



CAPTAIN WILLIAM SMITH HOUSE

Minute Man National Historical Park
Lincoln, Massachusetts



Historic Structure Report

THE CAPTAIN WILLIAM SMITH HOUSE
HISTORIC STRUCTURE REPORT

Minute Man National Historical Park
Lincoln, Massachusetts

Prepared in 1980- 1981 by

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and
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EDITOR'S NOTE:

Shortly after this report was written in 1980- 1981, the Captain William Smith House underwent a complete exterior and interior restoration based on the findings and recommendations of the report. The work was performed by the North Atlantic Historic Preservation Center (NAHPC), at that time part of the North Atlantic Region (NAR) and located in Boston, Massachusetts. The project was documented in two completion reports by NAHPC historical architect Orville W. Carroll, as follows:

“Completion Report: Underground Utilities, Cpt. William Smith House,” November 1983; and

“Completion Report: Restoration of the Captain William Smith House, January 1985.”¹

In the early 1990s, the North Atlantic Historic Preservation Center became the Building Conservation Branch (BCB) of the Northeast Cultural Resources Center (NCRC), which in 1992 moved to Lowell, Massachusetts. More recently, the North Atlantic Region became part of the Northeast Region of the National Park Service, and the Northeast Cultural Resources Center was disbanded. The staff of the BCB was divided into two entities, the Historic Architecture Program (HAP) and the Architectural Preservation Division (APD).

¹ Orville W. Carroll, “Completion Report: Restoration of the Captain William Smith House, Virginia Road, Lincoln, Massachusetts, Minute Man National Historical Park,” January 1985. 16 pages. CRBIB Number: 400448. Holdings: BOSO/MIMA. Available on DSC/TIC microfiche (406D- 52).

PART 1.

ADMINISTRATIVE SUMMARY

*By Marlene Rockmore
and
Orville W. Carroll*

Building Location and Identification Numbers

The Captain William Smith House is located in the town of Lincoln, Middlesex County, Massachusetts. It stands approximately 325 feet north- northwest of the intersection of North Great Road (Route 2A), Virginia Road, and Bedford Road (fig. 1). Its approximate location on the UTM grid system is Z19 E657, 078 N528, 710.

The Smith House is listed in the National Register of Historic Places, and is included in the National Park Service's List of Classified Structures as no. 06553. The Minute Man NHP Building Number designation is 221.

Statement of Significance

The William Smith House, a prominent colonial- period house with a rare cove cornice, stands along North Great Road (Route 2A) in Lincoln, Massachusetts. The house achieves its distinction due to its architectural merits and its historical associations. The house appears to have been built ca. 1692, and is a good example of late 17th- century colonial architecture. The cove cornice, which presumably was constructed to protect the walls below, is an architectural feature found primarily in houses built in the first quarter of the 18th century. Abbott Lowell Cummings in his recent study *The Framed Houses of Massachusetts Bay, 1625- 1725* pointed out that no examples of this feature earlier than 1690 are known, and only three unrestored examples remain in Massachusetts: the Rea- Putnam- Fowler House in Danvers (ca. 1700), the Parker- Orne House in Marblehead (ca. 1711), and the Whittemore- Smith House in Lincoln.¹ The William Smith House is believed to be the oldest house in Lincoln.

The Smith House has also received recognition because of its historical associations. On April 18- 19, 1775, it was occupied by the captain of the Lincoln Minutemen, William Smith, and his wife Catharine Louisa.² William Smith, the son of Reverend William Smith of Weymouth, was also the brother of Abigail Smith Adams, John Adams' articulate and influential wife.

This seemingly simple patriotic pedigree, however, is complicated by two major mysteries concerning Captain William Smith. First, Smith was a recent arrival to Lincoln at the time of the Revolution, yet he inexplicably rose to become the captain of the local company of Minutemen. Second, he lost personal control of his farm in 1780, and disappeared from the historical records completely after 1783.

¹ Abbott Lowell Cummings, *Framed Houses of Massachusetts Bay, 1625- 1725*, p. 134. Two other houses with cove cornices might be found in Ipswich: the Kendrick House (unrestored) at 5 Hovey Street (ca. 1670) and a restored house on Turkey Shore Road (ca. 1710). See survey files, Massachusetts Historical Commission.

² Also spelled Catherine Louisa.

The house and its land were the property of Catharine Louisa when she married William Smith on January 2, 1771. In 1774, Rev. William Smith financed his son William's acquisition of the property. By 1775, William was captain of the Lincoln Minutemen. In 1780, however, Rev. Smith took the property away from his son and completed a series of transactions with Catharine Louisa's stepfather, William Dodge, to increase the size of the Lincoln farm. Rev. Smith died in 1783; his will bequeathed the property to Catharine Louisa, giving the impression that Smith had deserted or otherwise left his wife and children. The executors of the estate, for example, mentioned "getting off the tenants, moving Mrs. Smith into the house."³ Furthermore, William's name was removed from the assessors' records and replaced with his wife's name in 1784.

Given this information, it seems that the first genuine attempt to document the origin of the Captain William Smith House contained erroneous information about Smith's latter years. In 1939, Harriet Forbes wrote an article entitled "Some Seventeenth- Century Houses of Middlesex County, Massachusetts."⁴ She devoted part of her text to a chronology of events concerning, and occupants of, the Smith House. In her article, she stated that William Smith, Catharine Louisa Smith, and their children lived in the house until William Smith's death, on September 3, 1787. However, neither this date nor the place of Smith's death has subsequently been confirmed.

William Smith's rapid rise in colonial Lincoln has led to a great deal of speculation. The most cynical believe that Smith had been established in Lincoln in order for the Central Boston Revolutionary Committee of Correspondence to retain control over the local Provincial Committee of Correspondence and Minutemen. Certainly some exploration of this suggestion might amplify questions about the organization of the revolution in Massachusetts as studied by Richard Brown and Pauline Maier.⁵ More sympathetic researchers think that Smith moved to Lincoln simply to enjoy the farm owned by his young bride. Some persons surmise that Smith was named captain of the Lincoln Minutemen in exchange for his financial help in establishing the company.

Smith's equally dramatic fall and disappearance is also the subject of speculation and even shame. One local legend has it that Smith was an alcoholic; another, that he was suffering from the debilitation of tuberculosis. In 1904, he was disavowed by Charles Francis Adams, presumably his great grand- nephew. Adams lived in Lincoln at the time, and was asked to speak at the centennial commemorative for the town. His oratory focused on the prominent members of the community from its past. After proudly proclaiming "I am a cousin seven times removed of the descendants of Eleazar Brooks, now living in Lincoln...," Adams came to the name of the next neighbor along the County Road, William Smith. Adams' tone became less proud and confident, and he said, "I have always understood also that William Smith commanded the company of Lincoln Minutemen. The Reverend William Smith of Weymouth was of Charlestown descent, but in some way he became the possessor of a farm in Lincoln. He

³ Account of Richard Cranch as Executor, Suffolk Probate #18039.

⁴ Harriet Forbes, "Some Seventeenth Century Houses of Middlesex County," *Old- Time New England*, Vol. XXXIX, No. 3, 1939, pp. 97- 99.

⁵ Richard D. Brown, *Revolutionary Politics in Massachusetts: The Boston Committee of Correspondence and the Towns, 1772- 1774* (New York: Norton, 1970); and Pauline Maier, *From Resistance to Revolution: Colonial Radicals and the Development of American Opposition to Britain, 1765- 1776* (New York: Knopf, 1972).

had a son, William, and three daughters, among them Abigail who became Mrs. John Adams. Presumably, the son settled on his father's Lincoln farm; and if so, he was, in 1775, a man of twenty- nine. Of him little is recorded. The name is so common that I do not feel assured the Captain William Smith of Lincoln was the brother of Abigail Adams. Such, however, is unquestionably the Lincoln tradition."⁶

Investigation Done Prior to This Report

Historical Research

Forbes' 1939 article remained the primary source of information about the Smith House until the early 1960s, when more data was obtained as part of a large- scale collecting of archival records during the establishment of Minute Man National Historical Park. The breadth of that research was somewhat limited: it focused specifically on the need to define the new park's boundaries, and on the need to establish the historical association between the historical properties and the historic events. Most of the records relating to the Smith House were collected in 1962- 63 by Robert Ronsheim, former National Park Service historian, and Russell Keune, former National Park Service historical architect. Mr. Ronsheim tried to establish a date of construction and the historicity of the property. Mr. Ronsheim wrote a draft report in 1965 entitled "Smith and Dodge Holdings and Occupants, Lincoln," which stopped about 30 percent short of completion. Mr. Ronsheim, along with his history students from Northeastern University, researched and wrote a draft report on "Land in the Park," a study of the property transactions that included land owned by Captain William Smith. This report also was left uncompleted.

Another researcher who studied the Smith House was John Luzader, who discussed the folk legends associated with the house and the events of April 18- 19, 1775, in his report *The Samuel Hartwell House*.⁷ Other material of this type was contained in Paul Brooks' *The View from Lincoln Hill* and his pamphlet *Trial by Fire*.

The most extensive study of the archival records relating to the land transactions, inventories, wills, and probates of the property owners in the easterly part of Concord (now Lincoln, Massachusetts) was conducted by Mrs. Peg Grason of Bedford Road in Lincoln. Beginning in the mid- 1960s, Mrs. Grason researched the archives of Middlesex County, concentrating on the property owners in the eastern part of Concord, which became the town of Lincoln in 1754. After six years of continuous research on the property owners in North Lincoln, Mrs. Grason finally quit. As a result, her voluminous research notes, maps, and drawings of property owners was never published. However, she was most generous in allowing the authors of this historic structure report to read through her research notes, and in permitting them to duplicate a copy of a relatively unknown land survey dating from 1779.

⁶ Charles Francis Adams, *A Milestone Planted...*, p. 127.

⁷ John Luzader, *The Hartwell House and Hartwell Tavern: Historic Structure Report, Historical Data Section* (NPS, 1968).

Archeological Research

No archeological excavations or surveys have been done on the Smith House property. Several sites in the area remain to be investigated, such as those of the colonial- era barns, the outbuildings seen north of the house in the 1890s photographs, the well[s], the pond southeast of the house, the road traces, and the cellar hole mentioned in the 1734 deeds. The area east of the house, where several outbuildings once stood, has undergone much change since the 1930s, including extensive regrading. The bottom land east and northeast of the house is one enormous dump of 20th- century artifacts, as are isolated areas north and west of the house.

Architectural Research

This report is the first attempt to study the architectural changes made to the Smith House. In 1977, eight uncompleted sheets of HABS measured drawings were started by Mark Hall, Bob Louton, and Gordon Olschlager. These drawings are included as Appendix C of this report.

Major Findings of this Report

The year in which the Captain William Smith House was built remains unknown. However, the archival research suggests that 1692 is the most likely date.

Architecturally, the house has undergone four major changes to its exterior: circa 1742- 58; circa 1825; circa 1900- 10; and circa 1956. Despite these physical changes, the house retains much of its original fabric, and represents a fine example of late 17th- century architecture in New England.

Proposed Treatment and Use

Master Plan

The March 1965 Master Plan proposes the following treatment for the Captain William Smith House: “Composite rest.[oration] of ext.[erior] to appearance compatible w/historic scene. Remodeling of int.[erior] keeping original fabric which survives. Proposed use EIP, Seas.[onal] Q[uar]trs.”⁸ The Master Plan is subject to revision from time to time as a result of administrative decisions regarding building usage.

⁸ “Building Use and Treatment Plan,” Drawing No. NHP- MM 3002B, Sheet 2 of 2 of the Master Plan, March 1965.

The Master Plan also contains “The Troop Movement Map,” which indicates the route that the British troops took past the Smith House on their retreat from Concord to Charlestown.⁹

Interpretive Prospectus

The Interpretive Prospectus, approved February 11, 1977, contains only two references to the Captain William Smith House, on pages 15 and 16. On page 16, it states:

Here and at the Captain William Smith House there should be interpretive markers that identify the owners, their occupations, provide brief biographical information about them and indicate their place in the community and what they did on April 19, 1775. In this connection, the filiopietistic “Dr. Prescott- Mary Hartwell- Sukey, the slave” legend associated with the Sgt. Hartwell and Capt. Smith houses should not be perpetuated. (Identification signs and markers should be placed at other historic resources in the area.)

Historic Structure Report

The authors of this report recommend the restoration of the exterior of the Captain William Smith House to the historic period of April 19, 1775. During this significant period in American history, the house was occupied by Captain William Smith and his family. Smith was the brother of Abigail Adams, wife of John Adams, second president of the United States. This relationship may have resulted in William Smith being appointed captain of the Lincoln Minutemen. Captain Smith was responsible for alerting the Minutemen of Lincoln, on the night of April 18 and the following morning, that the British were marching to Concord to seize and destroy the military stores kept by several of the town’s inhabitants.

In addition, since the Smith House is the only 17th- century building in the park that can easily be shown to the public, it might be included as part of an architectural tour of the park, in addition to telling the story of the role of the Lincoln Minutemen and their contribution to the American Revolution.

⁹ Drawing No. NHP- MM 3010, dated August 1963.

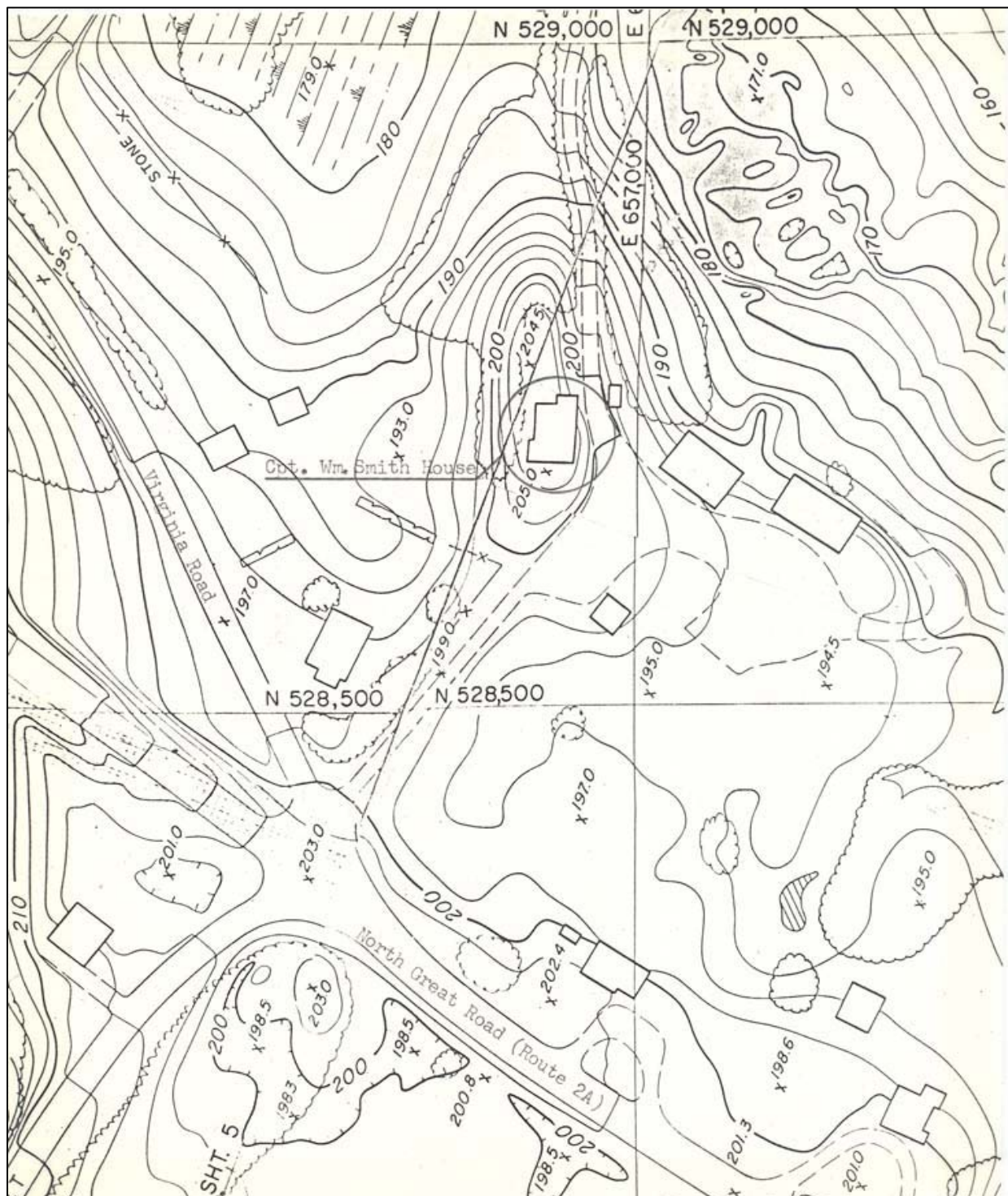


Figure 1. Location of the Captain William Smith House, Lincoln, Massachusetts.

PART 2.

HISTORICAL DATA

*By Marlene Rockmore
and
Orville W. Carroll*

INTRODUCTION

Research Methodology

I was engaged by the National Park Service during the summer of 1980 to complete the documentary research on the Captain William Smith. My primary task was to assist NPS historical architect Orville Carroll in determining the appearance of the house on April 19, 1775. For this reason, my research effort focused on detailed information that could verify the physical findings of the architect, rather than pursuing more general historical questions. I therefore assembled an extensive collection of deeds and probates related to the ownership and appearance of the Smith farm from 1690 to the present, as well as deeds and probates related to the abutting land, primarily for determining the historic boundary. These documents were scrutinized specifically to see if they contained any clues about the size and appearance of the William Smith House in 1775. However, they may be useful in the future for researching larger issues, such as William Smith's role in the American Revolution, or the house as an indication of social and economic status. These documents are filed at the Northeast Cultural Resources Center, Lowell, MA. The conclusions I drew from my study of them is presented here.

For example, one important question that the research effort sought to answer was the date at which an early lean- to was added to the north side of the 17th- century house. This lean- to was replaced ca. 1900 by the present two- story addition along the north side of the house. Of equal interest were exterior and interior alterations to the original house. For example, an attempt was made to determine the date when the large central chimney was removed. The research also considered the presence of outbuildings, stone walls, acreage, and land use, in order to describe the historic setting in which the house stood.

Most fortunately, I was able to examine the material collected by Mrs. Peg Grason during the latter's six- year study of the archival records relating to the land transactions, inventories, wills, and probates of the property owners in the easterly part of Concord (now Lincoln, Massachusetts).

I also reviewed the research notes compiled in the early 1960s by Robert Ronsheim and Russell Keune, which are filed at Minute Man NHP. The collection at the park includes mostly early deeds and probates related to property within the park; Ronsheim's notes and the preliminary draft of his report on the William Smith House, which provided me with valuable insights early in my research; and general reference books on local and state history, which provided background information. Having access to the park's collection of assessment and tax records was useful in determining the tenancy and use of the Smith farm in the late 18th to early 19th century. The park's collection was ample to document the 18th- century ownership, use, and alterations, but lacked information concerning both earlier and later use and development.

For earlier records that might document the age of the house, I searched the Concord Free Public Library. Lincoln was part of Concord until 1754, when it was set off as a separate parish. Later sources such as tax records, church and town records, maps, photographs, etc., through the late 19th century were sought at the Lincoln Public Library. I also completed a title search on the property. At the Middlesex Registry of Deeds, I was able to trace the title to Caroline M. Barnard in 1876. The search was continued at the Suffolk County Registry of Deeds, which yielded much of the missing information.

I also consulted the Adams Papers at the Massachusetts Historical Society, where I found some limited but useful information about the house of Abigail Adams' brother. Children of the Butcher and Primak families, who lived in the Smith House from the turn of the century until the early 1920s, were also interviewed.

Several other depositories were checked with less than fruitful results. One of these was the Worthen Collection at the Cary Memorial Library in Lexington, which contains photographs of persons, activities, and buildings clearly associated with Lexington's heritage. None of Mr. Worthen's correspondence about the Smith House was located. Back issues of the *Waltham Free Press*, on microfilm at the Waltham Public Library, were also checked: each Friday, the paper formerly carried a column on Lincoln happenings. The period from December 1890 until January 1981 (when the house was put up for auction) were particularly scrutinized.

Like Mrs. Grason, I was unable to pinpoint the year in which the Smith House was constructed. I did find, at the Middlesex County Courthouse, a misplaced page from the inventory of 1734, in which a reference to a "back room" was found. (This may or may not have been a reference to the early lean-to addition hypothesized by this report.) I also found, in the Suffolk County Courthouse, records that explained the pertinent land transactions during the 19th century. Finally, several new photographs of the Smith House were found during the research for this report, which permitted a more accurate interpretation of the changes that occurred to the building after 1890.

In addition to Mrs. Grason, I wish to thank the following persons for their invaluable assistance in preparing this report:

Cynthia Kryston, who guided me through the park's collections;
Mrs. Moss, research librarian at the Concord Free Public Library;
Mrs. Martin and Mr. Daly, of the Lincoln Public Library;
Mrs. Cross, of the Cary Memorial Library in Lexington; and
the staff at Minute Man National Historical Park.

Suggestions for Further Research

Two areas merit further study. I did not research either because I did not think that the time spent would yield information pertinent to the question at hand. First, I did not trace the Smith land back further than 1680. The land has historical associations with the formation of the early Puritan village of Concord, and certainly has prehistoric associations. Both of these topics should be considered for future investigations.

Second, many questions remain concerning William Smith himself. It might be helpful to obtain from the Massachusetts State Archives his deposition concerning the skirmish at Concord on April 19, 1775. Further, Smith could provide an interesting focus for a discussion of the relationship between the Central Boston Revolutionary Committee of Correspondence and the Provincial Committees. Finally, knowledge about Smith's plight during and after the war could lead to an understanding of the outcomes of the Revolution, not in terms of political gains, but in terms of social and economic privation and dislocation.

Abbreviations Used in the Footnotes

AFC	Adams Family Correspondence
CFPL	Concord Free Public Library
LPL	History and Genealogy Archives, Lincoln Public Library
Mid. Deeds	Middlesex County Registry of Deeds
Mid. Probate	Middlesex County Registry of Probate
MHS	Massachusetts Historical Society
MIMA	Library, Minute Man National Historical Park
MSA	Massachusetts State Archives
Suff. Deeds	Suffolk County Registry of Deeds
Suff. Prob.	Suffolk County Registry of Probate

— Marlene Rockmore

WHO BUILT THE SMITH HOUSE?

The conventional date given for the construction of the William Smith House is 1692- 1693 – shortly after the first known occupant, Benjamin Whittemore, Yeoman, married Esther Brooks on August 17, 1692. At the time of his marriage, Whittemore was busy aggregating a sizeable farm where he could support his young wife and his heirs. Partly because custom expected him to provide a new house, the date of construction of the Smith House has been accepted as 1692.¹⁰

However, this interpretation merits a closer examination. In order to examine the presumed date of construction, deeds that described Benjamin Whittemore's early land transactions were collated, particularly those before 1690 through 1700. From this compilation, it was found that during those years, Benjamin Whittemore had aggregated a farm of about 131 acres that he had bought from neighbors along the County (Bay) Road. He continued to expand this farm until his death in 1734. Of the deeds related to his earlier land acquisitions, three transactions are of particular importance because the descriptions bear some resemblance to the siting of the present property. The first parcel was a 15- acre piece purchased from Moses Whitney of Stow in March 1691/2, which had "one messuage or small tenement." The parcel was bounded by the Bay Road to the south, land of Samuel Hartwell to the west, and of Francis Fletcher to the east.¹¹ The second significant parcel was an unimproved parcel of 26 acres conveyed to Whittemore by Francis Fletcher on October 31, 1693. This parcel was bounded to the south by the Bay Road, to the east by the Rice division, and to the west by land of Samuel Hartwell.¹² The third significant transaction was completed in 1697 when Whittemore bought a 30- acre parcel from Peter Rice, which was bounded southwest by the Bay Road and west by land of Benjamin Whittemore. This parcel contained a dwelling house.¹³

The fundamental problem with the use of the early deeds is that they do not reveal on which parcel the house is sited. However, they do suggest two possible scenarios for the origin of the Smith House. First, Benjamin Whittemore could have built a new house ca. 1692, farther back from the road than the Rice or Whitney houses. He may have retaining these houses for the future use of his children; a 1749 document related to road construction suggests that his son Nathaniel lived not in the Smith House, but in a house closer to the road. Second, Whittemore could have moved into either the Rice or Whitney houses.

If this latter was the case, the Smith House would date to the early 1680s. The Peter Rice house conveyed to Whittemore in 1697 was built on the 30- acre parcel that Peter had been given by his father, Richard Rice, on November 25, 1681. At the time the father granted his son the lot, along with a 6- acre meadow, the parcel was unimproved. The transfer of the same parcel 12

¹⁰ See Forbes, p. 97.

¹¹ Mid. Deed 10:371.

¹² Mid. Deed 10:370- 1.

¹³ Mid. Deed 13:80- 1.

years later was improved with a dwelling house.¹⁴ The Whitney parcel of 15 acres was granted to Moses Whitney as part of the second division of land. Whitney was granted his lot April 8, 1681.¹⁵ Again, the lot was unimproved, but when Whitney transferred the lot to Whittemore in 1691/2, the deed mentioned the “small tenement or messuage.”

In conclusion, although no definitive date of construction could be determined from the historical documents, it is fairly certain the house was constructed no later than 1692/3, and may have been built a decade earlier.

After establishing a date when the house was built, the next inquiry was directed towards finding information on the original appearance of the house. Benjamin Whittemore retained the property until his death in 1734. Whittemore did not leave a will, so his neighbors had the responsibility of the inventory and division of Whittemore’s property among his heirs and setting off the widow’s thirds. The records of the administration of Whittemore’s probate, which include inventories, give some information on the exterior and interior appearance of the house and its outbuildings and setting.¹⁶

Most importantly, the real estate inventory establishes that the house was a typical colonial-style house with a central chimney, as indicated when the widow’s thirds were set off, granting Esther Whittemore “one half of the Dwelling house and one half of the Cellar, the west end of each.”¹⁷ The setting off of the widow’s thirds also gives some information on the interior configuration of the house. Esther Whittemore had to be granted assurance of the privilege of the cellar stairway “with liberty of using the same way into said cellar with liberty of use of the well for her supply of water, and of passing to and from the same, also the liberty of the ovens.”¹⁸ The language indicates that the access to the cellar, and the well and kitchen, were all located on the east side of the house. The kitchen might have been in the east first- story room. When Esther Whittemore died in 1743, her probate repeated this description of the house, confirming the previous probate.¹⁹

The inventory of Benjamin Whittemore’s estate suggests that the house also had a rear area by 1734. The inventory lists “the bed and bedstead and ye furniture in ye West Chamber; to six chairs in the West Chamber and to six speckled cups in ye West Chamber; the bed and all of the furniture in the East Chamber, the Bed and furniture in West Loer Room and to seven chairs in ye West Room and one in the Back Room.”²⁰ The “Back Room” was probably in the 1 ½ - story lean- to seen extending across the entire north wall of the house in the earliest photographs.

