this attracts other insects that may cause damage to the building. Elements of the roof framing system (pole rafters, rafter plate, wall girt, attic floor framing joists) also exposed at these locations are subject to water damage and insect attack (see RSA report). These openings are also collection points for animal droppings that are visually evident from the perimeter of the building. The painted surface of the wood components is also in poor condition with many areas of worn away or failed paint surfaces.

Roof Drainage System: CR – Poor / PR – Critical
Perhaps the most important element on the exterior of the building, the gutters, downspouts and downspout extensions require much-improved performance. While gutters are generally still attached to the roof edge, it was noted that water is retained in the gutters, meaning that they do not drain to the edges. Gutter straps used to attach the gutter to the roof edge are loose or have failed. Downspouts, although still attached to the building, have loose straps. The northwest downspout is missing. Downspouts discharge directly at the base of the building; downspout extensions are not in place.

Chimney: CR – Fair / PR – Critical
The stone portion the chimney appears to be in good condition, although an inspection of the interior throat has not been conducted. Stone masonry appears solid and well constructed.

The brick portion of the chimney has several construction items that are structural concerns. The chimney is unlined and built only one brick wythe thick. There are no interlocking units as the chimney is laid in common running bond. Bricks are not of the highest quality and several within the north attic have failed.

Above the roofline the chimney has been repointed with an inappropriate mortar. The mortar wash on the top of the chimney is worn away and the chimney flue is open to the weather allowing rapid deterioration of the remaining mortar and also of the structural integrity of the brick units and the internal construction of the chimney. Stones that have fallen out of the interior of the chimney are noted at the firebox openings on both the first and second floors.

The primary urgency with the chimney is the undermining of the foundation and its supporting earth shelf (or ledge) in the north cellar. Reference the *Condition Assessment Report* by Robert Silman Associates, PLLC, Structural Engineers, Washington, D.C. for further information. Conceivably, if this bank is allowed to continue eroding, portions of it may collapse. The entire chimney structure will be undermined, as will the load bearing interior wall structure of the adjoining wall.

Wall Surface Covering and Finish: CR – Fair / PR – Minor
Most exterior siding is in good to fair condition. Sections of the siding that have been removed should be replaced with an interim material. Some sections of wood siding near the ground are subjected to repeated wetting and drying and are deteriorated. Much of the siding dates from the mid 1930's and is still in good condition.

The exterior finish on the building is generally in fair condition. In some areas, especially at the windows and doors, the build up of layers is excessive and creates an unsightly appearance. In other areas, such as the cornice and gable ends, the paint layer has failed through cracking and peeling.

Architectural Trim: CR – Poor / PR – Critical
The exterior wood architectural trim applied to the exterior of the window and door openings is extremely fragile. Much of it dates from the period of construction and is primary historic fabric. The cornice frieze is also in danger of deterioration and should be preserved. Preservation maintenance issues include over painting and weather exposure of the individual elements.

Wall Openings ***- See separate survey lists for detailed description of all openings.***

Window Units: CR – Fair / PR – Serious to Minor
Many of the wood double hung window sash units have been repaired and are in good condition. At least two have not been repaired and are in poor condition. Window glass is in good condition; several inappropriate pieces of "restoration glass" have been inserted to reglaze where glass had been broken or missing. Historic cracked glass should be maintained in the sash, as it is an irreplaceable resource. Window putty is in generally good condition except where sashes have not been repaired. Window frames, including interior and exterior sills, jambs and headers and window stops, have not received attention and are in fair to poor condition. Some window frames have been totally destroyed through water and insect attack.

Door Units: CR – Poor / PR – Critical
Exterior doors and door frames are in generally poor condition. Many doors require structural repairs and are missing hardware or have non-operational hardware. The associated frames, including jambs, headers, trim, but especially thresholds, are in poor condition. Door thresholds were associated with the sill plates and so have either been removed or destroyed. At least one door is missing.

Cellar Wall Well: CR – Good / PR – Minor
Cement cast in place foundation wall well is in good condition with no observable maintenance deficiencies.

Cellar Vent Hood: CR – Poor / PR – Critical
The wooden vent hood used to cover the cellar wall well is in very poor condition. It has been inappropriately repaired many times and exhibits no structural integrity. This device is used to keep water out of the cellar but provides critical ventilation to this area of the house. Elements of the historic slat frame are built into the vent hood and should be salvaged for reuse in a replacement hood.

Interior Envelope

General Condition: CR – Fair / PR – Serious
The overall condition of the interior of the Henry House varies depending on the location within the building, but there is a high degree of integrity of the various periods of construction representing a wealth of historic fabric.

Features at or near the ground floor are in generally poor condition if they survive. Most any other interior features are in fair to good condition including the second floor. Interior plaster finishes on the walls and ceilings are in remarkably good condition as are the various elements of the interior architectural trim. Interior doors are also in a very good state of preservation. Every effort should be made to retain these features.

Most significant are the features associated with the first period of construction (1870) and features associated with the north addition (c. 1883). This includes remnants of the original exterior siding and architectural trim found as an interior wall surface on the south walls of the north rooms, including the north attic, interior trim at door and window openings, fireplace mantles, staircases and handrails, and the interior walls and ceilings of the kitchen. The installation of this material in the kitchen may have inadvertently protected some of the oldest interior finishes in the house. This determination has been verified by the *Historic Interior Finishes Analysis (Paint & Wallpaper) Report* completed in January 2002 by the NPS Northeast Cultural Resources Center, Building Conservation Branch (Yokum 2002).

Floor Surface and Finish: CR – Fair / PR – Serious
As described above, floor systems on the first floor are in generally poor condition. Most floors have been removed with the exception of the kitchen (R101) and the bathroom (R104) and a small section in the entry hall (R103). These remaining floor surface areas are in poor condition. The joists that support them may still be in good or fair condition.

The floor systems on the second floor are in generally excellent to good condition with little or no deterioration. Wood floorboards are generally unfinished and maintain a pattern of wear that is acceptable given their age. Floorboards should remain unfinished.

Wall and Ceiling Surface: CR – Fair / PR – Serious
Plaster walls and ceilings are in generally good condition. Although some walls and ceilings show evidence of small areas of localized repair, approximately 85 percent of the interior plaster dates from its period of construction – it has very high integrity. Most plaster is also in very good condition. There are some localized areas where water damage has occurred causing minor failure of plaster and there are other areas where original plaster has been removed for some other reason. Small areas of plaster have been removed for building

investigation. Other areas of plaster have been largely removed due to structural stabilization work – this is mainly at the north wall.

In some areas on the interior of the west wall, plaster lath and keys have been subjected to repeated exposure to the weather and impact hammering due to removal of exterior siding and sheathing and repairs to the building structure. Repeated wetting and drying and impact blows have weakened this plaster, some areas of the exposed plaster keys show evidence of cracking or separation from the lath. While this is a totally repairable condition, this section of plaster must be treated gently in order for it to survive.

Many of the interior plaster walls and ceilings exhibit a multi-directional system of micro-cracking. Much of this visible cracking is due primarily to expansion and contraction of the material over time and has no effect on its durability. Several larger structural cracks have been observed; these date mainly from the recent period of structural repair. They are created either by rapid moving of the building frame in response to sudden impacts or gradual movement of the structure because of loss of structural integrity in building framing systems. Both types of cracking are normal in older installations of plaster and lath and are easily repaired to an aesthetically desirable condition.

Other interior wall and ceiling surfaces include the wood strip interior siding in the kitchen (R101). This material is also in very good condition with little or no damage or deterioration.

Materials used in the Bathroom (R104) have not yet been determined. From casual visual observation, these appear to be in good condition. They include a variety of early mid 20th century home interior products such as tile board and vinyl floor tile.

Wall and Ceiling Finish: CR – Fair to Poor / PR – Serious to Minor
Plaster wall and ceiling surfaces are generally finished with either a color surface (tinted finish plaster coat, whitewash, calcimine, or paint – yet to be determined) and may be covered with wallpaper. In most instances the wallpaper has been over-painted.

Interior paint layers on these wall and ceiling surfaces are in generally fair to poor condition. Many of the wall and ceiling finishes are cracked and/ or peeling. Several small sections of the wallpaper have either been removed or the adhesive has failed and the wallpaper is missing in those areas.

Interior Doors: CR Good / PR – Minor
Interior doors are in generally good condition and in their original location. Most doors also retain all hardware, including hinges, knobs and knob plates (roses), knob and key plate escutcheons, and locking hardware. A separate survey report will provide specific information about each individual door.

Staircases: CR – Good / PR – Minor
There are three interior staircases, one at the south end and two at the north end of the building. The south stair and north stair that connect the first floor with the second floor are in generally good condition. The handrails, newel posts, and spindles associated with these two stairs are also in good condition. The north stair that connects the first floor to the north cellar is in fair condition. It is an open ladder type stair and does not contain a railing system.

Architectural Woodwork/ Trim: CR – Fair / PR – Minor
Interior architectural woodwork includes baseboards, floor molding, ceiling trim, and other elements not directly associated with window or door frames. Most of this material is in good structural condition but the finish is in fair to poor condition.

Architectural Features: CR – Fair / PR – Minor
Interior features include the two fireplace mantles and the cabinets in the kitchen. The two fireplace mantles, one each in R102 and R202, are in very good structural condition. The painted finish on these two features is also in good condition.

The kitchen cupboard is located adjoining the chimney in the southwest corner of the room. It appears to be in fair condition despite the wear and tear and missing doors.

Utilities – All Non-Extant.

Water Supply
Plumbing
Sewer/ Septic
Electrical Supply
Electrical Internal
Heating System
Lightning Protection

END of SECTION

Part 2. Treatment and Use

Introduction

A. Ultimate Treatment & Use

PART 2. TREATMENT & USE

INTRODUCTION

The purpose of this section is to provide treatment recommendations based on an approved ultimate treatment, the extant condition, and architectural and historical integrity of the Henry House.

Summary of Treatment and Use

This section focuses on the contemporary treatment and use of the Henry House and will not delve into the historic treatment and use as that is accomplished in other parts of the Historic Structure Report. The contemporary period encompasses the years identified in this report as the *NPS Ownership / Mothballed Occupancy Years, 1965 – 2002.* Within that time period the Henry House has been used as a scene setting structure and there has been little active use of the interior of the building. Treatment was mainly in the form of exterior maintenance until 2001 when a temporary emergency structural stabilization plan was implemented.

In the mid-1980's a series of reports were prepared that all contributed to the effort of producing the parks' General Management Plan. The most important of these documents is listed here:

- 1983. "General Management Plan, Manassas National Battlefield Park, Virginia." USDOI, NPS, DSC, September 1983. Malik, Marcus, P., et al., [MANA 379, D1808].

- 1982. McGarry, Thomas E. *Archeological Survey - Manassas Historic Sites Survey, Manassas National Battlefield Park, Virginia.* National Capital Team, Denver Service Center, Washington, D.C.: U.S. Department of the Interior, National Park Service (draft report 11/81 final report 12/ 82). [MANA 379, D2025]

- 1981. *Resource Management Plan, Manassas National Battlefield Park.* Recommended by Superintendent 11/15/1981, Concurred by Associate Regional Director, Professional Services, National Capital Region, 11/27/1981, Concurred by Associate Regional Director, National Capital Region, 11/30/1981, Approved by Regional Director, National Capital Region 11/30/1981. [MANA 379, D-28].

These documents report on the proposed treatment and use of the Henry House from this particular time period. The reader will find they are consistent National Park Service philosophy of long term preservation of cultural resources.

The history of the treatment and use of the Henry House goes back at least to 1981 where it is specifically mentioned in the *Resource Management Plan*. In Section III, Cultural Resources Management Program, as it is called in the report, the Henry House is identified in the following category of resources - *"those structures which are extremely important for the interpretation of the battlefield but which do not remain intact.... Henry House... (is) vitally important to the interpretation of the fighting on Henry Hill and, although... rebuilt after the war, (is) an important element in setting the historic scene"* (Pg. III-2). [Note: References to other buildings in this category are removed from these blocks of text by the author.]

In the *Project Statement MANA C-6*, provided as part of the Resources Management Plan, the Recommended Course of Action is *"Restoration/ stabilization of exterior only. This would consist of the following:*

1) *Removal of exterior sheathing to permit inspection of building framework.*
2) *Replacement of deteriorated timber.*
3) *Replacement of exterior sheathing material with original material or new material to provide a weather tight exterior wall.*

Of the five treatments considered this was the proposed action. The other four alternatives consisting of: Current Action 1 – Painting of exterior and maintenance of roof, Alternative 2 – Complete restoration of postwar building, Alternative 3 – Return to use as quarters, and Alternative 4 – Cease maintenance of building, were all considered unacceptable for various reasons. Not one of the five alternatives suggested modifications to the interior. This was most likely because use of the building for other than living quarters was not considered, and use of the building as living quarters would detract from the historic scene, and the value in scene setting would be reduced.

The next phase in determination of treatment occurs in 1983. The proposed treatment as identified in the *General Management Plan* is to *"stabilize / restore building exterior"*. It is noted the Henry House is located at the heart of the designated "restoration subzone". The *GMP* section that describes the Restoration Subzone has some articulate language about treatment and use. It states, *"The level at which historic structures in each subzone will be restored or preserved will be determined by their integrity and significance. New or existing facilities which are not directly related to historic preservation and Civil War interpretation will not be allowed in this subzone unless the property is privately owned or serves a protection function"*.

Furthermore, *"Establishing and maintaining a restored historic atmosphere so as to enhance visitor understanding of the battle stories is not only dependent on manipulation of the historic resources within the restoration subzone, but also on protection of that subzone from the intrusive effects of modern development and incompatible activities. Steps will be taken to decrease the potential effects of such*

intrusions by establishing the following companion subzones to the restoration subzone". Next follows in the report a discussion of the Preservation Subzone and the Protection Subzone. The Henry House is squarely in the middle of the Restoration Subzone.

During the late 1980's and into the 1990's the Henry House received exterior maintenance while awaiting its then current ultimate treatment of *"stabilize/ restore building exterior"* [GMP, 1983]. As time went by the management philosophy changed from the statements in the *GMP* to those found in the *1998 Project Management Information System (PMIS) Project Detail Sheet (Complete Report) Project Description for Package Number MANA-155, Rehabilitate and Maintain Significant Park Resources (PMIS No. 22762).* When this package was prepared it stated, *"This proposal will accomplish critical stabilization and preservation work..., including emergency stabilization of...the Henry House".*

The PMIS Justification given for the proposed work at the Henry House indicates that *"stabilization will treat these structural concerns (*described earlier in the Justification*) and will permit the park to maintain these significant structures on the landscape as an interpretive site. Without intervention, these structures will be irretrievably lost, removing any opportunity for interpretive use of the buildings."*

Other project objectives are located in these following PMIS Report sections:

Line-Item Construction Project Objective: Protect Cultural and Natural Resources, Factor: How will this project maintain or improve the condition of resources? Answer: *"Stabilization and rehabilitation of the ... Henry House will allow for public access to view exhibits, and attend interpretive programs."*

Line-Item Construction Project Objective: Improve Efficiency of Park Operations, Factor: How will this project protect employee health, safety, and welfare? Answer: *"The Henry House ... is currently unstable and unsafe for employees to enter...Currently thirteen employees have access to the structure to perform routine monitoring, protection, and maintenance duties. Stabilization of the Henry House will allow safe access to the interiors of those buildings."*

This factors indicate the primary reason to access the interior of the Henry House, as proposed in the PMIS Justification for Line Item Construction Project Objectives, is to protect employees who must access the interior of the structure to perform routine monitoring, protection, and maintenance duties, and to allow the public access to view exhibits and interpretive programs.

In 2000-01 a series of discussions occurred between the National Capital Region, the Denver Service Center (DSC) and the park. These were focused on further detailed definition of the new proposed use of the structure, the selection

process, and the impact on the fabric of the building based on the current needs of the park.

The discussion centered on the Regions' perceived "*expansion of the project's scope beyond the reasons for which it was appropriated funds*"[1] as described in the previously mentioned PMIS Report and the *Agenda for the April 2001 Henry House Alternatives and Value Analysis Meeting* held at the park and organized by the Denver Service Center Project Manager and Project Architect. In reviewing the Agenda for the Value Analysis Meeting the regional office became concerned that the proposed treatment and use had grown beyond what had been identified in the PMIS request for NPS Line Item Construction Funding to those as listed in the DSC Agenda.

The Regional Office also wanted to know what type of treatment would be applied since the language in the PMIS statement did not articulate a single treatment type that could be recognized by a specific National Park Service standard (various treatment standards were selected for various building features). The Region suggested that a new PMIS form be completed that reflected the intended treatment of the structures involved, *"...if the long range goal for the site is active use..."* in addition to the stabilization treatment described in the PMIS form.

The DSC Project Manager explained[2] it was within the authority of park management and the NPS Development Advisory Board (DAB) to make a determination if, *"whatever we finally propose is beyond the scope of the project"*. It was further recognized that the DAB would ask the question, *"How does the project differ from the original PMIS?"* Differences in treatment philosophy were explained by the DSC Project Manager as a miscommunication of the technical preservation terminology used in the PMIS application. It was suggested the cost estimate was a better source of information, *"to see what they had in mind"*.

Lastly, in an attempt to more fully explain the proposed *"alternatives for achieving the objectives"* treatment selection process, the DSC Project Manager stated that the DAB would require, *"documentation of the decision making process to determine the alternative which achieves the best value for the dollar spent"*[3]. Attached was a copy of a Project Review Report as an example of the type of document that would be completed. To date, an approved copy of this particular completed document cannot be located for the MANA-155 package.

The decision making process is annotated in a series of reports issued by the DSC in September 2001. Treatment and use decisions for the Henry House were

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[1] Fax communication from National Capital Regional Historical Architect to Denver Service Center Project Manager, 04/19/2001.
[2] Email communication from DSC Project Manager to NCRO Regional Historical Architect, Subject: MANA-155, dated 04/20/2001.
[3] Ditto.

determined through the National Park Service Value Analysis Study process and "Choosing By Advantage" system. This is the system put in place to present projects before the NPS Development Advisory Board (DAB) and to gain approval of the project prior to the allocation of funds for line item construction.

An ultimate treatment and use is determined as part of the NPS line item construction project review process. The primary documents resulting from this process provide the documentation of the decision making for determination and approval of the ultimate treatment and use of the building. Consequently, they are also used as the basis for this section. The following documents have been identified. No records are available from the DAB.

- *Value Analysis Study, Rehabilitate and Maintain Significant Historic Structures, Henry House, Part 2 of 3 of a Project for Manassas National Battlefield, Manassas, Virginia, MANA-155. Study Dates July 31 through August 2, 2001.* John Marsh, Historical Architect, DSC, Study Team Leader. Prepared by: Betty Janes, Value Analysis Facilitator, Denver Service Center, National Park Service, 09/04/01.

- *Project Review Report, Choosing By Advantages – Henry House.* Prepared by Ken Duce, Project Architect, Denver Service Center, National Park Service, 09/04/01.

- *Denver Service Center Class "B" Estimate, Henry House Rehabilitation, Manassas National Battlefield Park.* Estimate by Jack Hagen, 09/19/2001; Estimate Reviewed by Robert Merrick, 10/09/2001, Denver Service Center, National Park Service.

Section A. Ultimate Treatment and Use

TREATMENT: The approved alternative that emerged from this process and was approved by the National Park Service Development Advisory Board is *Henry House, Alternative 1 – Discovery Center, Shed Used for Restrooms.*

According to the Value Analysis Study report, *"The goal of the selected alternative is to **restore the exterior and much of the interior to its 1883 to 1896 form.** This was the form of the building just before Hugh Henry, the original owner of this structure (sic) died."*

As far as the proposed use, the report continues, *"The building will be used as a Discovery Center. A Discovery Center will bring children and adults into the building in the first floor rooms and in small groups for curriculum based educational programs. When not used as an educational center, the building will be open to the general public for changing interpretive programs. The upstairs (second floor) rooms will be used for offices for the expanded education staff and storage of education materials, props and equipment for outdoor activities.*

Interpretive program materials for changing public programs will also be stored on (sic) upstairs.

The approved overall treatment for the intended approved use, as just described, is interpreted by the HSR report to be "preservation" with "restoration" of selected exterior architectural features and "rehabilitation" of the interior. While this is a mixed treatment for the building, Preservation has a specific definition provided by the NPS which still applies to the overall project. There are always various levels of sensitivity to the fabric of a structure while implementing a treatment and use project. This report focuses on Preservation as defined in *The Cultural Resource Management Guideline, NPS-28 (a.k.a. Director's Order 28)* which is summarized in this report.

Preservation of the Henry House is interpreted to mean the following:

- Repair and stabilization of the structural system and exterior architectural features while preserving the existing historic fabric and character-defining features.

- Preservation of extant architectural features that date to the period of construction.

- Restoration of selected exterior architectural features such as the exterior wooden horizontal siding and all associated architectural trim, the roof surface covering, the west porch, exterior window shutters, exterior gutter and downspout system.

- Preservation and repair of the first-floor interior for sympathetic reuse while retaining the character defining features.

- Stabilize and preservation of the second floor interior as-is and retain the character defining features.

- Preservation of the cellar and attic spaces as conservation zones.

- The least intrusive approach to treatment is recommended.

While there is a section in the *Value Analysis Report* labeled "Preservation Philosophy" the approved treatment statements present more than a singular treatment strategy. Various treatment terms are interchangeably used in the same sentence, so there is no clear definition of the treatment.

Based on language following later in the report it appears that while "Preservation" is the overall selected, the described treatment indicates a return of the exterior appearance to that of what Hugh Henry would have seen prior to his death in 1896. The report says, "Historic photos of the Henry House taken in

1896, just two years before Hugh Henry died, exist and show the details necessary for the **restoration of the exterior of the building** (emphasis added). Restoration is a different treatment type with different treatment standards.

A specific treatment is not identified for the interior, but the proposed use, as previously described, clearly indicates a modern use of the interior and the need for improvements. Descriptive line items, as specifically called out in the *Class B Line Item Construction Cost Estimate,* such as *"replace windows and trim", "install dry pipe fire sprinkler system", "install commercial electrical service"* and *"install electric dumbwaiter"* clearly indicate the interior treatment will be "rehabilitation" rather than "preservation". In order to clarify the various recommended treatment terms used in the previous reports the following explanation is offered.

Rehabilitation, as a formal treatment strategy, is defined in NPS *Cultural Resource Management Guidelines, Chapter 8 – Historic and Prehistoric Structures, Section D. Stewardship, 1. Treatment and Use.* Rehabilitation improves the utility or function of a historic structure, through repair or alteration, to make possible a compatible contemporary use while preserving those portions or features that are important in defining its significance. It acknowledges the need to alter a historic property to meet continuing or changing uses. An emphasis is placed on *"retaining the property's historic character"*, or character-defining features. *"The replacement or removal of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a structure is avoided."*

"Stabilization" is no longer recognized as a treatment standard, its type of work being relegated to "Preservation". Likewise "Repair" is now considered part of "Preservation"[4]. "Rehabilitation", "Adaptive use/ reuse" and other terms used in the *Value Analysis Study Report* and the *Project Review Report* may indicate a less sensitive approach to the treatment of the Henry House than is the generally anticipated outcome. **It is usually acknowledged that the most sensitive, and least intrusive, level of treatment is appropriate and desired, given the historical significance of the structure.**

The following definition of "Preservation" is from *The Secretary of the Interior's Standards for the Treatments of Historic Properties, 1995*[5]. This standard is used to develop and guide the recommended treatments in the following section (Requirements for Treatment) of this report.

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[4] *The Secretary of the Interior's Standards for the Treatments of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstruction Historic Buildings.* National Park Service, Washington, D.C., 1995.
[5] Ditto.

- **Preservation** is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

- **Preservation as a Treatment.** When the property's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular period of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations, preservation may be considered as a treatment. Prior to undertaking work, a documentation plan for preservation should be developed.

USE: As stated earlier, the determination of use is made in the *Value Analysis Study* and the *Choosing By Advantage* system process. As reported in approved *Henry House Alternative 1 – Discovery Center, Shed Used for Restrooms* treatment the following uses have been identified and approved:

- Cellar – No permanent use, restricted to park maintenance access. The interior of this space will not be accessible to the public at any time.

- First Floor – Discovery Center and point of contact for visitors, presentation of the curriculum based educational programs and changing interpretive programs. Limited utilities or building services will be introduced to the structure.

- Second Floor – Rooms will be used for offices for the expanded educational staff and limited storage of educational materials, props and equipment for outdoor activities. Interpretive program materials for changing public programs will also be stored upstairs.

- Attic – No public access will be permitted to these areas due to their designation as preservation zones within the building. Controlled access may be permitted by park management under special circumstances for maintenance, security, and further conservation of historic fabric. There will be no permanent use and no storage permitted.

END of SECTION.

Part 2. Treatment and Use

B. Requirements for Treatment

PART 2. TREATMENT & USE

Section B. Requirements for Treatment

RECOMMENDED TREATMENTS

This report does not include recommendations for Temporary Emergency Structural Stabilization or Short Term (Mothballing) Stabilization – see Structural Investigations Report by Robert Silman & Associates, Structural Engineers, PLLC, Washington, D.C.

The following recommended treatments have been developed to represent the preservation and rehabilitation alternatives for the ultimate treatment of historic fabric within this development project. A range of impacts to historic fabric will change the level of integrity, but the character defining features may be retained whether preservation, selective restoration, or rehabilitation is the ultimate selected level of treatment for any given building feature. These recommendations are based on the condition of the building at the end of the field research program, November 2001.

Included in the Requirements for Treatment statements are direct citations from *The Secretary of the Interior's Standards for the Treatments of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstruction Historic Buildings*. These citations are directly applicable to item description statements in the Value Analysis Study and the Class B Estimate dated 2001.

They are noted as **"NPS – RECOMMENDED TREATMENT GUIDELINES".** This language is intended to illustrate the difference between the Recommended Treatments provide by this report and the "Not Recommended" treatments, especially where the cost estimate line item description falls directly into this category.