The probate also tells us that the property had one barn. Esther Whittemore was granted the use of the west end of the barn. There was no mention of outbuildings other than the well. The probate does leave an impression of some aspects of the historic setting. It is possible that the

¹⁴ Mid. Deed 12:25, Mid. Deed 13:80- 1.

¹⁵ See Lemuel Shattuck, *History of Concord*, p. 44.

¹⁶ Benjamin Whittemore Probate, Mid. Prob., #24776, Nov. 12, 1734.

¹⁷ Whittemore Probate, Item #9, Real Estate Inventory.

¹⁸ Whittemore Probate, Item #27, Widow’s Dower.

¹⁹ See Probate of Esther Whittemore, 1742, Mid. Prob., #24786.

²⁰ Benjamin Whittemore Probate, Item #3, Inventory.

barn was located on the east side of the house, because Esther Whittemore was granted “the liberty from time to time and at all times to pass and repass from the house to the barn.”²¹

The description of the widow’s dower, traditionally 7 ¾ acres and one- third of the whole value, also gives detail about the house’s setting. The neighbors’ description of the boundary was as follows:

Then we proceeded and set off to Esther...the fore swamp with the land whereon the house and barn stands with orcharding and pastureland with a small corner of plowland at ye old celler bounded by the County Road up the middle of the lane to the east end of the Dwelling house between the East End Doors and the well thence turning four rods to a large rock

...thence running Northeastwardly twenty three rods and a half to a stake and stones from thence turning near an Northwestardly point near twenty seven rods to a heap of stones at the stone wall between the premises and Nathaniel Whittemore’s cornfield then running westerly straight to the County Road including a corner of old orchard.²²

Of the remaining acreage, the descriptions offered in the inventory are vague but provide some details. We know that the land of Benjamin Whittemore was bounded to the east by land of Ebenezer Lamson and north by land of Samuel Hartwell. The County Road ran southwesterly, and Whittemore had some property on the south side of the road that was bounded by land of Ebenezer Brooks. The inventories mention three stone walls, one to the northwest behind the house, and two on the southern side of the property. The first of these ran southwest by the land of Ebenezer Brooks near the swamp and Silver Book; the second ran southeast by the Great Pasture. The inventory also mentions clay pits on the northeast side of the property, by Nathaniel Whittemore’s stone wall. The balance of Benjamin Whittemore’s land totaled 67 acres, since prior to his death Whittemore had given his eldest son Benjamin and his second son Nathaniel 40 acres each. Benjamin Whittemore, Jr., died within a year of his father, his property eventually passing into the hands of his brother Nathaniel.

The executors granted Nathaniel Whittemore, the second son, two- thirds of his father’s estate, and following Esther Whittemore’s death in 1743, Nathaniel Whittemore was granted the widow’s dower, which included the “seven acres and a quarter and twenty five rods on which the house and barn stands...three acres and sixty fore rods lying at the North End of that peace on which the house and barn stands further more...two acres on the south side of the great past[ur]e so cald....”²³

Nathaniel had also purchased several abutting parcels of land from his father before the latter’s death. In 1728 Benjamin Whittemore sold Nathaniel “forty acres in Concord, 30 acres southeasterly on the County Rd and 10 acres north on the road.” In 1731 the father sold his son 22 acres: 10 acres bordered on the west by land of Samuel Hartwell, on the northeast by land of Stephen Davis, on the east by land of Ebenezer Lamson, and on the south by land of Ebenezer Brooks; two acres of meadow land bounded north and east by land of Ebenezer Lamson; and an

²¹ Whittemore Probate, Item #27, Widow’s Dower.

²² Whittemore Probate, Item #27, Widow’s Dower.

²³ Whittemore Probate, Item #27, Widow’s Dower.

upland parcel bounded north by the County Road and east by land of Benjamin Whittemore.²⁴ Between the land inherited and bought by Nathaniel Whittemore, his holdings totaled 145 acres; presently, the additional 50 acres of the 203- acre tract sold in 1758 by Nathaniel Whittemore to the Dodges cannot be accounted for. It is possible that Nathaniel Whittemore acquired most of the remaining acreage from the heirs of his neighbor to the east, Ebenezer Lamson.²⁵

What can be verified are some small changes made to the property between 1743 and 1758, when Nathaniel Whittemore sold the farm in Lincoln to the Dodges. First, a second barn was built; the deed between Whittemore and Dodge mentions “a dwelling house and two barns.”²⁶ Secondly, three “highways” were laid out by the Town of Concord across the Whittemore property in 1749. One way, two rods wide, ran near the William Smith land. The description reads:

The third way beginning at Concord Road against the Dwelling House of Mr. Nathaniel Whittemore on the westerly side of the land of Mr. Ephraim Hartwell and runs on the land belonging to the heirs of Benjamin Whittemore Deceased to the land of said Nathaniel Whittemore the Easterly end of the Draw Bars to be bound of the said way on the easterly side thence across said Jones land continuing to the meeting house.²⁷

The passage also leaves an impression that Whittemore did not live in his father’s house, but had built a house or lived in one of the earlier houses that had been located closer to the great road. If this is the case, then it could be further assumed that the father’s house might have been vacant between the time of Esther Whittemore’s death and the conveyance of the land in 1758. If this is the situation, then it seems plausible that the house might well have remained unaltered.

²⁴ See Mid. Deed 44:713- 714, March 21, 1728; Mid. Deed 44:76, Sept. 16, 1731.

²⁵ When Nathaniel Whittemore becomes the owner of the Smith House, the research becomes very difficult. Robert Ronsheim discussed the obstacle in preparing an earlier report on the Jacob Whittemore House: “There are some problems with the Nathaniel Whittemores. There was one in Lexington and one in Concord, about two miles apart; both married Abigails; both had sons named Nathaniel.... We do not know when the Lincoln Nathaniel Sr., a man of some wealth died or if he remarried in the area after selling 203 acres in 1758. There was another Nathaniel who died in Lincoln or Concord in 1780 with but a half acre and a poor dwelling house. His widow was poor and in debt but she was not named.” Ronsheim, *Land in the Park*, p. 38. We know now that Nathaniel Whittemore moved from Lincoln to Lunenburg, Massachusetts, in 1758 and died in Lunenburg in 1770. The common name has made deed research somewhat troublesome.

²⁶ Mid. Deed 56:193, April 6, 1758.

²⁷ This possibly describes Bedford Road. See Record of General Sessions, Town of Concord, obtained from Mrs. Peg Grason.

THE HISTORY OF THE SMITH FARM

In 1758 Nathaniel Whittemore sold his 203- acre farm with a house and two barns to Elizabeth and William Dodge of Lunenburg in the County of Worcester. The property was abutted to the south by the County Road, easterly by the land of the heirs of Ebenezer Lamson and the land of Thomas Nelson, northerly by the land of Nathaniel Whitaker heirs, and easterly by Ephraim Hartwell's land. The Dodges paid £1000 for the property out of an estate left to Elizabeth Dodge before her marriage to William Dodge.²⁸ In exchange, Whittemore bought a farm from the Dodges in Harvard, Massachusetts, where Elizabeth had been born.²⁹

Documentary evidence suggests that the Dodges did not occupy the Smith farm themselves. In October 1758, shortly after they bought the farm, the Dodges leased the property to one Elizabeth Proctor, identified as a widow from Lincoln. The property was described as follows:

a messuage and other buildings and three parcels of land all situated in Lincoln, being all the lands and premises conveyed by Deed of Bargain and Sale dated the Sixth of April last from Nathaniel Whittemore of said Lincoln to Elizabeth Dodge the wife of the said William Dodge as by the same deed recorded among the Registry of Deeds for said County Book 56, Page 193. For a rent of fourty pounds every thirty first of October.³⁰

The Dodges also gave Elizabeth “a pair of oxen, six cows, a mare and a Riding Chair, all the hay in the barn,” and for the term of the lease, “a pew in the meeting house.”³¹

There is no record of the renewal of the lease, and Dodge is listed in Lincoln's 1764 assessment record. However, it is still not clear if the Dodges ever occupied the farm. The assessment record of 1769 lists William Dodge as a nonresident.³² And by 1770, when the Dodges moved to New Hampshire, his residence was recorded as Medford.³³

The move to New Hampshire apparently required a transaction involving Elizabeth Dodge's only child by a previous marriage to William Salmon, Catharine Louisa Salmon. When Elizabeth's father died in 1755, he bequeathed his land to Elizabeth and William Salmon and their natural children.³⁴ Thus, in 1770 the Dodges granted 100 acres of the farm in Lincoln to

²⁸ Mid. Deed 56:193, April 6, 1758. Harvard marriages, p. 209. William Dodge and Elizabeth Salmon married January 28, 1755.

²⁹ Worcester Deeds 33:546, April 9, 1758.

³⁰ Mid. Deed 56:276, Oct. 31, 1758.

³¹ Mid. Deed 56:276, Oct. 31, 1758. [Editor's note: Elizabeth Dodge's maiden name was Proctor; it is possible that the two women were related. This would explain why the Dodges bought a farm that they never inhabited, and why the terms of the lease were so apparently generous.]

³² Lincoln Assessment Records, North Book, 1764- 1790.

³³ Mid. Deed 71:38- 39, Dec. 20, 1770.

³⁴ See Worcester Probate #48062, Nov. 18, 1775.

Catharine Louisa, who in return “quit claimed unto Nathaniel Whittemore of Harvard in the County of Worcester all her Right, Title and Interest...in a farm in said Harvard.”³⁵

In 1771 Catharine Louisa Salmon married William Smith, Jr., the only son of Reverend William Smith of Weymouth, and the brother of Abigail Adams. Harriet Forbes claims that William Smith and Catharine Salmon were married on Sept. 3, 1771.³⁶ This date appears to be incorrect; they were probably married earlier. In the diary of Reverend William Smith for the year 1771, he mentions that on March 23, 1771, “my son and his wife dined here.”³⁷ It is believed that they were married on January 2, 1771.

On February 5, 1774, William Smith rented from William Dodge three additional parcels of land: (a) a 40- acre piece lying on the south side of the County Road bounded southerly by the land of Aaron Brooks and easterly by Samuel Hartwell; (b) a one- acre piece lying northerly on the County Road easterly by Samuel Hartwell and southerly by Aaron Brooks; and (c) a two- acre piece bounded “beginning at a pitch pine tree marked thence running easterly till it comes to the end of a stone wall by a cranberry meadow so called thence from the northerly end of said stone wall to a maple marked thence southerly to the first mentioned bounds.” Two months later William Smith borrowed £100 pounds from his father and bought the property from Dodge.³⁸

Although it seems probable that Smith might have moved to his wife’s land soon after their marriage, there is no documentation of Smith’s occupancy of the property before 1774, when he first appears in the town’s tax record; he was assessed for his sizeable farm of about 101 acres. The farm had 16 acres of tillage, 35 acres of mowing land, and 50 acres of pasture land. His livestock included two horses, two oxen, nine cows, four swine, and 20 sheep. He was also assessed for the possession of one slave.³⁹ Therefore, in 1775, William Smith’s house was located within the bounds of a 140- acre farm.

On May 22, 1775, Reverend William Smith acquired woodlands from Jonas Minot. The 6- acre lot lay in the easterly part of Concord bounded “north on the land of John Davis as the fence now stands to Zacharias Wheeler’s land then turning and bending westerly on Zacharias Wheeler’s land to a large stone or rock from thence as a wall now stands to Timothy Wheeler’s land then bending on my [?] westerly then bending southeasterly and east on the land of Timothy and William Wheeler as the wall now stands to the bounds first mentioned.”⁴⁰ In 1777,

³⁵ Mid. Deed 71:38- 39, Dec. 20, 1770.

³⁶ Harriet Forbes, “Some Seventeenth Century Houses,” *Old- Time New England*, p. 98.

³⁷ Diary of Rev. William Smith, 1771, MHS. See also Adams Genealogy, MHS, Adams Papers on microfilm.

³⁸ Mid. Deed 76:36- 37. See also the Map of Stephen Davis, for boundaries of Smith Farm in 1779 which on the western, southern and northern boundary remain the same as in 1775.

³⁹ Lincoln Assessment Records, North Book, 1774, Book 4, page 12, MIMA files. William Smith owned a sizeable farm compared to his Lincoln and Concord neighbors. He certainly had enough land to comfortably maintain his family. Robert Gross in *The Minutemen and Their World* estimates that a family of six needed a minimum of 24 to 26 acres to provide sufficient grain (8- 10 acres) and beef and dairy products (14- 16 acres meadow and pasture).

⁴⁰ Mid. Deed 82:280, May 22, 1775. The 6- acre Minot woodlot was inherited upon Catharine Louisa Smith’s death by her daughter, Louisa Catharine Smith, who passed it on to her sister, Elizabeth Foster (see Mid. Deed 686:217, June 29, 1854). The piece is not included in the transaction between Barnard and Pierce. The 6- acre lot then might have been sold sometime between 1854 and 1876 by the Fosters.

Reverend Smith added the widow's thirds of Sarah Lamson to the eastern boundary of the Smith farm. Figure 2 is a plan of land ownership in the area in 1779.

In 1780, the Smith farm was expanded when Reverend William Smith bought 100 additional acres from William Dodge. The land was part of the 203- acre farm Dodge had bought in 1758 from Nathaniel Whittemore.⁴¹ As was his practice, Dodge had leased the farm to a tenant who had been cultivating the farm. The land was bounded "northeasterly on the land now belonging to said Smith...down to the corner of Ephraim Hartwell's Meadow thence as the fence now stands to the land of Deacon Davis from thence as the fence now stands to land belonging to Josiah Nelson and running from said land to the County Road then to the bounds first mentioned the whole of the premises now under the improvement of one Jacob Foster."⁴²

At the time of his purchase of the 100 acres from Dodge, Reverend William Smith required his son and his daughter- in- law to sign away their rights and title to the land. William Smith and Catharine Louisa Smith continued to live at the farm until 1783 when William Smith's name disappears from the assessment records. In September 1783, Reverend William Smith died, leaving the farm in Lincoln to his daughter- in- law and absolving his son of all his debts. The will contained a curious phrase:

My will is that my farm at Lincoln...shall all be possessed by my executors herein named during the natural life of my son, William, and the profits thereof by then [them?] applied according to their discretion to the separate maintenance and comfort of Catharine Louisa, the present wife of my said son and her children and after the death of my said son, William, and give the use of my farm...to my daughter- in- law....And my will further is in case my executors should die before my said son, William, my desire is that the Honorable Judge of Probate appoint an administrator cum testamento annexo to manage my farm.⁴³

The passage seems to indicate that William Smith was alive in 1783, but had perhaps deserted the family.⁴⁴ This interpretation is corroborated by tax records and family letters. The Lincoln Assessors from 1783 through the early 1790s listed Catharine Louisa Smith as the head of the house, sometimes also listing a tenant. For example, in 1783, the executors of Reverend Smith's estate leased half the house to Aaron Brooks. William Smith is absent from the tax records after 1784, as he is from the Federal Census of 1790.⁴⁵ There seems to be no clear explanation for the sudden disappearance of William Smith.

Registration of the transaction was not found in a search at the Suffolk County Registry of Deeds, nor could any deed be found at the Middlesex Registry.

⁴¹ Mid. Deed 82:57.

⁴² Mid. Deed 82:57. This aggregation continued the substantial prosperity of this farm compared to the neighbors. See Lincoln Tax Records 1778, Book 7; 1779, Book 7, p. 6; 1780, Book 12, p. 8.

⁴³ Probate of the Reverend William Smith, Suff. Prob. #18038, Sept. 3.

⁴⁴ There is no death record at present for Captain William Smith. Previous reports have confused Capt. William Smith of Lincoln with other William Smiths. See, for example, the Probate of Captain William Smith of Stoughton, Suff. Probate #19162, Sept. 3, 1788.

⁴⁵ See Lincoln Invoice Book 1783- 1790.

When John Quincy Adams, then 18, visited his Aunt Smith in Lincoln in September 1785, he noted that “She has five children with her and one at Mrs. Shaw’s: Billy, Louisa, Polly (Mary), Isaac and Charles are here. The eldest is not more than 14 years old, the youngest about 6.” And he added, “Oh, it almost makes my heart shrink within me when I look on these fine children to think of the prospects before them: entirely the affects of extravagance in a father. What a lesson. Surely Providence makes sometimes up [sic] of high means to terrify those who can be actuated by no other principle into the performance of their duty.”⁴⁶ Again, there is only fragmentary information that could explain Smith’s transgression and subsequent disappearance. The only clue appears to be John Quincy Adams’ reference to some sort of financial misconduct.

What happened to Captain William Smith? The information, again, is limited. In early letters between Abigail Smith and her fiancé John Adams, the description is of a carefree adolescent. Abigail Smith also wrote to Cotton Tufts in 1764, “Please remember me to my brother and tell him he should write me for he has little else to do,” and later she remarked of her brother, “...he is in high spirits and more agreeable than he ever was.”⁴⁷ After William Smith’s marriage to Catharine Louisa, Abigail Adams did visit her brother in Lincoln in 1774, but did not offer much observation on her brother’s health or the house.⁴⁸

Abigail Adams, however, did provide some clues into her brother’s war record. Smith was a captain of the Lincoln Minutemen in which he served briefly. He had a captain’s commission at the time of the Battle of Bunker Hill, but did not serve because he was ill “and confined to his chamber.”⁴⁹

A month before the signing of the Declaration of Independence, John Adams wrote Abigail:

Your brother, I hope, will be promoted. He is fit for it, and has deserved it. If his name comes recommended from the General Court, he will have a Commission for a Field Officer and I will recommend him to the General for his notice.⁵⁰

Later, Abigail wrote back to her husband that she had not heard from her brother since he applied to the General Court for a commission.⁵¹

Rather than seek a commission in the Army of the Continent, Smith chose to sail on board a privateer. He sailed as Captain of the Marines aboard the *American Tartar*, a 24- gun privateer, in the spring of 1777. In the fall the vessel, returning from the Baltic with a cargo of duck and

⁴⁶ Diary of John Quincy Adams, Jan. 1, 1785- June 30, 1786, Adams Papers Microfilm Reel #11, Entry dated Sept. 13, 1785, MHS.

⁴⁷ AFC, Abigail Smith to Cotton Tufts, April 2, 1764, Vol. I, p. 14; also A. Smith to C. Tufts, April 9, 1764, p. 17.

⁴⁸ AFC, Abigail Adams to John Adams, Vol. I, Sept. 22, 1774, p. 161.

⁴⁹ AFC, Isaac Smith, Jr., to John Adams, June 24, 1775, Vol. I, p. 228; Abigail Adams to John Adams, June 25, 1775, p. 231.

⁵⁰ AFC, John Adams to Abigail Adams, June 16, 1776, Vol. II, p. 13.

⁵¹ AFC, Abigail Adams to John Adams, Sept. 29, 1776, Vol. II, p. 43.

cordage, was captured off the coast of Newfoundland. The ship and the crew were later released.⁵²

Already indebted to his father for the mortgage of his farm in Lincoln, Smith might have returned to the Lincoln house a more anxious man, having failed to gain a profit from his privateering expedition. We know from a letter between his sister Elizabeth Smith Shaw and Mary Smith Cranch, dated April 6, 1781, that Smith did engage in some sort of financial misconduct that impelled his father to assume title to the Lincoln farm. The letter stated in part:

I have been uneasy that I could not send my letter but I find by yours that Brother's conduct with regard to the Rates has determined my Father not to let him take the Farm into his own hands. I am sorry for the misfortune and loss but believe it may be a means of preventing greater evils.⁵³

After 1783, the Smith farm's value declined. Catharine Louisa Smith rented the farm to a co-tenant and leased the adjacent Whittemore- Dodge- Foster farm. In 1788, she began selling parcels of land to her neighbors. After 1796, retaining but the 100 acres she had been given by her stepfather, Catharine Louisa Smith's name disappears from the local assessment record.

⁵² AFC, Abigail Adams to John Adams, May 6, 1777, Vol. II, p. 232; Abigail Adams to John Adams, Nov. 18, 1777, p. 368. Also see MHS Collections 77, 1927, p. 73.

⁵³ AFC, Elizabeth Smith Shaw to Mary Smith Cranch, April 6, 1781, Vol. IV, pp 98- 100.

ARCHITECTURAL APPEARANCE OF THE SMITH FARM

Finding clues about the appearance of the Smith house in 1775 in the historical documents is problematic. We know from earlier transactions that the property was supposed to have a house and two barns. The conveyance from William Dodge to Catharine Louisa Salmon in 1770 refers vaguely to a “certain tract or parcel of land being cowland, mowing, pasture and woodland with all the buildings thereon.” The next descriptive source is the probate of Reverend William Smith which, although leaving a complete inventory of the house’s furnishings, records only a sparse description of the house site, which is described as follows:

The lower farm known by the name of the Dogg Farm, lying on the Nerly side of the great rode leading from Concord to Cambridge, with a number of other peaces belonging to the same, held in fee simple by the Decs’d during the life of William Dogg, the Homestead with the Buildings standing thereon contains by estimation 83 acres.⁵⁴

Although the probate lacks an exhaustive description, it does give some information on the property owned by Reverend William Smith. The inventory of his estate in Lincoln and Concord includes “The upper farm called the Whittemore Farm with the buildings thereon contains by estimation 120 acres more or less.” This appears to be the property Smith bought from William Dodge in 1780, which was tenant- farmed by Jacob Foster and which Catharine Louisa Smith sold to Benjamin Winship in 1796. The property is now owned by the Cooks, except for the land used by Hanscom Air Field. This property was not part of the Smith Farm in 1775.

The probate confirms the size of the farm in 1775 as previously described, but it does little to clarify the exterior or interior appearance of the house. The inventory of furnishings was not listed room by room, leaving only the impression of a small, sparsely furnished house.

The only clue about the size or configuration of the house in 1775 is contained in a letter written by Abigail Adams to John Adams dated July 12, 1775. In the letter Abigail Adams describes how she has been trying to find housing for friends, the Trotts, who had lived in the South End of Boston. Knowing “the great distress people were in for houses,” the Trotts had come to stay with the Adams after a brief stay at the Smith House in Lincoln. Explained Abigail: “You know from the situation of my brother’s family, it was impossible for them to tarry there, Mrs. Trott’s circumstances requiring more rooms than one.”⁵⁵

⁵⁴ Reverend William Smith probate.

⁵⁵ AFC, Abigail Adams to John Adams, July 12, 1775, Vol. II, p. 244.

The indication from the passage seems to be that the Smith House was a small, two- story house with four rooms and the back lean- to, housing Smith, his wife, and their four infant children.⁵⁶

The probate also describes other parcels of land held by Reverend William Smith. The “Hill Pasture lying on the Southeasterly side of the great rode by estimation 40 acres more or less” was conveyed from William Dodge to William Smith in 1774,⁵⁷ and is part of the historic setting (see figure 2). The Minot lot (the wood lot in Concord) was bought by Reverend Smith on May 22, 1775.

Reverend Smith also owned 8 acres “called the thirds lying Northerly of the great rode in common with the lower farm (Dogg Farm).” The thirds was the dower of Sarah Lamson, wife of Ebenezer Lamson.⁵⁸ On November 25, 1777, Esther Lamson, the widow of Sarah’s son Amos Lamson, conveyed the property to William Smith.⁵⁹ The property was 7 acres 100 poles of improved land, “Bounded south on County Road, westerly on the land of William Smith, east by and with the land that was formerly set to Ebenezer Lamson dec’s running near the west end of the house in which Jacob Foster now dwells and soon to the road first mentioned.” Reverend William Smith left this property to his granddaughter Elizabeth Smith, who later transferred the property to her mother, Catharine Louisa Smith.⁶⁰

The “further pasture lying on the easterly side of the rode leading from the great rode to the Lincoln meeting house by estimation 110 acres” was also conveyed to Smith by Dodge in 1774 and is part of the 1775 farm. The probate also mentions “the pond hole so called lying on the South easterly side of the great rode.” It seems unlikely that this is the same pond that is on the house site.

⁵⁶ By 1775, the Smiths had four of their six children (see Appendix A).

⁵⁷ Mid. Deed 76:36.

⁵⁸ See Mid. Deed 55:457, July 18, 1774, and the Probate of Ebenezer Lamson, Mid. Probate #13S21.

⁵⁹ Essex County Registry of Deeds, 79:251.

⁶⁰ See Essex County Deeds 122:421, June 16, 1794.

THE SMITH HOUSE SINCE 1783

Following the Revolution, the farms of Concord and Lincoln suffered from the economic depression that followed the war. Local farmers had tried to remain on their farms during the war by finding substitutes for their military service, but farm labor was scarce. Stocks of draft animals, cows, oxen, and swine had been sold to, or requisitioned by, the army. Both farm and grazing land were wearing out, and inflationary pressures caused farm prices to be severely depressed.⁶¹

Catharine Louisa Smith's farm does not appear to have been immune to the postwar depression. Each year the value of her farm declined – perhaps in part owing to deterioration, perhaps in part due to the depression. Following the death of her father-in-law and disappearance of her husband in 1783, Catharine Louisa, in order to maintain her family, rented “half the Smith Farm” to Aaron Brooks.⁶² The following year she retained the farm. In 1788 she began to sell parcels of land. The first such was to Aaron Brooks, a 6- acre pasture “bounded westerly in the town way leading to Lincoln meeting house (Bedford Rd), southerly and easterly on the land of him the said Aaron Brooks and northerly on my own land all as the stone wall stands around the lane.”⁶³

The 1791 tax records list the farm as producing “cyder,” corn, and rye. The inventory also listed four cows. In 1792, Catharine Louisa Smith found another tenant for half the house, Jonas Pierce, Jr. The tax record for 1792 assesses Smith and Pierce for one dwelling house, one barn, no other outbuildings except for “cyder [mill?],” and four acres of tillage, four acres of English mowing, 12 acres of meadow, 15 acres of pasture, and 22 acres of unimproved land. Pierce kept a horse, two oxen, three cows, and two swine, and grew rye.⁶⁴

In 1794, as well as renting half her house, Smith sold the 100- acre Foster farm to Benjamin Winship.⁶⁵ The boundary of the Foster farm corresponded with the property known previously as the Whittemore Farm, lying to the east of the Smith Homestead. This land, then, was the same property that William Dodge sold to Reverend William Smith in 1780.