The Recommended Treatments presented by this report are consistent with the Preservation and Rehabilitation standards as per *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings (1995)*. They are also in accordance with the National Park Service policy and guidelines as presented in *Director's Order No. 28 – Cultural Resource Management Guidelines.*

This section of the report is organized using the same outline as in the condition assessment section of the report. It is based on the Facility Condition Assessment System (FCAS) recently implemented by the National Park Service. Features are grouped according to treatment type and level of intervention.

Site

Overall Site Drainage
Perimeter Conditions
Building Drainage

Gutters and downspouts are discussed as Roof Drainage System. There is no building drainage system at the Henry House. Such a system should include either a foundation drainage system around the perimeter of the house, positive drainage of surface water away from the house, or a roof run-off water collection system that directs water away from the base of the house.

Structure

See various structural reports and stabilization memos from Robert Silman Associates, PLLC, Structural Engineers, Washington, D.C., March – August, 2001 and HPTC *Project Reports Nos. 1 – 5, 2001* for a discussion of the overall structural condition of the house. The structure would be considered stabilized (even though in fair to poor condition) after all punch list items are completed for the emergency temporary structural bracing system.

South Block Foundation
North Addition Cellar Walls
Cellar Wall Well

Chimney. The primary urgency with the chimney is the undermining of the foundation and its supporting earth shelf (or ledge) in the north cellar. Reference the *Condition Assessment Report* by Robert Silman Associates, PLLC, Structural Engineers, Washington, D.C. for further information. Conceivably, if this bank is allowed to continue eroding, portions of it may collapse. The entire chimney structure will be undermined, as will the load bearing interior wall structure of the adjoining wall.

The overall treatment of the chimney feature is Preservation.

NPS RECOMMENDED PRESERVATION TREATMENT GUIDELINES

Masonry Features and Systems - Repairing, stabilizing & conserving fragile masonry walls and other masonry features by repointing the mortar joints where there is evidence of deterioration... Removing deteriorated mortar by carefully hand-raking the joints to avoid damaging the masonry. Duplicating old mortar in strength, composition, color, and texture. Replacing in-kind extensively deteriorated or missing parts of masonry features where there are surviving prototypes. The new work should match the old in material, design, color and texture, and be unobtrusively dated to guide future research and treatment.

Floor Framing System - All structural material in close proximity to the ground should be evaluated by a structural engineer familiar with historic preservation structural engineering practices to make a final determination as to their individual treatment.

A complete discussion of sill plates is in the Physical Description section of the report. As per the floor joists, all sill plates should be evaluated for continued use or replacement. While many sill plates have recently been installed, they are discontinuous and provide little structural integrity to the building framing system, in their current condition (08/01).

Wall Framing System - Framing above the two-foot elevation is in much better condition. Examination of the limited framing available to inspection through non-destructive investigation indicates that it is solid and in good condition. Framing techniques are discussed in the Physical Description section; they appear to be adequate to support limited loads on the structure. Other areas of the concealed framing may be damaged from insect infestation; a thorough non-destructive examination is recommended.

As demonstrated on the north elevation and in other selected areas of the wall framing, this type of wall framing system is very easily repaired. Replacement of deteriorated material should be limited to totally destroyed elements. All other wall-framing members may be stabilized with the use of supplemental framing added into the wall cavity.

Roof Framing System – Preservation of extant roof rafters and roof sheathing boards.

NPS RECOMMENDED PRESERVATION TREATMENT GUIDELINES:

Building Structural Systems – Repairing the structural system by augmenting or upgrading individual parts or features using recognized preservation methods. For example, weakened structural members such as floor framing can be paired with new members, braced, or otherwise supplemented and reinforced.

The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment ***Preservation*** *and should only be considered after protection, stabilization, and repair concerns have been addressed.*

Limited Replacement in Kind:

Limited Replacement in Kind.

Replacing in kind those visible portions or features of the structural system that are either extensively deteriorated or missing when they are surviving prototypes. The new work should match the old in materials, design, color, and texture; and be unobtrusively dated to guide future research and treatment.

Considering the use of substitute material for unexposed structural replacements, such as floor joists or wall studs. Substitute materials should, at a minimum, have equal load-bearing capabilities, and be unobtrusively dated to guide future research and treatments.

Exterior Envelope

Roof Surface Covering
Roof Surface Finish
Roof Overhang / Cornice
Roof Drainage System
The overall treatment of the exterior roof surface covering is restoration. The treatment of the structural frame of the roof and the extant roof sheathing boards is Preservation.

Wall Surface Covering and Finish
Architectural Trim
Exterior Window Shutters
West Porch
The overall treatment of these features is Restoration.

Architectural Trim
Door Units
Cellar Vent Hood - The wooden vent hood used to cover the cellar wall well is in very poor condition. It has been inappropriately repaired many times and exhibits no structural integrity. This device is used to keep water out of the cellar but provides critical ventilation to this area of the house. Elements of the historic slat frame are built into the vent hood and should be salvaged for reuse in a replacement hood. The overall treatment of these features is Preservation and selected Restoration.

NPS RECOMMENDED RESTORATION TREATMENT GUIDELINES:

Repairing, stabilizing and conserving fragile wood from the restoration period using well-tested methods and materials, when appropriate. Repairs should be physically and visually compatible and identifiable upon close inspection for future research.

Repairing wood features from the restoration period by using traditional repair techniques.

Replacing in kind an entire wood feature from the restoration period that is too deteriorated to repair – if the overall form and detailing are still evident – using the physical evidence as a model to reproduce the feature. If using the same kind of material is not technically feasible, then a compatible substitute material may be considered. The new work should be unobtrusively dated to guide future research and treatment.

*The following **Restoration** work is highlighted to indicate that it involves the removal or alteration of existing historic wood features that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing wood features from the restoration period using all new materials.*

Removing Existing Features from Other Historic Periods

Removing or altering wood features from other historic periods such as a later doorway, exterior siding, architectural trim, porch or steps.

Documenting materials and features dating from other periods prior to their alteration or removal. If possible, selected examples of these features or materials should be stored to facilitate future research.

Re-Creating Missing Features from the Restoration Period

Re-creating a missing wood feature that existed during the restoration period based on physical or documentary evidence; for example, duplicating a porch, exterior siding and finish, window shutters, or a wood shingle roof.

Window Units

Many of the extant windows and frames have been repaired by NPS park maintenance and preservation staff. Many windows and window frames are in very good condition and should be preserved. Some historic glass has been replaced by "restoration type glass" which is inappropriate treatment. This glass should be removed and replaced with modern glass. Remaining historic glass should be conserved in-situ. An in-depth survey of all extant window units should be undertaken as part of the design phase of the proposed development project.

NPS RECOMMENDED PRESERVATION TREATMENT GUIDELINES:

Protecting and maintaining the wood which comprises the window frame, sash, muntins, and surrounds through appropriate surface treatments…

Evaluating the existing conditions of materials to determine whether more than protection and maintenance are required.

Repairing window frames and sash by traditional finish carpentry repair techniques or otherwise reinforcing them using recognized preservation methods.

The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment ***Preservation****, and should be undertaken only after protection, stabilization, and repair concerns have been addressed.*

NOT RECOMMENDED

Replacing an entire window when limited replacement of deteriorated and missing parts is appropriate.

Interior Envelope

The overall condition of the interior of the Henry House varies depending on the location within the building, but there is a high degree of integrity of the various periods of construction representing a wealth of historic fabric.

Features at or near the ground floor are in generally poor condition if they survive. Most any other interior features are in fair to good condition including the second floor. Interior plaster finishes on the walls and ceilings are in remarkably good condition as are the various elements of the interior architectural trim. Interior doors are also in a very good state of preservation. Every effort should be made to retain these features.

Most significant are the features associated with the first period of construction (1870) and features associated with the north addition (c. 1883). This includes remnants of the original exterior siding and architectural trim found as an interior wall surface on the south walls of the north rooms, including the north attic, interior trim at door and window openings, fireplace mantles, staircases and handrails, and the interior walls and ceilings of the kitchen. The installation of this material in the kitchen may have inadvertently protected some of the oldest interior finishes in the house. More detailed documentation and analysis of the

historic interior finishes is provided in *The Interior Finishes Analysis Report* [Yokum: 2002].

NPS RECOMMENDED PRESERVATION & REHABILITATION TREATMENT GUIDELINES:

Interior Finishes and Features: **Identifying, retaining and preserving** interior features and finishes that are important in defining the overall historic character of the building (character defining features) including cornices, baseboards, fireplaces and mantels, paneling, hardware, and flooring; and wallpaper, plaster, paint, and finishes such as whitewash; and other decorative materials that accent interior features…

Evaluating the existing conditions of materials to determine whether more than protection and maintenance are required, that is, if repairs to interior features and finishes will be necessary.

NPS RECOMMENDED REHABILITATION TREATMENT GUIDELINES:

Repairing interior features and finishes by reinforcing the historic materials. Repair will also generally include the limited replacement in-kind – or with compatible substitute materials – of those extensively deteriorated or missing parts or repeated features when there are surviving prototypes of those features.

Replacing in-kind an entire feature or finish that is too deteriorated to repair – if the overall form and detailing are still evident – using the physical evidence as a model for reproduction. If using the same kind of material is not technically feasible, then a compatible substitute material may be considered.

*The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of **Rehabilitation** projects and should only be considered after the preservation concerns listed above have been addressed.*

Design for the Replacement of Missing Historic Features

RECOMMENDED

Designing and installing a new interior feature or finish if the historic feature or finish is completely missing. This could include missing partitions, stairs, elevators, lighting fixtures, and wall coverings; or even entire rooms if all historic spaces, features, and finishes are missing or have been destroyed by inappropriate "renovations." The design may be a restoration based on historical, pictorial, and physical documentation; or be a new design that is compatible with the historic character of the building, district, or neighborhood.

NOT RECOMMENDED

Creating a false historical appearance because the replaced feature is based on insufficient physical, historical, and pictorial documentation or on information derived from another building.

Introducing a new interior feature or finish that is incompatible with the scale, design, materials, color, and texture of the surviving interior features and finishes.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of ***Rehabilitation*** *projects and should only be considered after the preservation concerns listed above have been addressed.*

Alterations/Additions for the New Use

RECOMMENDED

Accommodating service functions such as bathrooms, mechanical equipment, and office machines required by the building's new use in secondary spaces such as first floor service areas or on upper floors.

Reusing decorative material or features that have had to be removed during the rehabilitation work including wall and baseboard trim, door molding, panelled doors, and simple wainscoting; and relocating such material or features in areas appropriate to their historic placement.

Installing permanent partitions in secondary spaces; removable partitions that do not destroy the sense of space should be installed when the new use requires the subdivision of character-defining interior space.

Enclosing an interior stairway where required by code so that its character is retained. In many cases, glazed fire-rated walls may be used.

Placing new code-required stairways or elevators in secondary and service areas of the historic building.

Creating an atrium or a light well to provide natural light when required for the new use in a manner that preserves character-defining interior spaces, features, and finishes as well as the structural system.

Adding a new floor if required for the new use in a manner that preserves character-defining structural features, and interior spaces, features, and finishes.

NOT RECOMMENDED

Dividing rooms, lowering ceilings, and damaging or obscuring character-defining features such as fireplaces, niches, stairways or alcoves, so that a new use can be accommodated in the building.

Discarding historic material when it can be reused within the rehabilitation project or relocating it in historically inappropriate areas.

Installing permanent partitions that damage or obscure character-defining spaces, features, or finishes.

Enclosing an interior stairway with fire-rated construction so that the stairwell space or any character-defining features are destroyed.

Radically changing, damaging, or destroying character-defining spaces, features, or finishes when adding new code-required stairways and elevators.

Destroying character-defining interior spaces, features, or finishes; or damaging the structural system in order to create an atrium or light well.

Inserting a new floor within a building that alters or destroys the fenestration; radically changes a character-defining interior space; or obscures, damages, or destroys decorative detailing.

Floor Surface and Finish

First Floor: Replace deteriorated and non-extant sections, retain historic sections.

Second Floor: Wood floorboards are generally unfinished and maintain a pattern of wear that is acceptable given their age. Floorboards should remain unfinished and protected from further excessive wear and tear.

Wall and Ceiling Surface and Finish - Materials used in the Bathroom (R104) have not yet been determined. From casual visual observation, these appear to be in good condition. They include a variety of early mid 20th century home interior products such as tile board and vinyl floor tile.

Interior Doors - Interior doors are in generally good condition and in their original location. Most doors also retain all hardware, including hinges, knobs and knob plates (roses), knob and key plate escutcheons, and locking hardware.

Staircases - There are three interior staircases, one at the south end and two at the north end of the building. The south stair and north stair that connect the first floor with the second floor are in generally good condition. The handrails, newel

posts, and spindles associated with these two stairs are also in good condition. The north stair that connects the first floor to the north cellar is in fair condition. It is an open ladder type stair and does not contain a railing system.

Architectural Woodwork/ Trim - Interior architectural woodwork includes baseboards, floor molding, ceiling trim, and other elements not directly associated with window or door frames. Most of this material is in good structural condition but the finish is in fair to poor condition.

Architectural Features - Interior features include the two fireplace mantles and the cabinets in the kitchen. The two fireplace mantles, one each in R102 and R202, are in very good structural condition. The painted finish on these two features is also in good condition.

The kitchen cupboard is located adjoining the chimney in the southwest corner of the room. It appears to be in fair condition despite the wear and tear and missing doors.

Utilities – All Non-Extant (2001)

Water Supply
Plumbing
Sewer/ Septic
Electrical Supply
Electrical Internal
Heating System
Lightning Protection

Building Utility Systems (2001)

Building Utility Systems – it has been determined that the following utility systems will be installed as part of the proposed development project. This includes electric, water, telephone, heating and cooling (HVAC).

VA – Building Utility Systems Not Listed/ Included in Class B Cost Estimate Totals.

NPS PRESERVATION & REHABILITATION TREATMENT GUIDELINES:

NOT RECOMMENDED – Installing a new building utility system so that character-defining, structural or interior features are radically changed, damaged, destroyed, or obscured.

Health and Life Safety

Fire Detection – A smoke and heat detection system has been approved for installation. A photovoltaic system is recommended as it has been determined that minimal electrical service will be supplied to the house. In no case should conduit or any other device be fastened directly to historic fabric. Supplemental wood framing should be inserted to support this system.

Fire Suppression – It has been determined that a dry pipe fire suppression (sprinkler) system will be installed.

Hazardous Materials - A hazardous material survey has not been completed for the Henry House. Simple field tests for lead containing finishes indicated that lead is present in some of the exterior and interior wood trim. Testing of door surrounds was conducted and results will be located in the Door Survey. No testing was done for asbestos containing materials or other potentially hazardous materials

Intrusion Detection and Alarm System - An intrusion detection and alarm system has been approved for installation. A photovoltaic system is recommended as it has been determined that minimal electrical service will be supplied to the house.

In no case should conduit or any other device be fastened directly to historic fabric. Supplemental wood framing should be inserted to support this system.

Lightning Protection System – not determined by Value Analysis. It is recommended that a visually sympathetic system be installed for building protection.

Public Heath – Determined not applicable.

Seismic – Manassas, Virginia is located in Seismic Zone 2 which predicts *moderate damage* in the event of earthquake activity – level of activity not indicated. No special structural alterations have been made or are proposed to the building to mitigate the effects of a moderate earthquake. Source: *Seismic Risk Map of the Coterminous United States*, by S.T. Algermissen, "Seismic Risk Studies in the United States", proceedings of the Fourth World Conference on Earthquake Engineering, 1997.

VA – Building Health & Life Safety Features Not Listed/ Included in Class B Cost Estimate Totals.

NOTE: Interior intrusion alarm, smoke and heat detection systems will have detrimental visual effect on interior of building.

NPS PRESERVATION & REHABILITATION TREATMENT GUIDELINES:

NOT RECOMMENDED – Installing a new building system so that character-defining, structural or interior features are radically changed, damaged, destroyed, or obscured.

RECOMMENDED – Complying with health and safety codes [and practices], including seismic code requirements, in such a manner that character-defining spaces, features, and finishes are preserved.

CODE COMPLIANCE ISSUES

Federal legislation and NPS policies clearly stipulate that as historic structures are preserved and rehabilitated attempts should be made to meet applicable nationally accepted model building codes to the maximum extent feasible.

Compliance with the nationally accepted codes does not automatically trigger a complete code based upgrade. Alternative criteria do exist for alterations to historic structures. These typically encourage flexibility in the literal application of the code intent.

General Code Compliance – The Public Buildings Amendment Act of 1988 instructs Federal agencies to follow, "to the maximum extent feasible", as determined by the administrator or head of the agency, the "...nationally recognized model building codes and other applicable nationally recognized codes such as electrical codes, and fire and life safety codes."

The intent of the National Park Service is to adhere to the pertinent national, state, and local codes to the maximum extent feasible.

The Federal government, in this case the National Park Service, is the "authority having jurisdiction" within the park boundaries. For those projects assigned by the regional office or park, the regional office assumes the role of local jurisdictional authority and retains code review and waiver granting responsibility the park safety officer, with regional oversight, may participate and/ or act as the code reviewing authority.

Codes that should be reviewed include the most recent copies of the following:

Virginia Uniform Statewide Building Code (USBC): The Virginia Uniform Statewide Building Code establishes the minimum safety requirements for buildings and structures, as well as the administrative process and procedures for enforcing the code in Virginia. For the technical requirements, the Virginia Uniform Statewide Building Code adopts national model codes and makes amendments as needed for Virginia.

- Building Officials and Code Administrators (BOCA) National Building Code, *most current edition*
- National Fire Protection Association 101 (NFPA-101), Life Safety Code, most current condition
- International Building Code, International Code Council (ICC), 2003
- International Existing Building Code, International Code Council (ICC), 2003

- Uniform Code for Building Conservation, International Conference of Building Officials (ICBO) 1997
- Building Construction and Safety Code (NFPA 5000) 2003 Edition
- National Fire Protection Association 70 (NFPA –70), National Electrical Code, 1996
- Standard for the Installation of Lightning Protection Systems (NFPA 780) 1997
- Code for the Protection of Cultural Resources (NFPA 909)
- Code for the Fire Protection of Historic Structures (NFPA 914)
- Uniform Federal Accessibility Standards (UFAS), 1988
- Americans with Disabilities Act of 1990, as Amended (ADA, ADAAG)
- National Historic Preservation Act of 1966, as Amended (NHPA)
- The Secretary of the Interiors Standards for the Treatment of Historic Properties (36 CFR 67)

END of SECTION.

Part 2. Treatment and Use

C. Alternative Treatment Recommendations

PART 2. TREATMENT & USE

Section C. Alternate Treatment Recommendations

NOTE: This section was first written prior to the Value Analysis Project Study conducted by the Denver Service Center. It does not represent alternatives discussed at that time. This section presents alternatives derived from the fabric analysis and is based on options presented by the historic structure.

A brief outline of alternatives with list of architectural fabric changes required for each. *Notes in italics are repeated from previous treatment section.*

PRESERVE AS IS – NPS OCCUPANCY (C. 1940 – 1999/ 2000):

- Upgrade condition through preservation maintenance – return to functional condition permanently repair all structural damage;
- replace missing and deteriorated exterior siding and shiplap sheathing to match current style;
- repair existing metal roof and roof finish;
- prep and paint all exterior features as per standing maintenance request (maintain current color scheme);
- repair all doors and windows to operational condition, maintain existing configuration;
- reinstall floor system and architectural trim in RMS102/ 103 interiors to previous 1999/ 2000 configurations;
- repair plaster walls and ceilings;
- repaint interior;
- leave bathroom in place but not operational;
- [upgrade electrical system].

RETURN TO PERIOD OF ACQUISITION (1940 - 1942):

- Remove bathroom, restore interior finishes in that area (requires historic finishes analysis);
- remove bathroom window and replace with replica of ¾ scale 4 panel door with 6 light transom window seen in period photos;
- maintain kitchen existing configuration;
- *upgrade condition through preservation maintenance – return to functional condition, permanently repair all structural damage;*
- *replace missing and deteriorated exterior siding and shiplap sheathing to match current style;*
- *repair existing metal roof and roof finish;*
- *prep and paint all exterior features as per standing maintenance request (maintain current color scheme)[exact year of first paint application is not determined];*
- *repair all doors and windows to operational condition, maintain current configuration;*
- *reinstall floor system and architectural trim in RMS 102/ 103 interiors to previous 1999/ 2000 configurations;*
- *repair plaster walls and ceilings;*
- *repaint interior (requires historic finishes analysis to determine correct finishes for this time period – may have later finishes from 1950s and 60s),*
- *[upgrade electrical system].*

RETURN to SONS of CONFEDERATE VETERANS OWNERSHIP – MUSEUM of the HENRY HOUSE (c. 1922 – 1940/42):

- Construct replica south elevation entrance deck (and Museum of the Henry House sign) based on period photographs;
- restore first floor middle room finishes to Museum Room appearance (requires historic finishes analysis);
- *remove bathroom, restore interior finishes in that area (requires historic finishes analysis);*
- *remove bathroom window and replace with replica of ¾ scale 4 panel door with 6 light transom window seen in period photos;*
- *maintain kitchen existing configuration, possibly remove ceiling light fixture, remove sink and cabinets, remove tile floor, remove plaster board covering of chimney, repair/ replace wood floorboards – determine correct size for this time period*
- *upgrade condition through preservation maintenance – return to functional condition, permanently repair all structural damage;*
- *replace missing and deteriorated exterior siding and shiplap sheathing to match current style[1];*
- *repair existing metal roof and roof finish;*
- *paint all exterior features as per standing maintenance request (maintain current color scheme or determine appropriate period appearance through historic finishes analysis) [building appears with thin whitewash coating and also painted finish during this time period – exact dates not determined],*
- *repair all doors and windows to operational condition, maintain current configuration except where noted; [shutters were non-extant at this time]*
- *reinstall floor system and architectural trim in RMS 102/ 103interiors to previous 1999/ 2000 configuration;*
- *repair plaster walls and ceilings;*
- *repaint interior (requires historic finishes analysis to determine correct finishes for this time period – may have later finishes from 1950s and 60s);*
- *[upgrade electrical system].*

[1] Mr. Fred Ebhardt recalls that old siding and old roof were replaced during Powell/ Ebhard occupancy in the 1930's to "what they are now".

RETURN TO LATE HENRY FAMILY OCCUPANCY (c. 1883 - 1896):

- Remove existing siding and roof materials, replace with period of construction (c. post 1885) replica siding (unpainted) and wood shingle roof patterned after historic shingle samples located in house attic;
- remove 2/2 window sashes and replace with replica 6/6 window sashes;
- install replica slatted wood shutters at all window openings (unpainted);
- remove south elevation door and install 6/6 window - repair framing, exterior siding and interior finish's to replicate period of construction materials;
- construct missing portion of south stair with repairs to existing handrail and balusters;
- construct replica west porch with benches as per period photographs;
- remove existing gutters and downspouts and replace with roof drainage system based on evidence in period photos (1896);
- remove paint from exterior historic trim and doors that will be preserved;

- *remove bathroom, restore interior finishes in that area (requires historic finishes analysis);*
- *remove bathroom window and replace with replica of ¾ scale 4 panel door with 6 light transom window seen in period photos;*
- *maintain kitchen in existing configuration, remove ceiling light fixture, remove sink and cabinets, remove tile floor, remove plaster board covering of chimney [installation of interior siding and ceiling date is not determined] repair/ replace wood floorboards – determine correct size for this time period;*
- *upgrade condition through preservation maintenance – return to functional condition, permanently repair all structural damage;*
- *repair all doors and windows to operational condition;*
- *reinstall floor system and architectural trim in RMS 102/ 103 interiors to previous 1999/ 2000 configuration;*
- *repair plaster walls and ceilings;*
- *restore interior finishes on all walls, ceilings, woodwork (requires historic finishes analysis to determine correct finishes);*
- *[upgrade electrical system].*

RETURN TO EARLY HENRY FAMILY OCCUPANCY (c. 1870 – 1883)

Return house to pre expansion appearance. This would include removing the north block of the structure and reestablish the north wall integral with the chimney as the north exterior wall of the structure.

Part 3. Record of Treatment

A. Completion Report

This section summarizes (a) the intent of the work, (b) the way in which the work was approached and accomplished, (c) the time required to do the work, and (d) the cost of the work. It also describes any information about the history of the structure based on physical evidence discovered during construction.

B. Technical Data

This portion of the report contains copies of field reports, material data sheets, field notes, correspondence, accounting spread sheets, and contract summaries.

C. As-Constructed Drawings

These sections to be completed after the recommended treatments have been performed. It is issued as a separate document. See NPS Directors Order #28, Cultural Resources Management Guidelines, Chapter 8 for further guidance.