⁶¹ For a discussion of the economic effects of the Revolutionary War on local farms, see *The Minutemen and Their World* by Robert Gross.

⁶² Lincoln Assessment Records, 1784, Book 13, p. 6; Mid. Deed 97:519- 20, July 18, 1788.

⁶³ Until 1788, Catharine Louisa Smith was called “single woman” in transactions; she is first listed as “Widow Smith” in 1790. See Mid. Deed 99:539- 40, June 2, 1792.

⁶⁴ Lincoln Invoice Book, 1795, Book 24, p. 4.

⁶⁵ Mid. Deed 122:467, June 19, 1794. Following Benjamin Winship's death in 1825, this property was sold by his widow Lydia to the Fiskes, who at the turn of the century sold the land to the Cooks, who still own what remains of the 100- acre farm.

Catharine Louisa Smith left Lincoln in 1795/6, although it is not known where she went. It is assumed that she lived for some time with the Adamses at Quincy, and that she died in Charlestown, Massachusetts, on November 23, 1824. It was not possible to confirm or deny these facts. It is known that she kept her farm in Lincoln, which she continued to rent. Soon after her departure, the farm was rented to William Caldwell. Caldwell raised pigs on the farm. In 1799 he was inventoried for one horse, two oxen, six cows, and 300 swine. He also, like any farmer, made cider and grew rye, barley, and corn. Caldwell last appears in the records in 1802.⁶⁶

In 1804, Catharine Louisa Smith of Quincy sold Samuel Hartwell “six and $\frac{3}{4}$ acres of pasture land bounded northerly by Samuel Hartwell, westerly on the road to Lincoln, southerly on the road newly laid out and easterly on the Old road to Concord.”⁶⁷

Sometime between 1804- 11, Catharine Louisa Smith rented the farm to Samuel Hartwell’s brother, Abel Hartwell, who occupied the house until his death in 1856.⁶⁸ Hartwell’s name first appears in the tax records in 1811. It is difficult to determine what alterations Abel Hartwell made to the house. Hartwell did not marry. The 1824 State Tax indicates Hartwell lived in half the house, the other half held for his brother, Samuel. He had 32 acres of improved land and 21 acres of wood and unimproved land. Hartwell raised livestock and grain. In 1817, he had two oxen, five cows, and 250 swine; in 1821 he had two oxen, two cows, and 600 pigs; and in 1825 he had four oxen, seven cows, and 700 pigs. In 1831, he had four oxen, seven cows, and 350 swine. The town assessment records, available for 1821 and 1831, show Hartwell had one dwelling house and one barn. The 1821 list one other building that is not on the 1831 assessment. Of his farm land, there were no acres of tillage, 7 acres of English mowing, 25 acres of meadow mowing, 40 acres of pasture, 12 acres of woodland, and 6 acres of unimproved bottom land.⁶⁹

Before her death, or perhaps at the time of her death, Catharine Louisa Smith passed her property in Lincoln to her daughter, Louisa Catharine Smith.⁷⁰ Louisa Catharine remained single and lived out her life under the care and protection of the Adams family in Quincy, where she supported social organizations for the protection of indigent females. In 1854, she transferred the 100- acre farm in Lincoln to her sister Elizabeth Smith Foster “in consideration of one dollar and diverse other valuable considerations.”⁷¹

⁶⁶ Federal Direct Tax 1798, 5th District, p. 693; Invoice book 1798, Book 25, p. 4; Invoice book 1802, Book 26, p. 6.

⁶⁷ Mid. Deed 149:223- 24, Nov. 4, 1802.

⁶⁸ It is clearly established that Abel Hartwell lived at the Smith farm through 1856. An 1835 deed transaction for an adjacent property, the Foster farm, describes it as “bounded westerly on the Smith Farm now in occupation of Major Abel Hartwell” (Mid. Deed 339:58- 59, January 3, 1835). Also, the 1854 deed that transfers the Smith House from Louisa Catharine Smith to her sister Elizabeth Smith Foster states “the same farm which now is and for several years has been occupied by Abel Hartwell.”

⁶⁹ Massachusetts State Tax, Lincoln, pp. 14- 15, Lincoln Invoice Book, 1811, 1813 (32:6), 1817 (29:3), 1820 (29:19), 1825 (29:26). Also Assessors Record Lincoln, 1821 (28:6) and 1831 (28:20).

⁷⁰ Also spelled Louisa Catherine.

⁷¹ In October 1823 John Quincy Adams instructed his son George Washington Adams to “pay Miss Louisa C. Smith 18 dollars quarterly commencing on November next.” Oct. 1, 1823, Adams Papers Microfilm, Letters Received, Reel 46. See also Probate of Louisa Catharine Smith, 1857, Suffolk County Registry of Probate #41169.

What happened during the next 10 years is not clearly documented. Apparently Elizabeth Smith Foster died soon after her sister's death, with her property going to her husband James Hiller Foster. Foster died in 1863, leaving the "mansion house," other property and stocks and bonds to his daughter Elizabeth Ann Foster. It might be assumed that Elizabeth Ann Foster chose to move to Lincoln soon after her father's death. She was living in Lincoln at the time of her death in 1875, as indicated by the Beers atlas and her probate.

Her probate administration leaves some information as to the appearance of the Smith House 100 years after William Smith had lived there. The inventory lists the house as having two parlors, a pantry, a dining room, a kitchen, and a wash room in the first story. Also, there was Mr. Foster's chamber, Louisa's room, Aunt Libby's room, Charles' room, an upper hall, library furniture, and a front room. The probate also mentions the attic, a paper room, and a library.⁷² The probate, then, indicates that the house had been enlarged in some manner to create eight rooms. It is doubtful that the alterations occurred before 1811: up to that date, the property's valuation had steadily declined in the town assessment records, suggesting the deterioration of the buildings and personal estate. It appears that the enlargement occurred between 1821 and 1831, in the form of an ell addition to the ca.- 1730 lean- to. The value of the house increased during this period (see Appendix B, Table 6); the architectural investigation uncovered clear physical evidence of alterations at this time.

Without heirs, Miss Foster's estate was passed on to a niece, Caroline M. Barnard, who sold the house to a Samuel H. Pierce.⁷³ Pierce lived in the house until 1890, when Barnard foreclosed on his mortgage.⁷⁴ Barnard then sold the property, which remained an intact parcel of 100 acres, to Augustus Russ, who on the same day sold the property to Mary and James Butcher.⁷⁵ Although it is not possible to document what alterations Samuel H. Pierce made to the house, it is thought that figures 3- 5 show the house as it appeared when the Pierces lived there.⁷⁶ These three photographs are attributed to Alfred Hosmer. They show the house unpainted with narrow wooden clapboards, a "covenant"- type central chimney, and a 1 ½- story lean- to extending across the north wall of the house. Attached to the lean- to at the east end is a one-story, gable- roofed ell. The photographs show also one outbuilding behind (north of) the house. The window sashes, which appear in early photographs as 12- over- 12 lights (panes), were changed between 1890 and 1900 to two- over- two lights, as shown in the photographs.

⁷² Probate of Elizabeth Ann Foster, Suff. Prob. #56700.

⁷³ Mid. Deed 1384:475, Jan. 27, 1876.

⁷⁴ Mid. Deed 2023:201- 03, Jan. 31, 1890. Caroline Barnard claimed in her Affidavit of Sale that she published a notice of mortgagee's sale of real estate in the *Waltham Free Press* on Dec. 26, 1890, Dec. 31, 1890, Jan. 2, 1891, and Jan. 9, 1891. Recent investigation of the *Free Press* for those dates could not find the notice. The Pierces did retain the 30- acre woodland on the south side of the State Highway and Bedford Road.

⁷⁵ Mid. Deed 2023:207, January 31, 1891; Mid. Deed 2023:204- 05, January 31, 1891.

⁷⁶ The reason that figures 3- 5 have been dated ca. 1885- 90 is based on an interview with Mrs. Doris Hampson, the granddaughter of Mary and James Butcher. Mrs. Hampson recalled that her grandparents were in their late forties when they bought the house, so the young woman in the photographs could not be her grandmother. It also follows, since Mrs. Hampson was born in 1912, that the woman is not her mother. The photograph was produced from a glass negative by Hosmer, which also dates the photograph by technique to the last quarter of the 19th century. Hosmer died in 1903. It seems then that the photographs can safely be attributed to the time when Samuel H. Pierce lived in the house.

Through use of the photographs, some major alterations can be attributed to the next owners, Mary and James Butcher. The Butchers tore down the central chimney and replaced it with the two existing chimneys; they painted the clapboards white, razed the lean- to and its ell, and built a two- story addition in its place. (The new addition was similar in plan to the former lean- to, in that it extended across the north wall of the house and had an ell at its east end.) The Butchers also removed the outbuilding behind the house and sold about 50 acres of land. In 1902 the Butchers sold to Lizzie McPherson 2 $\frac{3}{4}$ acres with a dwelling house located on Route 2A between the Butchers and the Cooks.⁷⁷ In 1916, Lizzie McPherson sold the same tract to Charles O. Sargent,⁷⁸ who then sold the tract and house to Manuel Silva on May 31, 1919.⁷⁹

In 1919, the Butchers sold 5.44 acres to Jennie M. Pearson.⁸⁰ The deed mentions a stone wall bounding the property line “beginning at a stone bound on the east side of the property of the grantor and running 240 ft. to another bound near the Brook and on line of a stone wall extended easterly thence S.W. along land of grantor about 298 feet along the stone wall thence 472 feet and by land of grantor to a stone wall at the land to be conveyed to Ralph E. Butcher to drill hole at end of the wall...thence SE 180 feet and still along land to be conveyed to said Butcher to stone bound across brook to point beginning....” This land was sold to Manuel Silva on July 19, 1928.⁸¹

The Butchers also sold 39 acres to their son, Ralph Butcher. The deed is included in the report, as is the plan (fig. 15). In 1944, Ralph Butcher conveyed the entire parcel to the United States government as an easement for the Bedford Airfield.⁸²

An interview was conducted on June 6, 1980, with Mrs. Hampson, the granddaughter of Mary and James Butcher, who was born in the West Chamber of the Smith House in 1912. She recalled that as a child she remembered entering the house, which was painted white, through the side door and climbing up the wooden steps. Opposite the entry was a staircase to the bedrooms in the second story. The house was then four rooms deep. Mrs. Hampson remembered that her grandparents were elderly, which means that they were in their late forties when they bought the house in 1891. They occupied the front two rooms in the first story. Her mother and father, Mr. and Mrs. Ralph Butcher, and their three children occupied portions of the first and second stories of the new rear addition, and the two front rooms in the second story of the main house.

Mrs. Hampson also said that the site had been dramatically changed. The pond, she thought, was twice as big and divided in the middle. It was on the side of a hill or mound on which her grandmother had a summer house. Mrs. Hampson remembered an old barn with old beams standing east of the house where the pile of granite is now. She said that, although the driveway hadn't changed, she remembered big trees and an apple orchard in the front of the house, and blueberry patches and cranberry bogs behind the house. She attributed most of the exterior and interior changes to the house to the Silvas, although she believed that her grandfather took down the chimney and rebuilt the building to the rear.

⁷⁷ Mid Deed 2971:25.

⁷⁸ Mid Deed 4041:123.

⁷⁹ Mid. Deed 4261:503.

⁸⁰ Mid. Deeds 4324:167, and Book of Plans 279:43.

⁸¹ Mid. Deed 5255- 313.

⁸² Mid. Deed 6737- 151.

In 1921, the Butchers sold the house to John and Lena Primak, who had emigrated from Russia to New England in 1915.⁸³ The Primaks lived in the house until 1923 when they sold the property to Manuel Silva.⁸⁴ According to Mrs. Anna Moscka, the Primaks' daughter, her parents left the house as they found it. She remembers the front yard of the house had a long driveway (as it has today) lined with big elms.⁸⁵ To the right she remembered "a little summer house" by the pond, which she thought was two ponds. This confirms Mrs. Hampson's memory of a summer house, and of a pond twice as big but divided in the middle. Mrs. Moscka said that her father had a blacksmith shop on the other side of the ponds.

Her memories of the house were not as vivid as her recollections of the landscape. She remembered that the house was painted white. She believed that the house had a summer kitchen "with the wide floorboards" in back. She remembered that the doors had "those old-fashioned latches." She could not remember any details about the rooms such as their coloring, their beams, or their function. She said that they never used the fireplace; they relied on the kitchen stove for heat. She also remembers climbing up to the attic "on those rickety, steep stairs."⁸⁶

As previously cited, Manuel Silva acquired the William Smith house in 1924. Manuel Silva operated a large garden farm and raised hogs. For the purpose of raising hogs, he was also under contract to dispose of garbage. At the time of his death in 1945, Manuel Silva had about 400 hogs.⁸⁷

The alterations made by the Silvas to the house and grounds were extensive. The house was converted into four apartments; the alterations made are described in the appraisal report made by Harry G. Berglund in 1962. The Silvas constructed a small, two-story addition at the west end of the north wall of the addition, and built an enclosed porch between it and the existing east ell. The interior alterations included installing new floorboards in the front west first-story room, and adding linoleum and new fixtures.⁸⁸ As well as the alterations to the house, the Silvas landscaped and graded the front driveway. They filled in the pond, diminishing its size, and built several outbuildings (since removed). The old barn that had stood on the east side of the driveway burned one night in the 1930s.⁸⁹

Following Manuel Silva's death in 1945, the property was inherited by his wife, Mary, and shared by the children. The United States government acquired the property in 1975.

⁸³ Mid. Deed 4429:147, April 21, 1921.

⁸⁴ Mid. Deed 4627:182, June 21, 1923.

⁸⁵ There are spruce trees here today.

⁸⁶ Interview with Mrs. Anna Moscka, June 10, 1980.

⁸⁷ Probate of Manuel Silva, Mid. Prob. #263:198, May 12, 1945.

⁸⁸ Berglund, Appraisal Report, June 14, 1962.

⁸⁹ Interviews with Mrs. Doris Hampson and Mrs. Anna Moscka.



Figure 3. Captain William Smith House, view looking northeast from Virginia Road. Earliest known photograph of house, probably by Alfred Hosmer, 1885- 1890.



Figure 4. Captain William Smith House, view looking northeast from "Swamp Meadow." Photograph probably by Alfred Hosmer, 1885- 1890.

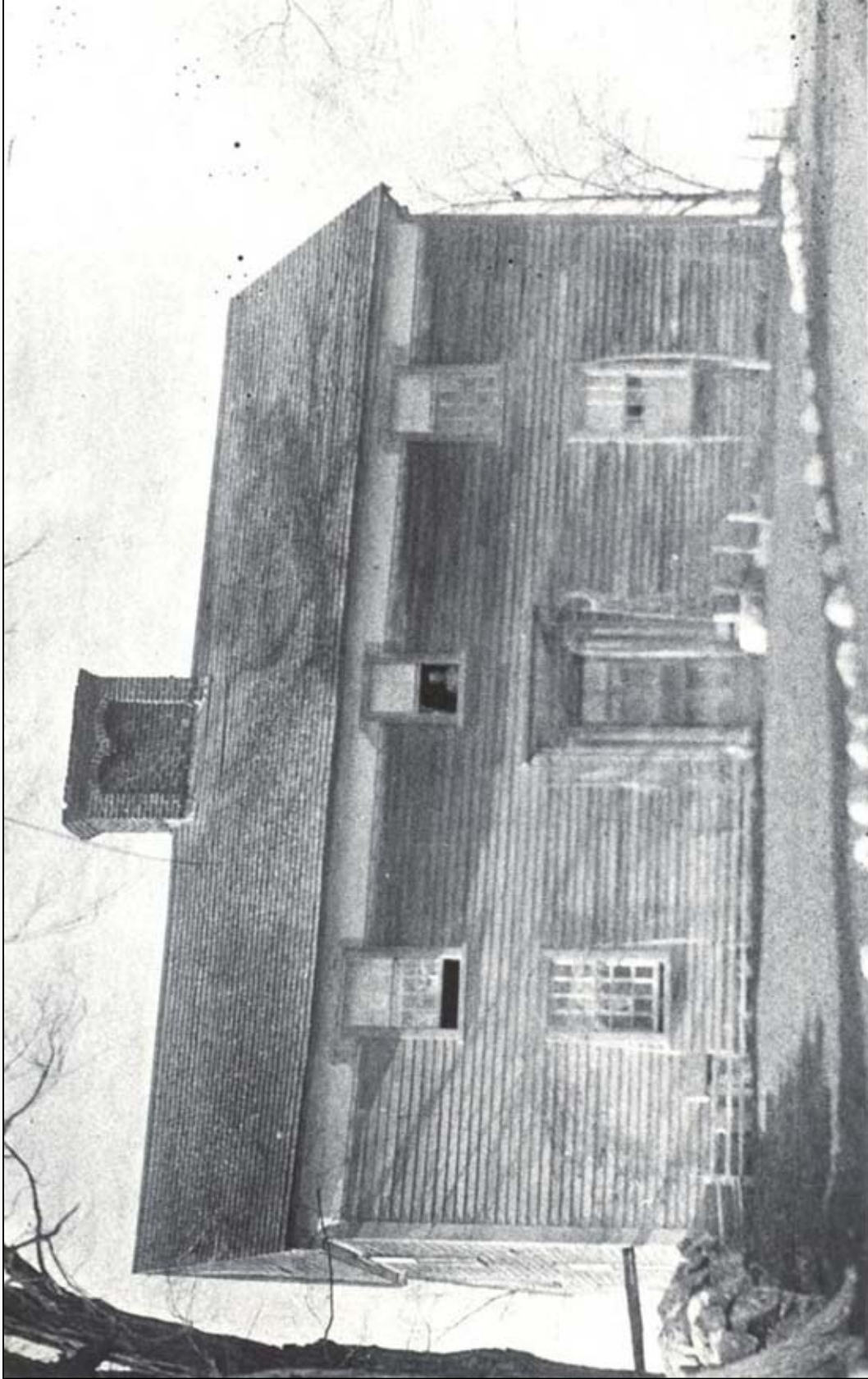


Figure 5. Captain William Smith House, view of south (front) elevation showing plaster cove cornice and double-arched chimney panels.
Photograph probably by Alfred Hosmer, 1885- 1890.



Figure 6. Captain William Smith House during the Butcher family ownership. Photographer unknown; date of photograph between 1891 and 1895.



Figure 7. Captain William Smith House: View of west elevation, showing shed ell of ca. 1825 attached to kitchen lean-to.
Photographer unknown; date of photograph 1895- 1897.



Figure 8. Captain William Smith House during the Butcher family ownership. Photographer unknown; date of photograph 1898.

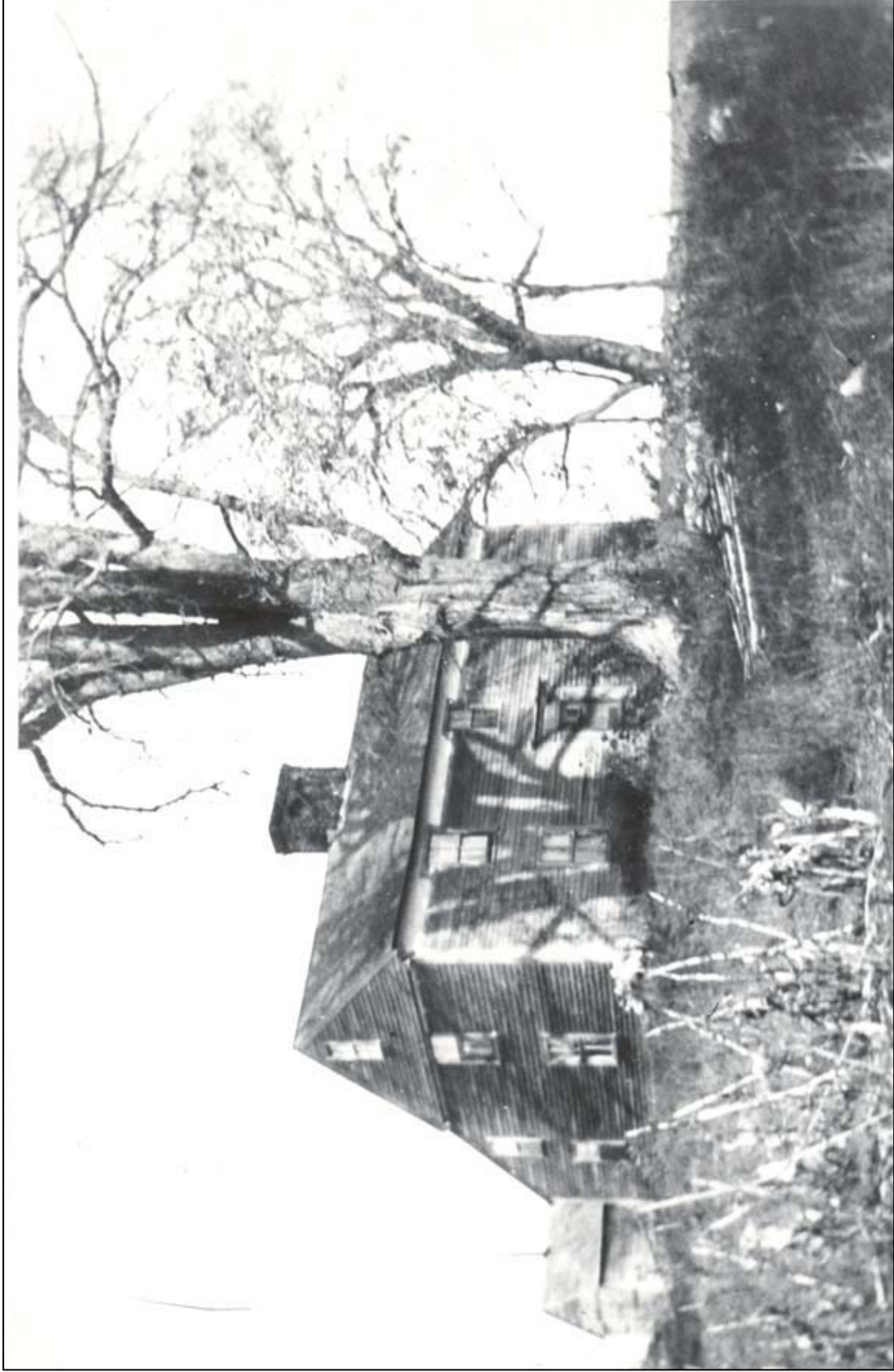


Figure 9. Captain William Smith House: View looking northeast. Photographer unknown; date of photograph ca. 1899.

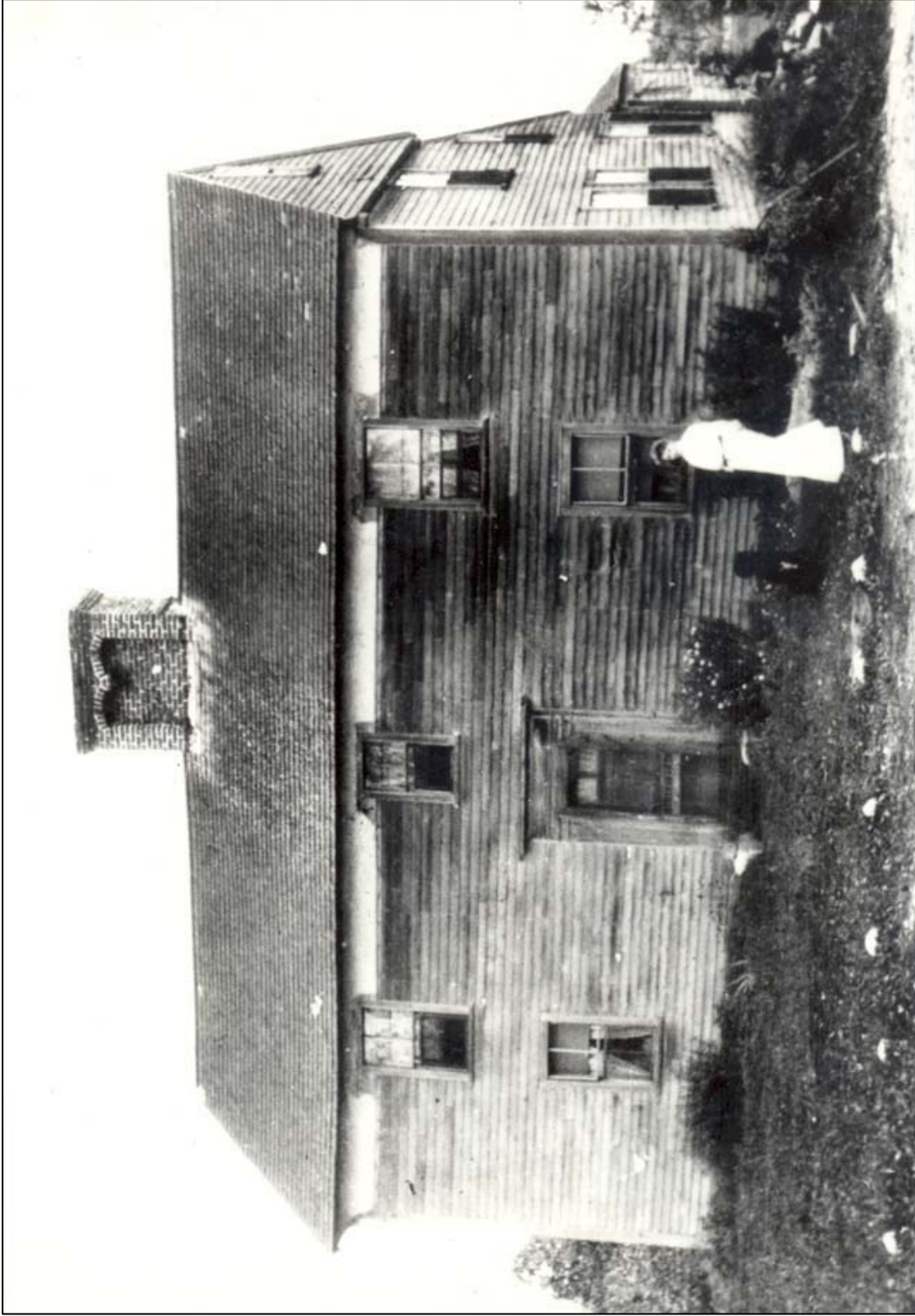


Figure 10. Captain William Smith House: View looking northwest during the Butcher family ownership. Photographer unknown; date of photograph ca. 1899.

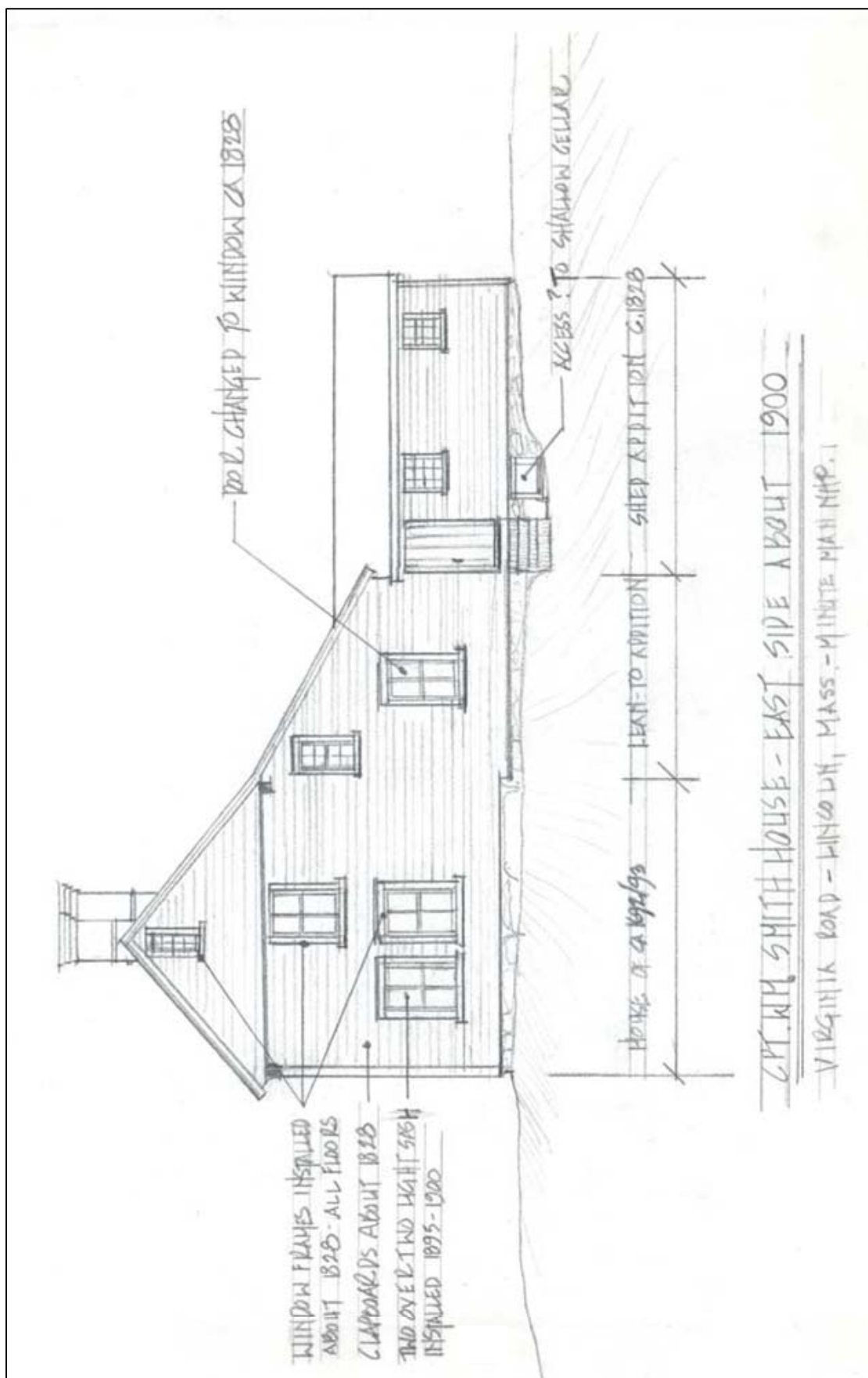


Figure 11. Captain William Smith House, east side as it appeared about 1900.

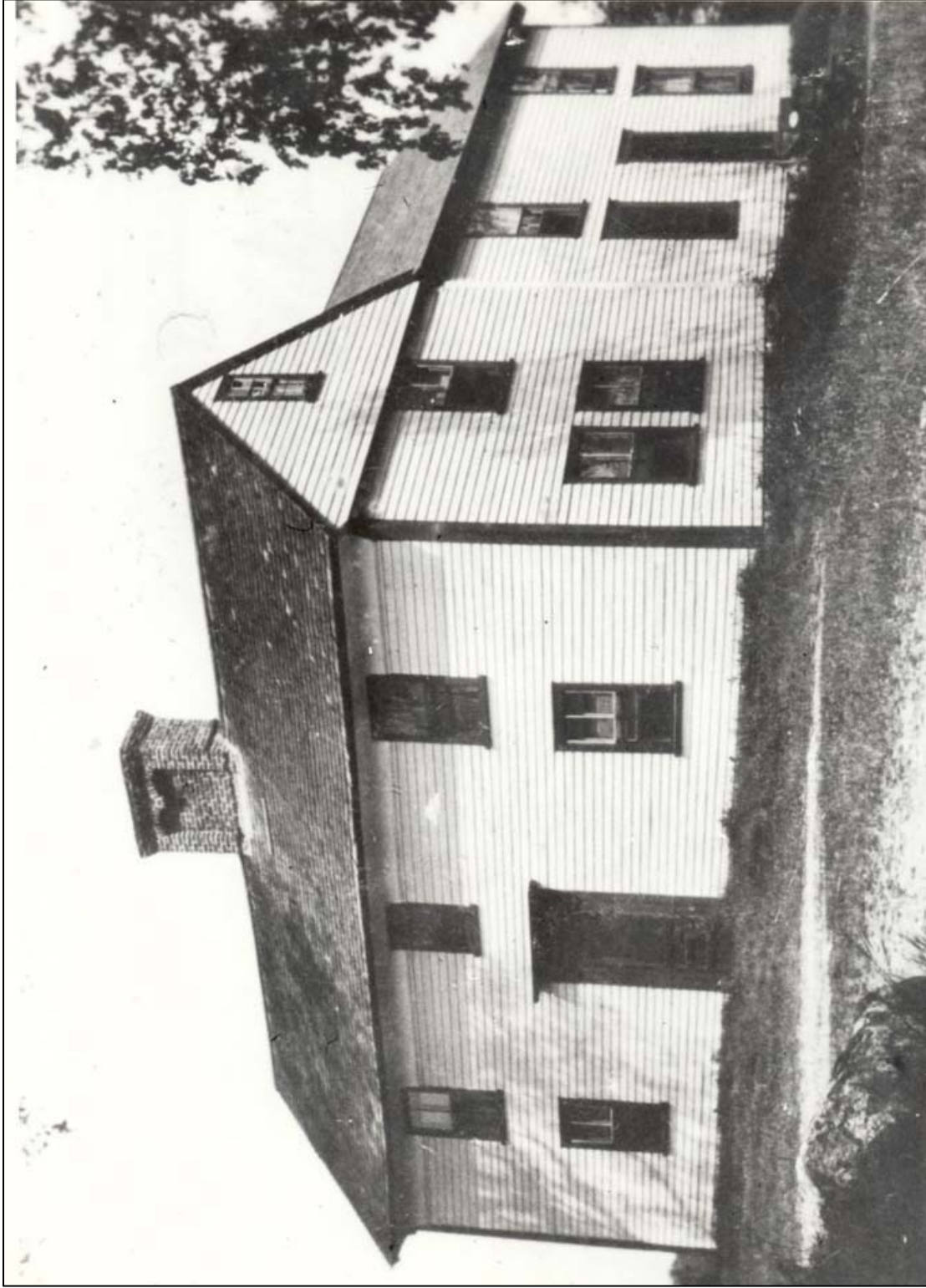


Figure 12. Captain William Smith House: View looking northwest after Butcher family had begun remodeling. Photographer unknown; date of photograph 1905.

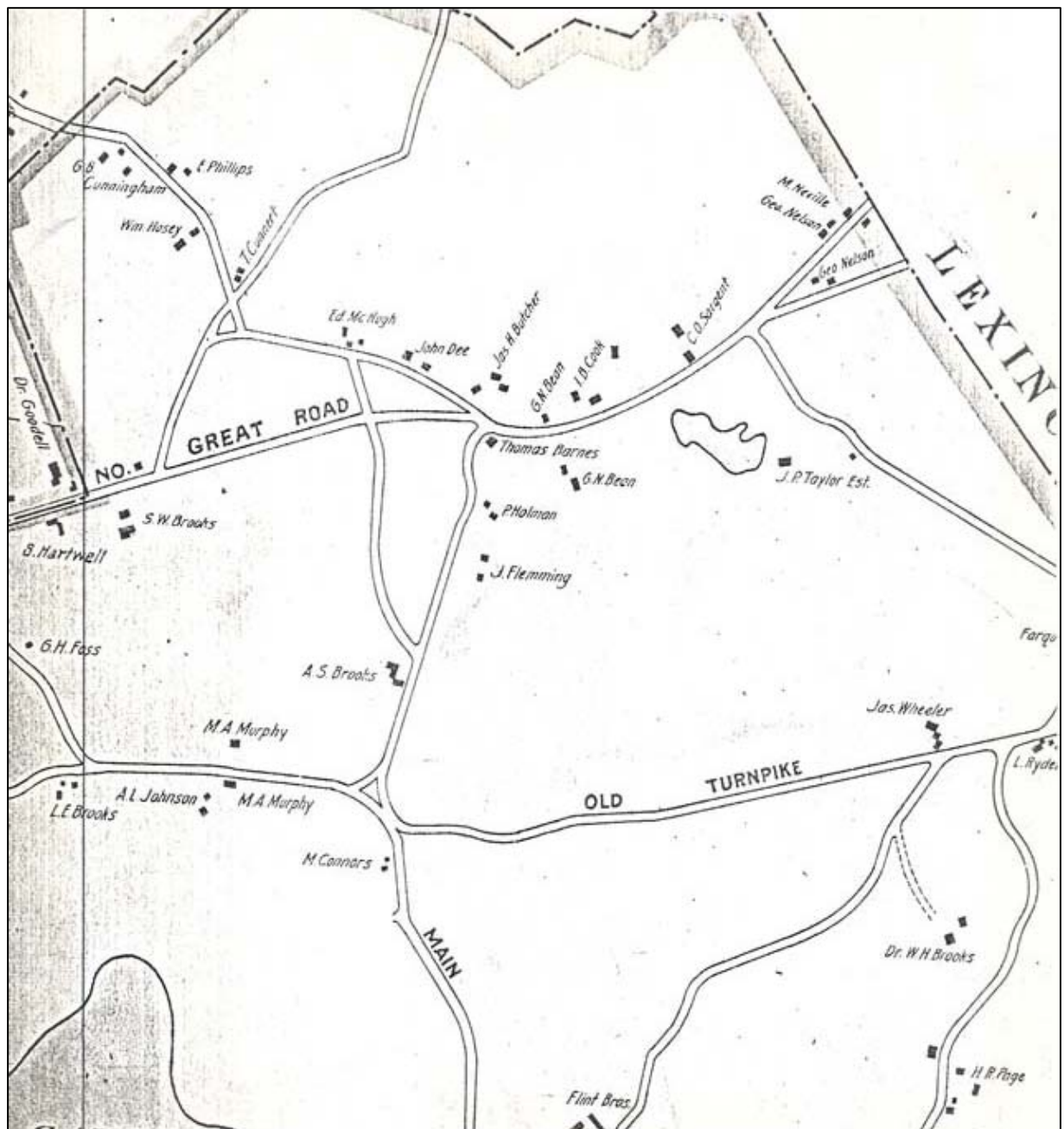


Figure 13. Section of Walker atlas (1906), showing James H. Butcher property with three outbuildings.

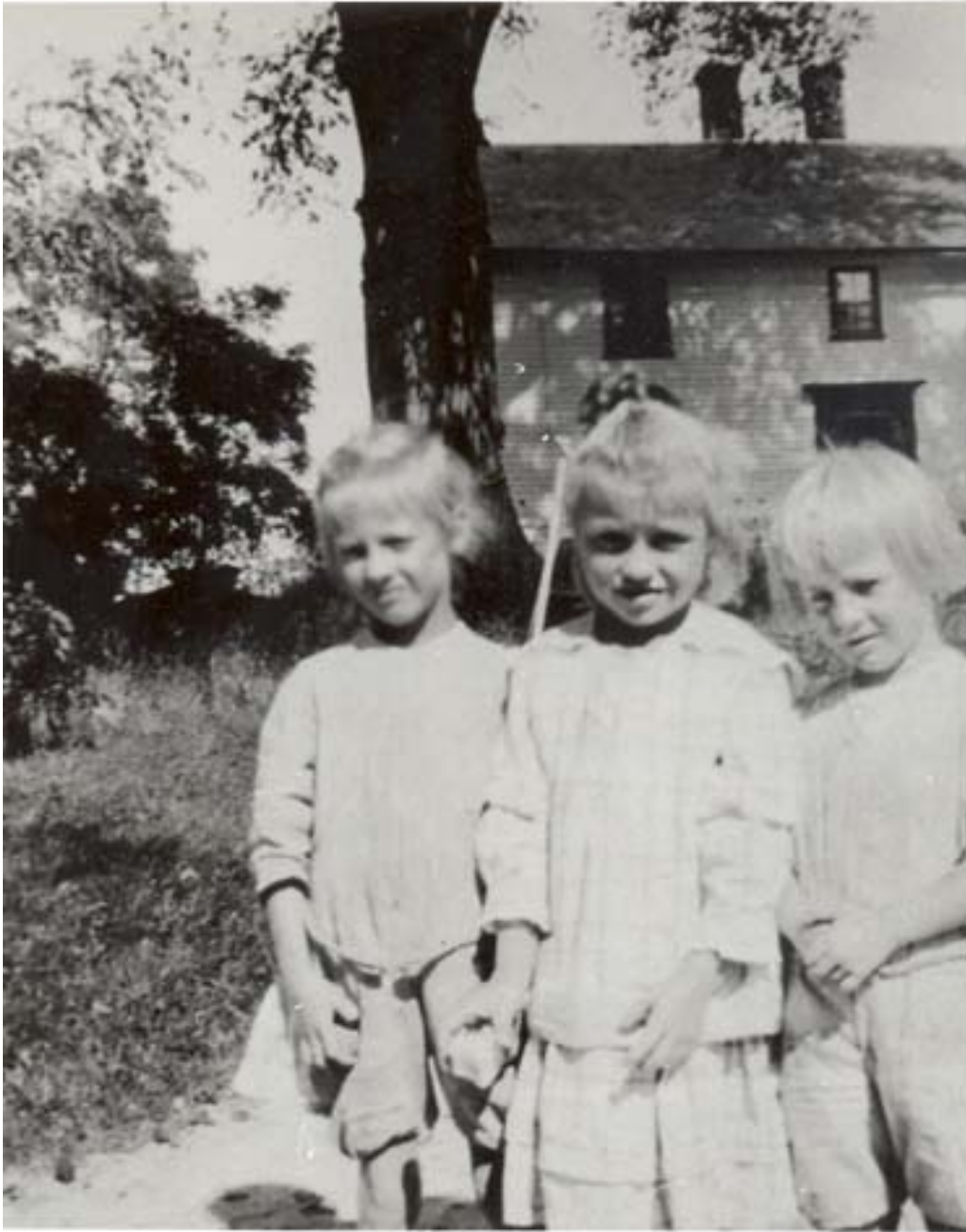


Figure 14. Captain William Smith House, south elevation ca. 1918.

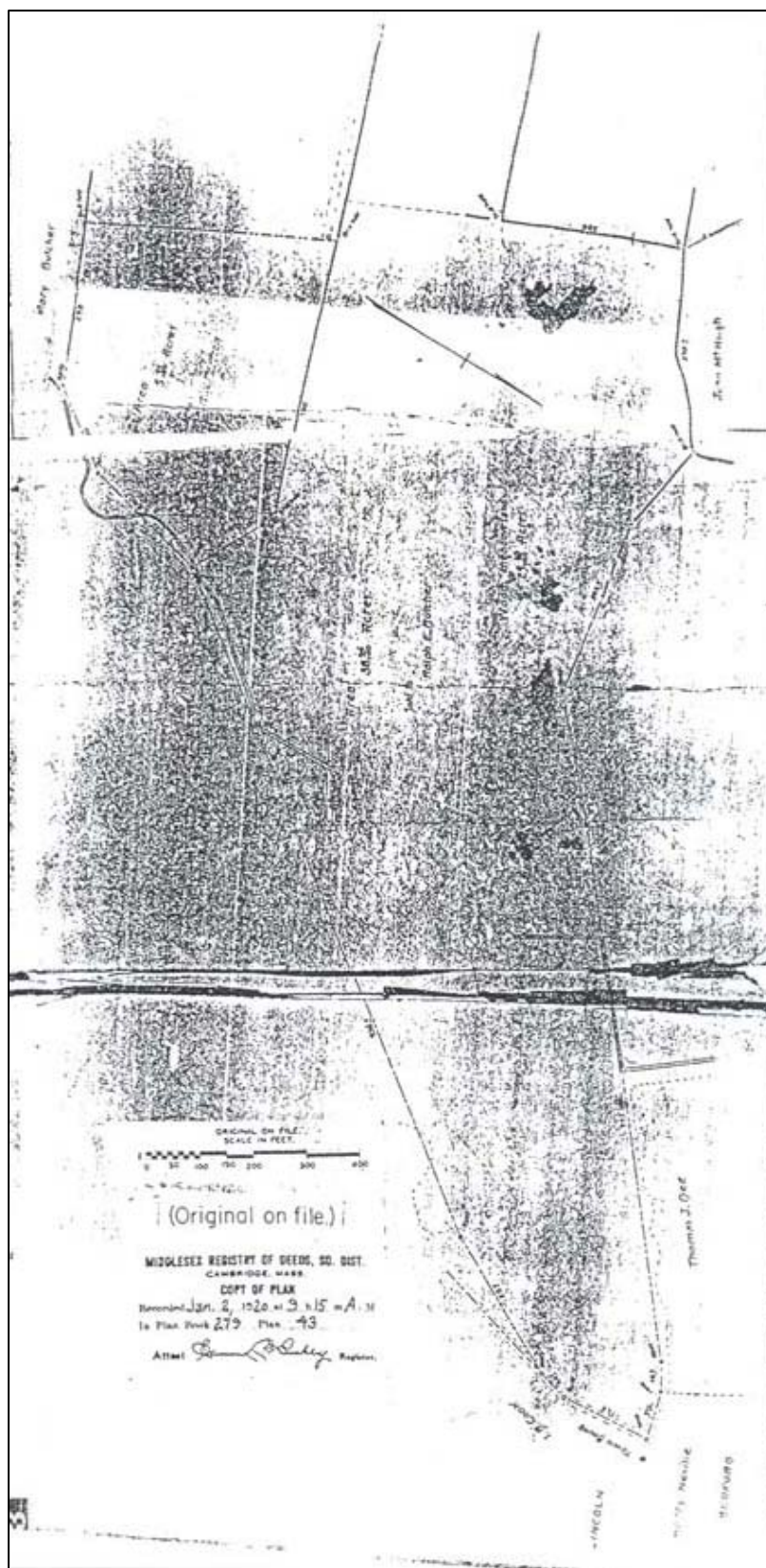


Figure 15. Plan of land sold to Ralph Butcher. Recorded January 2, 1920.

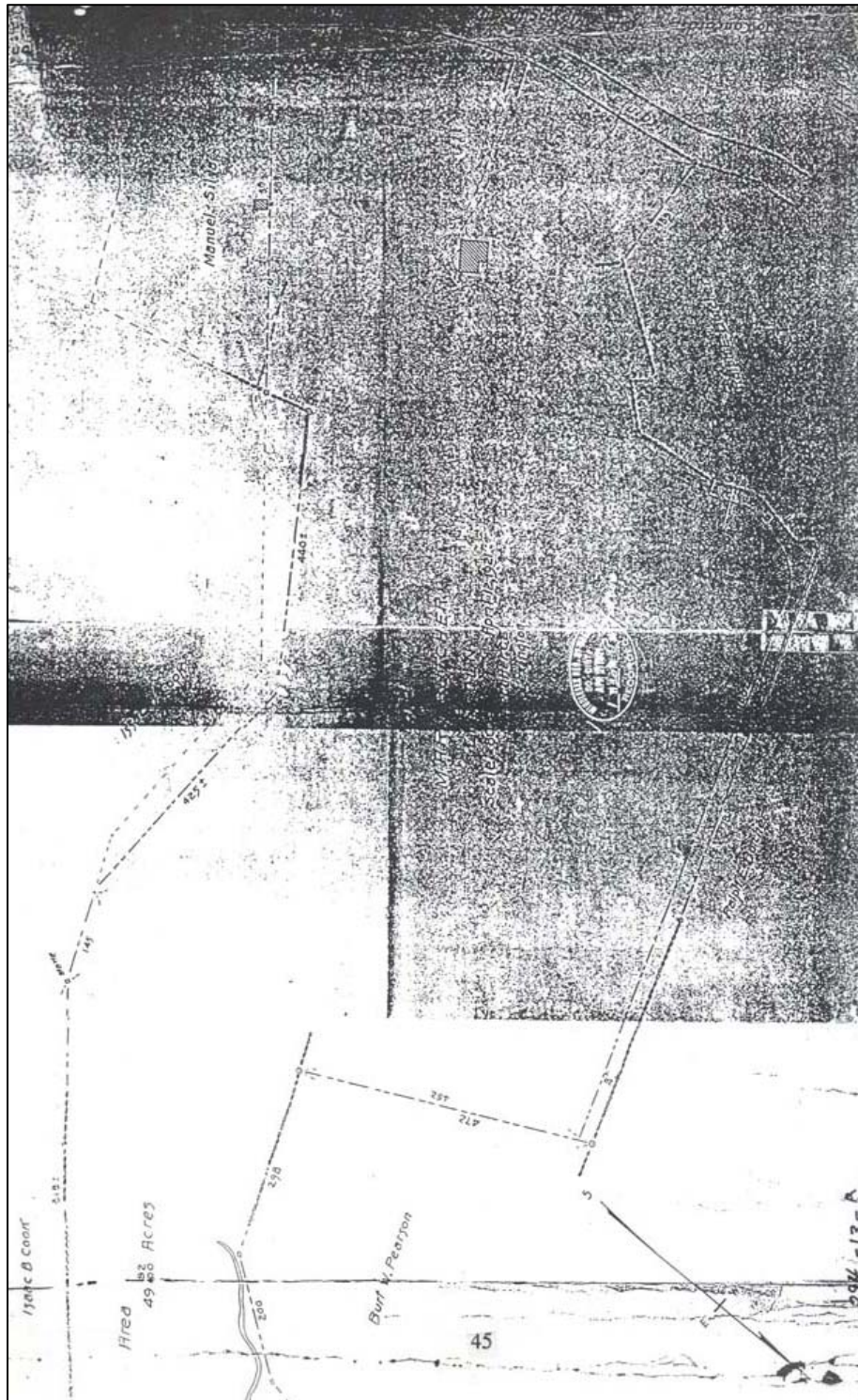


Figure 16. Plan of the land of Mary Butcher. Recorded April 21, 1921.



Figure 17. Captain William Smith House: View looking northwest after central chimney was removed. Photograph 1921 or 1922.



Figure 18. Captain William Smith House: Closer view looking northwest after central chimney was removed. Photograph 1921 or 1922.



Figure 19. Captain William Smith House: View looking northeast, ca. 1930.



Figure 20. Captain William Smith House: View of grading and leveling of side yard, ca. 1935.



Figure 21. Captain William Smith House: View looking northeast, ca. 1939.

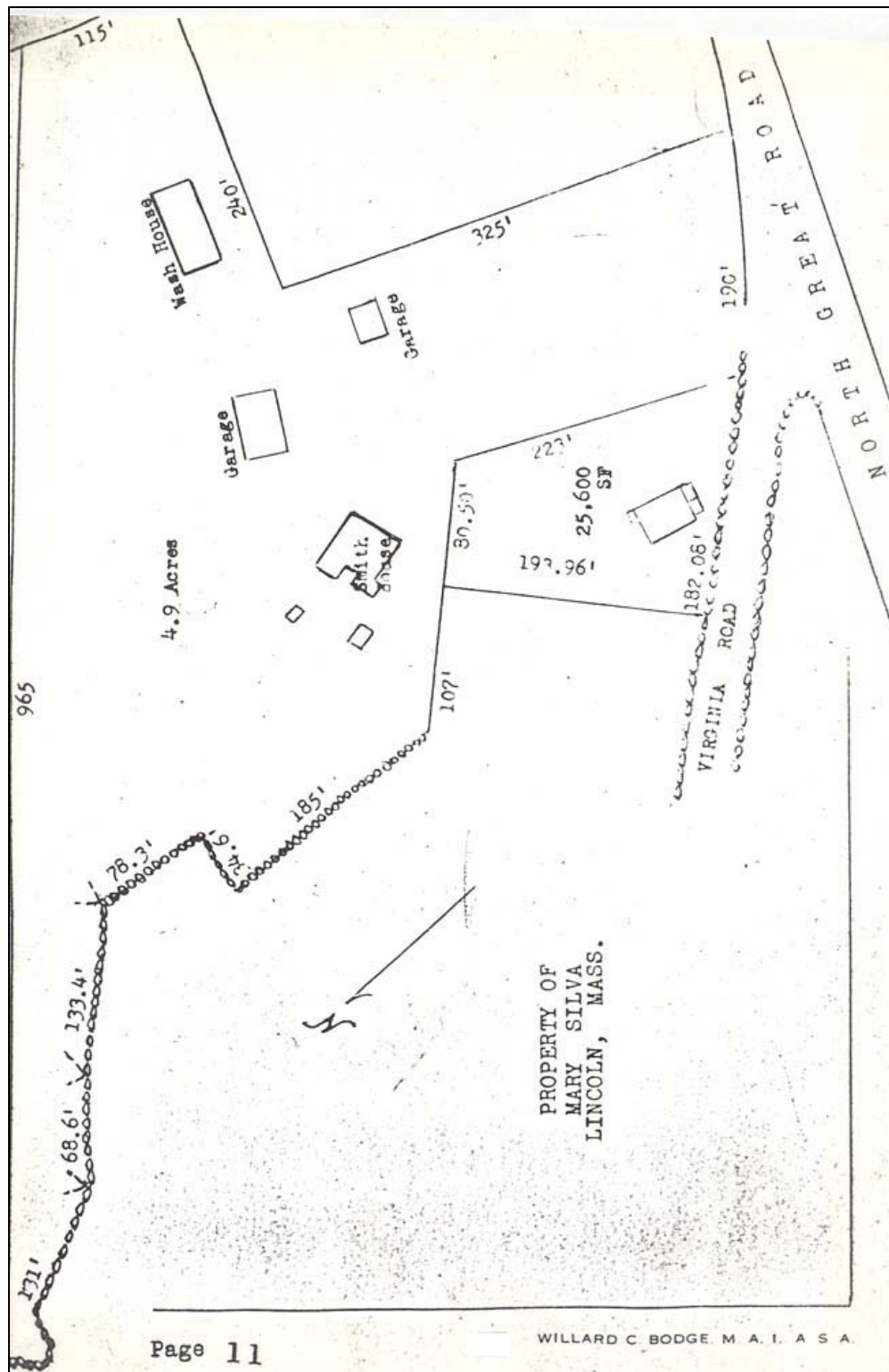


Figure 22. Survey taken from "Appraisal of Unit A," 1962.