Appendices

Appendix

Administrative

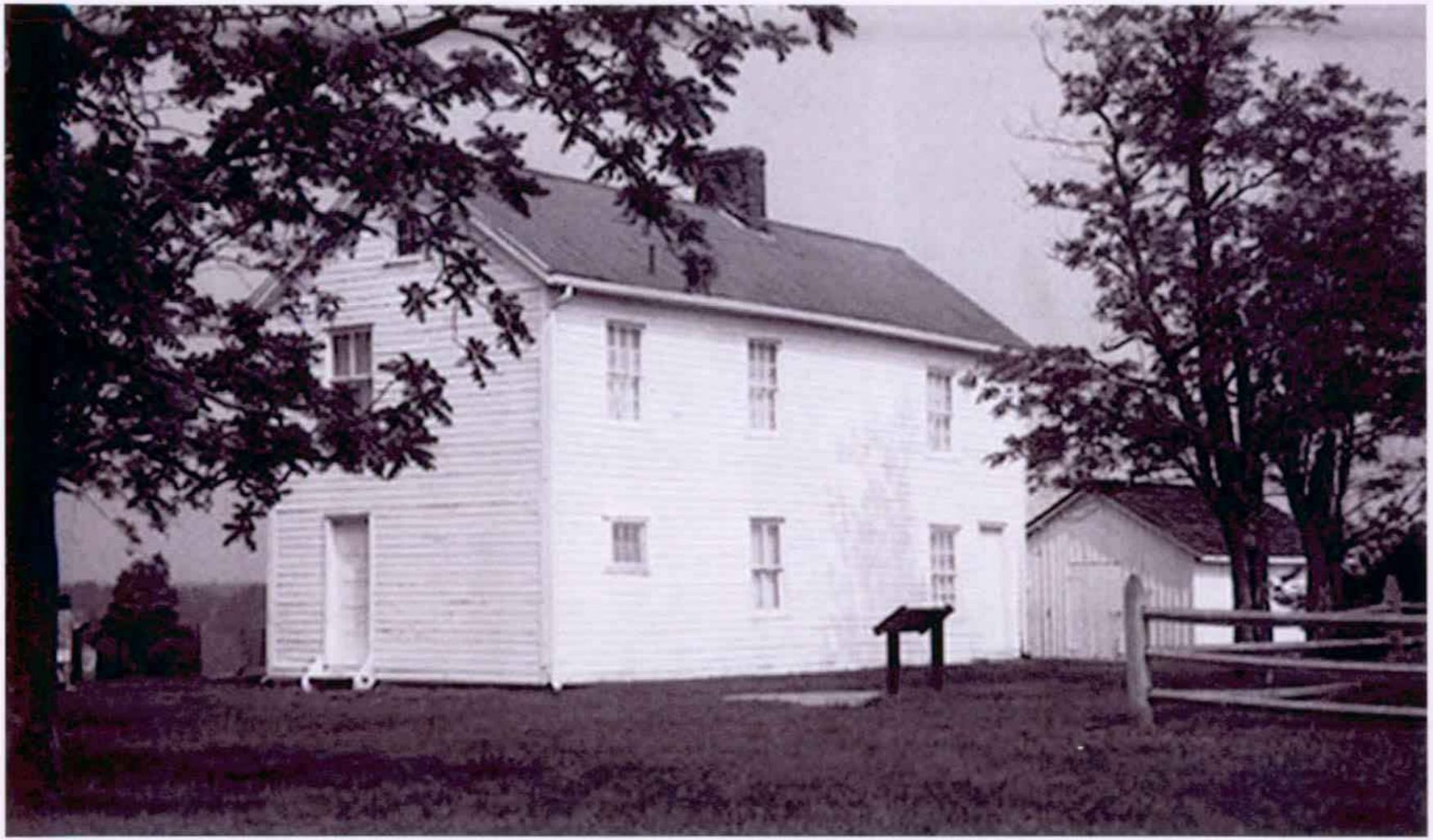


Figure 32. National Capital Region List of Classified Structures, 1991. View of Henry House, IDLCS 10782, South and East elevations showing corrugated metal roof. Shed visible in background. Rail fence to photo right encloses historic Bull Run Monument. Photo documents structure in 1991 prior to recent NPS preservation maintenance projects, 1992 - 2001. Courtesy of National Capital Region, Office of Chief Historical Architect.

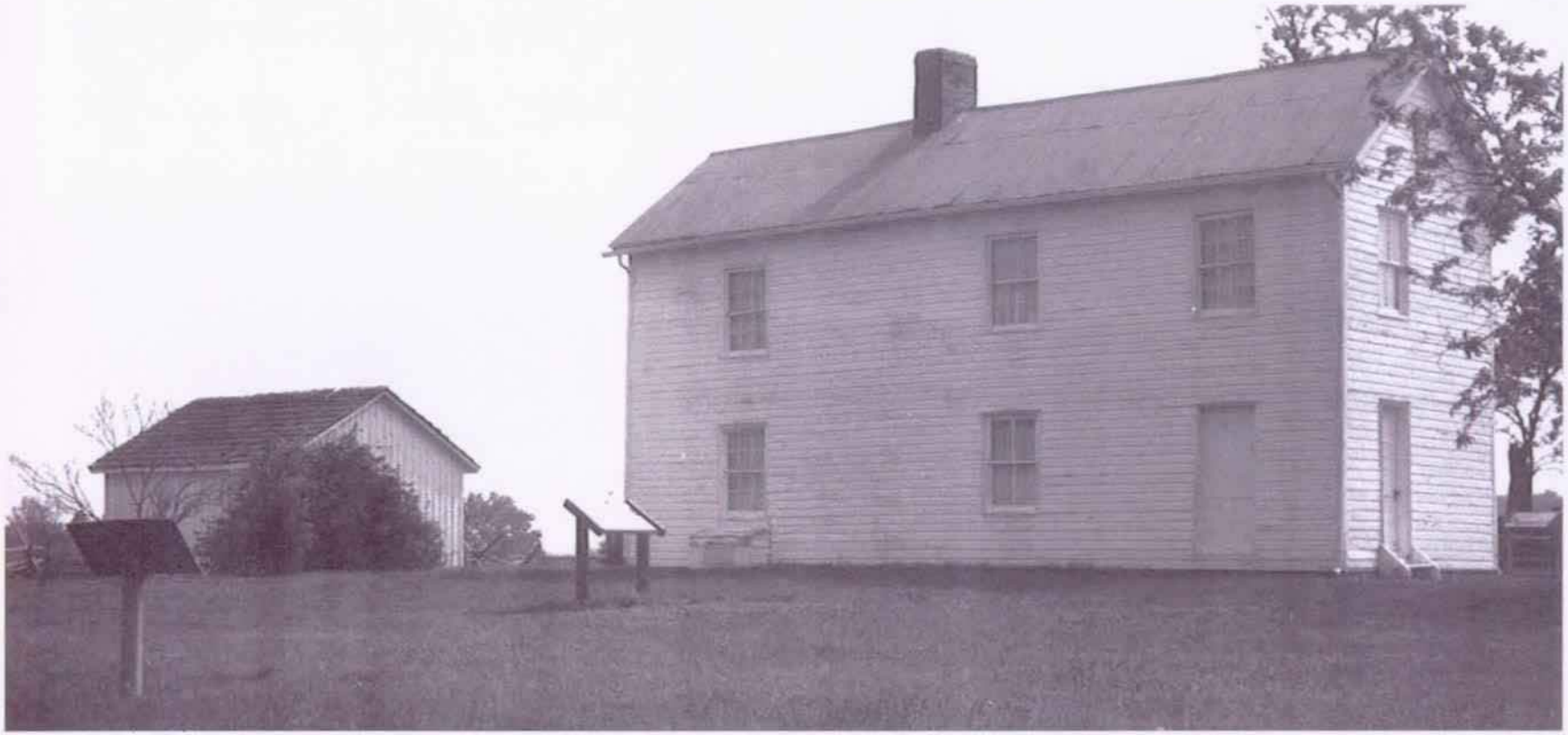


Figure 33. National Capital Region List of Classified Structures, 1991. View of Henry House, IDLCS 10782, West and North elevations showing corrugated metal roof. Shed visible in left background. Photo documents structure in 1991 prior to recent NPS preservation maintenance projects, 1992 – 2001. Courtesy of National Capital Region, Office of the Chief Historical Architect.

Henry House

Identification

Preferred Structure Name:	Henry House
Structure Number:	HENHSE
Park:	Manassas National Battlefield Park
Park District:	(Empty)
Historic District:	(Empty)
Structure State:	Virginia
Structure County:	Prince William
Region:	National Capital
Cluster:	(Empty)
LCS ID:	010782
Approval Level:	Waso

Other Structure Name(s)

Other Structure Name(s)
Spring Hill Farm (before 1st Battle of Bull Run)

UTM(s)

Zone	Easting	Northing	Source	Datum
18	280960	4299040	(Empty.)	(Empty.)

Historical Significance

National Register Status:	Entered - Documented
National Register Date:	10/15/66
National Historic Landmark?	No
National Historic Landmark Date:	(Empty)
Significance Level:	Contributing
Short Significance Description:	Approx.13'x30'simple 2-s white frame house w/ 2 entries, on stone

foundation, tin roof, brick chimney; 20'x15' frame vertical board shed w/ shake roof; family cemetery; current structure lived on by family til 1922 & bought by sons of confederacy

Long Significance Description: (Empty)

Construction Period: Historic

Chronology

Physical Event	Begin Year	End Year	Designer	Designer Occupation
Built (BU)	1812	(Empty.)	King,T.;Carter,B.(later bought for)	Other (O)
Altered (AL)	1820	(Empty.)	Inherited by sister, Judith	Other (O)
Altered (AL)	1861	(Empty.)	Destroyed in battle	Other (O)
Built (BU)	1870	(Empty.)	Current house built	Other (O)

Function and Use

Primary Historic Function: Single Family Dwelling

Primary Current Use: VACANT (NOT IN USE)

Structure Contains Museum Collections? Yes

Other Function(s) and Use(s)

Other Function(s) or Use(s)	Historic or Current
Exhibit (08CC)	Historic ()

Physical Description

Structure Type: Building

Volume: 2,000 - 20,000 cubic feet

Square Feet: (Empty)

Short Physical Description: Detailed documentation; "wayside clearance report", hernigle, draft 1990; Virginia historic landmarks commission survey, warren-findley, draft 1991

Long Physical Description: (Empty)

Materials

Structural Component(s)	Material(s)
Foundation (1)	Stone (40)
Walls (3)	03 (03)
Roof (4)	Shingle (22)
Other (5)	03 (03)
Framing (2)	03 (03)

Condition and Impacts

Structure Condition: Poor

Year Condition Assessed: 1998

Impact Level: Moderate

Primary Impact: Weather

Other Impact(s)

Other Impact Type
Neglect (NEG)
Animal/Pest Infestation (PIN)

Management - Legal

Legal Interest:	Fee Simple
Fee Simple Life:	0
Fee Simple Reservation Expiration Date:	(Empty)
Federal Government Owner (if owned by other Federal Agency):	(Empty)
Local Government Owner (if any):	(Empty)
Management Agreement:	None
Management Agreement Expiration Date:	(Empty)
Management Category:	Should Be Preserved and Maintained
Management Category Date:	5/15/91
Ultimate Structure Treatment:	Stabilization
Ultimate Treatment Document:	Resource Management Plan
Ultimate Treatment Document Date:	6/15/91
Was Ultimate Treatment Approved?	No
Was Ultimate Treatment Completed?	No
Ultimate Treatment Responsibility:	National Park Service
Ultimate Treatment Cost:	250000
Ultimate Treatment Cost Estimate Date:	6/1/91
Estimate Level:	Similar Facilities
Estimator:	Regional Office
Interim Treatment Responsibility:	National Park Service
Interim Treatment Cost:	30000
Interim Treatment Cost Estimate Date:	6/1/91
Routine Maintenance Responsibility:	National Park Service
Cyclic Maintenance Responsibility:	National Park Service
Short Management Text:	Part of historic scene-setting, but not of war period; stablization needesfor basement structural memebers; some wood deterioration, especially to window frames; modern aluminum gutters; needs paint badly; little maintenance done other than paint
Long Management Text:	(Empty)

Last Updated By: JAH

Last Updated: 6/8/98

Other Reference(s)

Source	Reference Number
National Register Information System (NR)	66000039
Cultural Resource Management Bibliography (CRBIB)	450632
Other (OTH)	ENVIRON. ASSESS. BIB#012240
Other (OTH)	ORAL HISTORY
Other (OTH)	ARCHEO SURVEY 12/82, MCGARRY

Graphic(s)

Graphic	Graphic Caption	Graphic Date/Year
	(Empty.)	(Empty.)

Henry House/Spring Hill

Structure Number: HENHSE

National Register (1981): Henry House

LCS (1991): Henry House
10782

National Register Update: Henry House
1870s Contributing
2-story wood frame dwelling, side gable roof, central entry

Spring Hill
1812 Contributing 44PW293

Photos: NR Nomination Photo #1

Site Survey:

3	Driveway to Henry Farmstead
5	Henry House
6	Henry House Shed

References:

Thomas McGarry, "Manassas Historic Sites Survey," Denver: Denver Service Center, National Park Service, U.S. Department of the Interior, 1982.

Mia Parsons, *Cultural Landscape Inventory: Southern Portion, Manassas National Battlefield Park*, Harpers Ferry, West Virginia, Harpers Ferry National Historical Park, 1996.

General Management Plan, 1983.

Resource Management Plan, Draft, April 1999.

Jacqueline L. Hernigle, "Manassas National Battlefield Park Wayside Exhibit Installation: Archeological Investigation and Clearance," National Park Service, National Capital Region Report, March 1991.

1812-Thomas King builds "Spring Hill"
1861-"Spring Hill" destroyed by Rickett's Battery, 10-lb. Parrotts to flush out Confederate snipers
-Judith Carter Henry killed
1870-present house built, used orig. fireplace
1921-incorporated in Manassas Battle Field Confederate Park, served as visitor center
1940-donated to US govt
1981-Investigated by McGarry for Historic Sites Survey
-no subsurface features of original house found
-garage, family cemetery, Bull Run Monument
1989-2 wayside exhibits installed
1995-structural investigations, preliminary repairs
1999-funding to begin addressing structural concerns

Composition/Type of Structure: wood building

Management Zone: Restoration

General Management Plan (1983): Henry House
Condition: Fair
Proposed Treatment: Stabilize/restore building exterior

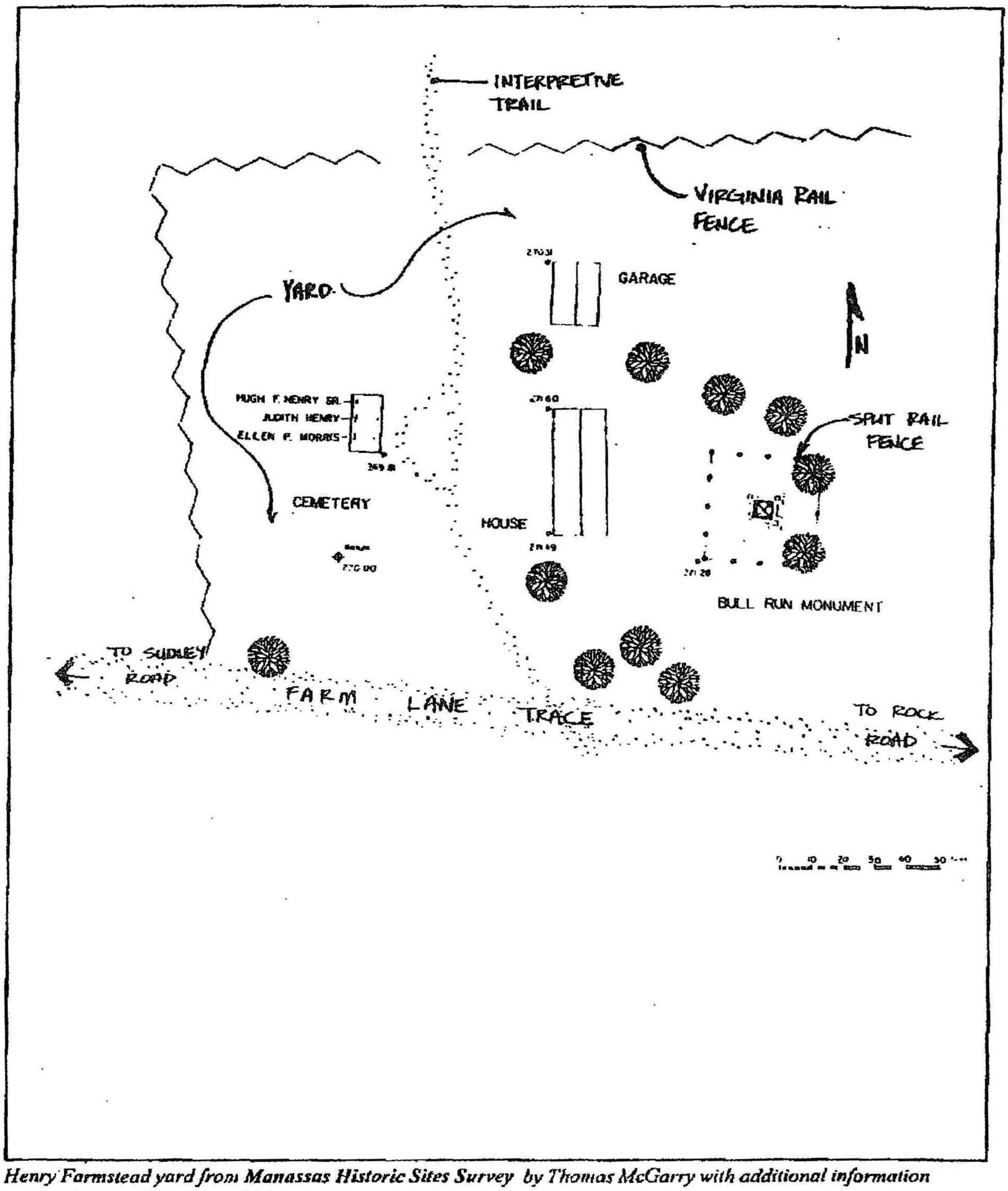
1983 Condition: Intact, replacement of original

Resource Management Plan:
-Stabilize and Rehabilitate Henry House
-Complete Historic Structures Documentation (see Sudley Post Office)

Other Structures:
-shed/garage (pre-1941)
-remnant fence lines

Stone Bridge Trail—Stop 9
Henry Hill Walking Tour—Stop 4

GPS: 2 September 1999



Henry Farmstead yard from Manassas Historic Sites Survey by Thomas McGarry with additional information provided by the CLI survey, 1996.

Project Statement

MANA-C-016.000
Priority: 2
Page Num: 0022

Last Update: 03/18/99
Initial Proposal: 1997

Title : STABILIZE AND REHABILITATE HENRY HOUSE

Funding Status: Funded: 50.00 Unfunded: 450.00

Servicewide Issues : C54 (EMERG STABL)
C56 (REHAB, ETC.)
Cultural Resource Type: STRC (Structure)
N-RMAP Program codes :
10-238 Package Number :

Problem Statement

The Henry House, a significant landmark on the battlefield, requires extensive repair and stabilization. Built by the Henry family in 1870 on the site of the war-ruined home, the existing structure now serves as a site marker and an aid to interpreting the First Battle of Manassas. Unoccupied for many years, the building now shows serious signs of deterioration resulting from infrequent preservation maintenance. In 1995, staff from the park and the Regional Office inspected the Henry House to identify structural problems, which included deterioration of the stone foundation and basement walls, termite infestation, and damaged door frames and windows. Although park staff made preliminary repairs to the basement walls and windows following the inspection, the structure still requires thorough stabilization.

Description of Recommended Project or Activity

1. Complete stabilization of the Henry House to address structural problems. The work should include repairing and repointing the stone foundation, completing repairs to basement walls, inspecting timbers for damage and replacing or repairing as necessary, and completing repairs to roof.

2. Rehabilitate the interior of the Henry House to allow for use for interpretive programs and exhibitry. Rehabilitation work will include the installation of electrical service, fire protection and security alarm systems, and an HVAC system to allow for visitor access.

3. Prepare baseline data on the Henry House for the Inventory and Condition Assessment Program (ICAP). Monitor the Henry House during all phases of the preservation project and establish a schedule for the annual inspection and periodic repair to the structure.

Project Statement

MANA-C-016.000
Priority: 2
Page Num: 0023

Last Update: 03/18/99
Initial Proposal: 1997

BUDGET AND FTEs:

FUNDED

	Source	Activity	Fund Type	Budget ($1000s)	FTEs
1999:	RG-CR-MTN	MIT	Cyclic	35.00	0.00
	PKBASE-OT	MIT	Recurring	15.00	0.40
			Subtotal:	50.00	0.40
			Total:	50.00	0.40

UNFUNDED

	Activity	Fund Type	Budget ($1000s)	FTEs
Year 1:	MIT	One-time	450.00	0.00
		Total:	450.00	0.00

(Optional) Alternative Actions/Solutions and Impacts
(No information provided)

Compliance codes : NHPA ((106) NAT. HIST. PRES.)

Explanation:

Appendix

Bibliography

BIBLIOGRAPHY

National Park Service reports are listed in the Administrative & Cultural Resource Data section of this report at Related National Park Service Studies and are not repeated in the Bibliography.

Adams, Eric. "Assessing Historic Structures – Without Damage", *architecture magazine*: (BPI Communications, Inc., New York, November 1997, pp.142 – 149.

America's Wooden Age: Aspects of its Early Technology. Hindle, Brooke, Editor. (Sleepy Hollow Press, Tarrytown, New York, First Printing 1975, new contents copyright & reprinted 1985 by Sleepy Hollow Restorations, Inc.).

Audels Masons and Builders Guide, Volume 4, A Practical Illustrated Trade Assistant on Modern Construction for Bricklayers – Stone Masons, Cement Workers – Plasters and Tile Setters, Frank D. Graham – Chief and Thomas J. Emery – Associate (Theo. Audel & Co. – Publishers, New York, 1924.

Audels Carpenters and Builders Guide, Volumes 3 and 4, A Practical Illustrated Trade assistant on Modern Construction for Carpenters-Joiners, Builders – Mechanics and All Wood Workers, Frank D. Graham – Chief and Thomas J. Emery – Associate (Theo. Audel & Co. – Publishers, New York, 1923.

Battles and Leaders of the Civil War, Vol. 2, Copy 2. New York, Thomas Yanoff Inc, 1956.

Buchanan, Paul E. "The Eighteenth - Century Frame Houses of Tidewater Virginia", in *Building Early America*, ed. Charles E. Peterson, FAIA (Chilton Book Co., Radnor, PA 1976), pp.54-73.

Bucher, Ward, A.I.A. (Ed.), Madrid, Christine (Illustrations Ed.). *Dictionary of Building Preservation*. Preservation Press, John Wiley & Sons, Inc., New York, 1996.

Carpentry and Contracting – A Practical Reference Work...,Volume 1, Carpentry, The Steel Square, Stair-Building, Plastering, Painting. (American Technical Society, Chicago, 1920).

Ching, Francis D.K. *A Visual Dictionary of Architecture*. New York, Van Nostrand Reinhold, 1995.

Christian, Rudy R. "Old Ways of Measuring". Christian and Son, Burbank, OH. Unpublished manuscript available from Christian & Son @ rudad@bright.net, or 330-624-7282, or 15022 Gearhart Road, Burbank, OH 44214.

CRM (Cultural Resource Management). *America's Civil War*, Vol. 25, No. 4, 2002. National Park Service, U.S. Department of the Interior, Washington, D.C.

Davis, William C. *The First Battle of Manassas, National Parks Civil War Series*. Published by Eastern National, 1995.

Deitz, Albert G.H. *Dwelling House Construction*. Cambridge, MA: The MIT Press, 1946; seventh printing, 1987.

Elliot, Cecil. *Technics and Architecture, The Development of Materials and Systems for Buildings*. Cambridge, MA, The MIT Press, 1992.

Ellis, George. *Modern Practical Joinery, A Treatise on The Practice of Joiner's Work by Hand and Machine*. Originally published by Scribner's, New York, 1908. Reprint by Linden Publishing Co., Fresno, CA, 1987.

Ellis, George. *Modern Practical Stairbuilding & Handrailing*. Linden Publishing Co., Fresno, CA. reproduction of 1932 first edition, 1990.

Glassie, Henry. *Pattern in the Material Folk Culture of the Eastern United States.* Philadelphia, University of Pennsylvania Press, 1968.

Glassie, Henry. "The Variation of Concepts within Tradition: Barn Building in Otsego County, New York," in *Man and Cultural Heritage:*

Papers in Honor of Fred B. Kniffen, ed. H. J. Walker and W. G. Haag, Geoscience and Man (Louisiana State University School of Geoscience, Baton Rouge, 1974), 5: 177-235.
Glassie,Henry. *Folk Housing in Middle Virginia, A Structural Analysis of Historic Artifacts*. Knoxville: The University of Tennessee Press, 1975.

Glassie, Henry. *Vernacular Architecture*. Bloomington, IN: Indiana University Press, 2000.

Goodman, W.L. *History of Woodworking Tools*. (London, G. Bell & Sons, 1964).

Grimshaw, Robert. *Grimshaw on Saws*. Philadelphia, 1880.

Hanson, Joseph Mills. *A Report on Proposed Boundaries and Areas for a Manassas National Battlefield Park, Virginia*. (U.S. Department of the Interior, National Park Service, Petersburg, VA, November 10, 1937, 47pgs.) On file at Harpers Ferry Center Library, CRBIB # 24, Manassas National Battlefield Park.

Harpers Ferry Photo Collection – Manassas Files. Civil War 1861 – 1865 File; Bull Run 2nd Battle File; Bull Run 1st Battle File and Miscellaneous Collection, Willows Springs Conservation Reference Services Center, Charles Town.

Harpers Weekly Periodical Index, Harpers Ferry Willows Springs Center, Charles Town.

Heikkenen, H. J. and M.R. Edwards, "The Key-year Dendrochronology Technique and Its Application in dating Historic Structures in Maryland", in *The APT Bulletin*, The Association for Preservation Technology, Vol. XV No. 3, 1983, pp.3 – 25.

Hindle, Brooke (Ed.). *America's Wooden Age, Aspects of It's Early Technology*. Sleepy Hollow Press, Tarrytown, NY, 1976.

Jandl, H. Ward, editor. *The Technology of Historic American Buildings: Studies of the Materials, Craft Processes, and the*

Mechanization of Building Construction. Washington, D.C., Foundation for Preservation Technology, 1983.

Kniffen, Fred B. "Folk Housing: Key to Diffusion", taken from *Annals of the Association of American Geographers* 55:4 (1965): 459-77. Reprinted by Upton & Vlach, 1986.

Index to Virginia Estates 1800 – 1855. Bull Run Regional Library, Manassas.

Kimball, Fiske. *Domestic Architecture of the American Colonies and of the Early Republic*. Charles Scribner's Sons, 1922; republished by Dover Publications, Inc., New York, 1966.

Lanier, Gabrielle M. and Herman, Bernard L. *Everyday Architecture of the Mid-Atlantic, Looking at Buildings and Landscapes*. Baltimore, The John Hopkins University Press, 1997.

Library of Congress Website. American Memories Collection, Selected Civil War Photographs, http://lcweb2.loc.gov/pp/mdbquery.html

Library of Viriginia. Special Collections and On-line Catalog, Richmond.

Manassas Army Maneuvers, September 1904 – A Souvenir Guide.

Manassas Gazette 1869 - 1895, Microfilm, Bull Run Regional Library, Manassas, VA.

Manassas Gazette-Journal Messenger, Microfilm, Bull Run Regional Library, Manassas, VA.

Manassas Journal, Microfilm, Bull Run Regional Library, Manassas, VA.

McAlester, Virginia & Lee. *A Field Guide to American Houses*. New York, Alfred A. Knopf, 1998.