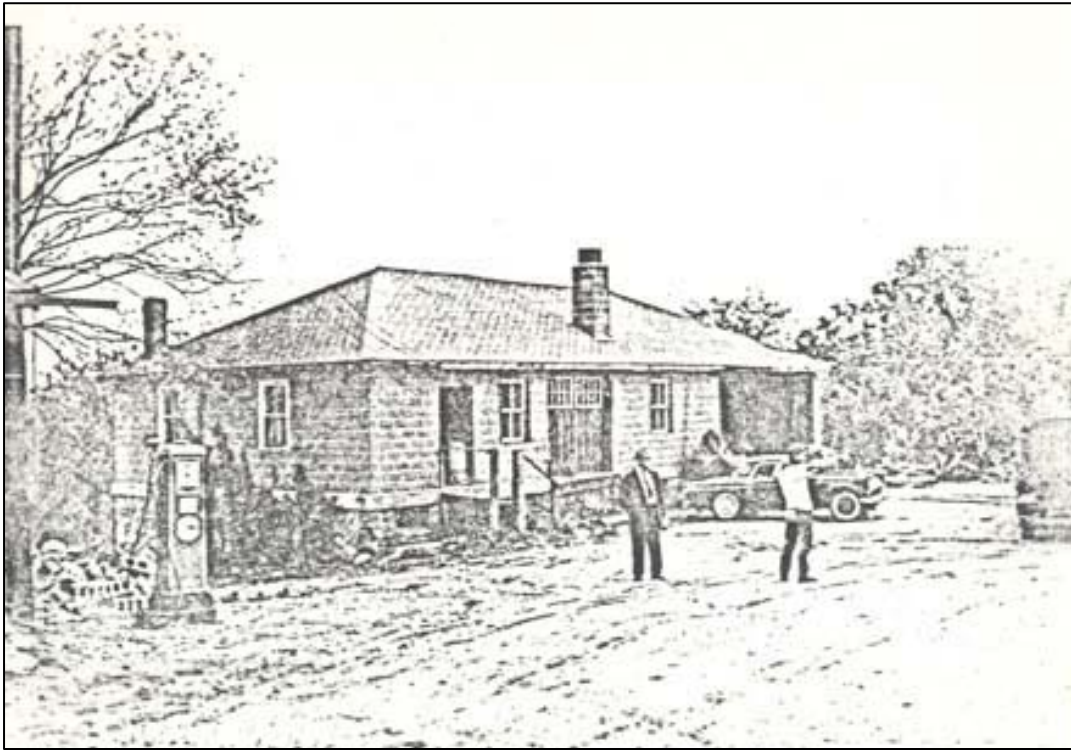


Figure 23. Wash House, built ca. 1956. Photograph 1967.



Figure 24. Rear view of Wash House, 1967.

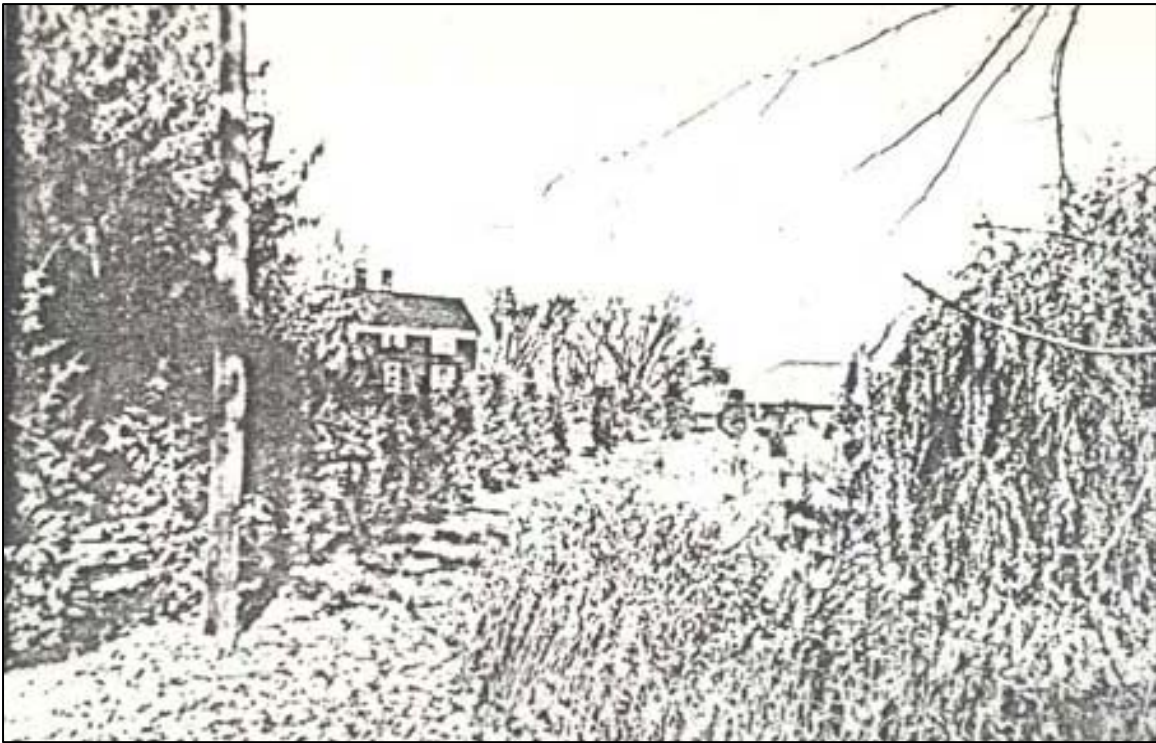


Figure 25. Captain William Smith House, as seen from North Great Road (Route 2A), 1967.

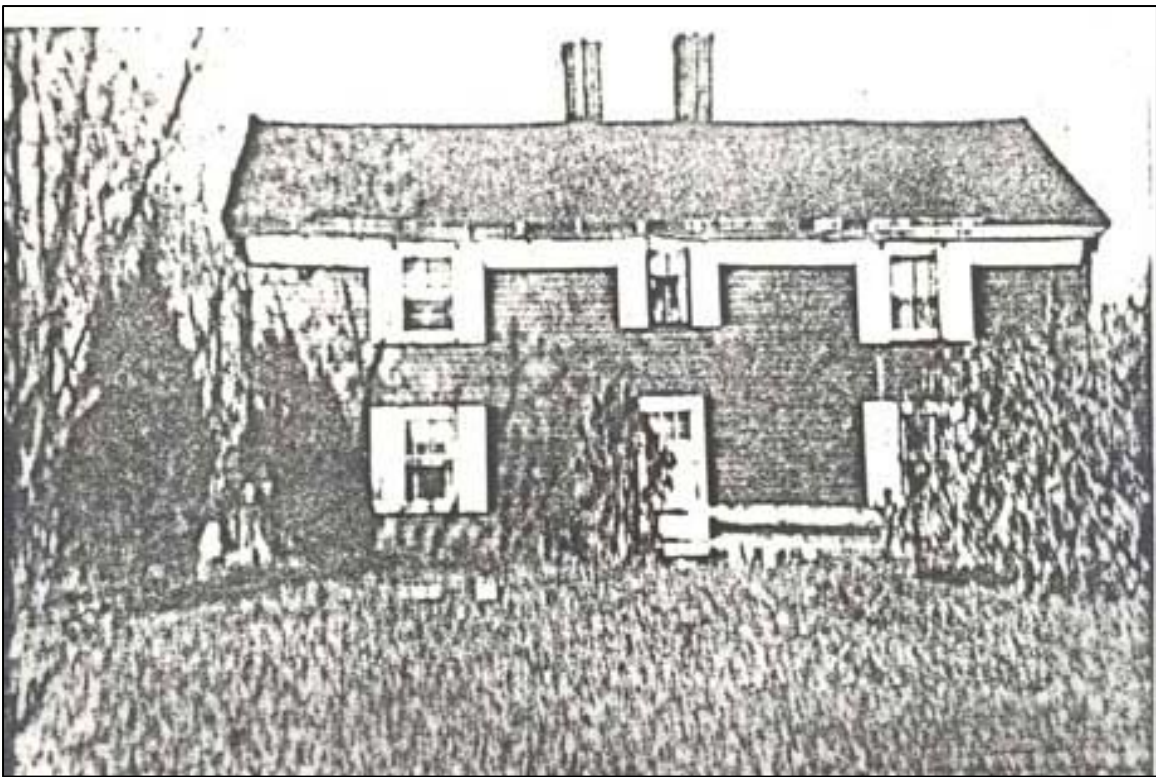


Figure 26. Captain William Smith House: View of south elevation, showing wing remodeling work completed ca. 1956.



Figure 27. Captain William Smith House, as seen from the north: View showing rear enclosed porch and exterior stairway, 1967.

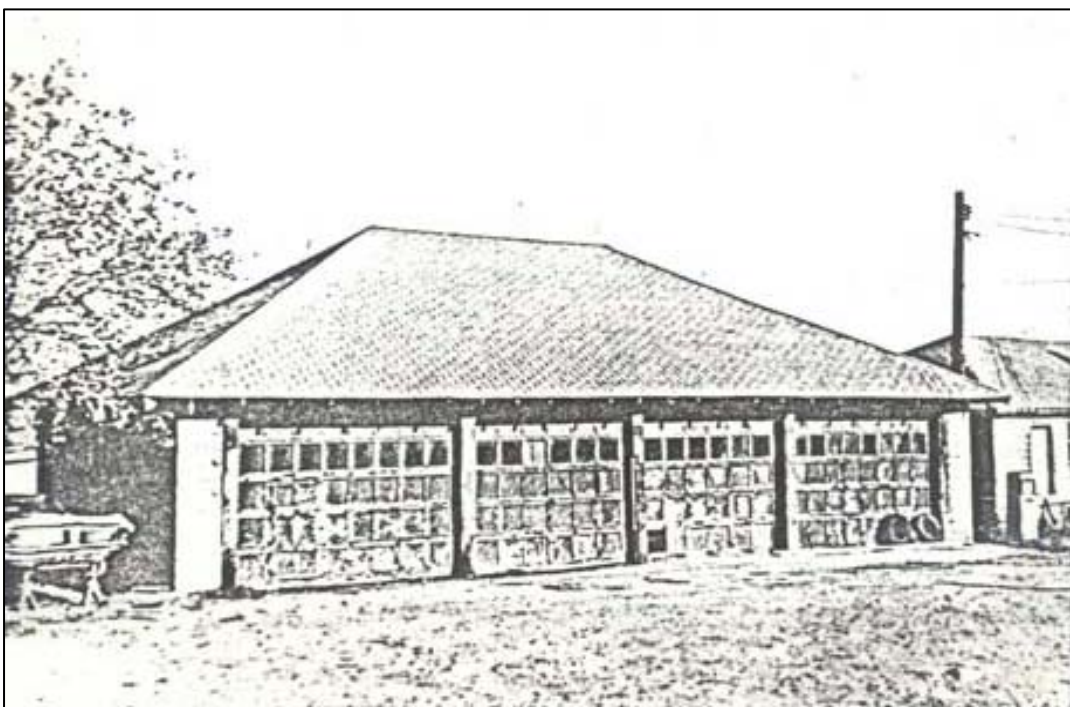


Figure 28. Concrete- block garage, built ca. 1956. Photograph 1967.



Figure 29. Captain William Smith House: View looking northwest, after NPS acquisition, 1978.



Figure 30. Captain William Smith House: View looking southeast, 1980.



Figure 31. Captain William Smith House: View looking south, before removal of enclosed rear porch, 1978.



Figure 32. Captain William Smith House, after removal of enclosed rear porch, 1980.

PART 3.

PHYSICAL EVOLUTION

By Orville W. Carroll

INTRODUCTION

The architectural investigation of the Captain William Smith House was begun by the author in April 1980, and it continued throughout the summer and fall on an almost full- time basis. Part of the author's time was diverted to the Hartwell Tavern, a restoration project running concurrently with the investigative work on the Smith House.

The architectural investigation involved, in part, the removal of clapboards in order to facilitate the measuring of the original wall boards that contained evidence relating to the early appearance of, and the later changes made to, the original house. The results of this effort were recorded in the field notebooks, photographs, and final sheets of restoration drawings that are included in the appendices of this report.

Early on, Minute Man NHP furnished several laborers for a few days to clean out the litter from the attic and cellars, and to pick up the debris at the site on a semi- weekly basis. This effort was especially helpful to the author, who had no funding to implement the completion of this work.

Visitors to the site included members of the Butcher family – Mrs. Doris Butcher Hansom and Mrs. Marion Butcher Cail; Mrs. Anna Primak Moscka, and her son and daughter; and Mrs. Harold (Silva) Shaw. Several photographs of the Smith House, kept in their possession, were photocopied for inclusion in this report.

– Orville W. Carroll

SITING AND ORIENTATION

The Captain William Smith House stands approximately 325 feet north-northwest of the intersection of North Great Road (Route 2A), Virginia Road, and Bedford Road. An access lane 8 feet wide extends from this intersection to the house, curving slightly to the northeast as it approaches the building, where the lane divides. One portion of the lane veers eastward toward the location of the old barn site, while the other portion turns northward, passing within 15 feet of the east wall of the old house. In passing, the lane separates the house from an existing stone-lined well about 38 feet east of the building. Once past the house, the lane continues in a northerly direction as far as the fence forming the boundary between NPS property and the access road into Hanscom Air Field. This latter lane was once a way to the now-nonexistent farm fields.

It seems unusual for a colonial house to be located more than 300 feet from the main road.⁹⁰ One explanation might be that an earlier house stood on the property near the main road, conceivably the house related to the “old cellar hole” mentioned in Benjamin Whittemore’s probate of 1734.⁹¹

The site chosen to build the existing house was on the crest of a small rise, with land dropping away on all sides. To the west is low swampy ground where a small brook begins. To the southeast, approximately 350 feet away, lies a pond that is a source of another intermittent brook. These brooks eventually unite and form a portion of the headwaters of the Shawsheen River flowing through the town of Bedford. The topography of the land in the area immediately surrounding the house was changed by the Silva family after they acquired the property in 1923. A knoll located southeast of the house was graded level with the roadway and the cut possibly used to fill in portions of the pond. Today, the roadway beside the house is about 3 feet lower than historic grade, and is presently retained by a stone wall. North and west of the house the earthen banks are retained by timbers.⁹²

⁹⁰ The former Aaron Brooks House once located southeast of the Whittemore House in Lincoln is another example of a colonial house found some distance from the main road. In this instance, Aaron Brooks owned property that had no direct access to North Great Road except through an easement given to him by Samuel Hartwell. The Brooks house and lane (approximately 400 feet long) can be seen on the Stephen Davis plan of 1779 (fig. 2). Also noted (but not shown) on this plan is the “Land of Rev. William Smith,” abutting property to the west owned by Samuel and Ephraim Hartwell.

⁹¹ Benjamin Whittemore Probate, Mid. Prob., #24776, Item #9, Real Estate Inventory, Nov. 12, 1734. A copy of the probate is on file at Minute Man NHP.

⁹² Virginia Road, at its intersection with North Great Road, is at an elevation of 197 feet above sea level. The elevation of the grade at the Smith House is 205 feet. The low swampy ground northwest of the Smith House drops 25 feet to an elevation of 180 feet, while the ground on the east side of the house has been graded more or less uniformly to a height of 195 feet above sea level.

The longitudinal axis of the 17th- century house is oriented east- west. The principal elevation, or facade, faces south in the traditional manner of 17th- and 18th- century New England houses. The approximate location of the Smith House on the UTM grid system is Z19 E657,078 N528,710. The reader can get a general idea of how the house relates to its site by referring to the location map and site plan on sheet no. 1 of the HABS measured drawings (Appendix C).

EARLY APPEARANCE

CIRCA 1692- 1734

Background

Before his death in 1734, Benjamin Whittemore, Sr., owned at least four houses in the easterly part of Concord. The first tract of land was purchased in 1691/2 from Moses Whitney, a yeoman from Stow, Massachusetts. The house was described in the deeds as a “small tenement or message.”⁹³ A second parcel of land containing a house was purchased in 1697 from Peter Rice.⁹⁴ A third house was purchased in 1707 from Joseph Wheat, and a fourth house was acquired from John Holdin in 1729.⁹⁵ Eight acres of land, apparently without buildings, was purchased prior to January 20, 1693, from Francis Fletcher.⁹⁶ Another 26 acres of Fletcher land was added to Whittemore’s holdings the following October.⁹⁷ Of these early land transactions, the Fletcher land seems the most likely of the parcels on which the Captain William Smith House stands. If so, then Benjamin Whittemore, Sr., may have built a new house for his new bride and himself in 1692/3.

Benjamin Whittemore, Sr., married Esther Brooks on August 17, 1692. Their first child, Mary, was born on July 12, 1694, and the second child, Benjamin, Jr., in 1696. A second son, Nathaniel, was born in 1698. Altogether, nine children were born to the Whittemores from 1694 to 1711 (see Appendix A).

Benjamin Whittemore, Sr., left no will when he died in 1734. The Judge of Probate for Middlesex County assigned a committee of five to appraise and distribute his property. Esther, his wife, was granted:

...one half of the Dwelling house and half the celler [sic] the West end of each, with Liberty of using the stair way into Sd Celler, with Liberty of the use of the well for her supply of water and of passing to and from the same, also Liberty of baking in the oven...[emphasis added]

The one half of the barn, the west end thereof...and Liberty from time to time and at all times to pass and Repass from the house to the barn....

⁹³ Mid. Deeds, Book 10: 371, March 16, 1691/2. MIMA files.

⁹⁴ Mid. Deeds, Book 13: 80- 81, January 26, 1697.

⁹⁵ Mid. Deeds, Book 21: 377- 8, March 24, 1707.

⁹⁶ Mid. Deeds, Book 10: 369, Jan. 20, 1693.

⁹⁷ Mid. Deeds, Book 10: 370- 1, October 31, 1693.

The Benjamin Whittemore, Sr., probate of 1734 included an inventory of the household goods that included, in part, the following items:

The Bed an Bedstead & furniture in ye West Chamber
The bed and al of the furniture in ye East Chamber
The Bed and furniture in West Loer Room
To one Chest of Drawers
One oval table
To Six Chairs in ye West Chamber
To six speckled cups in ye West Chamber
The Loom and furniture
To Seven Chairs in ye West Room and one in ye Back room [emphasis added]

Also included were the following kitchen utensils, in part:

To a trammel
The Lamp
to a Cider Mill [emphasis added]
To a chair

By inference, one can assume from the above descriptions that we are dealing with a two- story house having two rooms on each story; a cellar under the western end of the house; and that the way to the cellar and the baking oven were located in the east part of the building. In addition, the house contained a “back room,” suggesting that an addition of some type existed at the back or north side of the structure. The last architectural clue found in the 1735 division of land reads as follows:

The one half of the barn, the west end thereof at fourteen pounds - the foreswamp with the Land whereon the house and barn stands with orcharding and Pasture Land with a small corner of plowland at ye old celler bounded by the countrey Road, southwestwardly, then turns Northeastwardly from the country Road up the middle of the Lane to the east end of the Dwelling house, between the East end Door and the well...[emphasis added]

From this description, we know the house had a doorway in the east end wall, perhaps in the “Back room,” and that the well and barn stood east of the house. The cider mill might have been an outbuilding associated with the orchard.

Size

The overall size of the Whittemore house compared favorably with other houses constructed in the local area; indeed, it may have been slightly larger. A house to be built in Concord in 1668 was to measure 18 feet by 40 feet, with studs 12 feet high.⁹⁸ West of the Whittemore house, the

⁹⁸ Town Records, Concord, Massachusetts. Transcribed under the aegis of the CWA project, typescript copy, Volume I, Part I, 1663- 1784, kept on file at the Concord Free Public Library.

oldest section of the Samuel Hartwell house, a building of comparable age, measured 18 feet by 36 feet six inches, with studs 14 feet 3 inches.⁹⁹ The Whittemore house measured 19 feet by 40 feet, with studs 14 feet high.

Exterior Elements

Walls

Construction

The frame of the ca. - 1692 house is virtually intact. The surviving members are identified on sheet nos. 12- 14 of the restoration drawings (Appendix I). There is abundant evidence that the house of ca. 1692 was built as it stands today. For example, the front and rear plates run the full length of the house, with an overhang of 5 inches at each end. Also, the principal rafters, girts, and summer beams of the roof structure have progressive framing numbers, running from 1 through 6, incised in pairs at points where joints occur at plate level. Finally, a similar marking system can be found incised into the structural members of the north wall, first and second stories, where the studding is numbered from 1 to 36. Six of the eight corner braces are numbered from 1 through 6; one brace is unnumbered, and one brace is marked XXXI to correspond to the last studding number. These marking were used as an aid to the housewright in identifying the locations of each framing member in the wall as it was laid out and fitted together on the ground.

The most unusual feature of the house is its overhanging gable ends.¹⁰⁰ The overhangs were achieved by placing the studding flush with the inside of the girt, rather than on the outside surface, as was done on the rest of the house frame. By doing this, it eliminated the projection of the end girts into the second- story chambers. On the exterior, the overhangs provided some protection from the weather for the wall surfaces below (figs. 33- 35). Another unusual feature of the Whittemore house is the foundation sills, which project into the first- story rooms. The surviving 17th- century sills were more or less broad- axed smooth, with no decorative markings.

The original foundation sills, floor joists, principal posts, studs, corner braces, and plates were made from oak, as opposed to the girts, summer beams, and principal rafters, which were of pine (figs. 36- 41). The common rafters were mixed oak and pine. The large frame members were all hand- hewn and smoothed only on the surfaces that were exposed to the room interiors. Even so, there were exceptions to this rule; e.g., the posts and girts in the chambers were left in their roughed- out condition. The smaller- dimension pieces were mill- sawn, such

⁹⁹ Frame of Samuel Hartwell House measured, recorded, and photographed by the author in 1969, after fire destroyed the bulk of the building in 1968.

¹⁰⁰ The following list of Massachusetts houses having overhanging gable ends is a compilation of observations by the author and Wayne Perry of Burlington, Massachusetts. To date, Concord and Ipswich are the only towns observed to have three houses with overhanging attic end walls; Carlisle is the only town to have two houses with this feature. Towns having one house with this feature are: Acton, Allston, Andover, Bedford, Billerica, Boston, Enfield, Groton, Harvard, Lancaster, Lincoln (Capt. William Smith House), Littleton, Sudbury, Topsfield, Wayland, West Boylston, Westford, and Weston.

as four pairs of common rafters, the wall studding, the corner braces, and the floor joists in the second and attic stories.

In addition to being smoothed, several of the exposed frame members were embellished with decorative carving. The room with the most extensive carving was the east first- story room – the kitchen – where the bottom edges of the summer beam and the four girts were chamfered and stopped within 2 inches of each end by a lamb’s- tongue followed by a “pip,” or diamond- shaped cut.¹⁰¹ Where the summer beam joined the girts, the decorative elements on the girts stopped 2 inches short on either side of the summer beam and repeated themselves. The corner posts in the kitchen received a full- length chamfer with a simple taper stop at each end. The summer beams and chimney girts in the West Parlor and East and West Chambers were finished with chamfers and stops similar to those in the kitchen, but the girts and corner posts there were given either a simple chamfer with taper stop or none at all. The east corner posts in the West Chamber, on the other hand, were always concealed by the vertical wall sheathing.

Covering

The exterior walls were sheathed with wide, rough, mill- sawn pine boards (fig. 42) nailed to the studding with rose- headed, hand- wrought nails.¹⁰² The surviving boards are identified on sheet nos. 15- 17 of Appendix I.

Clapboards were nailed over the sheathing boards on the east, south, and west sides of the house ca. 1692. They probably were hand- riven and smoothed, made of white pine and approximately 4 feet 3 inches long. They were fastened with hand- wrought nails having shanks long enough to penetrate through the sheathing boards and into the oak studding and posts. The clapboards in the gable ends were also nailed through the sheathing boards to the studding, as shown in sheet no. 6 of Appendix I. This type of nailing pattern gave the wall a uniform appearance, with both nails and clapboard joints appearing in vertical alignment.

Apparently corner boards were not used in the original construction.¹⁰³ The author has identified the location of the ca.- 1692 clapboard nail holes on the southwest and southeast corner posts, and they measure between 1 ¼ inches and 1 ½ inches in from the outer edge of the posts. The corners were probably finished off by extending the clapboards on the south wall

¹⁰¹ Abbott Lowell Cummings, *The Framed Houses of Massachusetts Bay, 1625- 1725* (Cambridge, MA: Harvard University Press, 1979), Chapter IX, page 158. “More elaborate is the lamb’s tongue stop, sometimes augmented with an incised diamond- shaped cut or pip just beyond the head of the stop....” Illustrations of various types of stops can be found on page 159.

¹⁰² “Underboarding” was used on all four walls of the Smith House during its initial construction. Three walls had boards with squared edges and butted ends, whereas the north wall contained boards with feather- edges and lapped ends. Cummings (p. 134) states that “The earliest known example of underboarding can be found at the Gedney House in Salem [MA], ca. 1665.” Before this, clapboards were nailed directly to the studs. References to “boarded” walls can be found as early as 1649 in the records of Dorchester, MA.

¹⁰³ Like the Hartwell Tavern (ca. 1733), the Smith House was finished off without corner boards. Cummings writes that “Corner boards did not come into use until the eighteenth century” (p. 134). Instead, clapboards “were butted at right angles where they met at the four corners of the house.” Not all houses were clapboarded on four sides, as in the case of the Hartwell Tavern and the Smith House, where the north wall was not clapboarded.

past those on the end walls approximately one- half inch. The same technique may have been used at the northeast and northwest corners of the house, where the sheathing boards and clapboards of the end walls extended past the north- wall sheathing about one- half inch.¹⁰⁴

A red paint line found on the sheathing of the west gable has been interpreted by this author as being the former location of a belt board approximately 14 inches wide, once extending across the width of the gable end as shown on sheet no. 6 of Appendix I. The irregular ends of the clapboards running up the rake of the gables would have been covered with a molded- edge verge board and molded verge- board trim terminating at the eave line with a square- cut end.

The north exterior wall clad with wide, feather- edged pine boards having lapped ends (see figures 43- 45 and Appendix I, sheet no. 17). No clapboard nails were found in these boards to indicate that the wall was previously clapboarded. Most likely these boards were exposed to the weather until the “Back room” (or lean- to) was constructed prior to 1734.

Doorways

If the house of ca. 1692 was built without a lean- to, it may have had only two exterior doorways – the main entry centered in the south wall, and a small utility doorway centered in the north wall of the kitchen. It is not known if the east wall of the kitchen also had a doorway. However, the existing mortises in the east girt are identical to those in the second story, which suggests that the opening here would have been a window similar to the second- story window above it.

The width of the original doorway in the south wall can be established as 2 feet 10 inches, by measuring between the existing (but empty) mortises in the underside of the girt. Because the original sill and studs are missing, the overall height of the doorway opening cannot be determined.

A pattern of nail holes left in the sheathing boards from the clapboards of ca. 1692 and ca. 1750 gave an indication of the size and shape of the doorway surrounds for these two periods. The doorway surround for ca. 1692 is shown on sheet no. 3, and the frontispiece for ca. 1750 is shown on sheet no. 5, of Appendix I. Nail holes left in the sheathing boards by the ca.- 1692 clapboards indicated that the topmost part of the architrave surrounding the doorway opening stopped approximately 6 inches above the second- story girt. Also, pieces of a molded edge board 9 inches wide were found to have been used as wall sheathing during the narrowing of the 17th- century window openings around 1750 (figs. 46- 47). These molded edge boards are thought to be portions of the original architrave, minus an outer ogee back band measuring 1 ½ inches wide. This thought is reinforced by the fact that the red paint found on these pieces is identical to that found on the original 17th- century window sill.

¹⁰⁴ See the east elevation on sheet no. 16 of Appendix I, which shows the two lower wall sheathing boards of ca. 1692 extending past the northeast corner post approximately 1 ½ inches. This means that they would have extended beyond the boards of the north wall about three- quarters of an inch. The reason for this may have been to protect the north wall boards. Alternatively, the boards may have originally been long enough to have extended across a lean- to wall. If this was the case, the lean- to would have to be considered an integral part of the original building.

The type of exterior doors used ca. 1692 can only be imagined. Assuming that a portion of the foundation sill was cut away to the level of the floor, the front door would have measured 2 feet 9 inches wide by 6 feet 2 inches high, and might have had a transom window above it. The construction of a surviving 17th- century door from Deerfield, Massachusetts, suggests that exterior doors of this period were double boarded (for strength and warmth), and held together with hand- wrought nails placed in a decorative pattern.¹⁰⁵ Evidence of pintle- supported strap hinges was found at the kitchen doorway, and this type of hinge would probably have been used for the front doorway, as well. A thumb latch might have been used to secure the kitchen door, but a more elaborate wrought- iron drop knocker/latch could have been used for the front door.¹⁰⁶ Sheet no. 3 of Appendix I shows a conjectural view of the 17th- century doorway designed for the main entrance.

Windows

Clear evidence was found on the ca.- 1692 sheathing boards for the locations for all but two of the original window openings (figs. 48- 52). Evidence was not found for the original center window in the second story of the south wall; it may be concealed behind the existing ca.- 1825 window frame. Evidence for the original window in the first story of the east wall was lost when this wall was remodeled ca. 1956.

Openings

Window openings were located only in the east, west, and south walls of the ca.- 1692 house. The north wall was solidly sheathed with feather- edged boards and had only a doorway. With the exception of the remodeled east wall of the kitchen, the window openings of ca. 1692 were placed in the same locations as they are today, based on the architectural evidence found by the writer.

The most important piece of evidence recovered was an intact 17th- century window sill shown in full size on sheet no. 18, and in figures 53 and 54. The sill has a quirked ogee profile molded from a piece of pine stock measuring 2 ⁷/₈ inches by 3 ¹/₂ inches by 4 feet 5 ⁵/₈ inches long. The ogee profile, without the quirk, returns at each end. Mortises measuring five- eighths of an inch by 3 ³/₄ inches by 2 ¹/₄ inches deep are cut into each end of the sill to accept the tenons from the vertical jamb members, whose profile remains weathered on the surface of the sill. Rubbing marks along the front edge of the sill suggest that double sashes were used, probably supported by some form of strap hinges. The glass opening for this period sash could have been rectangular.

¹⁰⁵ Cummings, p. 145. Figure 198 is a close- up view of the door to the so- called “Indian House” in Deerfield, Mass. (ca. 1700), with its double- boarded construction and decorative pattern of nail heads.

¹⁰⁶ Cummings, p. 145. Figure 198 shows an original knocker/latch used on the front door of the “Indian House” in Deerfield. In the case of the Smith House, the author elected to recommend a wrought- iron rim lock for the front door of the proposed restoration work.

Evidence of a secondary nature but of no less importance than the window sill is the remains of red paint on the wall boarding outlining portions of the 17th- century window frames. When compared with the window sill, the paint outlines match exactly. Sheet nos. 15 and 16 shows the extent of the red paint markings.

Frames

Three sizes of window frames may have been used ca. 1692. The writer assumes that windows were used in the gable ends of the attic. If so, these would have been the smallest of the openings. No firm evidence was found to indicate the size of the attic window frames, but their rough openings could not have been wider than 1 foot 7 inches, the distance between the original studding in the west gable end.

The next largest window frame would have been located in the south wall of the second- story hallway. Like the attic windows, no firm evidence was found of the exact size of this window frame. It must have been narrower than the existing ca.- 1825 frame, because the red paint line of the bed molding extends under the existing jambs. The overall size of the conjectural frame measures 2 feet 4 inches by 2 feet 10 inches. Additional evidence may turn up to change this size somewhat.

The remaining eight windows were all of one size. This is known because parts of the original window openings remain in the exterior wall sheathing or the interior plaster walls. In addition to the partial openings, outlines of the original frames were left behind on the wall sheathing when red paint was applied to the frames prior to the installation of the clapboards. The overall size of the window frames measured approximately 4 feet 1 inch wide by 3 feet 7 high. All frames in the first and second stories, except the two gable end windows in the second story, were nailed against the wall sheathing boards, with the lower edge of the head piece flush with the lower edge of the girts and plates. Sill level above the floor would have been between 3 feet 7 inches and 3 feet 10 inches above the second- story floor, and between 4 feet 1 inch and 4 feet 4 inches above the first- story floor.

The interior trim of the ca.- 1692 window openings probably consisted of a flat stool, possibly with a molded edge, that lapped over the top of the sill 1 inch (and fastened with three nails), forming a stop for the sashes. The end of the stool had “ears” that projected 1 ½ inches past the side jambs. The jambs were probably flat pieces of trim, possibly with molded edges, placed tight against the window frame and fastened to the girts and plates with hand- wrought nails. This trim, in turn, projected into the room just far enough to form a plaster stop for those rooms that were lathed and plastered. The window openings in the kitchen would have been trimmed in the same manner, except that the interior wall finish was horizontal shiplapped boards.

One question that remains is the method used to finish the tops of the window frames on the exterior. It is possible that the first- story and attic window frames were covered with a canted hood, although no evidence of hoods was found. The window frames in the gable ends in the second story were pushed against the overhanging girts, precluding the use of hoods. This arrangement can be verified on the west wall, where red paint has outlined the location of the head piece on the soffit of the overhanging girt. The unpainted section of the soffit, which represents the location of the window frame, measures 3 inches wide by 4 feet 4 inches long. This length would leave an “ear” of approximately 1 ½ inches beyond the jambs. The ears would

have been squared off to conform to the red paint line. Along the front edge of the paint line is a second line measuring nine- sixteenths of an inch and containing 10 nail holes dispersed along its length. The origin and use of the nails is unknown. Unfortunately, no paint evidence was left on the soffit of the east overhanging girt to corroborate that on the west.

Roof

The existing roof structure has changed very little from its original construction. The surviving roof rafters and purlins are identified on sheet nos. 12- 14 of Appendix I. Basically, the roof structure is a combination of principal rafters and purlin- supported common rafters. The principal rafters are mortised and tenoned, and pinned together as pairs at the peak of the roof; their feet are tenoned and pinned into mortises in the girts and summer beams. The common rafters were half- lapped and pinned together as pairs at the peak of the roof; their feet were notched into cogs cut into the purlin plates before lapping by approximately 6 inches to form part of the overhanging cornice along the south wall. Along the north wall, the common rafters were notched into cogs cut into the main plate before lapping by approximately 9 inches to form the rear cornice. The common rafters were held in place by long tapered pins driven diagonally in holes pre- drilled through the top of the rafters and into the plates. Collar ties and wind braces were not used in the original construction.

As shown on sheet no. 13 of Appendix I, the center line of the roof was positioned approximately 9 inches south of the center line of the house. This allowed the cornice on the south wall to project horizontally 1 foot 6 inches beyond the wall surface, compared to a horizontal projection of 6 inches for the north- wall cornice, where the projecting feet of the common rafters formed the overhang. Whereas the ends of the common rafters on the south side were squared off, those along the north wall had exposed feet that were probably molded, with chamfered edges.¹⁰⁷

The offset centering of the rafters created an unequal angle to the roof slope, which is difficult to measure directly in the attic because of settlement in the house frame. Mathematically speaking, the trigonometric function of the south roof slope – where the span measures 9 feet 11 ½ inches, with a height of 7 feet 7 inches – the angle of the roof is approximately 37 degrees, 15 minutes. The north roof slope, which has a span of 9 feet 1 inch and a similar height, has an angle closer to 39 degrees, 50 minutes.

The original roof covering would have been wood shingles with square butts, hand- riven and smoothed and probably made of pine or cedar. The shingles would have been about 16 inches long, with widths varying from 3 ½ inches to perhaps as much as 7 or 8 inches. The exposure has not been determined yet, but 5 inches was a common spacing. The shingle joint at the peak of the roof would have been covered with a pair of ridge or saddle boards equal in width to the shingle spacing.

¹⁰⁷ Overhanging common rafters having molded feet can be seen at the Hartwell Tavern. See Cummings, p. 132, for a detailed drawing and description of this feature.

Cornice

The shape and design of the existing cornice along the south wall, except for the cove terminations at each end, is thought to be very similar to its original construction.¹⁰⁸ Prior to ca. 1825, when the ends of the cornice appear to have been changed, the plaster cornice was probably one continuous coving terminating at each end against a gable board as shown in sheet nos. 5- 6. The lower edge of the original bed molding may have been three- quarters of an inch lower than the existing one, if the red- paint line found running continuously along the sheathing boards is an indication of where the lower edge of the original bed molding was located (see figure 50). The red paint line, incidentally, was left behind when a primer coat of paint was applied to the trim ca. 1692. Sheet no. 15 shows the extent of the red- paint line just under the present- day bed molding. The plaster for the coving was made of sand and lime, with cow hair added as a binder.

The rear, north cornice was not as elaborate as that on the front elevation. It was formed by the feet of the common rafters extending approximately 9 inches beyond the sheathing boards. The feet of the common rafters were probably truncated or molded, with all edges chamfered and left exposed on the undersides of the roof sheathing. The ends of the girts and summer beams projected approximately 3 inches beyond the wall sheathing and terminated in the shape of a triangle.

¹⁰⁸ Cummings, p. 133. Cummings dates the introduction of the plaster cove cornice to “the very end of the seventeenth century.” An illustration of a house with a cove cornice, published in London in 1700, appears as Figure 31 (p. 55) in Fiske Kimball, *Domestic Architecture of the American Colonies and The Early Republic* (New York: Dover Publications, Inc., reprinted in 1966). Existing examples of coved cornices in Massachusetts are the White- Ellery House in Gloucester; the Rea- Putnam- Fowler House in Danvers (ca. 1700); the Parker- Orne House in Marblehead; the Benaiah Titcomb House in Newburyport; the Hovey- Boardman House (ca. 1710) and the Kendrick House (ca. 1670) in Ipswich; and the Capt. William Smith House in Lincoln. Lost examples are the Pillsbury House in Newburyport and the Joseph Blaney House in Swampscott. Standing houses that may have once had coved cornices are the Schiff House in Topsfield (ca. 1697), the Spear House in Lynnfield, and the Bray House in West Gloucester. Existing examples in Connecticut are the Parmelee House in Guilford and the Pardee House in North Haven (ca. 1725). Existing examples in Rhode Island are the Wanton- Lyman- Hazard House in Newport, the Monroe House in Newport, the Joseph Reynolds House in Bristol (ca. 1698), and the Coggeshall- Redwood House in Portsmouth (1743). A lost example is the Gabriel Bernon House in Providence. The Monroe House is unique in having a continuous coving on each side of the building. Plaster cove cornices are also found in the Philadelphia vicinity, according to an article published in the December 1982 issue of *Antiques* magazine. Page 1243 states that “...the pent eave between the first and second stories, and the cove cornice are all characteristics of the early Georgian style as interpreted by the English Quakers in Pennsylvania.” See Appendix E for a drawing by P. Batcheler in 1960 of a plaster cove cornice under a pent eave in Philadelphia. A cross- section through the cornice of the Smith House is shown on sheet no. 18 of Appendix I. See Appendix E for drawings of the other houses’ cornices.

Chimney

Before the chimney of ca. 1692 was removed around 1910, several photographs were taken of the exterior of the house showing the original chimney stack above the roof. Characteristic of 17th- century houses in Massachusetts, the chimney stack straddled the roof ridge, with its longest sides parallel to the ridge.¹⁰⁹ A pair of arched panels, associated with houses after 1674,¹¹⁰ was recessed into the south side of the chimney the depth of one header brick, or slightly more than 4 inches. Drip courses, projecting about 1 inch and used to divert rainwater away from the juncture of chimney and roof, were built just above the roof on both sides and flanks. Three stretchers and one header were used to construct its depth of approximately 2 feet 9 inches, while 7 stretchers and three headers were used to produce a width of 6 feet 3 inches. A height of 5 feet 8 inches above the roof was achieved with 24 courses of bricks laid in running bond. The chimney cap consisted of two single courses and one double course of bricks, each projecting about three- quarters of an inch. Below the roof, the chimney stem without the recessed panels, reduces in depth to three stretchers.

¹⁰⁹ Frederick J. Kelly, *The Domestic Architecture of Connecticut* (New York: Dover Publications, Inc., 1963 reprint), p. 73. Kelly states that in the earliest Connecticut houses, “the center of the stack was invariably carried up behind the main roof ridge, and the chimney was long and narrow, its length being parallel with the ridge.” Seventeenth- century Massachusetts chimneys were similar in construction, but were generally located in the center of the roof ridge.

¹¹⁰ See Appendix G for illustrations of double- and single- arched chimney fronts. According to A.L. Osborne, *A Dictionary of English Domestic Architecture*, p. 24, the last phase of the traditional brick stack with double- arched construction occurred around 1634 in England. Cummings, on the other hand, states that “Both single and paired arched panels have been noted (figure 163), and the form seems to be confined to the later of our period (i.e., after 1700), certainly in the rural communities” (p. 124). Double- arched chimneys, sometimes referred to as “covenant chimneys,” were found on the Tremero House in Boston (ca. 1674, demolished), the Craft House in Boston (1709, demolished), the Bowman House in Lexington (n.d., demolished), an unidentified house in Groton (n.d.), and the “Wentworth Mansion” in Salmon Falls, NH (1701). Single- arched chimney fronts can be found on the Abbott House in Andover (n.d.), the Coffin House in Nantucket (1686), the Poore Tavern in Newbury (1700), and the General Walker House in Stratford, CT (1740).

Interior Elements

Floor Plan

The floor plan of the Whittemore House was typical of the full- sized houses built in Massachusetts – i.e., two rooms on each story, separated by a central chimney that was fronted by an entry hall and stairway (see Appendix I, sheet no. 2). These four rooms were approximately the same size, measuring 14 feet 11 inches by 18 feet 3 inches (within 1 ½ inches). Ceiling heights averaged 7 feet 3 inches (within 1 inch).

A cellar room was excavated under the west end of the house, with access being provided by a stairway ascending to a doorway in the west wall of the east first- story room (at that time the kitchen). The attic may have been divided into two rooms during Benjamin Whittemore's lifetime, but this is speculation. The only evidence remaining to define the location of any former partition is the hand- wrought nails found on the west sides of the principal- rafter pair number 3, and directly below them, molded- edge cleats nailed to the attic floor with hand- wrought nails.

By the time Benjamin Whittemore, Sr., died in 1734, his house had a rear lean- to addition, described in his inventory of that year as “ye Back room.” Also, there was an “East end Door” opposite the well. Since the physical evidence indicates that the east end of the main house did not have such a doorway, a more likely location would have been in the lean- to.

Little is known about the arrangement of rooms in the lean- to. One can assume there were stairways to the cellar and to the second story, and – after ca. 1750 – a kitchen. Some information can be gained by studying the locations of doorways created in the north wall of the main house to access the lean- to. One such doorway remains (blocked up) in the center of the East Parlor's north wall. Another was at the east end of the north wall of the West Parlor. The frame of this doorway survives in situ, and several attributes suggest it to be an early addition. It is small (2 feet wide by 5 feet 10 inches high); it is nailed with hand- wrought nails; and the diagonal wall brace and foundation sill here were cut away to accommodate the opening (see figure 55 and sheet no. 17 of Appendix I). A third early doorway to the lean- to was located in the north wall of the chimney bay in the second story. It is slightly smaller than the one in the West Parlor. Its door appears to have been hung on pintle- supported strap hinges (see sheet no. 17, Appendix I).

Fireplaces

Information about the interior design and construction of the central chimney and its fireplaces is scant. Enough pieces of the original East and West Parlor fireplaces were found in situ during the architectural investigation (figs. 56- 59) to reconstruct the size and shape of these features at floor level. (The fireplace in the East Parlor was a cooking fireplace, since that room was initially used as a kitchen.) Both fireplaces were recessed back from the face of the chimney girt about 6 inches. They measured approximately 3 feet 10 inches deep by 6 feet long, and were built with

their jambs square to the firebacks. The jambs appear to be one stretcher and one header (14 inches wide), and were probably laid in English bond, consisting of alternating courses of headers and stretchers. The fireplaces and hearths were laid with bricks set parallel to the jambs.

Given these dimensions, there would have been a space north of the fireplaces measuring about 2 feet 6 inches wide. It is thought that the area north of the kitchen fireplace contained a bake oven. The chimney post has been chopped away on the south side, suggesting that either additional room was needed for the oven brickwork, or that an attempt was made to separate the post from direct contact with the masonry. If traditional methods of building chimneys were followed, below the oven would have been an “ash hole” for storing wood ashes, a common source of potash used in soap making. The space north of the West Parlor fireplace is thought to have been a closet.

Except along its south side, the chimney (fireplaces and oven) was built directly on soil that was retained by the stone wall of the cellar to the west, and by the stone wall forming the cellar bulkhead to the south, which also supported the brick jambs of the fireplaces. The cellar wall to the west was built 2 feet 6 inches beyond the fireplace, and may have been placed this way intentionally to support a hearth in the West Parlor. The brick sizes used in this early masonry work average 4 inches in width, 8 ½ to 9 inches in length, and 2 ¼ inches in thickness. They were laid in clay mortar.

The appearance of the fireplace surrounds in the first story is not known. Fireplace openings for this period were supported on large oak lintels up to 12 inches square and set between 4 and 5 feet above the hearth.¹¹¹ The lintels were exposed as often as they were covered with trim boards. Material thought to be original to the West Parlor are four pieces of vertical wall paneling south of the existing fireplace opening; one piece covering the north chimney stack; and the perpendicular jamb piece that forms the 5- inch recess for the fireplace surround on the south side. The remaining parts of the east wall have been either introduced or repositioned. The width of the original fireplace opening seems to have been 6 feet 5 inches, based on a notch in the subfloor for the trim. The height is unknown, but would have been similar to that in the kitchen.

The chambers appear to have portions of their original fireplaces and surrounds left intact. The fireplace opening in the East Chamber measures 4 feet wide by 3 feet 6 inches high, and was cut out of the flush vertical wall paneling. Missing from the surround is a 4- inch- wide piece of molding, probably a bolection, set back three- quarters of an inch from the inside edge of the opening. Hearth bricks may have actually protruded into the room 3 ⅝ inches, based on a cut in the floorboard at the south end of the present hearth opening. The surviving pieces of the 17th- century fireplace surround in the West Chamber are the two side jambs, spaced 6 feet apart and forming a 7- inch recess that runs from the floor to the soffit of the girt. An unpainted surface – 1 ¼ inches wide on the south jamb, 5 feet above the floor – may indicate the former location of an early mantelshelf. Found 1 foot 5 inches above this is a paint line in form of an arc 8 inches high ending against the soffit of the girt, which suggests a plaster cove (fig. 60). A cutout in the floorboards immediately in front of the fireplace opening, measuring 5 inches by 5 feet 6 inches, is assumed to be the original opening for the hearth (fig. 61). It is about 1 inch off- center in the

¹¹¹ Kelly, p. 75; he lists examples of oak lintels in Connecticut houses that exceed 12 inches square.

recessed space, and is contained entirely within the recess. Portions of the mortar bed survive 1 inch below the surface of the floorboards, suggesting the use of tile at this point.

Finishes

Most of the walls and ceilings of the West Parlor, West Chamber, East Chamber, and hallways were originally finished with lath and plaster. The ceilings of the East and West Chambers were coved at the north and south walls (figs. 62- 63). Vertical- board sheathing was used on the fireplace walls of the parlor and both chambers (fig. 64). The so- called East Parlor, which was used as the kitchen until ca. 1750, had a lath- and- plaster ceiling and walls sheathed with wide horizontal boards with shiplapped joints.

The wide red- pine floorboards extant in the second- story chambers are original, and similar boards would have been used on the first- story floors. Not a single 17th- century interior door has survived. They may have all been the board- and- batten type, made from single- thickness, molded- edge boards and battens. The plaster walls retain evidence of the ca.- 1692 window openings (figs. 65- 68).

The 17th- century cellar must have looked much as it does today, including the extension at the north end that probably was introduced as part of the ca.- 1730 lean- to. Excluding the granite underpinning, the existing stone walls, and the dirt floor, the log joists and subfloor of the West Parlor all appear to be original. In the attic, bricks were laid over the south plate, then plastered over to form a weather seal between the plate and the floor (fig. 69).

Stairways

The configuration of the original stairways is not fully known. The cellar stairway has always been in the same location as it is today, under the main stairway; the stone walls forming its bulkhead walls appear to be original. However, it was accessed through a doorway in the west wall of the East Parlor, just south of the fireplace here. The present stairway is not considered to be original, because its stringers are made from reused materials.

The original stairway from the first to the second story was also in the same location as the present main stairway. It probably was an enclosed winder type. A section of ca.- 1692 handrail was found reused in the ceiling of the second- story former central- chimney area (fig. 70); it may relate to this stairway.

The type of stairway to the attic was determined in part during the architectural investigation in two ways: by measuring the cut- out in the front hall for the first step of the original attic stairway (fig. 71), and by measuring the outline of whitewash remaining on the stairway side of the east paneled wall in the West Chamber (fig. 72). Prior to ca. 1750, this wall was only one board thick, and it supported the lower three steps of a winder stairway. The stairway had to conform to an opening in the attic floor measuring 3 feet 4 inches wide by 4 feet 7 inches long, a space now covered by floorboards and a lath and plaster ceiling. The attic stairway probably contained nine risers measuring 10 inches (+/- 1 inch), three of which were winder steps.



Figure 33. Main House:
South corner of east
gable end, showing
overhanging plate and
girt.



Figure 34. Main House: South corner of west gable end, showing overhanging plate and girt.



Figure 35. Main House: North corner of east gable end, showing end of north wall plate overridden by east overhanging girt; arrows point to pin connections of rafter and posts tenons.



Figure 36. Main House:
East Parlor, north end of
east wall, showing
framing.



Figure 37. Main House:
East Parlor, south end of
east wall, showing framing.



Figure 38. Ca.- 1900 Addition: Looking east from first- story center room along north (formerly exterior) wall of main house (at right), after wall covering was removed.



Figure 39. Ca.- 1900 Addition: First- story east room, looking south at exposed framing of north (formerly exterior) wall of main house, showing East Parlor lath split from original wall boards ca. 1810.