Mercer, Henry Chapman. *Ancient Carpenters Tools*. Originally published: Doylestown, PA, The Bucks County Historical Association, 1929. (Mineola, NY, Dover Publications, Inc., 2000 reproduced from 3rd edition, 1960).

Mutual Assurance Society of Virginia Insurance Records. Library of Virginia, Microfilm and Mary Washington website MAS Records 1796 – 1865 (http://filemaker.mwc.edu:591-MAS.FP5).

Nelson, Lee H. "Notes on Historic Flooring, An 18th Century Method for Making High Quality Wooden Flooring from Boards of Irregular Thickness", *National Park Service, CRM, 1990 No. 4*, pgs. 27-8.

Noble, Allen G. *Wood, Brick and Stone: The North American Settlement Landscape*,Vol. 1: *Houses*, Vol. 2: *Barns and Farm Structures.* Amherst, Massachusetts, University of Massachusetts Press, 1984.

Non-Destructive Investigation of Standing Structures, Technical Advice Note No. 23, by GB Geotechnics, Ltd. (Historic Scotland, Technical Conservation, Research and Education Division, Edinburgh, 2001).

Park Historian Files, Henry House, Henry Hill Visitor's Center, Manassas National Battlefield Park, Manassas, VA.

Peterson, Charles E, FAIA, Editor. *Building Early America – Contributions toward the History of a Great Industry*. The Carpenter's Company of the City and County of Philadelphia, Chilton Book Company, Radnor, PA 1976.

Phillips, Carol. Death Notices, Obituaries and Memoriam from Prince William County, Virginia – Manassas Gazette and Manassas Journal 1885 – 1910.

Prince William County Chancery Court Dockets, 1833 – 1861 and 1865 – 1873, Prince William County Courthouse, Archives Room, Manassas.

Prince William County Clerk of Courts. Bond Book 7 1753 – 1786, 1815 – 1857, 1852 – 1873. Microfilm Reel #34, Bull Run Regional Library, Manassas.

Prince William County Deed Indexes, Prince William County Courthouse, Archives Room, Manassas.

Prince William County Land Records. District I, 1839 – 1915. Prince William County Courthouse, Bull Run Regional Library and Library of Virginia.

Prince William County Loose Probate Files, Prince William County Courthouse, Archives Room, Manassas.

Prince William County Minute Books, 1853 – 1856 and 1872 – 1877, Prince William County Courthouse, Archives Room, Manassas.

Prince William County Will Index, Prince William County Courthouse, Archives Room, Manassas.

Ramsey, Charles G., Harold R. Sleeper. *Traditional Details for Building Restoration, Renovation and Rehabilitation*. New York, John Wiley & Sons, Inc., 1990

Reeves, Matthew B. *Views of a Changing Landscape: An Archeological and Historical Investigation of Sudley Post Office (44PW294)*. Occasional Report No. 14, Regional Archeology Program, National Capital Region, National Park Service, 1998.

Rempel, John I. *Building With Wood and other aspects of nineteenth-century building in central Canada*. Toronto, University of Toronto Press, 1980.

Rifkind, Carole. *A Field Guide to American Architecture*. New York, A Plume Book, New American Library, 1980.

Salmon, John S. *Researching Your Historic Virginia Property*. Virginia Dept. of Historic Resources, 2000

Scott, John C. *The Penguin Dictionary of Building*. New York: Penguin Books, 1981.

Sloane, Eric. *A Reverence for Wood*. Ballantine Books, New York, 1965.

---. *American Yesterday*. Promontory Press, New York, 1985. Originally published by Harper & Row, Publishers, New York, 1956.

Sprague, Dr. Paul E. "Chicago Balloon Frame – The Evolution During the 19th Century of Geo. W. Snow's System for Erecting Light Frame Buildings from Dimension Lumber and Machine-made Nails", in *The Technology of Historic American Buildings: Studies of Materials, Craft Processes, and the Mechanization of Building Construction*, ed. H. Ward Jandl, (Foundation for Preservation Technology, Washington, D.C., 1983), pp. 35 – 59.

Timber Framers Guild, *Timber Frame Joinery & Design Workbook, Revision 3.01*, February 1997. Timber Framers Guild of North America, Becket, MA.

Turner, Ronald Ray. *Prince William County Annotated Census Records – 1840, 1850, 1860, 1870, 1880, 1900, 1910 and 1920.*

Turner, Ronald Ray. *Prince William County Burial Index 1800 – 1993.*

Turner, Ronald Ray. *Prince William County Death Records 1853 – 1896*, 1993.

Turner, R.R. *Prince William County Marriages 1854 – 1900.*

Turner, Ronald Ray. *Prince William County Obituaries 1900 – 1930.*

Turner, R.R. *Prince William County Obituary Index 1896 – 1978.*

Turner, Ronald Ray. *Prince William County Virginia Newspaper Transcripts, 1876 - 1899*, 2001.

Turner, Ronald Ray. *Prince William County Virginia Newspaper Transcripts, 1865 – 1875*, 2001.

Turner, Ronald Ray. *Prince William County Virginia Newspaper Transcripts, 1784 – 1860*, 2001.

Turner, Ronald Ray. *Prince William County Virginia Public Sales & Auctions 1905 – 1945*, 2001.

Watt, David & Peter Swallow. *Surveying Historic Buildings.* (Donhead Publishing Company, Dorset, Great Britain, 1996).

Wybczynski, Witold. *One Good Turn – A Natural History of the Screwdriver and the Screw.* (Scribners, New York, 2000).

Upton, Dell. "Vernacular Domestic Architecture in Eighteenth – Century Virginia". *Common Places, Readings in American Vernacular Architecture.* (Athens, GA: The University of Georgia Press, 1986).

Upton, Dell and Vlach, John Michael. *Common Places, Readings in American Vernacular Architecture.* Athens, GA: The University of Georgia Press, 1986.

Zenzen, Joan, M. *Battling for Manassas, The Fifty-Year Struggle at Manassas National Battlefield Park.* Penn State Press, University Park, PA, 1998.

End of Section.

PREFACE NOTE: This information was collected by the HPTC team of Mike Seibert and Sara Polzin in the initial phases of the project in February and March 2001. While much of this information has been incorporated into the main body of the HSR it has been kept together as the Resources Documentation Report they created.

RESOURCES DOCUMENTATION REPORT
SUMMARY OF RESEARCH PERFORMED BY HPTC

The following is an annotated listing of the collections and/or resources gathered for the preliminary research of the history for the Henry House Historic Structure Report.

MANASSAS NATIONAL BATTLEFIELD PARK – Park library document and photograph files; archeological collection gathered during recent work activity in the Henry House. Point of contact: Jim Burgess.

Documents / photographs / information gathered:

Henry family and acquaintances correspondence:

- Isaac Henry to Robert Hamilton, October 25, 1826,
  Subject: tax liabilities, family sick

- H.F. Henry Sr. to Cousin Ada Corson, June 10, 1882
  Subject: Family genealogy; Rosefield & Pittsylvania burnt during the war; Rosefield in hands of strangers; Edwin Carter & sisters living in log cabin near site of original dwelling; family graveyard not enclosed.

- H.F. Henry Sr. to Cousin Mary Carter, May 8, 1883
  Subject: Cost of new house at Pittsylvania, dimensions of Spring Hill (extant Henry House)

- Edwin L. Carter to ??, April 15, 1894
  Subject: H.F. Henry Sr. failing health & fees collected from battlefield tourists; raising turkeys, hogs; mentions Arthur Henry and Hugh Henry Jr.

- Edwin L. Carter to ??, December 7, 1898
  Subject: Hugh Henry Sr. wills house and land to Arthur, Hugh Jr., & Ida Henry.

- Arthur L. Henry to Cousin Edward, November 6, 1923
  Subject: Sale of Henry property [to the Sons of the Confederacy]; Pittsylvania: taxes, tenant, locations of former barn, servants quarters.

- Arthur L. Henry to Cousin Edward, October 12, 1926
  Subject: family matters; only receiving half payment for the "battlefield"; starting a school in Harrisonburg, VA.

- Arthur L. Henry to Edward, January 8, 1934
  Subject: family [Carter] genealogy; Spring Hill is now called Henry House it belonged to Aunt Betsy [Elizabeth Carter?].

- Arthur L. Henry to Edward, June 15, 1934
  Subject: health; false teeth; "Henry property" in decline.

Photographs and Illustrations

- Fremeaux illustration of damaged Henry House titled: *Mrs. Henry's House, the centre of the Battle of Manassas. July 21, 1861.* No date.

- Illustration showing damaged Henry House with original Bartow monument titled *"Scene from the Battle field of 21st July House in which Mrs. Henry was killed."* No artist, no date.

- Photograph showing Henry House ruins with lone soldier leaning against standing frame. No date (post July 21, 1861 probably after 2nd Manassas)

- Photograph showing Henry House ruins with several soldiers standing around the ruins. No date (post July 21, 1861 probably after 2nd Manassas)

- 2 Photographs showing dedication of Bartow Monument June 10, 1865. No house is visible it is assumed that it had not been rebuilt yet.

- Photograph showing the west elevation of the Henry House c. 1884?, titled: *"Henry House. Bull Run"*. This image shows the house at its present size with a west facing, gable roofed porch, wood shingle roof, 6/6 windows with louvered shutters and without later modifications – south elevation entry, "german" lap siding, metal roof. There is a two story shed to the north of the house. Building joint between the two construction periods of the house is clearly visible. Flat weatherboard siding appears to be unpainted or extremely weathered.

- Photograph showing the west elevation of the Henry House only, c. 1884, no title. This image shows the house at its present size with a west facing, gable roofed porch, wood shingle roof, 6/6 windows with louvered shutters and without later modifications – south elevation entry, "german" lap siding, metal roof. Building joint between the two construction periods of the house is clearly visible. Flat weatherboard siding appears to be unpainted or extremely weathered.

- Postcard showing Henry House being used by the Sons of Confederate Veterans as a museum. West elevation gable roofed porch has been removed and an entry door and porch has been added to the south elevation, some windows have been changed from 6/6 to 2/2. Building joint still visible, flat weatherboard siding appears to be unpainted or extremely weathered. Caption refers to the "bullet riddled tree on the Bull Run Battlefield, Manassas, VA."

- Photograph showing the south and west elevations of the Henry House after NPS acquisition? c. 1940. Building joint is no longer visible (house was probably re-sided prior to this photo), a corrugated metal roof has been installed, the house appears to be freshly painted. The museum sign is no longer on the house. All of the windows appear to be 2/2. The "bullet riddled tree" is laying on the ground to the south and west of the house. The Bartow monument is visible on the background.

- Photograph showing the south and east elevations of the Henry House after NPS acquisition? c. 1940?. Building joint is no longer visible, the corrugated metal roof appears to have been painted silver, the house paint is fading. The museum sign is no longer on the house. On the east elevation there is a mix of 6/6 and 2/2 windows. The "bullet riddled tree" is not visible. The one story, board and batten shed is clearly visible to the north of the house. The Bartow monument is visible on the background. There are two interpretive signs visible.

- Photograph showing the south and east elevations of the Henry House after NPS acquisition, Feb. 1949. The corrugated metal roof appears to have been painted a dark color, the siding appears to have been freshly painted. On the east elevation there is a mix of 6/6 and 2/2 windows. The "bullet riddled tree" is not visible. The one story, board and batten shed is clearly visible to the north of the house. The Bartow monument is visible on the background. There are two interpretive signs visible. A horizontal board fence has been installed south of the house.

- Photograph showing the south and east elevations of the Henry House after NPS acquisition, Feb. 1949. Similar to photograph described above (probably taken the same day). View of the east elevation mainly. There appears to be storm windows on some of the windows. Bartow monument clearly visible in the foreground.

- Photograph of the Henry House interpretive sign that describes the 1st battle events associated with the house. Portion of the south elevation visible showing "german" lap siding and other details.

- Photograph of the Henry House and farm buildings post NPS? Distant view, shows relationship of the house to its dependencies.

Manuscripts / Memorandums / NPS Correspondence:

- Henry, Elenea H. (Widow of Arthur Lee Henry), "Some Events Connected with the Life of Judith Carter Henry and the Circumstances Surrounding Her Death in the 1st Battle of Bull Run, July 21, 1861", no date.

  In this manuscript she discusses family history (before, during, and after the battles) and the events the first battle of Bull (July 21, 1861) where she recounts Judith Henry's death.

- Hanson, Joseph Mills, Assistant Historical Technician, Petersburg National Military Park, "Memorandum for Resident Landscape Architect Benson", , March 13, 1940.

  This memorandum recounts known information about the original Henry House.

- Sarles, Frank B., Jr., Historian, Manassas National Battlefield Park, letter to Mr. Burke Davis, August 15, 1953.

  Memorandum about the events associated with Judith Henry's death and the reconstruction of the house.

Archeological Collection / Reports

- Archeological midden revealed during recent work at the Henry House.

  Reviewed items collected including 18th century artifacts identified by regional archeologist. Sorted out nails collected into categories based on size and manufacture method (machine made (cut and wire) and hand made). Majority of nails appeared to date from the late 18th or early 19th century.

THE MANASSAS MUSEUM - photograph / postcard collection, point of contact Scott Harris / Scott Brown (Scott Harris is leaving 2/23)

Reviewed their battlefield photograph and postcard collection and selected a hand full of images to round out the photographs collected from Manassas NBP. Scott Harris indicated their document file duplicates the Park's.

BULL RUN REGIONAL LIBRARY "RELIC" ROOM, point of contact Don Wilson.

Reviewed 1870, 1880 census and agricultural census documents and the 1860 census. Made copies of these items and determined / confirmed who was living with the Henry's during this time.

PRINCE WILLIAM COUNTY COURTHOUSE, land records office (3rd floor)

- Reviewed the 1822 deed of the property being willed by Elizabeth Carter to Judith and Isaac Henry. Only reference to any structures in either deed was in the 1822 deed which stated the conveyance of "...tenements, hereditaments, and appurtenances." Tenements more than likely refers to the dwelling house and other structures such as sheds, barn, or other outbuildings. (have copy liber 9 folio 118)

- Reviewed the 1898 deed where Hugh F. Henry Sr. leaves the property to his heirs. (have copy liber 47 folio 37)

- Reviewed several of the deeds from 1920's documenting the sale of the Henry property by the heirs to the Sons of the Confederacy. (have 1923 deed Arthur L. to Manassas Battlefield Confederate Park (liber 78 folio 414)

- Review land tax records for the years 1865, 1870, 1875, 1880-1887 made copies of 1865, 1870 (both assessments), 1875, 1880.

Sons of Confederate Veterans

- They have a bi-monthly magazine called *Confederate Veteran*
- Left a message with the office manager 3/1/01

FURTHER RESEARCH IDEAS:

- Will books – Isaac Henry's and Hugh Henry's will, look for descriptions of the property.

- Confirm construction date by tracking down the notation in the Sons of Confederate Veterans guest book from 1920.

- Obtain copies of all associated deeds, applicable census records etc.

- Research newspaper accounts, Harper's Weekly etc. for info about the first house.

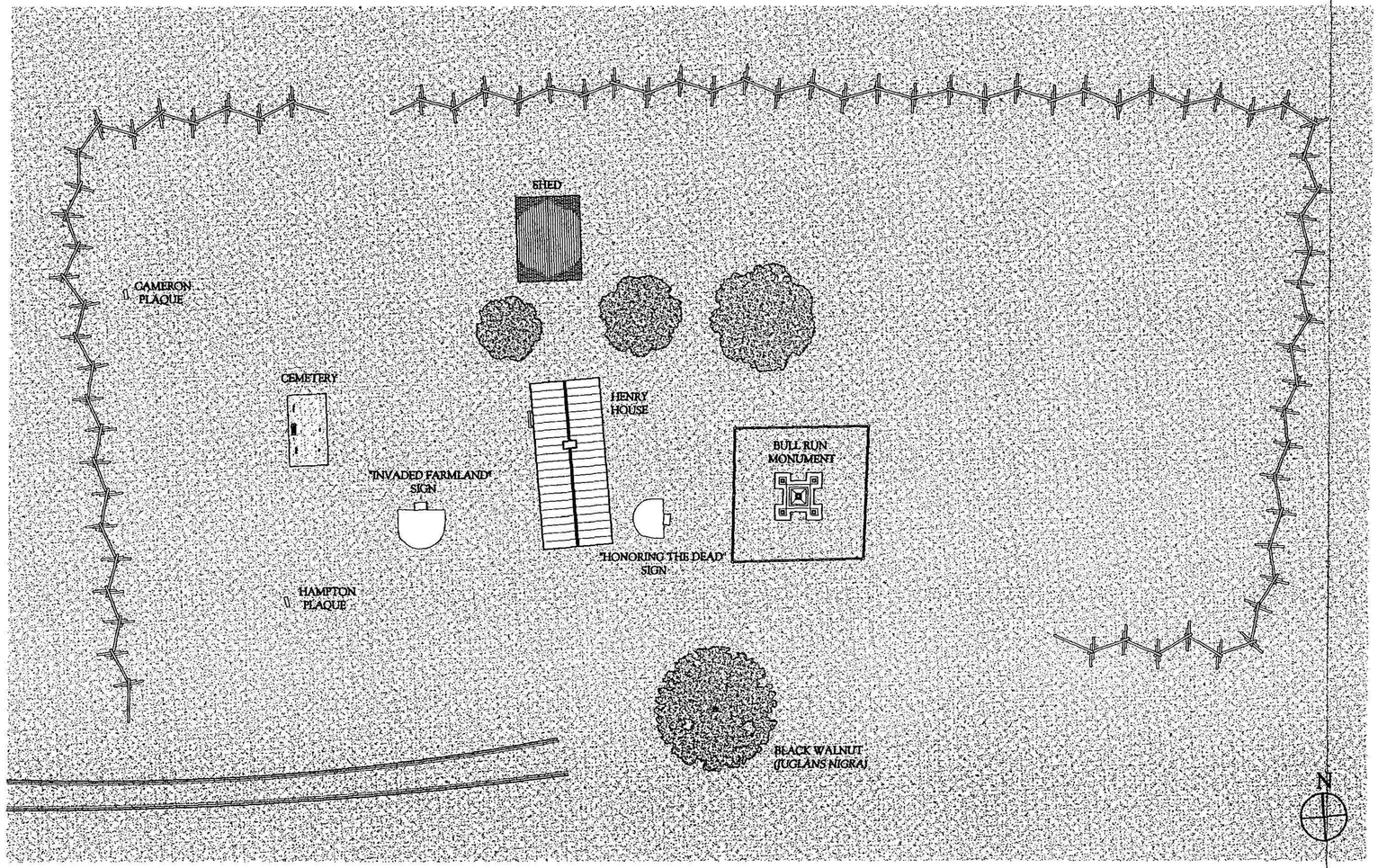
- Research Park Maintenance files for NPS treatments to the house.

END of SECTION.

Appendix

Documentation

HENRY HOUSE



THE FIRST HOUSE ON THE HENRY HILL SITE WAS BUILT BY THOMAS KING IN 1812. IN 1822 THE PROPERTY WAS ACQUIRED BY THE HENRY FAMILY. ON 21 JULY 1861 THE FIRST BATTLE OF BULL RUN WAS FOUGHT IN THE IMMEDIATE VICINITY OF THE HOUSE. FAMILY MATRIARCH JUDITH HENRY WAS KILLED, THE ONLY CIVILIAN CASUALTY OF THE BATTLE. ON 13 JUNE 1865 THE NATION'S FIRST CIVIL WAR MONUMENT WAS DEDICATED BY UNION VETERANS ADJACENT TO THE HOUSE SITE.

THE PRESENT HOUSE, A TWO-STORY, GABLE-END, VERNACULAR DWELLING, WAS CONSTRUCTED IN 1870 PARTIALLY OVERLAPPING THE ORIGINAL HOUSE SITE. BUILT OF WOOD FRAME CONSTRUCTION ON A FIELDSTONE FOUNDATION, THE HENRY HOUSE ORIGINALLY CONSISTED OF TWO ROOMS DOWNSTAIRS AND TWO ROOMS UPSTAIRS, WITH AN EXTERNAL CHIMNEY CENTERED ON THE NORTH GABLE. BY 1883 AN ADDITION HAD BEEN CONSTRUCTED AT THE NORTH END OF THE HOUSE, ADDING ANOTHER ROOM TO EACH FLOOR, AND INCLUDING A CELLAR. BY THE 1890s THE HENRY FAMILY WAS CHARGING VISITORS FOR TOURS OF THE BATTLEFIELD. THE HOUSE WAS BOUGHT BY THE SONS OF CONFEDERATE VETERANS IN 1922 FOR USE AS A VISITORS CENTER. IN 1940 THE HENRY HOUSE WAS DONATED TO THE NATIONAL PARK SERVICE, AS PART OF MANASSAS NATIONAL BATTLEFIELD PARK.

DOCUMENTATION OF THE HENRY HOUSE WAS UNDERTAKEN BY THE HISTORIC AMERICAN BUILDINGS SURVEY / HISTORIC AMERICAN ENGINEERING RECORD (HABS/HAER) DIVISION OF THE NATIONAL PARK SERVICE (NPS), E. BLAINE CLIVER, CHIEF. THE PROJECT WAS SPONSORED BY THE NATIONAL CAPITAL REGION (NCR), NPS, TERRY CARLSTROM, DIRECTOR; BY THE HISTORIC PRESERVATION TRAINING CENTER (HPTC), NPS, TOM McGRATH, SUPERINTENDENT; AND BY MANASSAS NATIONAL BATTLEFIELD PARK, NPS, ROBERT O. SUTTON, SUPERINTENDENT. PROJECT PLANNING WAS COORDINATED BY PAUL DOLINSKY, CHIEF, HABS; BY REBECCA STEVENS, REGIONAL HISTORICAL ARCHITECT, NCR; AND BY THOMAS VITANZA, SENIOR HISTORICAL ARCHITECT, HPTC. THE FIELD RECORDING WAS CONDUCTED AND THE MEASURED DRAWINGS WERE PRODUCED BY HABS ARCHITECTS MARK SCHARA, NAOMI HERNANDEZ, AND EDWARD L. BYRDY, JR.

SITE PLAN

1/16"=1'-0" 1:192

0 5 10 20 30 40 50
FEET 1/16"=1'-0"

0 5 10 15
METERS 1:192

DRAWN BY: EDWARD L BYRDY JR \ MARK SCHARA

HENRY HOUSE PROJECT, 2001
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

SUDLEY ROAD MANASSAS VICINITY MANASSAS NATIONAL BATTLEFIELD PARK PRINCE WILLIAM COUNTY VIRGINIA

HISTORIC AMERICAN BUILDINGS SURVEY
SHEET 1 OF 4 SHEETS

VA-1363

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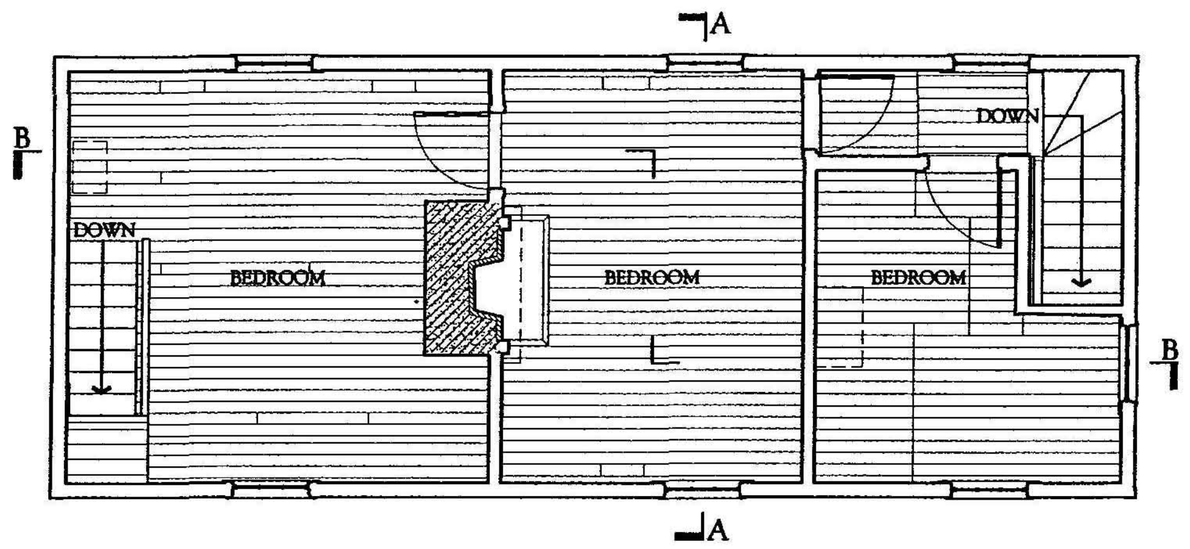

SECOND FLOOR PLAN

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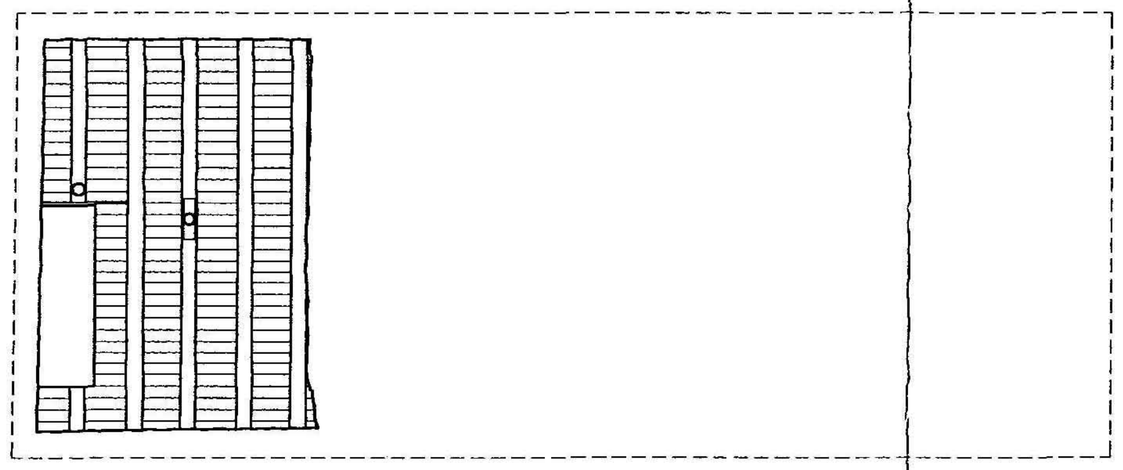