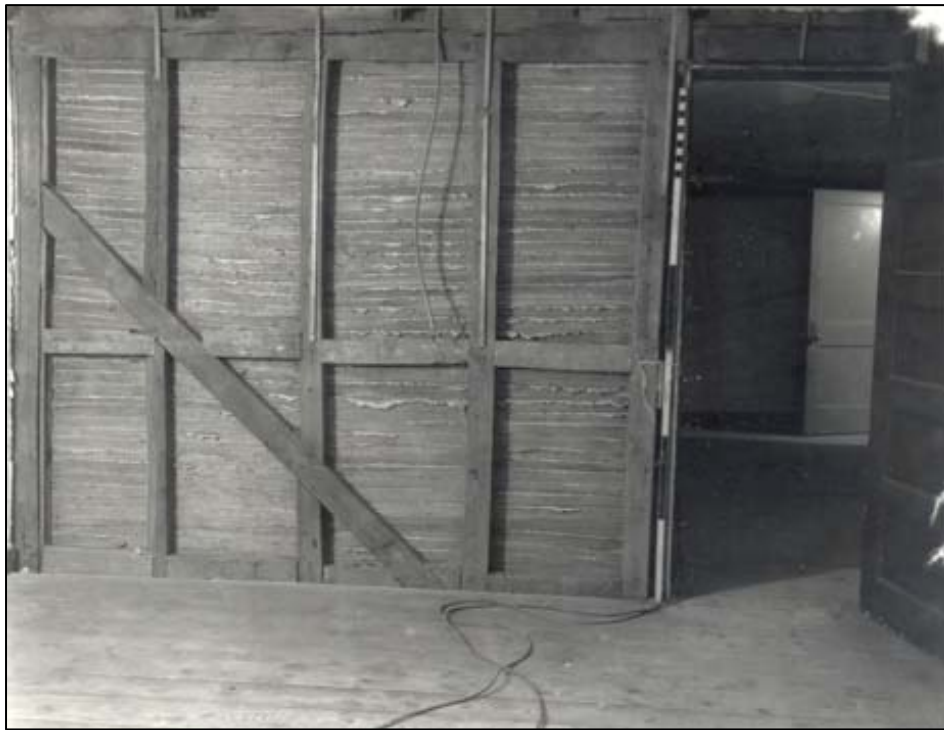


Figure 40. Ca.- 1900 Addition: Second- story east room, looking south at exposed framing of north (formerly exterior) wall of main house, showing oak framing members and East Chamber wall lath.



Figure 41. Ca.- 1900 Addition: Second- story west room, looking south at exposed framing of north (formerly exterior) wall of main house, showing oak framing members and West Chamber wall lath.



Figure 42. Main House: West gable end, after removal of ca.- 1956 clapboards during architectural investigation; window opening is not original.

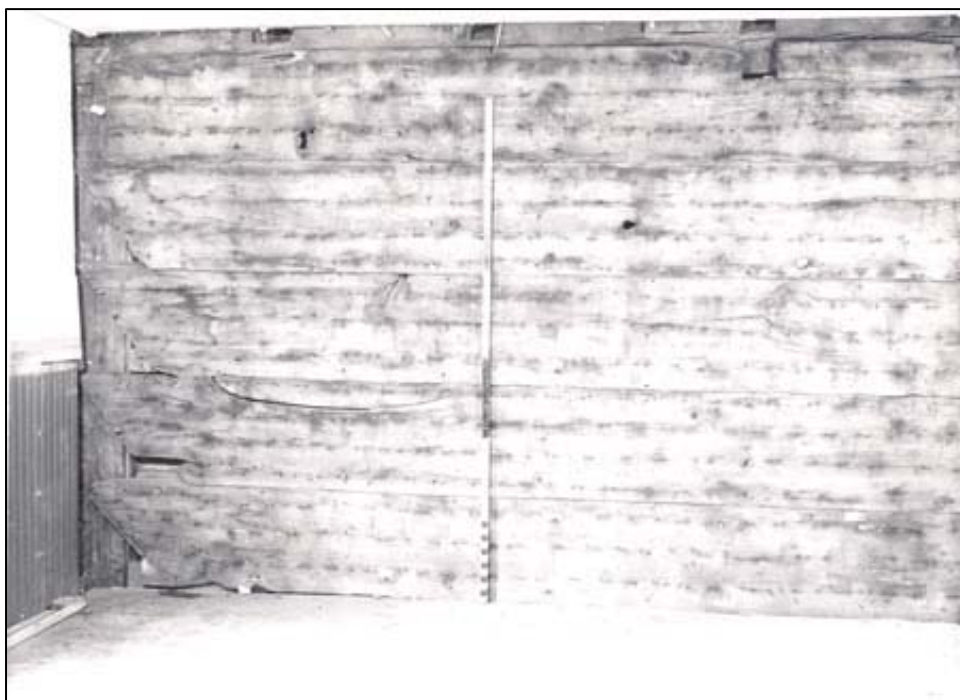


Figure 43. Ca.- 1900 Addition: Second- story east room, looking south at north (formerly exterior) wall of main house, showing original wall boards removed ca. 1900 and replaced in 1980.

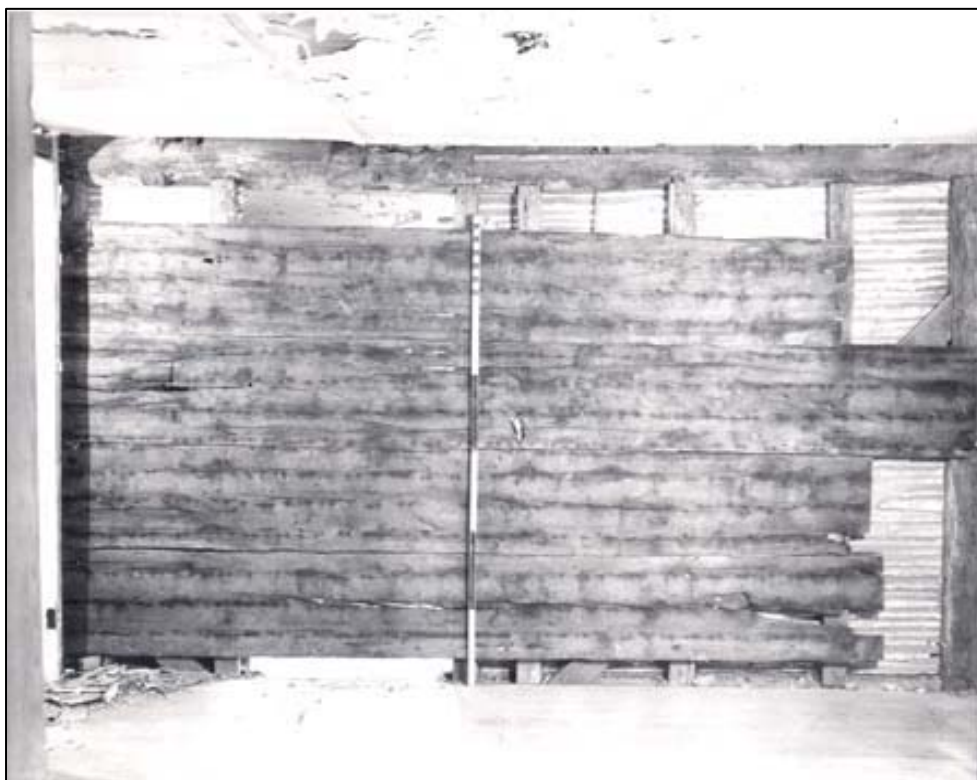


Figure 44. Ca.- 1900 Addition: Second- story west room, looking south at north (formerly exterior) wall of main house, showing original wall boards removed ca. 1900 and replaced in 1980.



Figure 45. Ca.- 1900 Addition: Second- story center room, looking south at north (formerly exterior) wall of main house, showing original wall boards with lapped ends, removed ca. 1900 and replaced in 1980.



Figure 46. Main House:
West exterior wall, showing
West Parlor window; arrows
point to head and sill of ca.-
1692 window opening.



Figure 47. Main House:
West exterior wall, showing
West Parlor window; arrow,
which is attached to back
side of board reused to
narrow ca.- 1692 window
opening, points to molded
edge and red paint.



Figure 48. Main House:
South exterior wall,
showing East Parlor
window; arrows point to
head, sill locations of ca.-
1692 window opening.



Figure 49. Main House:
South exterior wall,
showing East Chamber
window; arrows point to
head, sill locations of ca.-
1692 window opening.



Figure 50. Main House: East exterior wall, showing East Chamber window; arrow points to outline of ca.- 1692 window sill, jamb.



Figure 51. Main House: South exterior wall, west end, showing cove cornice and West Chamber window; left arrow points to former location of original bed molding; right arrows point to head, jamb, sill locations of ca.- 1692 window opening.



Figure 52. Main House: South exterior wall, showing West Parlor window; arrows point to head, sill locations of ca.- 1692 window opening.

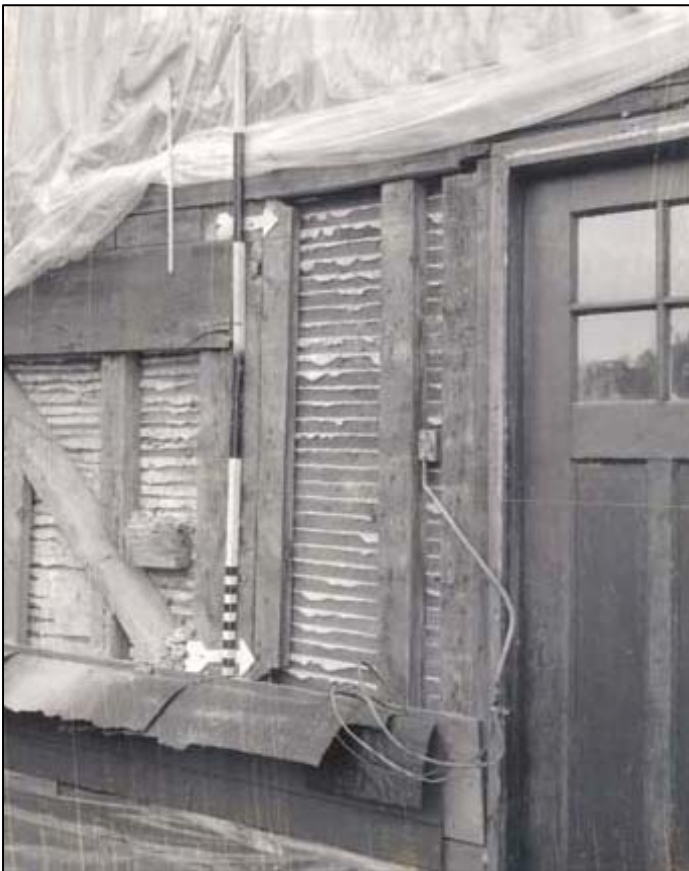


Figure 53. Main House: South exterior wall, west of doorway; arrows point to ends of ca.- 1692 window sill, reused in a vertical position.

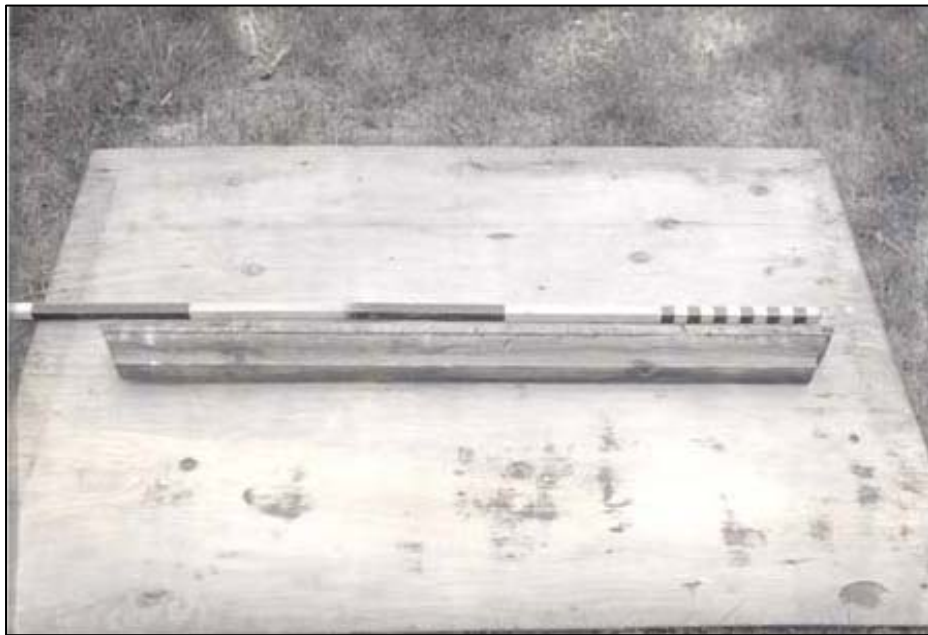


Figure 54. Ca.- 1692 window sill, after removal from south wall of main house.



Figure 55. Main House: West Parlor, north wall, former doorway to ca.-1730 lean- to.



Figure 56. Main House: East Parlor, west wall after removal of ca.- 1956 paneling, showing space originally occupied by central chimney.



Figure 57. Main House: View of central chimney area, showing clay fill exposed when later concrete slab was removed; brick remains of ca.- 1692 and ca.- 1750 fireplaces lie beneath the fill.



Figure 58. Main House: East Parlor, remains of north jamb of ca.- 1692 fireplace (left arrows), and of east side of ca.- 1750 fireplace in lean- to (right arrows).



Figure 59. Main House: West Parlor, remains of ca.- 1692 fireplace in east-wall closet.

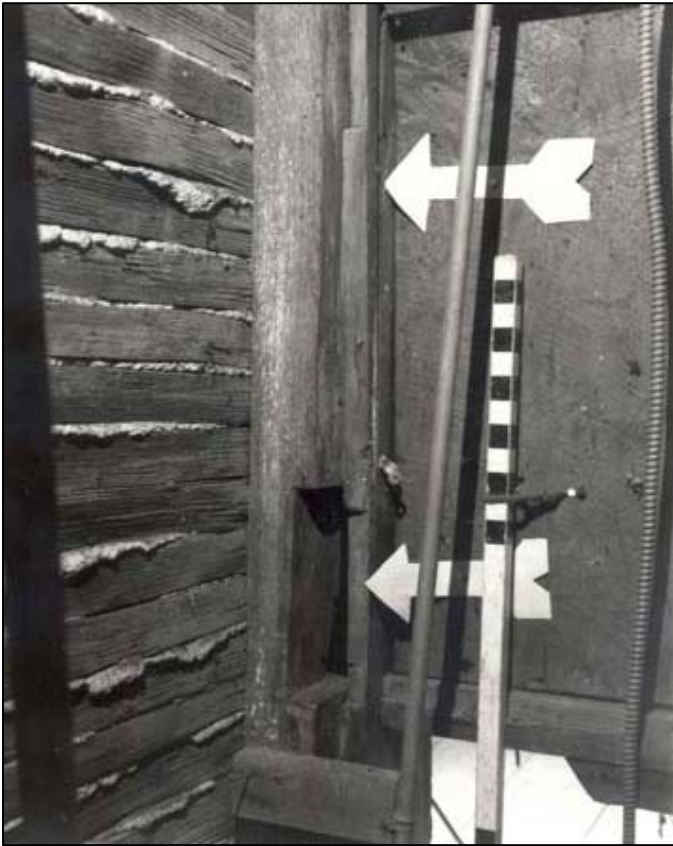


Figure 60. Main House: Former central chimney area, looking east at backside of fireplace wall of West Chamber; arrows point to evidence of missing, possibly original cove soffit (top) and mantelshelf (bottom).

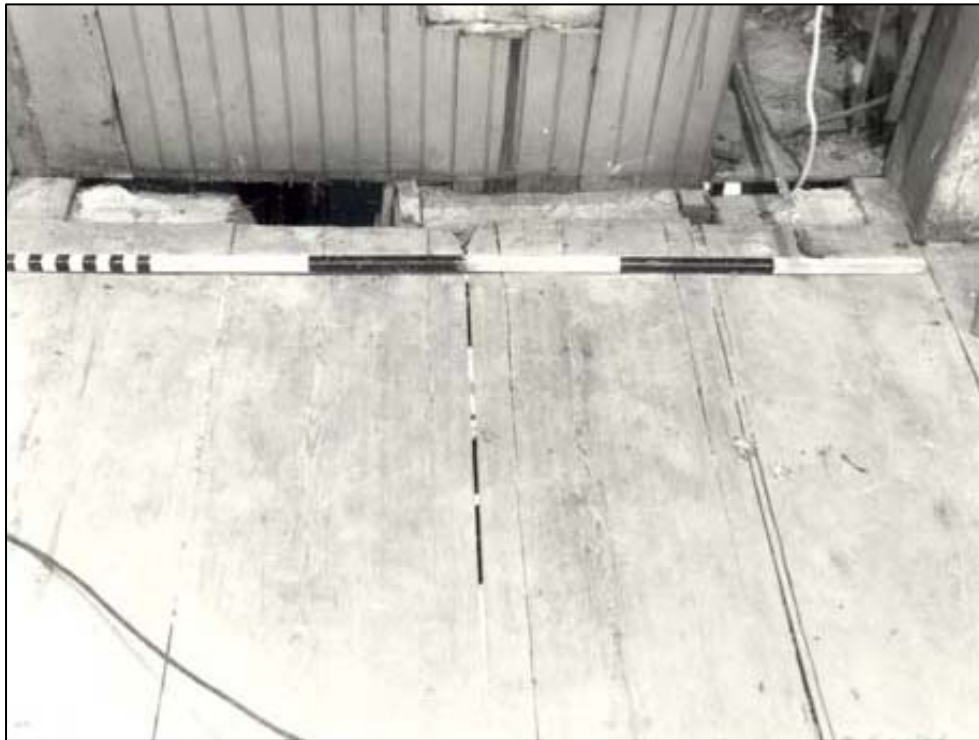


Figure 61. Main House: West Chamber, east wall, evidence of the ca.- 1692 hearth.



Figure 62. Main House: East Chamber, northeast corner, showing plaster cove ceiling.



Figure 63. Ca.- 1900 Addition: Attic, looking south at backside of lath- and-plaster cove ceiling along north wall of West Chamber.

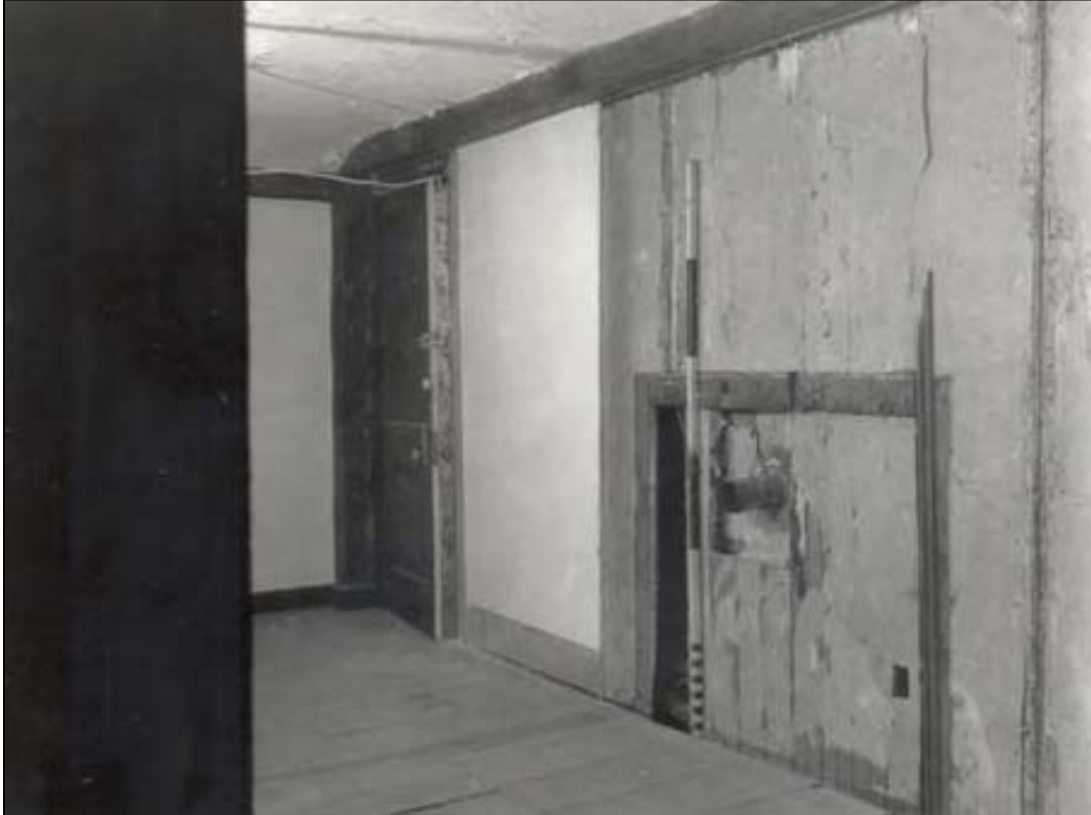


Figure 64. Main House: East Chamber, west wall, showing original wall boards being exposed as plasterboard is removed.



Figure 65. Main House:
West Parlor, west wall;
arrows indicate locations
of head, sill of ca.- 1692
window opening.

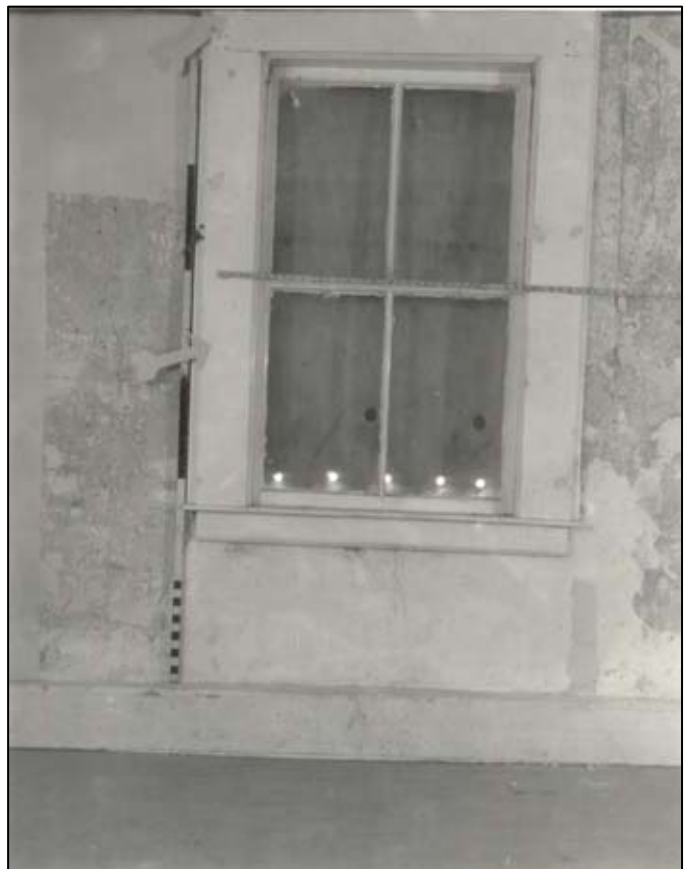


Figure 66. Main House:
West Parlor, south wall;
arrows indicate locations
of head, sill of ca.- 1692
window opening.

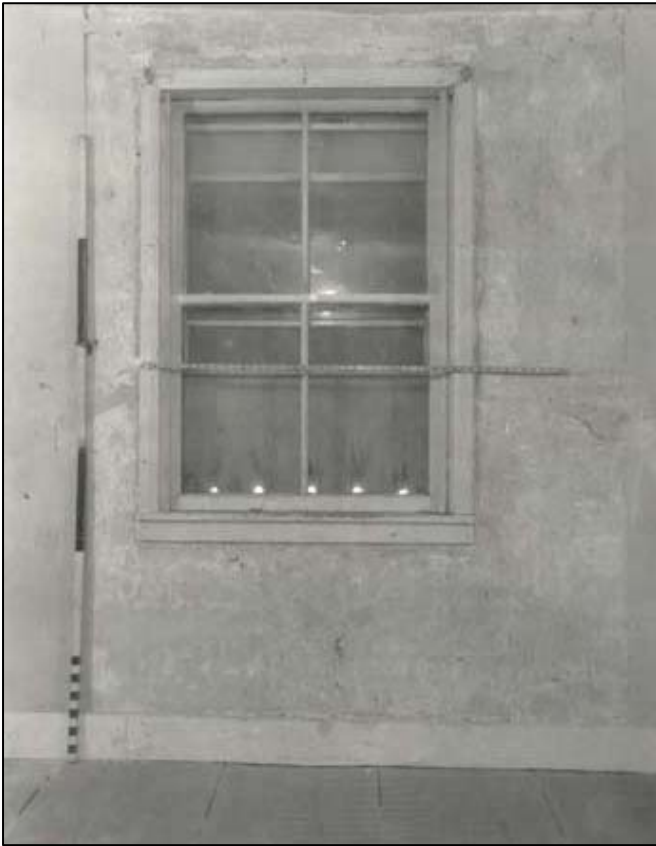


Figure 67. Main House:
West Chamber, west- wall
window, with wallpaper
peeled back to reveal
plaster patch from ca.-
1692 window opening.

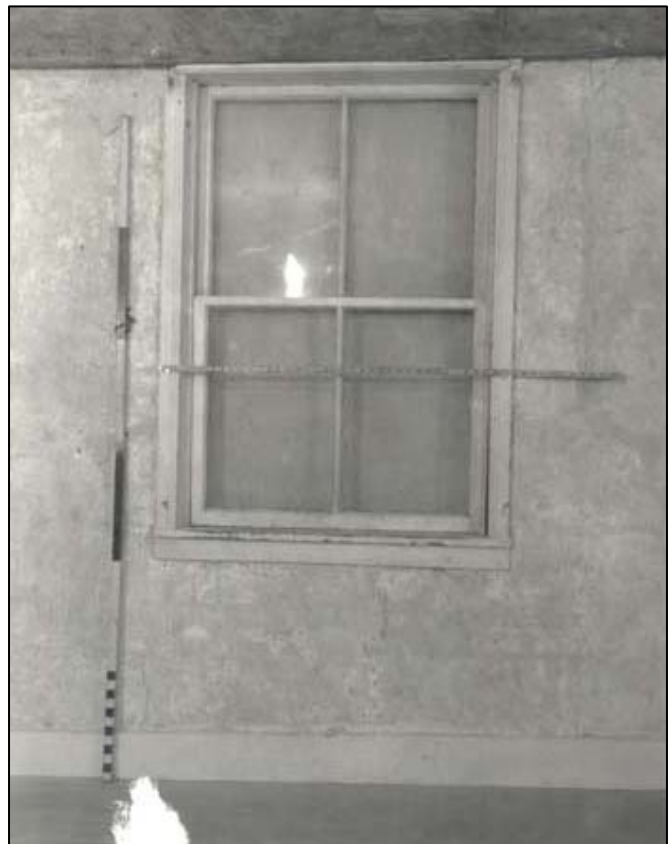


Figure 68. Main House:
West Chamber, south- wall
window, with plaster joint to
right indicating edge of ca.-
1692 window opening.