CELLAR REFLECTED CEILING PLAN

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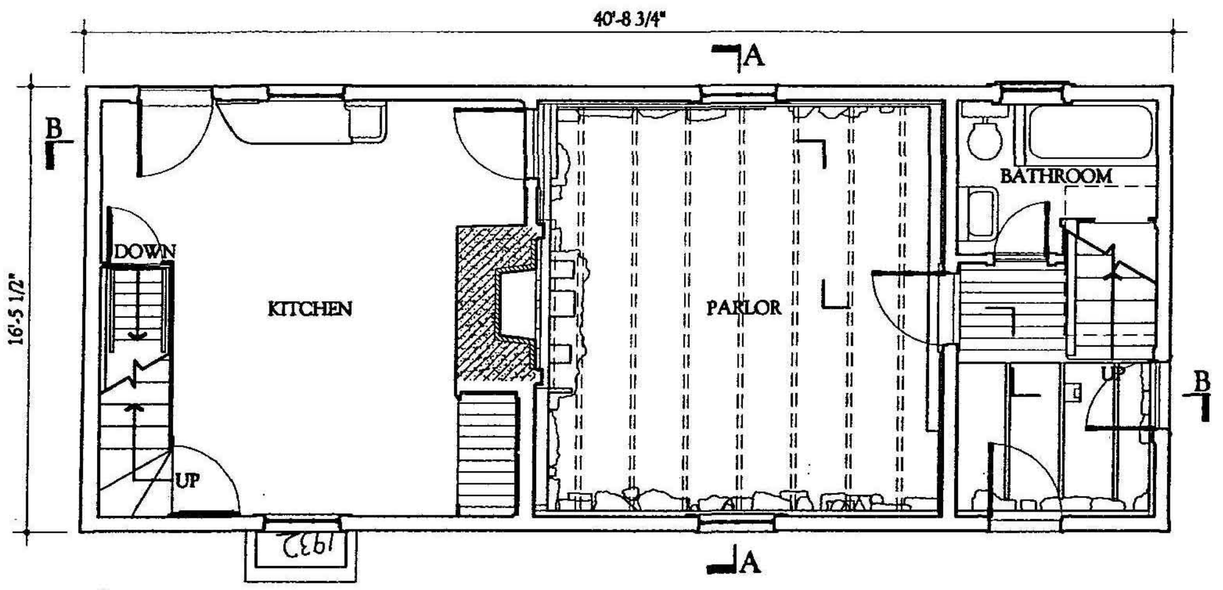

FIRST FLOOR PLAN

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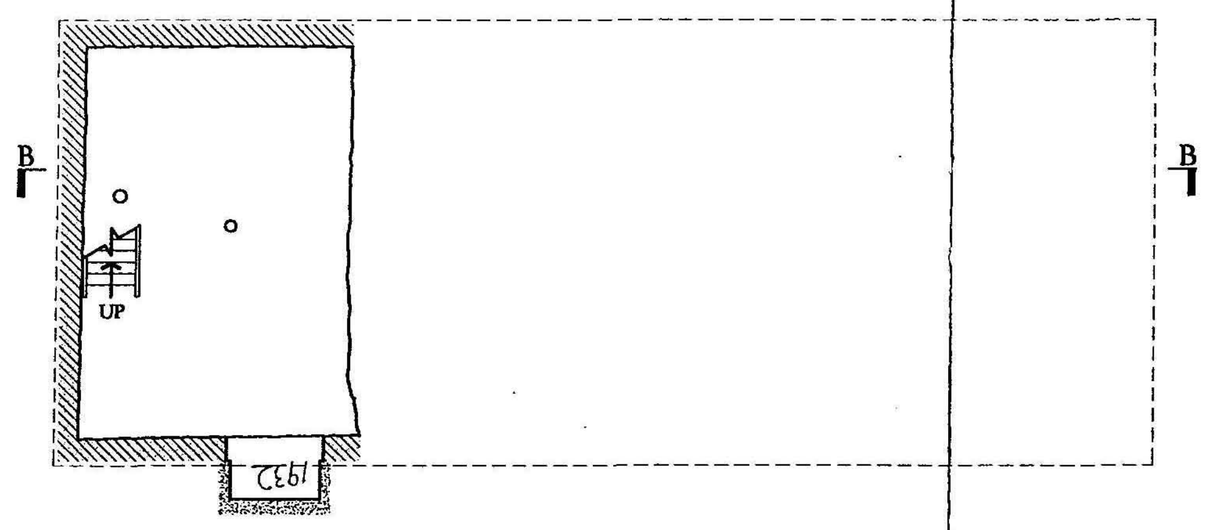

CELLAR PLAN

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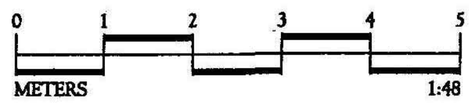

HENRY HOUSE

SUDLEY ROAD MANASSAS VICINITY MANASSAS NATIONAL BATTLEFIELD PARK PRINCE WILLIAM COUNTY VIRGINIA

HISTORIC AMERICAN BUILDINGS SURVEY
SHEET 2 OF 5 SHEETS

SURVEY NO. VA-1363

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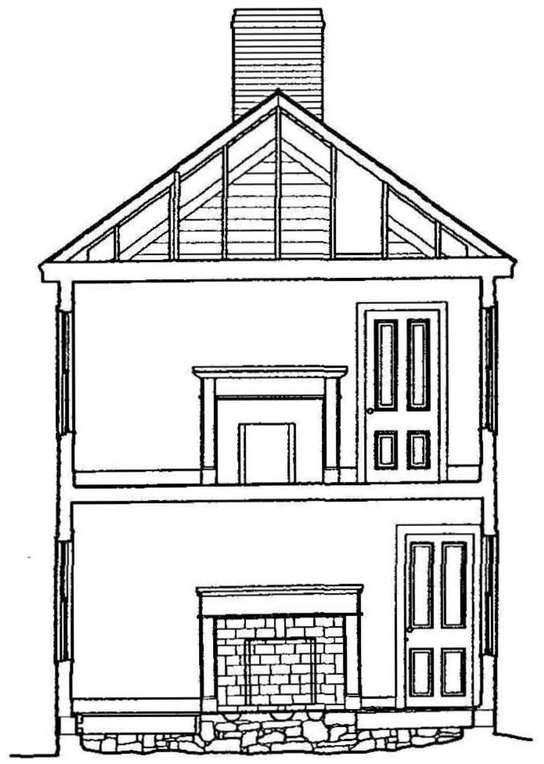

SECTION A-A

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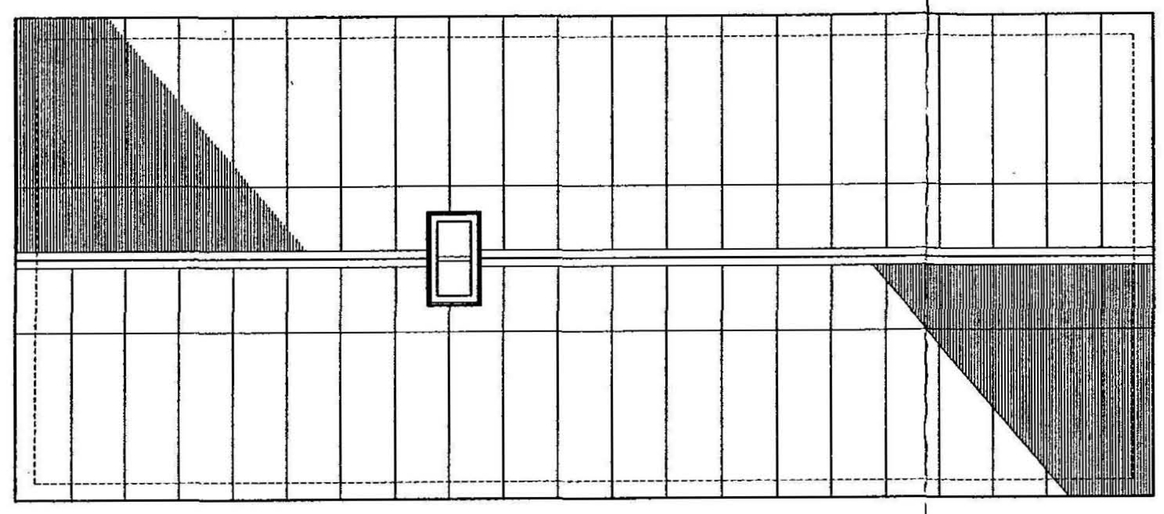

ROOF PLAN

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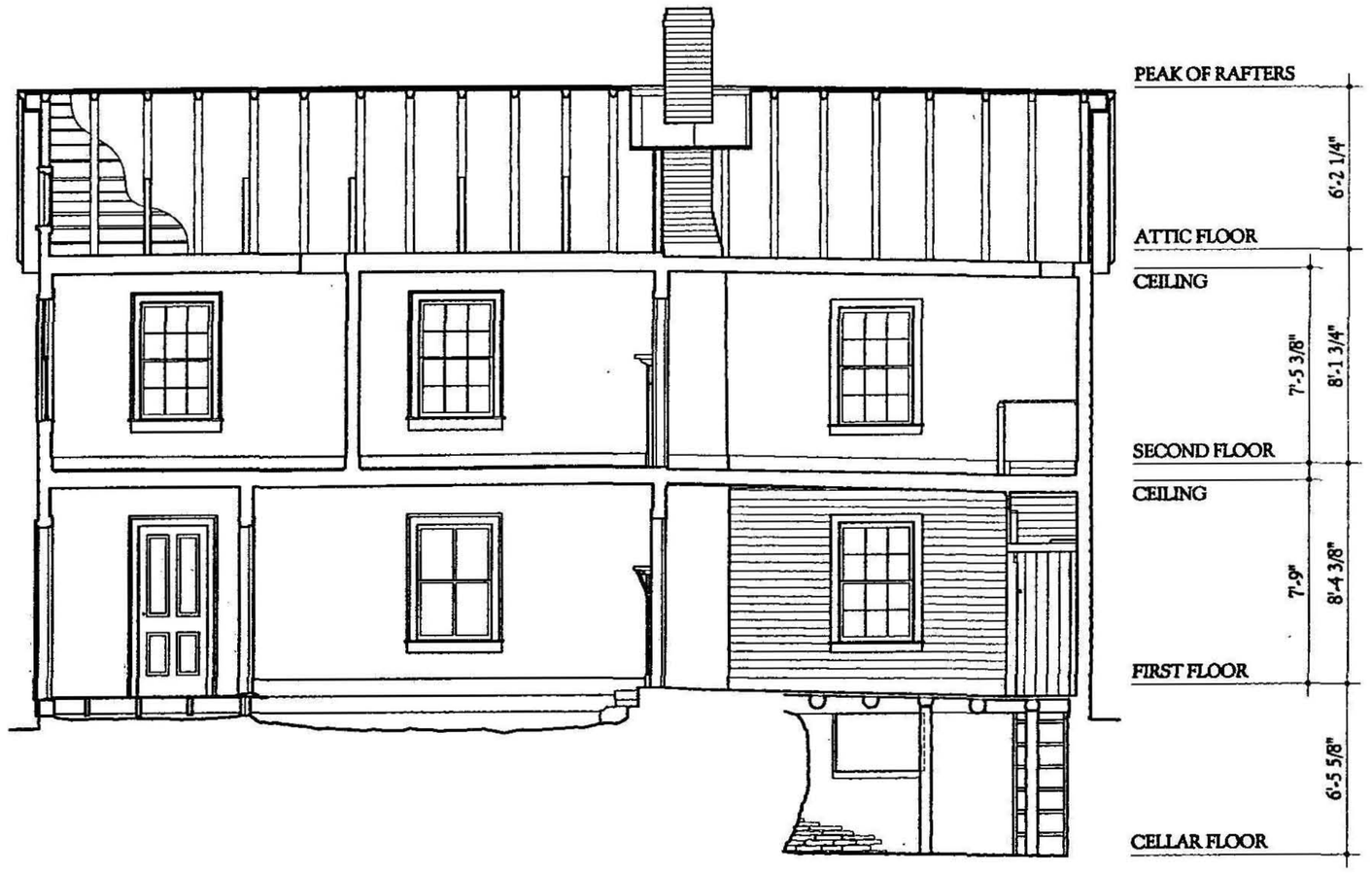

SECTION B-B

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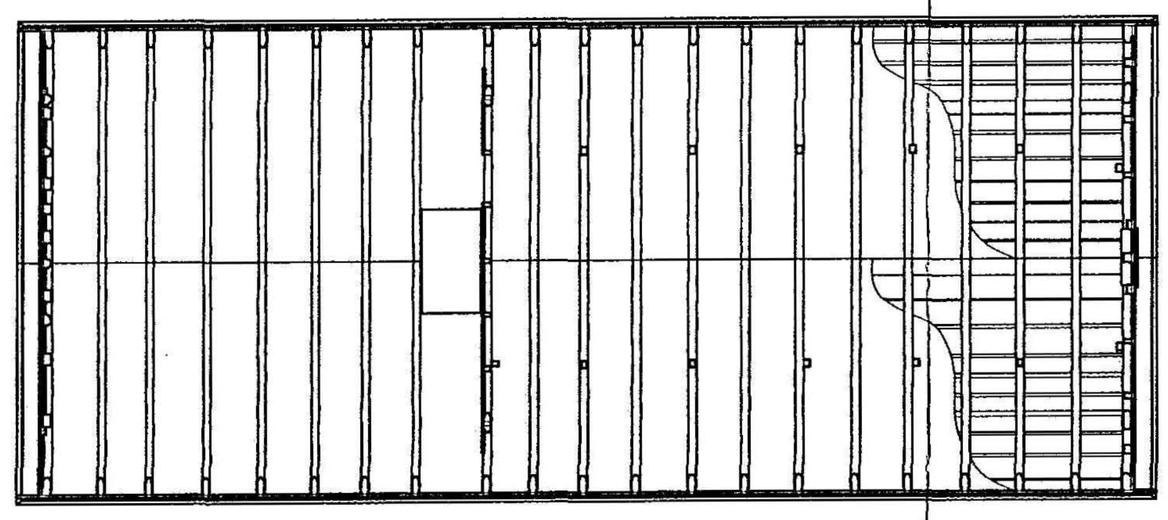

ATTIC REFLECTED CEILING PLAN

1/4"=1'-0" 1:48

0 1 2 3 4 5
METERS 1:48

N

HENRY HOUSE

SUDLEY ROAD MANASSAS VICINITY MANASSAS NATIONAL BATTLEFIELD PARK PRINCE WILLIAM COUNTY VIRGINIA

SURVEY NO. VA-1363

HISTORIC AMERICAN BUILDINGS SURVEY
SHEET 3 OF 5 SHEETS

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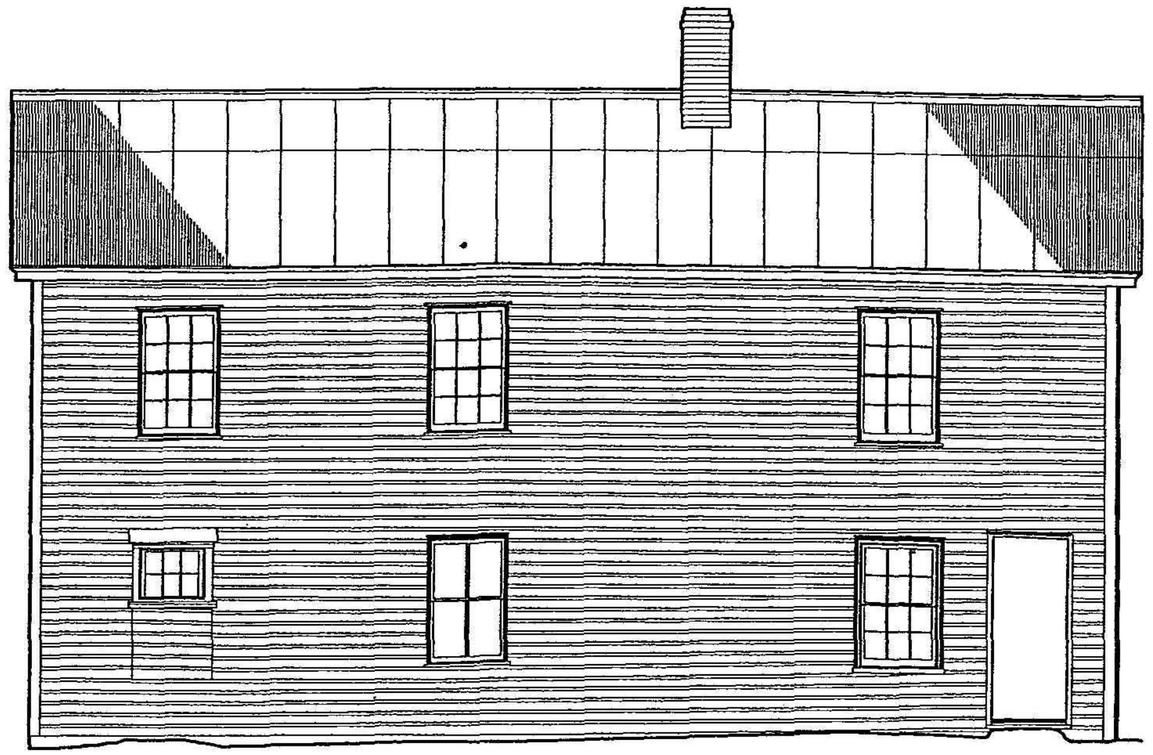

EAST ELEVATION

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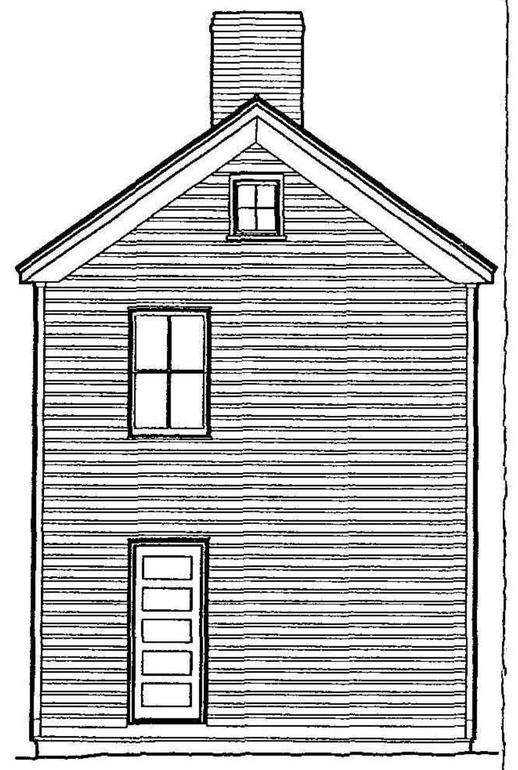

SOUTH ELEVATION

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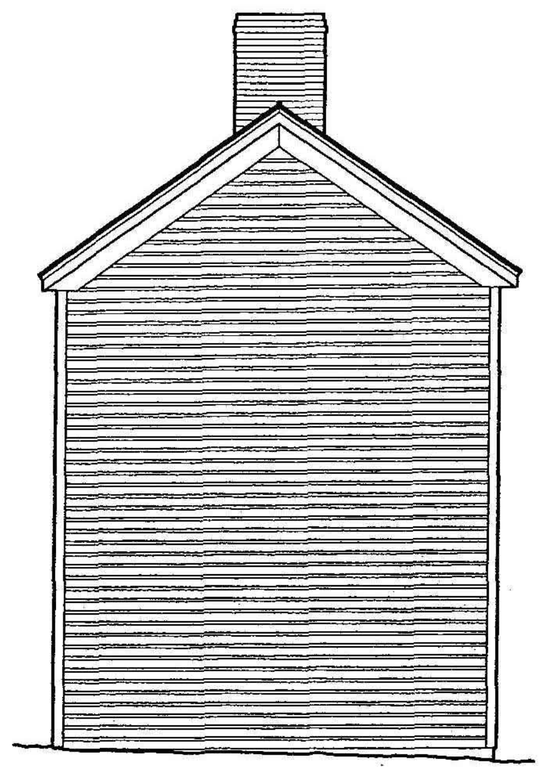

NORTH ELEVATION

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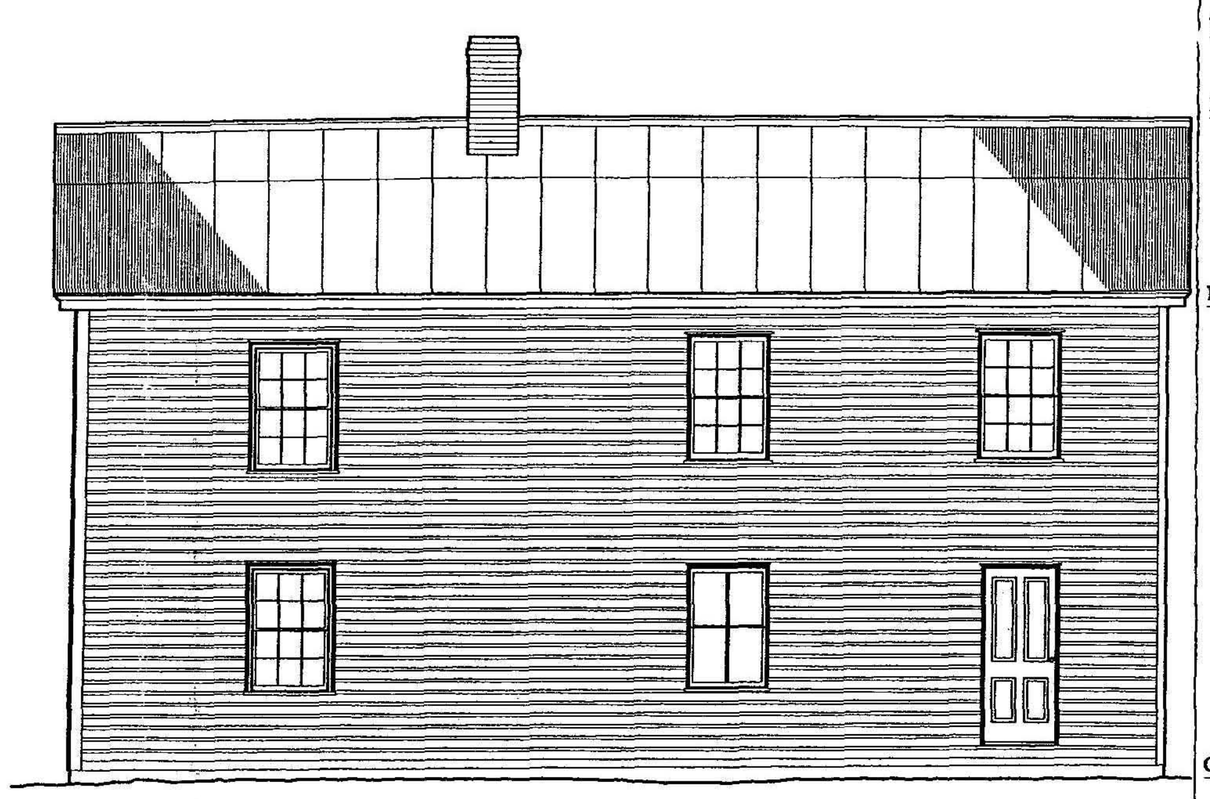
FEET 1/4"=1'-0"

NOTES:
GUTTERS AND DOWNSPOUTS NOT SHOWN
WEST ELEVATION SHOWN RECONSTRUCTED



WEST ELEVATION

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0 1 2 3 4 5
METERS 1:48

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HENRY HOUSE PROJECT, 2001
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UNITED STATES DEPARTMENT OF THE INTERIOR

HENRY HOUSE

SUDLEY ROAD MANASSAS VICINITY MANASSAS NATIONAL BATTLEFIELD PARK PRINCE WILLIAM COUNTY VIRGINIA

SURVEY NO. VA-1363

HISTORIC AMERICAN BUILDINGS SURVEY
SHEET 4 OF 5 SHEETS

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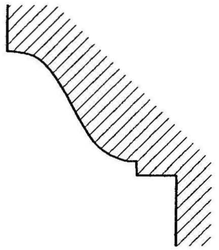

CORNICE
NORTH GABLE
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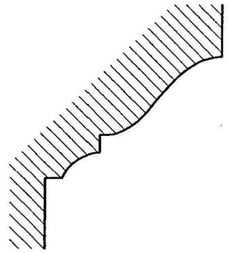
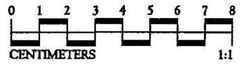
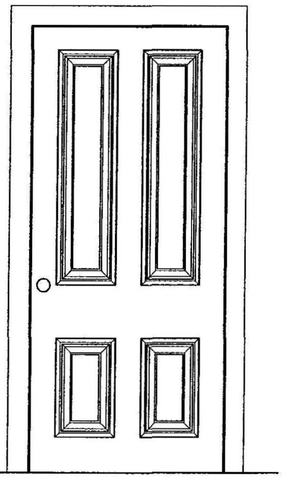
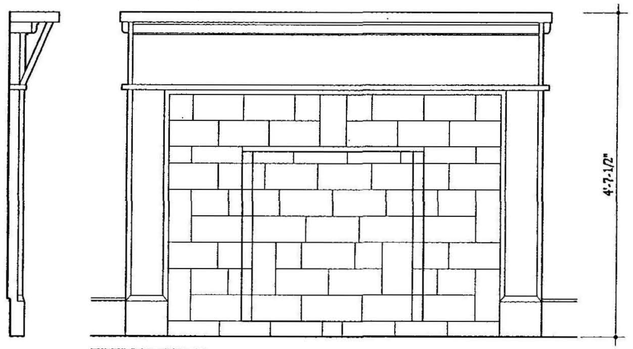


CORNICE
SOUTH GABLE
12"=1'-0" 1:1

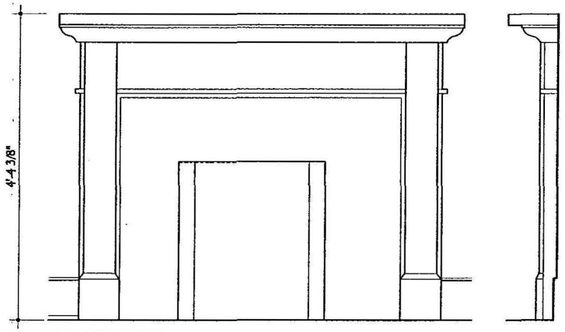




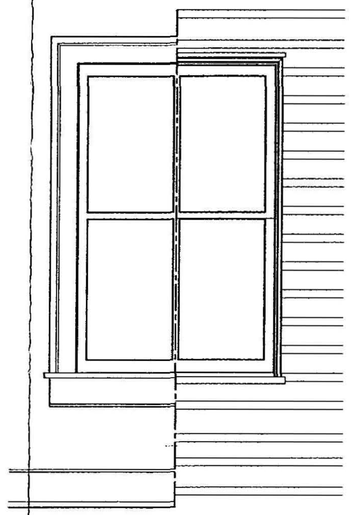
ELEVATION



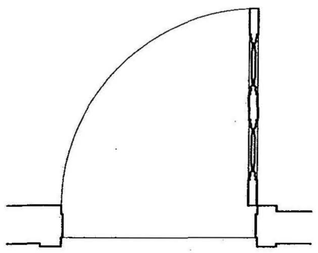
ELEVATIONS



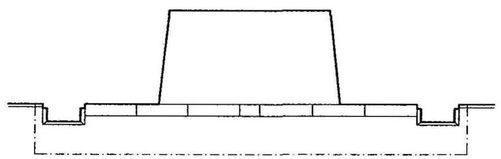
ELEVATIONS



INTERIOR EXTERIOR



PLAN



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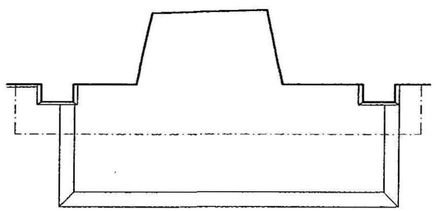

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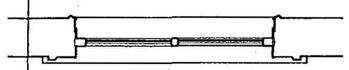


PLAN

DOOR DETAILS
SECOND FLOOR
1"=1'-0" 1:12

FIREPLACE DETAILS
PARLOR
1"=1'-0" 1:12

FIREPLACE DETAILS
BEDROOM
1"=1'-0" 1:12

WINDOW DETAILS
FIRST FLOOR
1"=1'-0" 1:12

HENRY HOUSE

SUDLEY ROAD MANASSAS VICINITY MANASSAS NATIONAL BATTLEFIELD PARK PRINCE WILLIAM COUNTY VIRGINIA

SURVEY NO. VA-1363

HISTORIC AMERICAN BUILDINGS SURVEY
SHEET 5 OF 5 SHEETS

LIBRARY OF CONGRESS PRINTS & PHOTOGRAPHS

DRAWN BY: EDWARD L BYRDY JR

HENRY HOUSE PROJECT, 2001
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

IF REPRODUCED, PLEASE CREDIT THE HISTORIC AMERICAN BUILDINGS SURVEY, NATIONAL PARK SERVICE, NAME OF BUILDING/SITE, DATE OF DRAWING

Family Report On Henry House
Christian Fredrick Ebhardt
Kathryn Ebhardt Weatherholtz

These are answers to the questions that were requested by Tim Van Cleve of the family about the time they lived in the Henry House with Adinarn Judson Powell and Catherine Reeves Powell. These responses are given to the best recollection that Fred and Kathyrn can recall from memory of the time they lived there. The responses are written as recalled in conversation with each other. Some answers will be referred back to previous answers.

Adinarn Judson Powell and Catherine Reeves Powell had no natural children of their own. When the parents of Christian Herman Ebhardt and Johanna Fredericka Ebhardt (Spencer), brother and sister died the Powells adopted (raised) the two children as their own children. Also another cousin or niece (not clear which relationship) Ada Rookwood (Kerrick). This is how the Ebhardt Family came to live in the Henry House with the Powells.

a. Christian Herman Ebhardt married Mary Valendia Skillman and when she died the Powells took in the children of this marriage. These children were Raymond Marshall Ebhardt, Christian Fredrick Ebhardt, William Henry Ebhardt, Virgie Virginia Ebhardt (Byrne) and Kathryn Fredericka Ebhardt (Weatherholtz). Not all the children lived in the Henry House as some were older or other people cared for them.
b. Fred Ebhardt went there about 1929. Kathryn Ebhardt about 1927. Mary Ebhardt became ill and when she knew that she was not going to live long gave Kathyrn to Fredericka Ebhardt Spencer to raise. After the death of her husband Fredericka (Aunt Rickie) returned to live with Grandpap and Grandma Powell . They helped her to raise Kathryn (age 2) and Fred (age 9). Kathryn lived there from 1925 –1942. When Mary Ebhardt died Christian Ebhardt also returned to live with Grandpap and Grandma Powell. This family calls the Powells Grandpap and Grandma as they were raised by the Powells as their own children and grandchildren.
c. Raymond Ebhardt married Ressie Scarbourgh and moved into the Henry House also with the family. Eunice Ebhardt Olive was born in the house of this union in 1935.

1. The porch was the same as the picture shows on the side of the house. The porch had railings, which were painted white with the floor of the porch gray as in weathered boards. Grandpap removed the railings and left the porch flooring. Not sure who built the original porch. The porch was the length of the side of the house and approximately 6 ft. wide.
2. No sewer, water lines, fuse box. No utilities. Had 3 stoves.
   1. cooking stove in kitchen
   2. Museum room

RCVD 06/12/2003 @HPTC/tav

3. upstairs middle bedroom (Grandpap and Grandma's bedroom) a king heater with iron top
4. kerosene lamps was used for light in the house
5. well for water with hand pump used for drinking, cooking, bathing, washing clothes also caught rain water off roof for clothes washing and water for animals

3. The interior was plaster walls had hole in living room at one time because plaster fell off
Museum room had paper on the walls
Kitchen and bedrooms were painted the color was light possibly white

4. Yes, the wood used came from the property. The wood line was in front of the present day museum and was located approximately where the woods line is now.

5. The roof of the house was tin. The roof on the shed was black tar roofing paper.

6. All display items were in a showcase in the museum room. This room was in the middle room downstairs. We think we saw the showcase in museum downstairs by a wall near the steps. All items were removed from the house when the museum was first built. **Fred and Kathryn think they can tell which ones were in the museum if allowed to see old displays.** They remember in the corner of the room were guns, small saber, bayonet, small sword. In the showcase were items that belonged to Mrs. Henry. Some of the items were a Bible, pocketbook, glasses, and handkerchief. Also 2 pistols. In the front hallway were miniballs, old muskets on a table. A picture of a soldier standing by a pole? by the Henry House. A picture of the house after shot up during battle. A picture of ROBERT E LEE AND STONEWALL JACKSON standing together on their horses. Think the names of the horses were Traveler and Little Sorrel. Several guns and old muskets stood in corner of door nearest to graveyard. A black table with kerosene lamp on it Fireplace where Mrs. Henry's black nurse stuck her head up fireplace and became deaf. This was replaced with stove. Furniture in the house museum room was Aunt Rickie's couch, Grandpap's rocking chair, showcase and items listed above kitchen was a cook stove, buffet, table and chairs, old rocking chair, old culbert safe, coat rack fastened on wall, door to basement, upstairs was bedroom furniture (bed and dresser). Outside toilet with 3 or 4 holes used old catalogs

7. Grandpap and Chris Ebhardt built shed that is now standing beside the house. Food was stored in meat house that had a cement floor also milk crocks barn had hogs and feed in the cellar under kitchen was stored apples, canned food, potatoes, turnips in kiln dug holes in ground to store cabbage

8. Bedrooms upstairs Chris and Fred had end room near road Kathryn and Aunt Rickie had bedroom over kitchen Grandpap and Grandma had middle bedroom with stove in it location of furniture in each room was bed in corner with dresser in middle of room wall

9. Ventilation Summer open windows with screens on Winter close windows with and use wood stoves
10. Attic was not used by family Shed stored wood for winter and cooking and to keep wood dry in wet weather. Also refer to question 7
11. Grandpap Powell painted and did most of the maintance with help from Chris and Fred Ebhardt Don't recall any recurring maintance as buildings were maintained regularly
12. The grounds were mowed by Fred Ebhardt the garden had potatoes, vegetables to supply the family with food
13. Yes a sign in book for visitors A President signed the book (can't recall which one) Grandpap caught a man trying to cut the signature of the President out (this book with this signature should be in the museum somewhere) This President was in office at the time this occurred to the best of recollection Could possibly be Herbert Hoover not sure Aunt Rickie showed the President around because Grandpap was away at the time. Grandpap was very upset because he was not home at the time. Think the man that tried to remove the signature could have been with the President at the time that he signed the book Can not recall if people were charged to view museum Do know that Grandpap was paid 30 dollars a month plus tips by Daughters of Confederacy
14. will ask question of K and F think we need to finish answer to this one Katheryn from 1927-1942 Fred from 1929- 1940? Katheryn went to museum to call dr fwhen Grandpap died
15. Yes domestic animals included a cow, a horse, hogs, cats, dogs Grandpap got rid of animals before he died
16. refer to answer in 1 and 14
17. There was no living arrangements between the Park Service and the family yes two families lived there after Grandpap died to the best of our knowledge

Questions for Fred Ebhardt.

1. Where was the porch and what were the dimensions? Was it there when you arrived or did you help build it?

2. What kind of utilities was used? Where were the fuse box, water and sewer lines?

3. What interior finishes was used? What were the colors?

4. Did the wood supply come from the e nearby woods? Where was the wood line at that time?

5. What was the roof of the house and shed made of?

6. Inside the house, where was the museum displays located? What was the furniture composition and location?

7. Where was food stored? What was the storage rack configuration?

8. Who lived in what room? What was the location of the furniture?

9. What was the ventilation system like? Were there windows and shutters used?

10. What was the attic and shed used for? What may have been stored in each?

11. What kind of annual maintenance did the buildings receive? Who did the maintenance and were there any recurring maintenance problems?

12. How were the grounds maintained? What did the garden have in it?

13. In the museum was there any sign in books and was there an admission cost? If so, where did the money go ?

14. What were the dates of occupancy? When were other structures built?

15. Were there any domestic animals on the property?

16. What years did you live here and what was your connection to the caretaker?

17. Was there a living arrangement between the occupants and the park service? Did people continue to live here after the park bought the property in 1940?

Appendix

Material Analysis

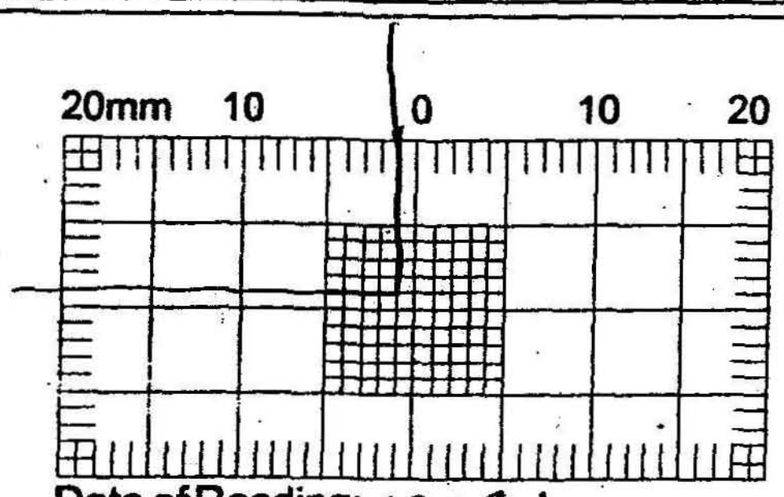
PRG
P.O. Box 1768
Rockville, MD 20849
Tel: (301) 309-2222
Fax: (301) 279-7885

CRACK MONITOR PROGRESS SHEET

#1/2

Project: HENRY HOUSE, MANA 0307.01

Location of Monitor: INSIDE PARTITION, WEST OF MANTLE CENTER ROOM, NORTH WALL



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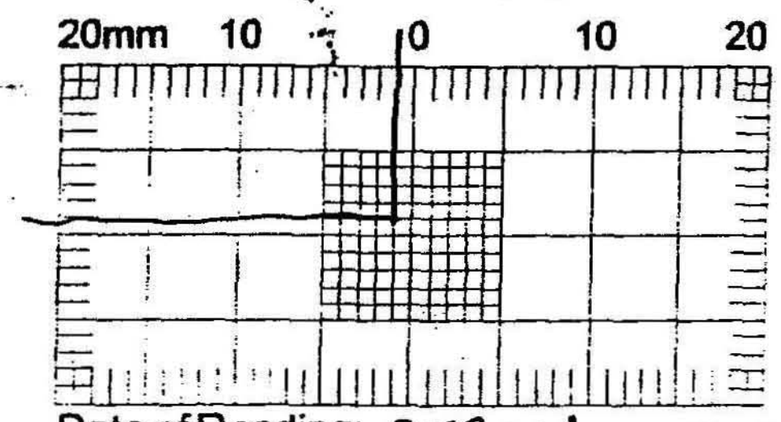

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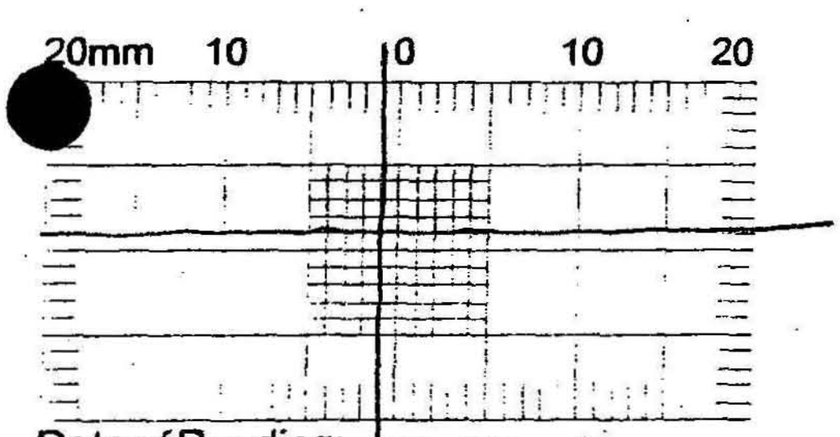
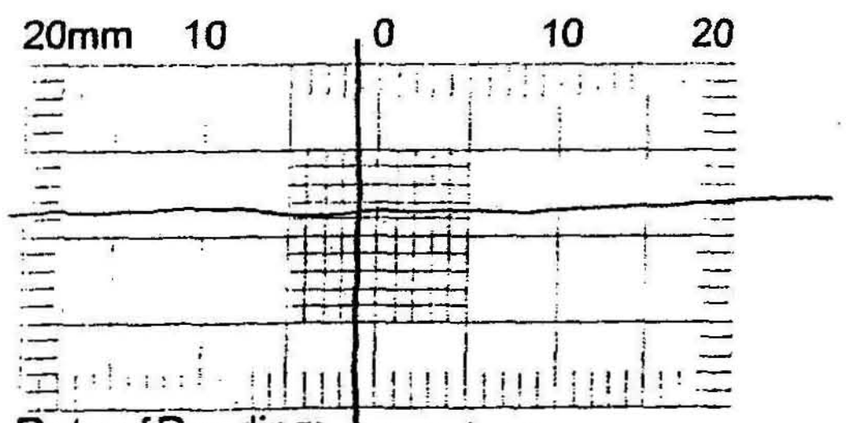
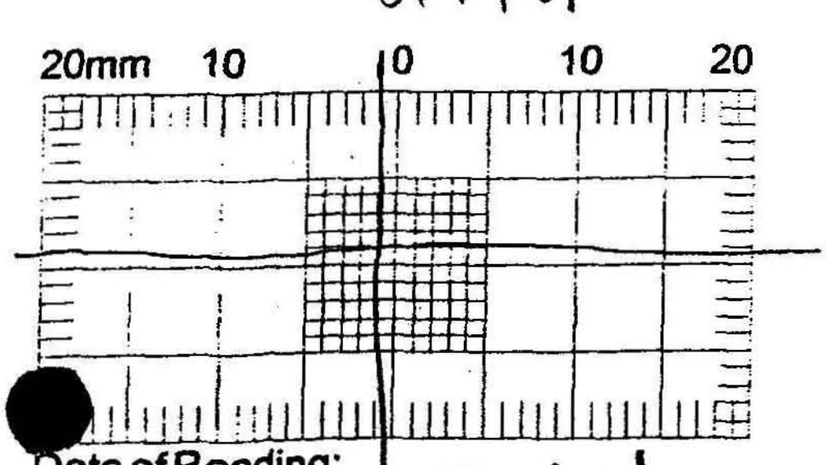


Date of Reading: 05.30.01



Date of Reading: 06.19.01



Date of Reading: 07.31.01

Notes

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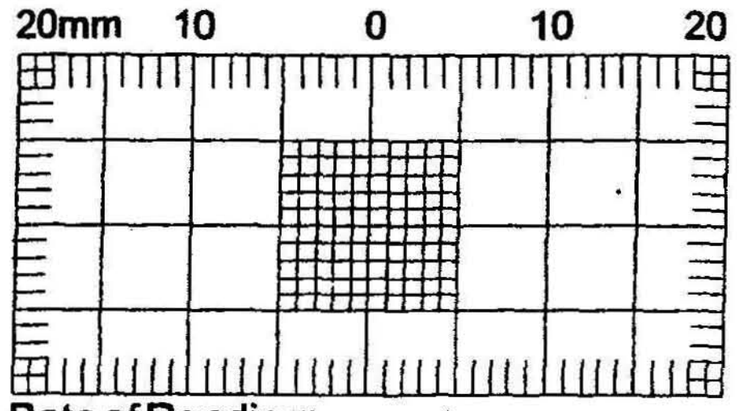
SLIDE ENLARGED 9 TIMES.



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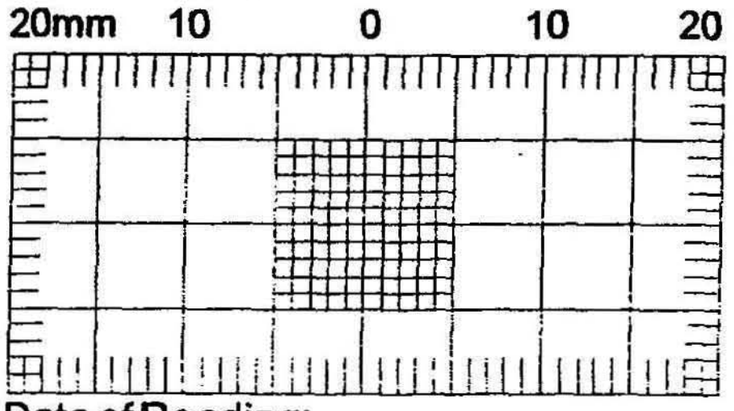

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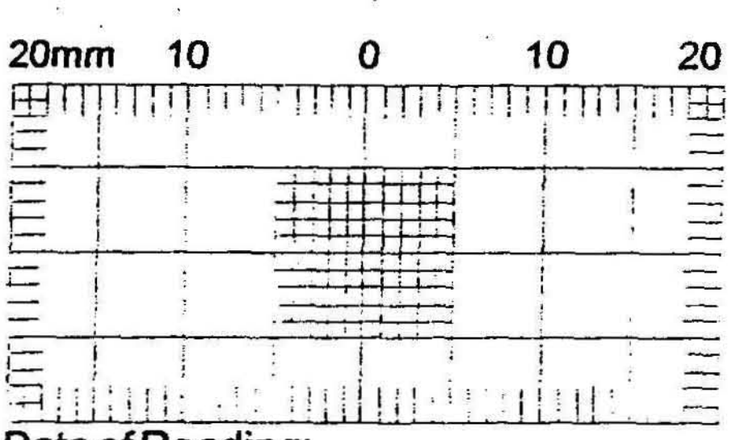

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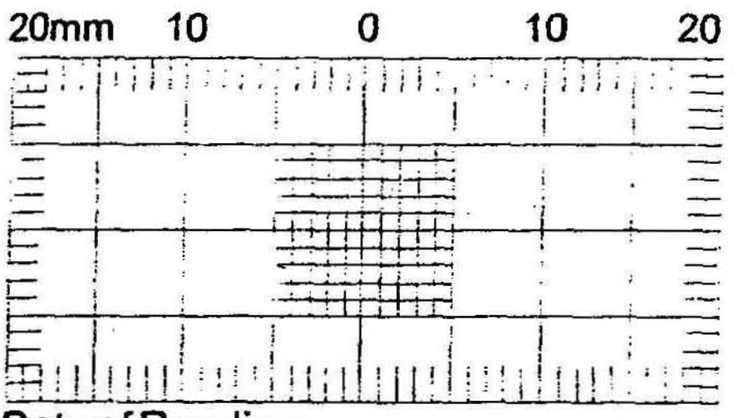

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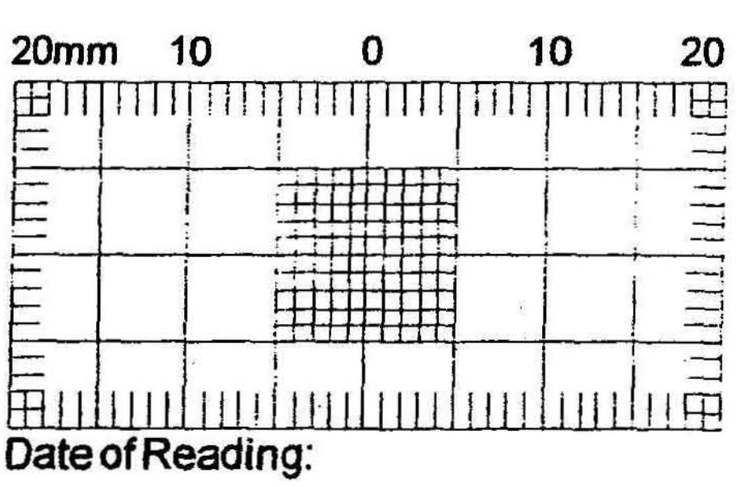


Date of Reading:

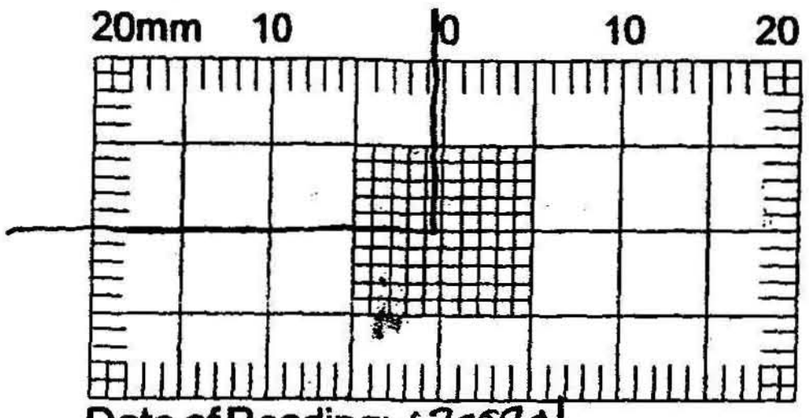
Coeff. of Thermal Expansion 3.80 X 10 -5 in/in/degree F (6.84 X 10 -5mm/mm/degree C)

PRG
P.O. Box 1768
Rockville, MD 20849
Tel: (301) 309-2222
Fax: (301) 279-7885

CRACK MONITOR PROGRESS SHEET

Project: HENRY HOUSE, MANTA 03.07.01

Location of Monitor: INSIDE CORNER @ BASEBOARD.



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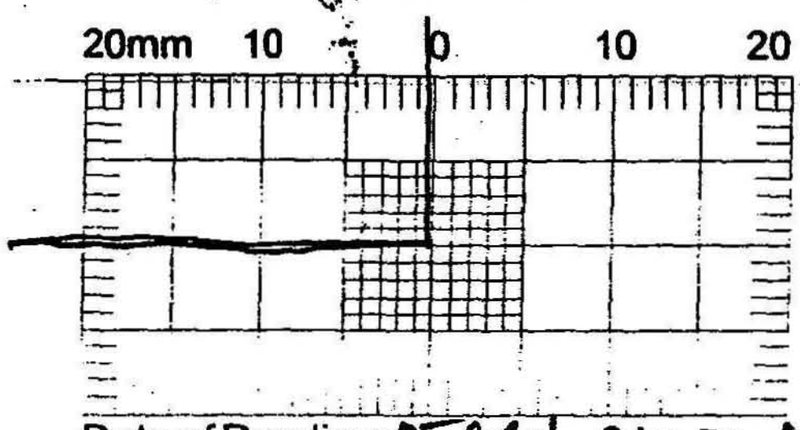
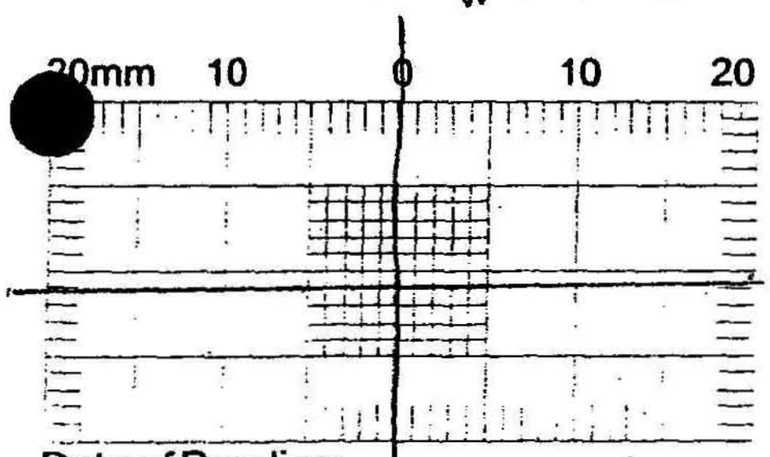


Date of Reading: 053101 - SAME AS 030901



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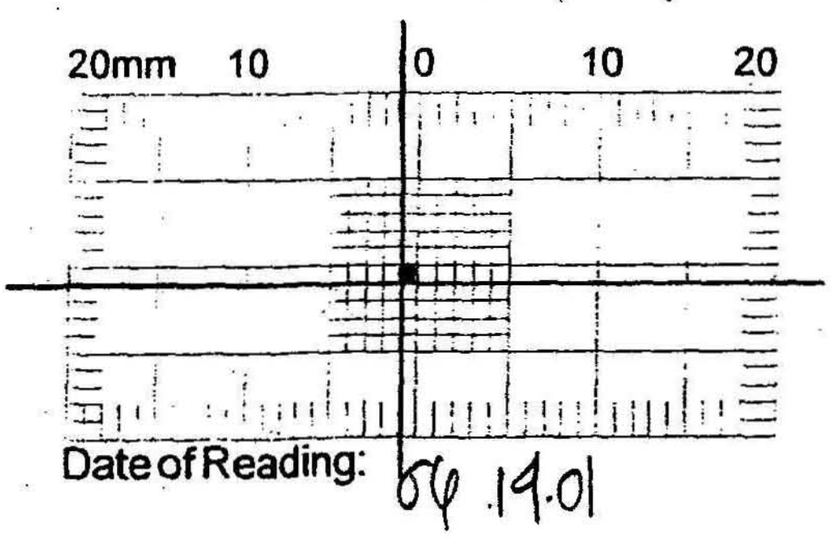

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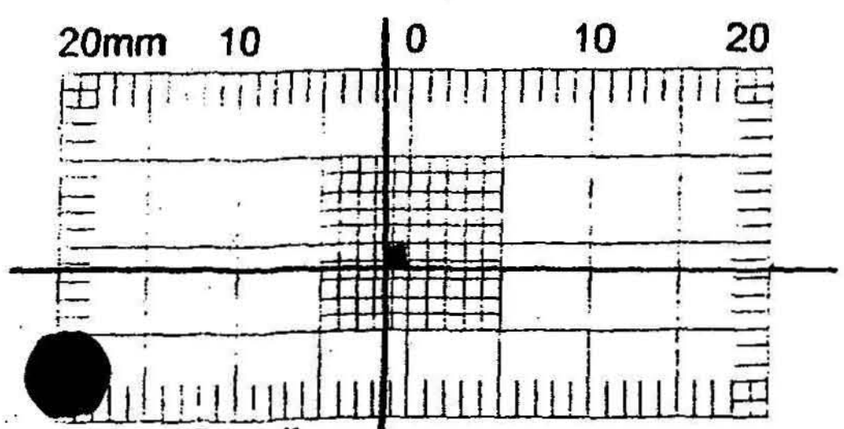

Date of Reading: 07-31.01

Notes

INSTALLED 030101
2 FROZEN OUT

MOVING ↓

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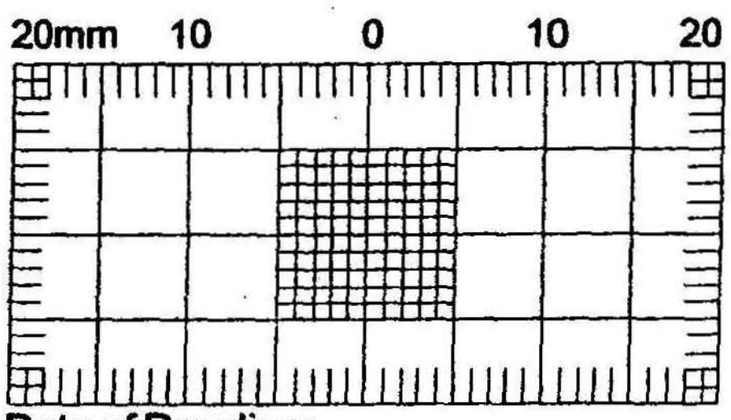
MOVING ↔



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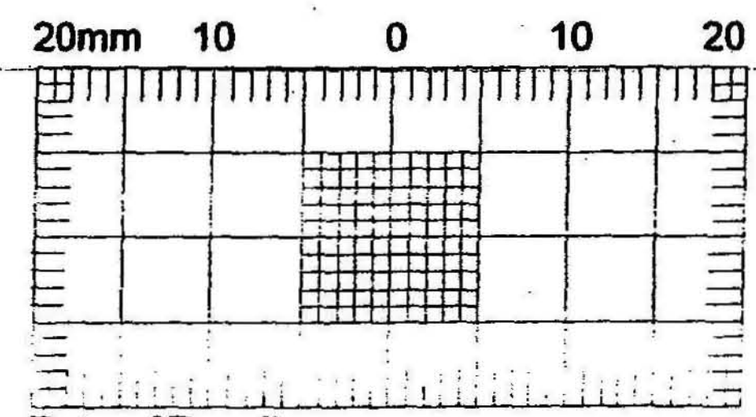

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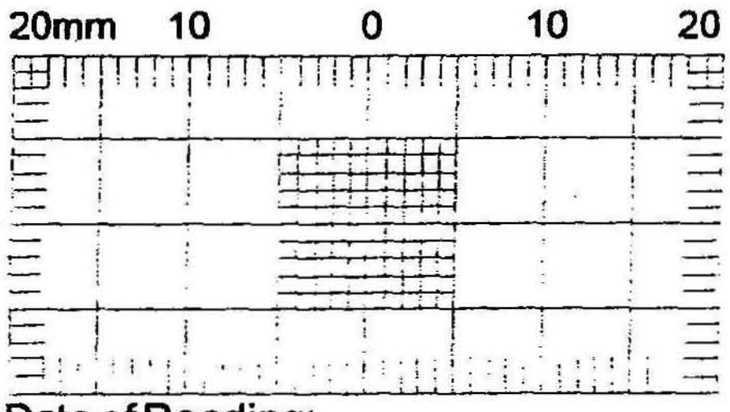

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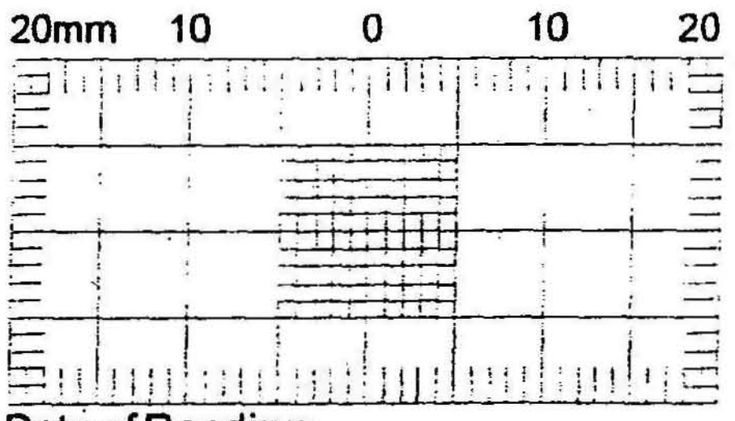

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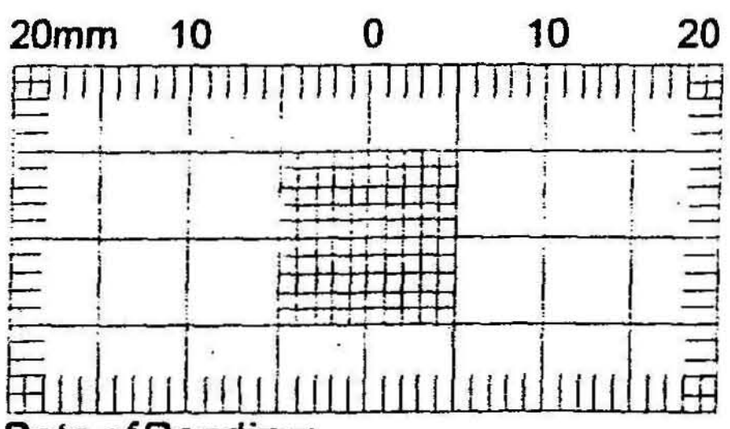

Date of Reading:

Coeff. of Thermal Expansion 3.80 X 10 -5 in/in/degree F (6.84 X 10 -5mm/mm/degree C)

Park MANA	NATIONAL PARK SERVICE HISTORIC PRESERVATION TRAINING CENTER		Sheet
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Project CRACK MONITORING	By tar	Checked	Pkg.
Feature	Date 05-30-01	Date	Account

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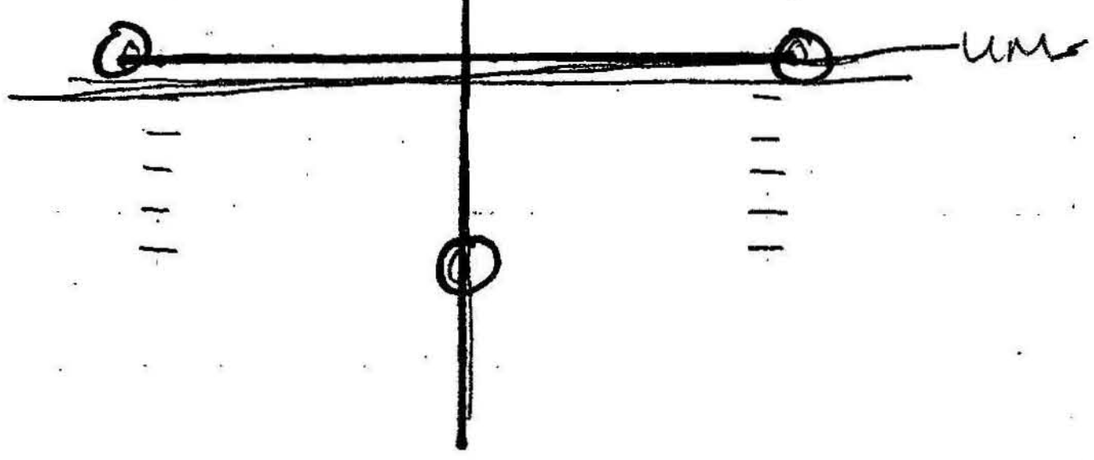

05.30.01 · 4PM.

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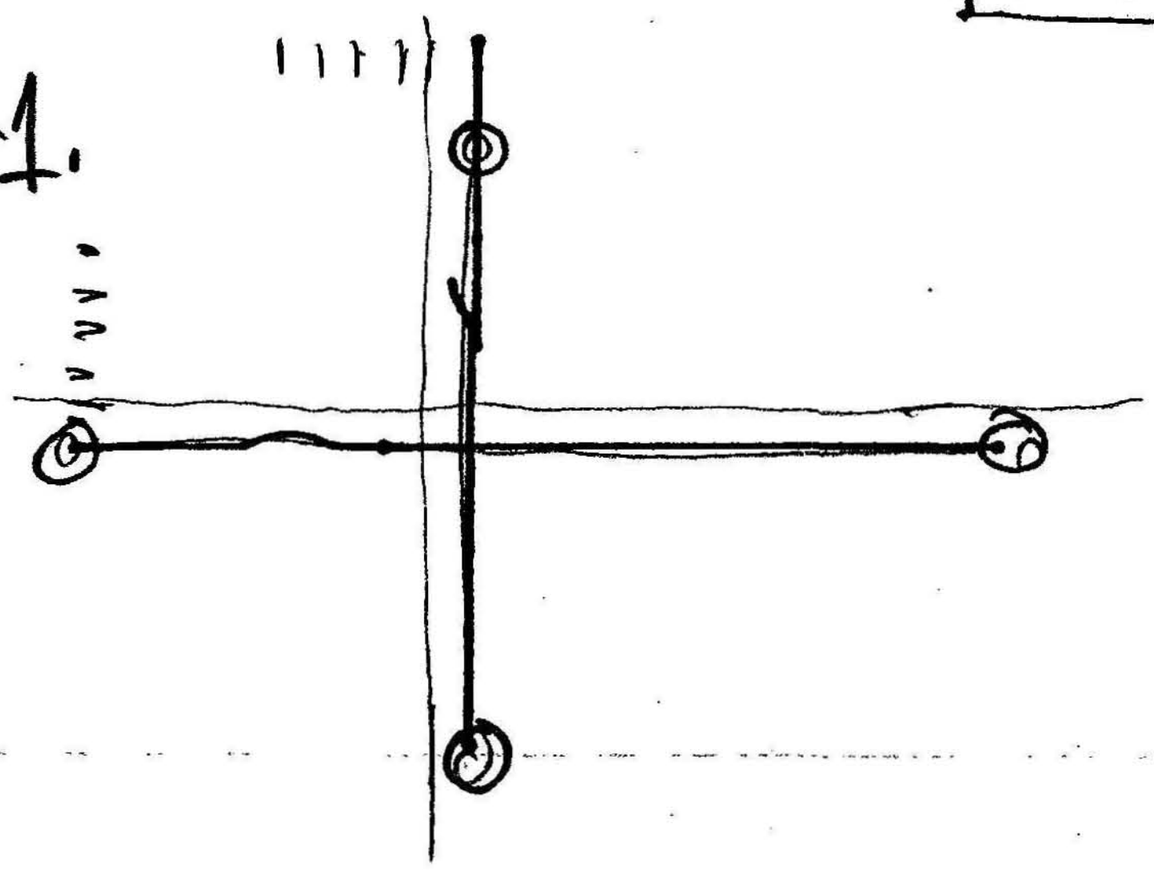

*U.S. GPO: 2000-467-092/39519

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Feature		Date 06-14-0	Date	Account

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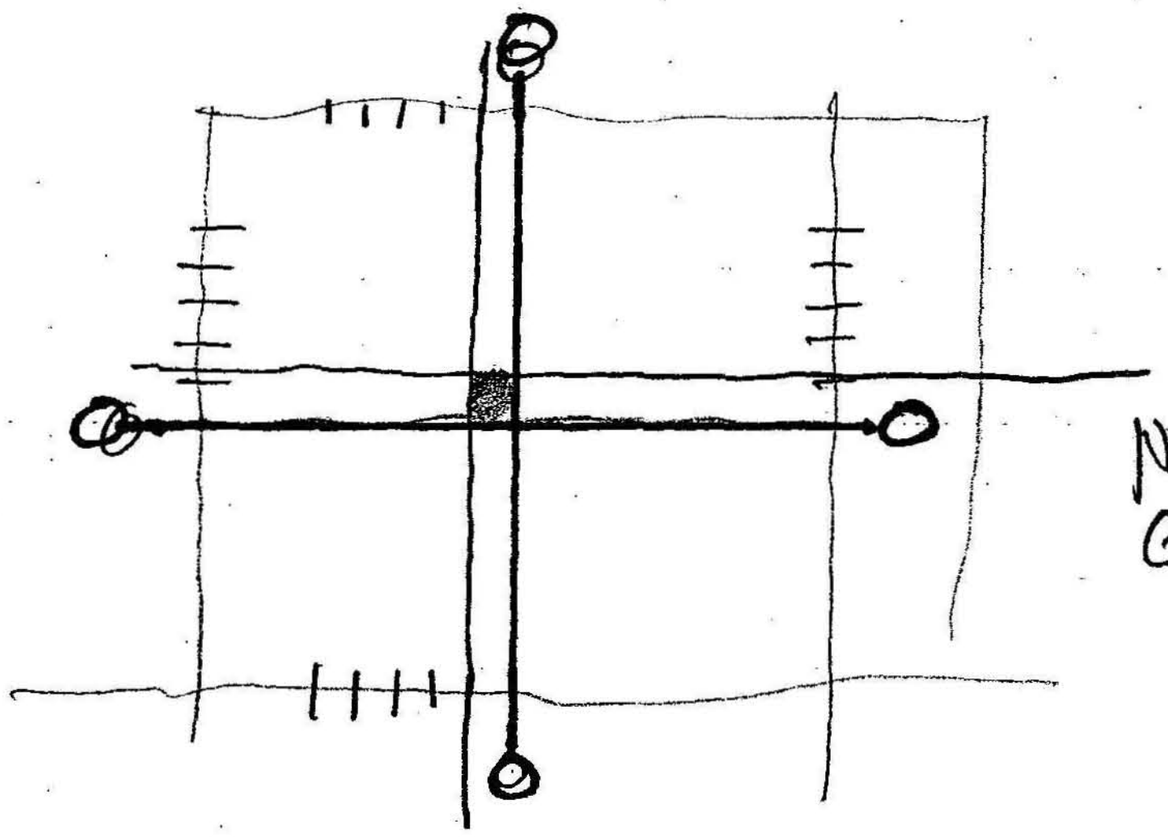

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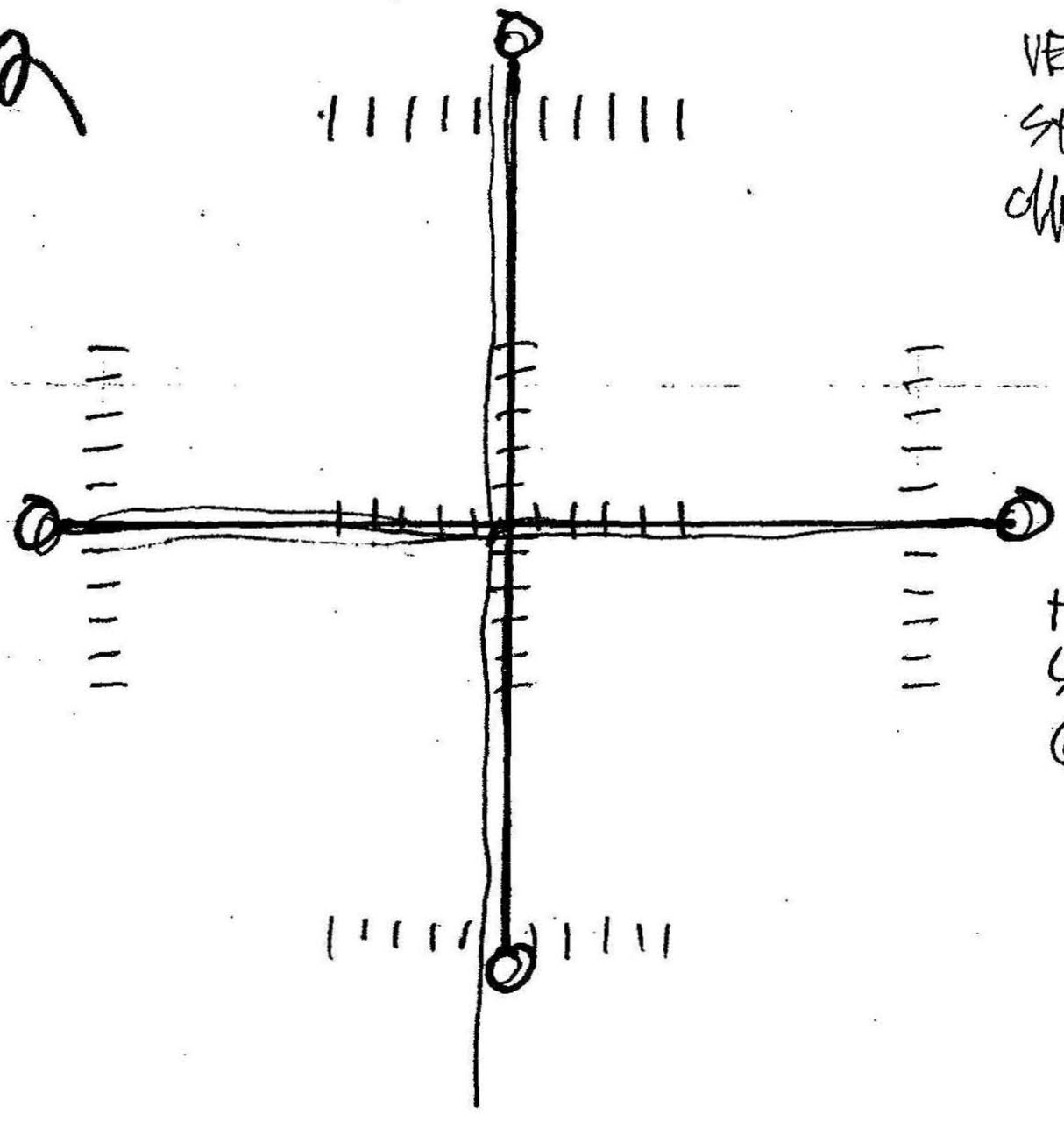

VERT LINE SHIFTED SLIGHTLY OFF ℄ TO EAST.

HORIZ LINE SHIFTED BELOW LINE @ EAST MARKER

*U.S. GPO: 2000-467-092/39519

Park MANA	NATIONAL PARK SERVICE HISTORIC PRESERVATION TRAINING CENTER		Sheet
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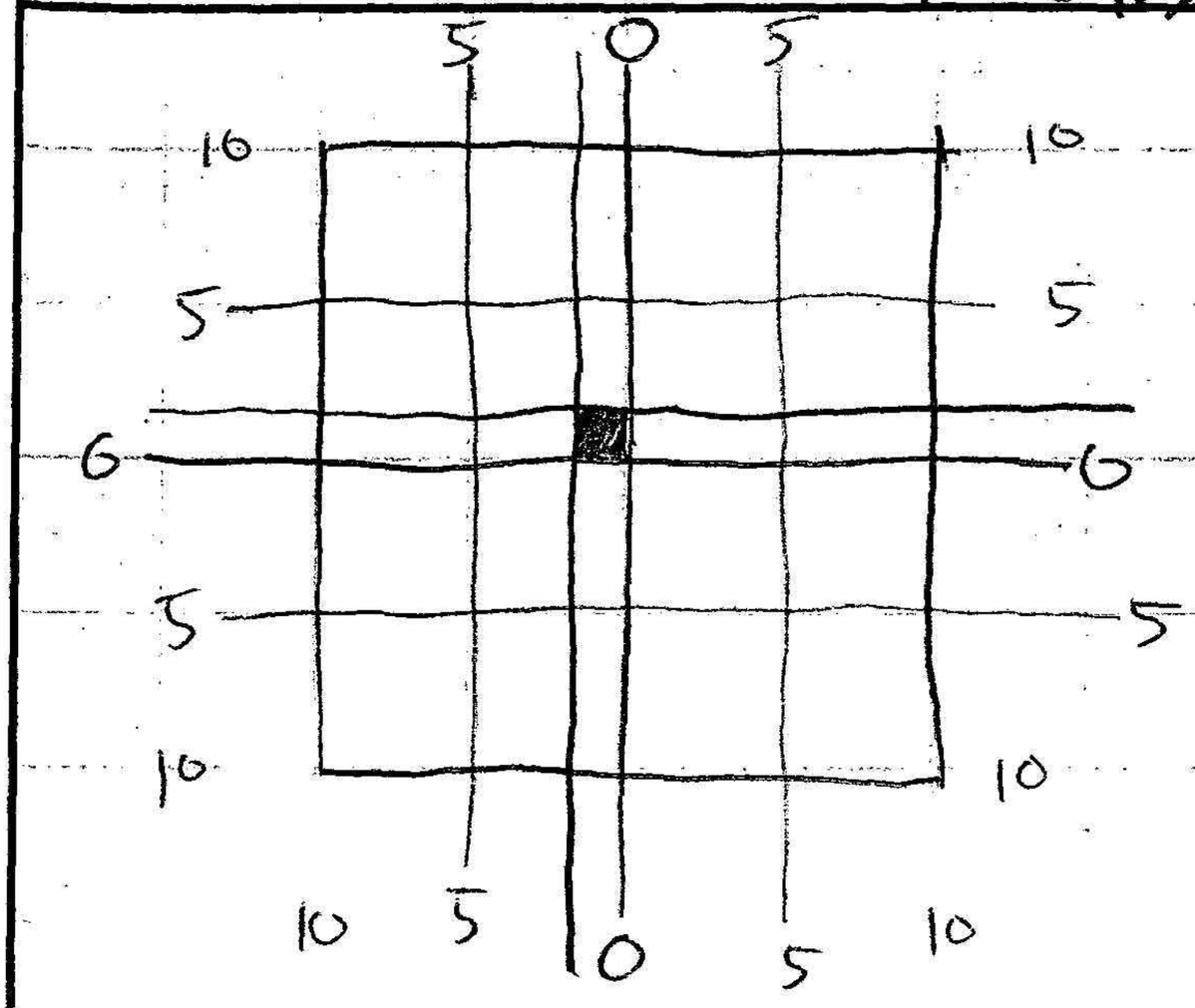
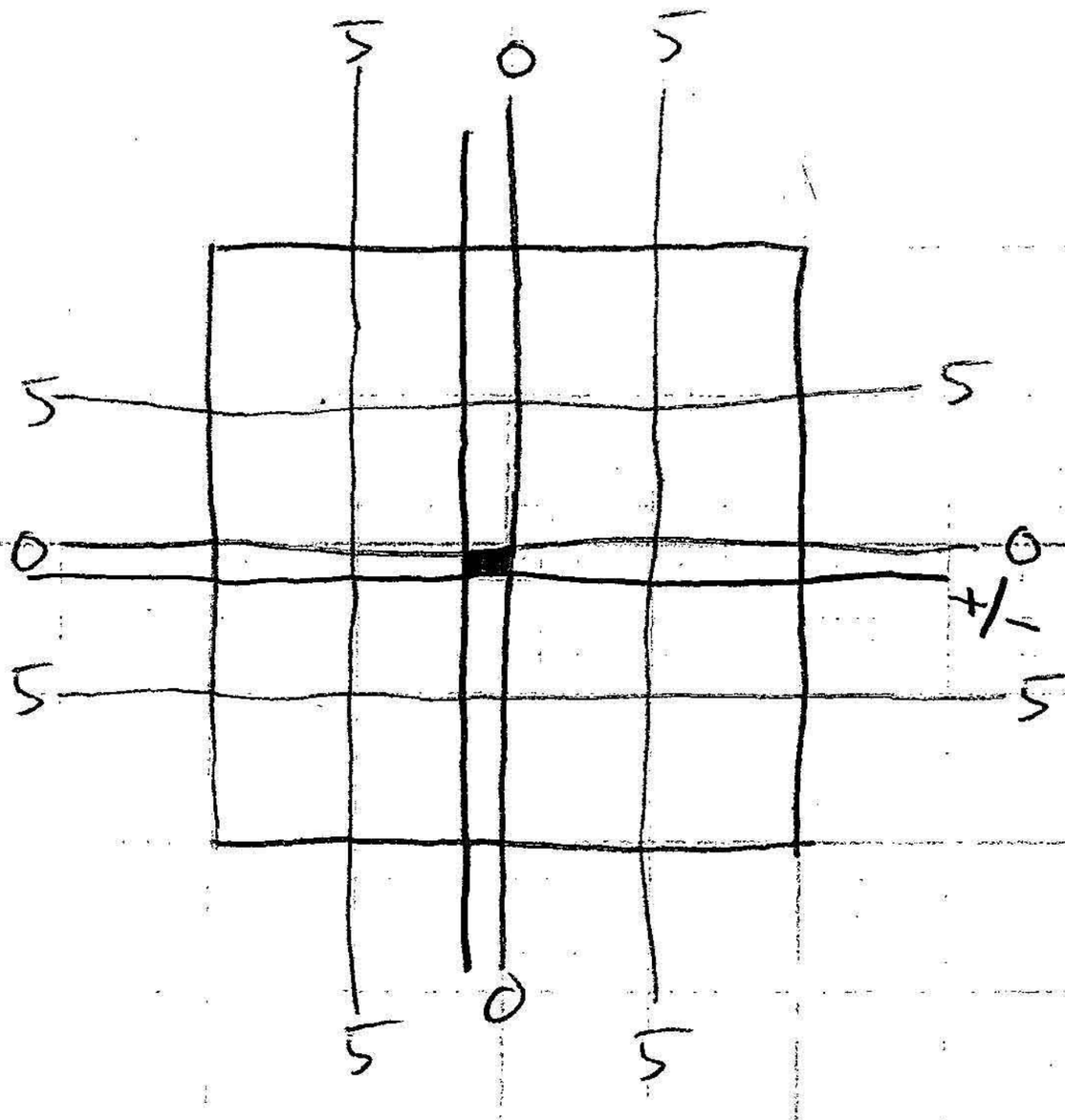
Project CRACK MONITORS	By TAM HPTC	Checked	Pkg.
Feature	Date 07.31.01	Date	Account



#1. 07.31.01

#2. 07.31.01



*U.S. GPO: 2000-467-092/39519

Park MANA	NATIONAL PARK SERVICE HISTORIC PRESERVATION TRAINING CENTER		Sheet
Area HEHO			of
Project MORTAR SAMPLES	By [signature]	Checked	Pkg.
Feature	Date 670501	Date	Account

MANA MORTAR SAMPLES - HENRY HOUSE

001- EXTR FDN, West d, was SW corner

002- BASEMENT WALLS - NO WALL. INTR.

003A } KITCHEN CHIMNEY MORTAR SAMPLES
003B }

004- MIDDLE ROOM, 1st Floor, WEST INTR FDN & SILL PLATES
RM102.

005- SE CORNER, EXTR, EXTR FDN POINTING MORTAR

006- SO. WALL, SW CENTER SECTION, EXTR FDN.
POINTING MORTAR

*U.S. GPO: 2000-467-092/39519

Park	MANA	NATIONAL PARK SERVICE HISTORIC PRESERVATION TRAINING CENTER		Sheet
Area	HEAD			of
Project	MORTAR SAMPLES	By	Checked	Pkg.
Feature	CHIMNEY - RM 202	Date 08.03.01	Date	Account

MORTAR SAMPLES 08.03.01

CH 201 : MUD MORTAR from BTWN FIREBRICK STONES, REMOVED from BEHIND PLASTER LAYER ABOVE MANTLE, RM 202

CH 202 : PLASTER/MORTAR from SAME LOCATION as CH 201.

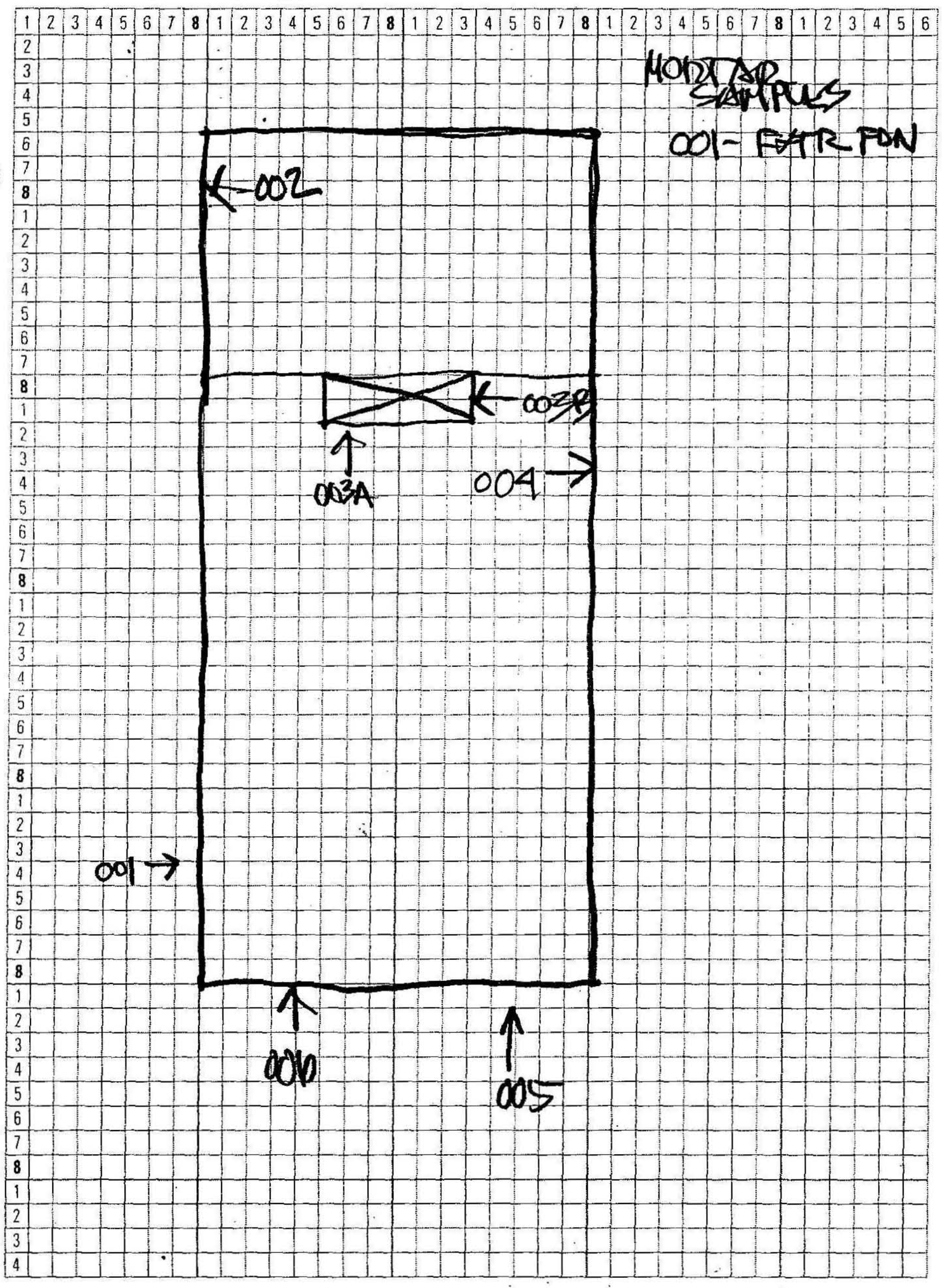
//

*U.S. GPO: 2000-467-092/39519

Park	NATIONAL PARK SERVICE HISTORIC PRESERVATION TRAINING CENTER		Sheet
Area			of
Project	By	Checked	Pkg.
Featur			Account

MAP: 07-0501

N



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Reorder Form No. 4426

*U.S. GPO: 2000-467-092/39519

concrete aggregate) all fines are skewed to yellow

NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER
FIELD MORTAR ANALYSIS

Project/Site: MANA

Location: HEHO 001 Date Sampled: 070501

Analysis performed by: TOM VITANZA Date Analyzed: 070901

DESCRIPTION OF SAMPLE **SAMPLE No.**

Type/Location: EXTERIOR FDN. POINTING MORTAR, WEST EL, NEAR SW CORNER

Surface appearance: GRANULAR, LARGE AGG. VISIBLE, SOFT LIME BASED POINTING MORTAR

Cross Section: SAME ↑ - MULTIPLE AGG'S.

Color: 10YR 6/3 - 5/4 Texture: COARSE / MEDIUM COARSE

Hardness: MEDIUM SOFT (NOT POINTING) Gross Weight: 54.6 / ACTUAL 53.9G

	COMPONENTS		
Fines:	Color:	Wgt:	Wgt %:
	Notes:		
Acid Soluble Fraction:	Wgt:	Wgt %:	
ALMOST NONE.	Desc. of reaction: NOT MUCH. NO OFFGASSING.		
MINOR BROWN FOAMING	Filtration color: GOLDEN YELLOW. CLEAR.		
	Notes:		
Aggregate:	Color	Wgt. 25+ (39.2) *	Wgt %:
undissolved concrete	Grain Shape:		

Sieve analysis:

Screen	Wgt.	% Retained
8	3.5	
16	5.6	
30	7.0	
50	9.5	
100	5.0	
pan	2.0	

mostly concrete — " " " " " " ? ? ? ? ? ?

% Fines: Acid Soluble: Aggregate:

hrw dis

Hee sr fillers?

Lost w/ sagger - 10.9gr.

of B sagger w/ residue 2.75 1.5 / 1.25 = fines + H_2O

275.9 − 182.0 / 53.96

BEAKER CLEAN 182.61 W/ AGG. 184.5 − H_2O

Δ 1.5 . AGGREGATE + H_2O LOST in BEAKER

NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER
FIELD MORTAR ANALYSIS

Project/Site: MANA 002

Location: HEHO | Date Sampled: 070501

Analysis performed by: TOM VITANZA | Date Analyzed: 070901

DESCRIPTION OF SAMPLE | **SAMPLE No.**

Type/Location: INTERIOR BASEMENT WALLS, NORTH WALL INTERIOR VARIOUS LOCATIONS

Surface appearance: DARK BROWN SAND, VERY GRANULAR.

Cross Section: IS IT MORTAR? OR JUST SAND

Color: 5YR, 4/3 - 3/3 | Texture: SANDY ?

Hardness: NONE. VERY SOFT. | Gross Weight: 56.5 GRAMS

COMPONENTS

Fines:	Color:	Wgt: 13.3 gr	Wgt %:
	Notes:		

Acid Soluble Fraction:	Wgt:	Wgt %:
30ML HCL	Desc. of reaction: INITIAL QUICK RELEASE of BROWN FOAM - SETTLED QUICKLY, NO FURTHER REACTION.	
	Filtration color:	
	Notes:	

Aggregate:	Color	Wgt. 3.3T.	Wgt %:
	Grain Shape:		

28.3

SAMPLE W/BEAKER 23 6/10 - 180 5 = 56.5

fine
SS, fine
Concrete,
—

Sieve analysis:

Screen	Wgt.	% Retained
8		
16		
30		
50		
100		
pan		

% Fines: Acid Soluble: Aggregate:

BEAKER EMPTY 180 5 W/ AGG. 183 8

180 5

Δ AGG. LOST 3.3 3 3

rust from metal lath + HCl

003A

NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER
FIELD MORTAR ANALYSIS

Project/Site: MANA	
Location: Henry Hse - see sketch	Date Sampled: 7/05/01
Analysis performed by: PGL	Date Analyzed: 7/09/01

DESCRIPTION OF SAMPLE — **SAMPLE No.**

Type/Location:	see field sketch
Surface appearance:	smooth, regular
Cross Section:	mod. smooth, fine grain
Color: 2.5Y, 7/1	Texture: smooth, med grain
Hardness: crumbly hard	Gross Weight: 59.5

COMPONENTS

Fines:	Color:	Wgt:	Wgt %:
	Notes: slightly damp		
Acid Soluble Fraction:	Wgt:	Wgt %:	
	Desc. of reaction: fast, big bubbles, yellow/br.		
	Filtration color: orange sol		
	Notes:		
Aggregate:	Color	Wgt. 20.0	Wgt %:
	Grain Shape:		

Sieve analysis:

Screen	Wgt.	% Retained
8		
16		
30		
50		
100		
pan		

% Fines: Acid Soluble: Aggregate:

add of mud to

191.9gr = beaker + sand + H_2O - 180 = 11gr

MANA 003B

NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER
FIELD MORTAR ANALYSIS

Project/Site: MANA

Location: Henry Hse | Date Sampled: 7/05/01

Analysis performed by: PGL | Date Analyzed: 7/09/01

DESCRIPTION OF SAMPLE | **SAMPLE No.**

Type/Location: see field sketch

Surface appearance: slightly irreg., dark stain

Cross Section: slightly irreg., grainy

Color: 10YR, 8/1 | Texture: coarse

Hardness: | Gross Weight: ~~38.3gr~~ 35

214
-179
35

COMPONENTS

	Color:	Wgt:	Wgt %:
Fines:			

Notes: still damp - paper adhering to lath

Acid Soluble Fraction:	Wgt:	Wgt %:	
	Desc. of reaction: fast big bubbles, yellow/tan		
	Filtration color: orange-yellow		
	Notes:		

"powder" to surface overnight → curds → dissolved

Aggregate:	Color	Wgt: 12.5	Wgt %:
	Grain Shape:		

felt

Sieve analysis:

Screen	Wgt.	% Retained
8		
16		
30		
50		
100		
pan		

% Fines: Acid Soluble: Aggregate:

2½ gr sand left in beaker

paperstuck to lath — MANA 004

fiber adhering to paper

NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER
FIELD MORTAR ANALYSIS

Project/Site: MANA

Location: Henry Hse 004 Date Sampled: 7/05/01

Analysis performed by: PGL Date Analyzed: 7/09/01

DESCRIPTION OF SAMPLE SAMPLE No. 004

Type/Location: see field sheet

Surface appearance: rough, regular fibers (hair?)

Cross Section: 1/2 "

Color: 10YR 8/1 Texture: coarse

Hardness: friable Gross Weight: 46 gr. -

COMPONENTS

Fines:	Color:	Wgt: 5.5	Wgt %:
	Notes: sh'd damp walled w/ fibers		
Acid Soluble Fraction:	Wgt:		Wgt %:
	Desc. of reaction: active, big bubbles, brown/yellow		
	Filtration color: orange-yellow		
	Notes:		
Aggregate:	Color	Wgt. 25.4	Wgt %:
	Grain Shape:		

some concrete

Sieve analysis:

Screen	Wgt.	% Retained
8		
16		
30		
50		
100		
pan		

SIEVE?

% Fines: Acid Soluble: Aggregate:

30ml. HCl

8 gr. sand / H_2O lost

fines adhering to paper - paper shredding same fines blew away -

NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER
FIELD MORTAR ANALYSIS

Project/Site: MANA

Location: Henry House 005 Date Sampled: 7/05/01

Analysis performed by: PGL Date Analyzed: 7/09/01

DESCRIPTION OF SAMPLE **SAMPLE No.**

Type/Location: see field sketch

Surface appearance: irreg, coarse, dirty, white specks clear ↓

Cross Section: " "

Color: 5YR 4/3 Texture: coarse

Hardness: friable Gross Weight: 45.5

COMPONENTS 3 papers - total 13.5 grams wad up caps

Fines:	Color:	Wgt:	Wgt %:
	Notes:		

30ml HCl

Acid Soluble Fraction:	Wgt:	Wgt %:
	Desc. of reaction: actively large bubbles, yellow brown	
	Filtration color: lt. white	
	Notes:	

Aggregate:	Color	Wgt. 26.2	Wgt %:
	Grain Shape:		

concrete lumps

Sieve analysis:

Screen	Wgt.	% Retained
8		
16		
30		
50		
100		
pan		

% Fines: Acid Soluble: Aggregate:

11.5 grams sand / H_2O lost

MANA 006

NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER
FIELD MORTAR ANALYSIS

Project/Site: MANA

Location: Henry Hse 006 — Date Sampled: 7/05/01

Analysis performed by: PGL — Date Analyzed: 7/09/01

DESCRIPTION OF SAMPLE — SAMPLE No. 006

Type/Location: see field sketch

Surface appearance: irreg, rough, coarse grain

Cross Section:

Color: 10YR, 7/3 — Texture:

Hardness: crumbly — Gross Weight:

	COMPONENTS + remainder		
Fines:	Color:	Wgt: 3.3+1=4.3	Wgt %:
	Notes: Powdery stuff to brown, fines sparkle - some grains of mica or lime		
	blown away.		
Acid Soluble Fraction:	Wgt:	Wgt %:	
	Desc. of reaction: active small bubbles, yellow-brown		
	Filtration color: lt. orange -		
	Notes:		
Aggregate:	Color	Wgt. 29.8	Wgt %:
	Grain Shape:		

Sieve analysis:

Screen	Wgt.	% Retained
8		
16		
30		
50		
100		
pan		

% Fines: Acid Soluble: Aggregate:

30ml HCl

??

3gr. Sand/H2O Cont

Park MANA	NATIONAL PARK SERVICE HISTORIC PRESERVATION TRAINING CENTER		Sheet
Area HEHO			of
Project PLASTER SAMPLES	By for	Checked	Pkg.
Feature	Date 070501	Date	Account

MANA PLASTER SAMPLES - HENRY HOUSE (INTR)

P001- CENTER RM (102) 1ST FLOOR, WALL PLASTER

P002- SO. ROOM (103) OVER OLD DOOR (D100) 1ST FLR

P003- RM 102, EAST WALL, INTR

P004- RM 102, NORTH WALL PLASTER

P005- RM NO 2, SW INTR CORNER

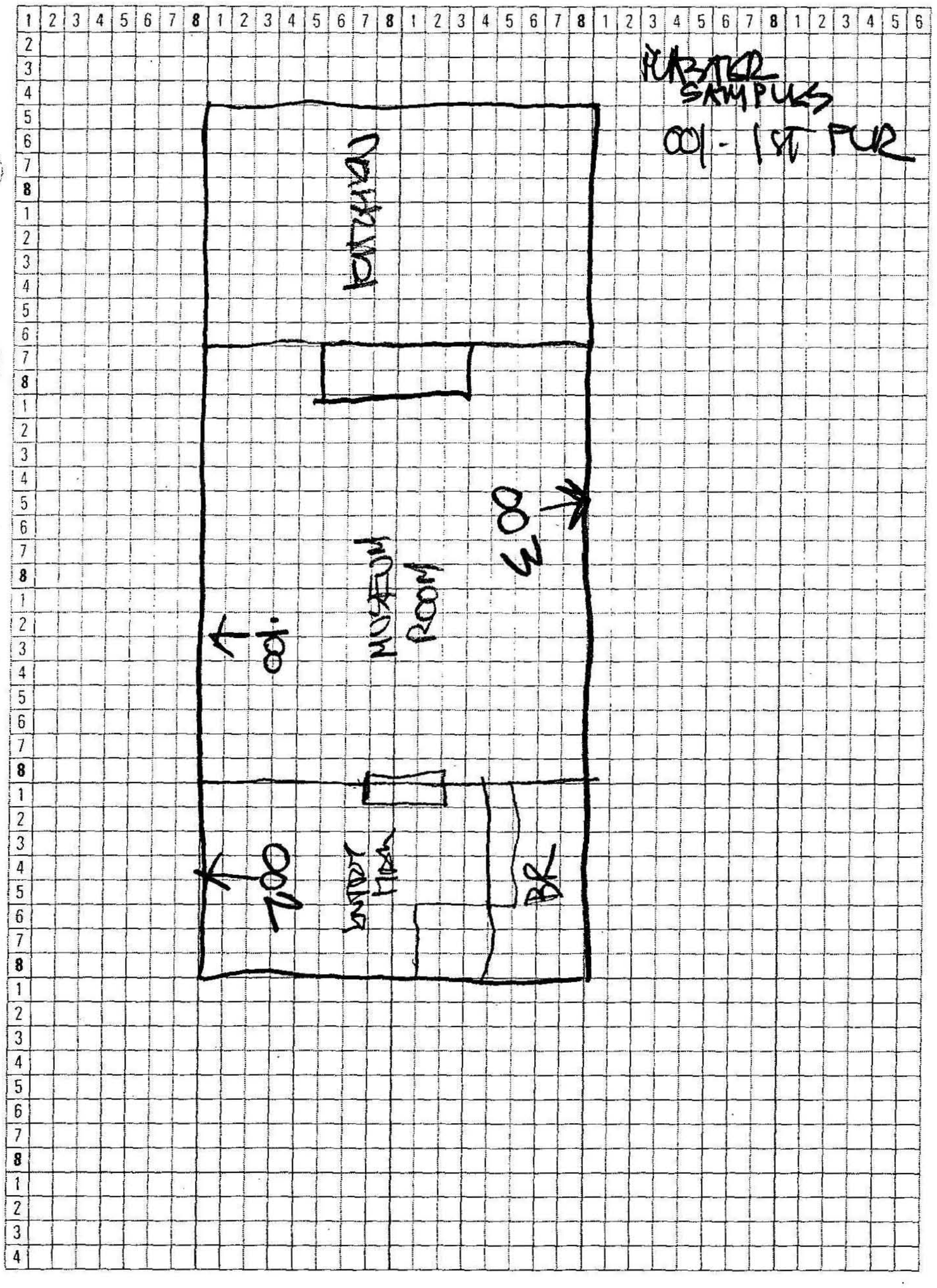
P006- RM 101- NORTH WALL @ STAIR INTR.

*U.S. GPO: 2000-467-092/39519

Park	NATIONAL PARK SERVICE HISTORIC PRESERVATION TRAINING CENTER		Sheet
Area			of
Project	By	Checked	Pkg.
Feature	Date	Date	Account

MANO 07-06-01

N



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Reorder Form No. 4426

U.S. GPO: 2000-467-092/39519

PROCEDURES FOR MORTAR ANALYSIS

PROPER PPE FOR THIS PROCEDURE INCLUDES EYE PROTECTION, HAND PROTECTION, AND CLOTHING PROTECTION.

☐ Select a representative mortar sample.

☐ Target sample weight is 20 grams.

☐ Dry sample thoroughly to remove all moisture content/weight.

☐ Match sample's color with Munsell Color chart. Record color code on data sheet.

☐ Observe and record your observations on hardness and texture on data sheet.

☐ Crush sample with mortar and pestle. Do not over crush. You do not want to alter the aggregate sizes. The mortar should be crushed into smaller pieces to aid in the dissolution in the HCL.

☐ Pre-weigh your weighing pans and filter papers. Record their weights on reverse side of data sheet.

☐ Carefully empty mortar sample into a weighing pan and weigh on scale.

☐ Record gross weight on data sheet (Remember to subtract weighing pan weight from total weight to arrive at the sample's gross weight.)

☐ Deposit sample into a 600 ml beaker.

☐ Using a 4:1 water to Hydrochloric Acid (HCL) solution *, add acid slowly to the beaker/sample to a volume of 50 ml.

☐ Stir gently with non metallic stir stick.

☐ Add a small amount of HCL to sample to ensure chemical reaction is complete and sample is dissolved.

☐ Allow "fizzing" to stop. (You may have to continue stirring throughout the course of the acidic reaction to ensure all cement/lime components are exposed to the HCL.)

☐ Record the reaction of the acid to the mortar and the observable composition of the mortar before separation of the fines and aggregates.

☐ Add water to the beaker to a total liquid volume of 200 ml.

☐ Place the pre-weighed filter paper into a funnel and place the funnel into a 2nd beaker or flask.

☐ Gently swirl the solution within the 1st beaker to suspend the fines in the liquid, allowing the heavier aggregate to remain close to the bottom of the beaker.

☐ Pour off some of the liquid into the filter paper. Continue swirling the liquid and pouring until all of the fines are in the paper and only the heavier aggregate remains in the beaker. You may have to add additional water to ensure that all of the fines are deposited onto the filter paper.

☐ Record filtration color of liquid in 2nd beaker.

☐ Allow all liquid to drain into the 2nd beaker.

☐ Remove filter paper and place on paper towel to dry.

☐ Once fines are separated from the coarser aggregates, empty aggregates from 1st beaker into a pre-weighed filter paper/beaker. Water will need to be added to aggregates to allow them to be poured into the filter paper. Place filter on paper towel to dry.

☐ Allow all samples to dry thoroughly (several hours to overnight.)

☐ Weigh both samples (subtracting filter weight) and record on data sheet.

☐ Divide the individual weights by the gross weight of original sample to attain % weights.

☐ Pour the aggregates into the graduated sieves.

☐ Weigh each sieve's collection, and record weight of aggregates. Calculate the % of each size using total weigh of aggregates divided into the weight collected in each individual sieve. Record on data sheet.

☐ Using a magnifying glass or microscope, determine grain shape and mineralogy of aggregates, if possible. Record data.

☐ Using Munsell chart, match colors of both the fines and the sands. If sand is multi colored, indicate dominant color range/categories. Record on data sheet.

☐ Add the fines and aggregate weights. Subtract them from the gross weight to attain the weight of the cement/lime components. Divide that weight by gross weight for % weight of the cement/lime.

☐ Record ratios of Fines: Acid Solubles: Aggregate***

☐ Carefully scrape dry fines into storage tube and label, assigning corresponding numbers to data sheet and collection tubes.

☐ Repeat with aggregate sample.

☐ Make 3 copies of Field Analysis Data Sheet. One copy for project completion

report, one copy to be kept with the mortar analysis notebook at Jenkins, one copy for record in Masonry team supervisor's office.

* When creating a 4:1 solution of water to HCL, place water in container first and then slowly add the HCL.

***When adding clay fines to mortar mix, they are considered part of the aggregate addition. Example - 1-1-6 =1 part portland, 1 part lime, 5 sand, 1 red clay fines. To determine the exact percentage of clay fines to the sand, combine the weight of the fines with the weight of the sand. Divide the fine's weight by the total weight. This will give you the % of fines in the aggregate. Addition of clay fines should be not exceed 15% of gross mortar weight. The above example has the clay fines at 13% of the total mixture. Your findings may indicate a higher percentage of clay fines, but too high of a percentage in modern mixes can lead to severe cracking upon drying.

To assign sample numbers, start with the alpha code, then the FY, and then the cronological order. Example, GRTO-97-01, ALPO-97-05, etc.