Figure 69. Main House: Attic, plaster over bricks between south plate and floorboards above West Chamber.



Figure 70. Main House: View of central chimney area, second story, looking east after removal of plasterboard walls and ceiling; scale stick rests on reused piece of ca.- 1692 handrail.



Figure 71. Main House:
Front Hall, looking northwest
into West Chamber, showing
cut- out for first step of
original attic stairway
(removed ca. 1750).



Figure 72. Main House:
Front Hall, looking north
into interior of partition wall
between hall and West
Chamber, showing
whitewash outlines of
original attic stairway
(removed ca. 1750).

ALTERATIONS CIRCA 1750

Background

Nathaniel Whittemore acquired half of his father's house upon the death of his brother Benjamin, Jr., in 1734, and the remaining half when his mother Esther died in 1742. By the time he sold the property to William and Elizabeth Dodge in 1758, Nathaniel Whittemore's holdings totaled 203 acres. As indicated in Chapter II, there is some speculation that Whittemore did not live in the house during the period of his ownership (1734- 1758). However, the physical evidence suggests that major changes were made to both the exterior and the interior of the house between 1742 and 1758. Whittemore also built a second barn between 1742 and 1758.

Exterior Elements

Significant changes were made to the exterior of the house between 1742 and 1758. The ca.- 1692 window frames and casement sashes were removed and replaced with new window frames having double- hung sashes and new interior window trim. This required the removal of the ca.- 1692 clapboards and their replacement with new clapboards. Corner boards were introduced for the first time. The ca.- 1692 frontispiece and door in the south wall were removed and replaced with a new frontispiece and door (see figure 73). The doorway in the east wall of the lean- to may have been updated; new interior doorway trim was installed.

These changes resulted in the appearance of the house as it existed in 1775; they are therefore described in greater detail in the following section, "The House on April 19, 1775."

Interior Elements

Significant changes also were made to the interior of the house. The ca.- 1692 front stairway was rebuilt into its present configuration (fig. 74- 75). It included an open balustrade and paneling below.¹¹² Figure 76 shows the back side of a section of the ca.- 1750 paneling; it was later hinged to serve as the present- day door to the cellar.

The attic stairway may have been relocated as part of this work. If so, a new lath and plaster ceiling would have been installed in the Front Hall, and the west and north walls of the Front Hall would have been rebuilt.

Some alterations were made to the fireplaces. New-style fireplaces with splayed jambs and cranes were built inside the square- backed fireplaces of ca. 1692 in the East and West Parlors. It is probable that a new kitchen fireplace and bake oven were created on the back of the central chimney stack, opening to the lean- to. The new bake oven would have occupied the same space as the earlier one, but would have been rotated by 90 degrees. The original closet north of the West- Parlor fireplace would have remained, but would have been greatly narrowed due to the incursion of the new kitchen fireplace. Appendix I shows this floor plan on sheet no. 2, labeled as “c. 1730- ca. 1825.”

Other improvements were made to the East Parlor, perhaps after the cooking activities were moved elsewhere. The physical evidence indicates that fire damaged the ceiling, and a new lath and plaster ceiling was installed. A cupboard was built into the northwest corner, and the wall sheathing and plaster ceiling were whitewashed after the cupboard was installed. The floor was possibly painted red.

New floorboards were laid in the hallways in the first and second stories at this time. Finally, new paneled doors and hardware may have replaced the older board- and- batten interior doors.

As with the exterior, these changes resulted in the appearance of the house as it existed in 1775, and are described in greater detail in the following section, “The House on April 19, 1775.”

¹¹² Most architectural historians agree that the use of the open balustrade in stair construction began about 1700. The introduction of plain square newel posts, molded handrails, fully turned balusters, and the boxed and/or open string were all part of this development. For a general discussion of the development of the stairway, see Cummings, pp. 162- 168.



Figure 73. Main House: South exterior wall, outline of ca.- 1750 entrance pediment.



Figure 74. Main House: Entry Hall, stairway built ca. 1750.



Figure 75. Main House:
Entry- Hall stairway.



Figure 76. Main House:
Rear side of present- day
cellar door.

THE HOUSE ON APRIL 19, 1775

Background

The old Whittemore- Dodge house had been occupied since 1771 by William Smith, Jr., and his wife Catharine Louisa, daughter of Elizabeth and William Dodge. William Smith was the brother of Abigail Smith of Weymouth, who married John Adams, second president of the United States. Through this relationship with the Adams family, Smith may have been elected captain of the Lincoln Minuteman company in 1775.¹¹³

The exterior of the house on April 19, 1775, must have looked much like it did after the alterations of ca. 1750 were completed, with its relatively new double- hung sashes, pedimented doorway, clapboards, and lean- to. The exterior clapboards were probably not painted, but the house trim could have been painted red, as done ca. 1692. The original central chimney with its paired arched panels had received an additional flue at the rear to serve a new kitchen fireplace and bake oven built in the lean- to. The original cove cornice along the front of the house had been repaired by filling with plaster around the three narrower window openings.

The interior floor plan of the main house remained virtually the same after the alterations of ca. 1750, i.e., with its front hall and two rooms in both stories. The front stairway constructed ca. 1750 probably remained unpainted through 1775, but the walls of the parlors and chambers may have been either whitewashed or covered with a tinted lime- wash.

Virtually nothing is known about the floor plan of the lean- to. There was probably a kitchen fireplace and bake oven located within the chimney bay. The western two- thirds of the lean- to was probably lathed and plastered; the remaining space in the first and second stories may have been unfinished. A conjectural drawing of the floor plan is shown on sheet no. 4 of Appendix I; conjectural views of the exterior and interior walls are shown on sheet nos. 5- 11.

¹¹³ *History of Middlesex County, Massachusetts*, compiled under the supervision of D. Hamilton Hurd, Volume II (Philadelphia, PA: J.W. Lewis & Co., 1890). An account of Captain William Smith's war record can be found on pages 618- 624.

Exterior Elements

Foundations

Fieldstones, pointed with lime mortar, were probably used for underpinning the house and lean- to. Sizes of the stones were small; two men together could lift the largest one and set it in place. A large flat step- stone like the present- day one would have been placed at the front doorway, with either stone or wooden steps used at the east lean- to door.

Walls

Clapboards

The clapboards of 1775 would have been hand- riven, feather- edged boards made from white pine in widths up to 5 inches and lengths up to 4 feet 6 inches, or in the case of the Smith House, long enough to span between two stud spacings. Butt thicknesses would have been one- half inch or slightly less. After riving, each board would have been smoothed on both sides, cut to length, and have each end scarfed with a lapped joint 2 ½ inches (+/- ½ inch) long.

Spacing of the clapboards was determined from the measurement of the individual nail holes left in the wall sheathing, studs, and posts, as recorded during the architectural investigation of 1980 (see Appendix D). With two or three exceptions, the nail holes are located opposite a stud or principal post, and they run from the cornice to within 2 ½ inches of the bottom of the foundation sill. At least this nailing pattern was observed on five studs in the south wall, indicating that a sill board or water table was not used. The spacing of the nail holes varied between 3 and 5 inches.

While no original clapboards were found in place, several clapboard nails were left behind, bent over into the wall sheathing. These were hand- wrought with flat heads and drawn points, and measured between 2 ³/₈ and 2 ½ inches long – long enough to penetrate through the wall boards and into the framework.

Clapboards in the west gable end were found to be nailed into the wall sheathing as well. (Only the west gable end was investigated for nail holes, but it assumed that the east gable end was treated similarly.) Clapboard nail holes were found following the rake of the roof below the present- day verge board, indicating that the clapboards of ca. 1750 were installed while the verge board of ca. 1692 was still in place.

Another feature thought to survive from the ca.- 1692 construction was the belt board at attic level. This board was determined to be 14 inches wide, based on the red paint line found on an original sheathing board. Its top edge would have been feathered to accept the overlapping clapboard. Based on the lack of ca.- 1750s clapboard nail holes within the space once occupied by this board, it was probably left intact when the second round of clapboards was applied.

Corner Boards

Clapboard nail holes from the 1775 period were found approximately $4\frac{3}{4}$ inches back from the edge of the corner posts on the south wall, whereas those from the ca.- 1692 period were found to be within $1\frac{1}{2}$ inches from the edge. Based on this evidence, it appears that the original clapboards were applied without corner boards, but that those applied in the ca.- 1750s had corner boards 4 inches wide on the south wall and approximately $3\frac{1}{4}$ inches on the east and west walls. Most likely the boards were plain, square- edged, hand- planed, white pine boards extending from the cornice to the stone foundation, and nailed with nails similar to those used for the clapboards.

Doorways

South Wall

When the alterations of ca. 1750 were completed, the old doorway of ca. 1692 was transformed into an entrance in the latest Georgian style. The 17th- century doorway trim and “board” door probably gave way to an up- to- date Georgian doorway consisting of a raised- panel door surrounded by a somewhat elaborate frontispiece containing a triangular pediment. Evidence for the pediment was found in the form of weathered lines etched into the original wall boards (see figure 73), coupled with the presence of clapboard nail holes (dating from this period of change) stepping down the rakes of the pediment.

The width of the doorway opening for ca. 1750 was not established until the lath and plaster was removed from the interior wall, exposing the evidence on the inner faces of the studding. One stud containing partial tenons at each end may have been used for the original doorway, since its length fit exactly the space between the girt and sill. Notched out of the studding 11 inches below the girt was a rabbet measuring 2 inches deep and 4 inches high, suggesting the location of a header for a transom window. The width of the ca.- 1750 doorway was determined from evidence found on two additional reused oak studs. The location of the east stud was established by matching vagrant nail holes in the stud with those found in an original sheathing board. This also aligned the west edge of the studding with the end of the sheathing board, where it was cut back during the widening of the doorway opening. Evidence was lacking to pinpoint the exact location of the west studding, since the sheathing boards had been replaced about 1956. However, both studding mortises in the overhead girt had been elongated ca. 1750, which allowed the studs to be spaced somewhat equidistance from the center line of a rough opening measuring 34 inches.

The inner side of both studs revealed a set of pintle holes for strap hinges supporting double doors. Additional holes for staples to hold a horizontal bar latch were found approximately 40 inches above the first floor. Weathered marks were detected 11 inches below the girt on the jamb side of each stud. These marks were thought to be made from a former header supporting a transom window. The height of the doorway opening was apparently increased ca. 1750, since the two studs are $5\frac{1}{2}$ inches longer than the original one. Additional height was gained by cutting this amount of material out of the foundation sill. At the lower end of both studs are wedge- shaped blocks attached with hand- wrought nails (see sheet no. 12); their purpose is not precisely known, other than to fill out the dimension of the studding.

The overall width of the frontispiece was based on two weathered lines found on the original wall boards. These lines measured 11 inches on both sides of the proposed rough opening, and undoubtedly mark the outer edge of the backboards for the proposed pilasters (see sheet no. 5).

East Wall

The doorway in this wall is identified in the land- division documents of 1735 as the “East end Door.” The author assumes the opening was located in the end wall of the lean- to, and remained intact after the alterations of ca. 1750 were complete, possibly leaving the original double- boarded door in place, although a newer door of the Georgian style might have been substituted for it. Sheet no. 7 shows a conjectural view of this doorway.

Windows

South Wall

The south wall contained three window openings in the second story and two openings in the first story. The window openings of 1775 were those installed in the 1750s when the original plank frames with their casement sashes were replaced with new plank frames containing double- hung sashes. The relatively square openings of ca. 1692 were narrowed and lengthened to accommodate the rectangular openings of the double- hung sashes. Ca.- 1692 boards were salvaged and used to fill in the gaps on either side of the new frames, and to provide nailing for the new clapboards. Evidence for this change was found at each window opening, and is shown in detail on sheet nos. 15- 16. Overall size of the 1775 window frames was determined by the existing rough opening, the ca.- 1750 clapboard nails, and occasionally a large hole left from a jamb nail. A full- length stile three lights high was found in the attic and is thought to be part of a 1775 sash. Vertical glass size measures 8 ½ inches from the stile, and horizontal glass size, based on the limitations of the frame, was computed to be 6 ½ inches. Photographs taken of the Smith House in the 1890s show 8- over- 12- light sashes in the parlor and chamber windows, but six- over- six- light sashes in the hallway window.¹¹⁴ This suggests that the sashes of ca. 1775 might have survived in four window openings, but that an early 19th- century sash was introduced in the hallway.

Briefly, the window openings of 1775 would have molded- edge plank frames with “superior” heads and “eared” sills, nailed against the wall boards. They would have held 8- over- 12- light, double- hung sashes in the four parlor/chamber windows, and six- over- six- light sashes in the hallway opening, all containing panes measuring 8 ½ by 6 ½ inches.

¹¹⁴ The size of the window in the hallway on the second floor as shown on sheet no. 5 of the restoration drawings as six- over- six lights is conjectural, but with a glass size identical to the other window openings, a six- over- six- light sash with a glass size measuring 8 ½ by 6 ½ inches fits the conjectural window frame of 1775.

West Wall

The west wall contained three window openings in 1775 – one in the parlor, one in the chamber above, and one in the attic. The first- and second- story window openings were offset one studding bay to the north from the center line of the house frame, whereas the window opening in the attic was shifted 3 inches north of center, or as much as the frame would allow before it struck the verge board. Architectural evidence at the two lower openings suggested that they were similar to the south- wall windows, having plank frames containing 8- over- 12 sashes of equal glass size. The attic window opening of ca. 1692 appeared to be lengthened only to receive a plank frame containing four- over- four- light, double- hung sashes.

East Wall

The window placement in the east wall was found to be identical to that on the west wall, except the parlor and chamber window openings were found to be one light wider. Apparently when the house was remodeled in the 1750s, the entire window width of ca. 1692 (3 feet 9 inches) was utilized for the new window frames in the parlor and chamber. Both openings were lengthened to accommodate the newly installed plank frames containing 10- over- 15- light, double- hung sashes.¹¹⁵ The attic window was probably treated in the same manner as the west attic opening described previously.

Lean- to

The 1775 fenestration for the lean- to is conjectural and is shown on sheet nos. 6- 7. Plank frames with double- hung sashes are specified in the reconstruction drawings for the lean- to.

Roof

The roof construction of the ca.- 1692 house was not altered during the remodeling of the 1750s. Assuming that the lean- to was built prior ca. 1730, its roof construction would have consisted of a multiple rafter system with oak rafters of nearly equal size set next to the rafters of the main house, as determined by the vacant seats left in the north plate.¹¹⁶ (See Appendix I, sheet nos. 7

¹¹⁵ Cummings, p. 36. Figure 38 is a photograph of the Turner House (“House of Seven Gables”) in Salem, MA (ca. 1668), showing a window opening on the second story with 10- over- 15- light sashes, and directly below a window opening of the same width having 15- over- 15- light sashes, similar to the situation in the east wall of the Captain William Smith House.

¹¹⁶ During the 1980 architectural investigation of the Smith House, the writer discovered a tip end of a lean- to rafter in the attic of the ca. 1692 house where it had become lodged against rafter number four, presumably falling in this position when it was sawn free during the removal of the lean- to ca. 1900. The rafter remnant was hand- hewn from oak stock and measured 4 ¼ inches wide by 4 ½ inches high, with an overall length of 6 inches at its tip end. The lower surface of the piece was axed off at approximately 42 degrees to conform to the angle notched into the plate, where it was pinned with a wooden pin. The angle of the lean- to roof, on the other hand, was determined to be about 33 degrees, based on a measurement projected directly from figure 4, showing the west elevation of the building. Common rafters were

and 14.) The upper ends of the rafters were fastened to the plate with wooden pegs driven through predrilled holes. The feet would have had a traditional “birds- mouth” notch pegged on the top side into the rear plate of the lean- to.

Roof boards with vertical mill- sawn markings would have been nailed horizontally to the rafters. The roof covering of 1775 was probably hand- rived and smoothed shingles, 16 inches long and made either from white pine or white cedar, laid approximately 5 inches to the weather.

Cornice

The cornice of 1775 may have been the same one installed ca. 1692 along the front of the house. Repairs were made to the plaster cove cornice where narrower window frames were installed. The verge boards and trim could have survived from the 17th- century installation, because the overhanging gables did not interfere with the building of the lean- to. The north cornice of the old house would have survived by being covered over with the newer lean- to roof.

Chimney

The central chimney of ca. 1692, with its additional flue built against the north side ca. 1750, remained the same in 1775.

generally mill- sawn from oak, whereas the principal rafters were predominately hewn from pine. It appears from the one rafter sample that all of the rafters in the lean- to were of one size and made of oak, inferring that the addition predates 1800; after this time, the type of wood species used for rafter construction in Massachusetts, particularly Middlesex County, was almost without exception pine. The spacing of the lean- to rafters to form a “multiple” or “common” rafter system is unusual for the age ascribed to its construction, i.e., early 18th century, but this method of framing was more or less dictated by the construction of the ca.- 1692 roof structure, which is in itself a form of multiple rafters with principals and commons spaced uniformly apart. Both Cummings (p. 115) and Kelly (pp. 44- 61) report that the common rafter system was not uncommon in Massachusetts and Connecticut, respectively, after the late 17th century. The writer, on the other hand, has found only two examples of the “common” rafter system in eastern Massachusetts that predates 1775. Clearly more study of existing buildings is needed.

Interior Elements

Cellar

The cellar space under the west end of the house and lean- to remained undisturbed during the 1750s remodeling.

First Story

East Parlor (Original Kitchen)

Although specific evidence is lacking, kitchen activities may have been moved from this room into the lean- to ca. 1750. At that time, the original square- backed fireplaces were filled in with fireplaces having splayed jambs and possibly lower openings. This work was probably accomplished by leaving most of the original construction intact. The oven, which was probably located north of the fireplace, may have been taken down and rebuilt to open into the lean- to. In its place, there is evidence to suggest that a china cupboard was built into the northwest corner of the room.¹¹⁷ The cellar stairway remained south of the fireplace; also untouched was the small doorway in the center of the north wall, leading to the lean- to. The plastered ceiling (including the girts and summer beam) and the board walls (including the corner posts and projecting sills) were possibly whitewashed by 1775, although by this time a blue lime- wash – which was found over a coat of whitewash in this room – could have been applied to the walls. Whether the floorboards were painted in 1775 remains unanswered; generally they were not. However, a piece of subflooring retrieved from this room in 1980 was painted red up to a diagonal line matching that of the corner cupboard. It is possible that the floorboards in this room were painted red in 1775.

Entry Hall

The Entry Hall remained undisturbed after the rebuilding of the (existing) stairway and front doorway in the 1750s. The staircase, including the paneling below, and the front doorway were possibly painted in 1775, but the surrounding plastered walls and ceiling were probably whitewashed. No evidence of paint was found on the floorboards that remain from the 1750s.

¹¹⁷ Kelly (p. 167) writes, “In a great many instances, the corner cupboard was built in subsequently to the erection of the house. If the house were originally of two- room (single room deep) plan and the corner cupboard was introduced at some later date, its installation generally coincides with the addition of the lean- to. The position against the outside wall was, however, well fixed and its occurrence [in Connecticut] against the chimney wall is rare.”

West Parlor

The West Parlor changed very little between ca. 1692 and 1775. The two window openings had been changed to accommodate double- hung sashes, and the outlines of the original windows could be seen where the plaster repairs were made. The original board- and- batten door to the hallway might have been replaced with a new paneled door. The fireplace of 1775 is thought to be the one dating to ca. 1750, with splayed jambs. If the chimney breast was changed at that time, no evidence was found to indicate what changes were made.

Between the chimney breast and the north chimney post was the 17th- century closet. It was considerably reduced in size ca. 1750 when the lean- to fireplace was built with its back projecting into the closet. In the north wall next to the chimney post remained the 17th- century doorway leading to the lean- to.

The plastered ceiling, the girts and summer beam, and the three plastered walls – including the two west corner posts and projecting sills at floor level – were probably whitewashed in 1775. In contrast, all of the woodwork on the east and north wall, and the window sashes and trim, may have been painted red. The floorboards would have been those laid ca. 1692, and – like those in the East Parlor – may or may not have been painted.

Lean- to

The interior plan of the lean- to is conjectural, but the room arrangement and room finishes of 1775 probably remained the same as when it was constructed, presumably ca. 1730.

Second Story

East Chamber

Except for the new splayed- jamb fireplace and double- hung sashes, the wall, ceiling, and floor finishes of this room remained unchanged from the 17th century. Possibly the old board- and- batten door leading to the Front Hall might have been replaced with a new paneled door, but the original door to the closet may have been retained. Whitewash was probably used in 1775 on the plaster ceiling (including the girts and summer beam), on three plastered walls (including the corner posts), and on the west paneled wall (including the doors). Later, a blue lime- wash was used over the whitewash.

ALTERATIONS IN THE 19TH CENTURY

Circa 1810

The second major renovation to the Captain William Smith House was the remodeling of the East Parlor, which occurred between 1800 and 1830. The majority of horizontal wall boards were removed from the walls and fabricated into “accordion”- type lath (fig. 39). The lath was nailed with machine- cut nails to the outer edges of the projecting sills, posts, girts, and newly introduced board studding, then plastered. In effect, the north, east, and south walls of the room were furred out to hide the projecting members of the house frame. The right- hand trim of the corner cupboard in the northwest corner was embedded in the plaster of the new north wall.

The north- wall doorway to the lean- to was widened by removing an original stud and reframing the rough opening with board studs nailed with hand- wrought nails, and heightened by cutting the sill to floor level (fig. 77). The east and south window openings were probably cased and retrimmed to make the new openings neat. It is not known if any work was done on the west (fireplace) wall at this time, since all evidence has since been removed.

Circa 1825

As indicated in Part 2, an increased assessment in the valuation of the Smith property was levied between 1821 and 1831. This time frame corresponds with the physical evidence found on the exterior of the house suggestive of changes made during this period.

Exterior Elements

Main House

Foundations

The 17th- century foundation sills were removed at the east and west ends, and new sills were installed (figs. 78- 79). The lower ends of studs were spliced, and rotted wall boards at sill level were replaced (see Appendix I, sheet no. 13). Cut granite stones were installed for underpinning along the south and east walls of the house. A cellar window was installed in the south foundation wall.

Walls

The 1750s clapboards, corner boards, comb boards, verge boards, and bed molding along the south cornice were removed and replaced. A new soffit board was introduced under the overhanging wall girts at attic level. The belt boards on the gable ends were removed but not replaced.

Four courses of clapboards remaining from the ca.- 1825 renovations were found in place in 1980 in the peak of the west gable (fig. 80). The boards were tapered and circular sawn¹¹⁸ (6 inches wide with one- half- inch thick butts that were smoothed off to one inch wide along the lower back side in order to fit more tightly against the clapboard below). They were laid 4 ½ inches to the weather, and were fastened with machine- cut nails similar to those used in fastening the corner boards, verge and soffit boards, and second- story window frames, also thought to date from ca. 1825.¹¹⁹ The majority of the existing rake boards, rake board trim, corner boards, and soffit boards covering the overhanging girt on the main house date from ca. 1825 and are plain, square- edge boards fastened (originally) with machine- cut nails. The rake board measures thirteen- sixteenths of an inch by 5 ¾ inches; the rake board trim measures three- quarters of an inch by 2 ¾ inches; the full- length soffit boards measure seven- eighths of an inch by 5 ½ inches (within a quarter of an inch). The corner boards, which are made of two sections, measure seven- eighths of an inch by 7 inches on the south wall and seven- eighths of an inch by 6 ⅛ inches on the end walls. In their original condition, the corner boards were full height. As done ca. 1692 and ca. 1750, a water table was omitted at sill level.

Doorways

The 1750s frontispiece and door in the south wall were removed and replaced with a new frontispiece and door.¹²⁰ The doorway in the east wall of the lean- to was converted to a window, its function being taken over by the east- wall doorway in the new ell (see below).

The earliest photographs of the house (e.g., figure 10) show the new frontispiece and door installed ca. 1825. The triangular pediment of ca. 1750 was changed to a flat projecting cornice protecting a deep frieze, shallow architrave, and flanking pilasters. The door consisted of six panels, and by the 1880s, the two upper panels had been replaced with glass. The east doorway, opposite the well, can be seen in figures 10- 11. It was relocated from the lean- to to the ell when the latter was added about 1825. The floor level of the ell was at least one step lower than the lean- to – a feature that would be retained when the ell was replaced by a larger ell ca. 1900.

¹¹⁸ A patent was issued in 1820 by the authority of the United States Congress to Robert Eastman and Josiah Jaquith for an invention called a “Circular Saw Clap- board Machine.” An Act to extend the patent of Robert Eastmen [sic] for a further term of seven years” was approved by the Twenty- Third Congress, Session II, on March 3, 1835. Taken from *The Public Statutes at Large of the United States of America*, edited by Richard Peters, Vol. VI (Boston: Little and Brown, 1848).

¹¹⁹ Most of the machine- cut nails found at the Smith House dating from ca. 1828 are shown on sheet no. 16 of Appendix I. The nails all have a common characteristic of rounded tips and shear or burr marks on the same side of the shank. Nails such as these were manufactured until the 1850s, when the tips of the nails became square due to shearing of large sheets of metal into nail bars.

¹²⁰ Judging from late 19th- century photographs, a very similar frontispiece and door was installed about the same time (1830- 1850) on the Sgt. Samuel Hartwell House and the Hartwell Tavern, both houses located a short distance west of the Smith House on Virginia Road.

Windows

The 1750s window frames were removed and replaced throughout the house with new window frames. New interior window trim was installed except in the West Chamber, where the backband molding of 1775 was retained. The sashes of 1775 may have been retained except in the second- story Front Hall, where six- over- six- light sashes were installed.

Five of the so- called 1825 window frames survive in the second story. A measured drawing of these frames is shown on sheet 18 of Appendix I. They represent the newest style of the plank frame, having superior jambs with the head mortised, tenoned, and pegged into them, while the jambs are mortised and tenoned into the sill and are blind- pegged from the back. The sill retained the old custom of being flat on the bottom side and sloping on the top side, but now has two new features: (a) a wind- seal rising behind the closed sash, and (2) a groove routed on the underside of the sill to receive the top edge of a clapboard. The jambs received a new weather- seal feature consisting of a full- length rout on the back side of each jamb to receive a wooden spline that acted as a wind- stop between the joint of the jamb and the clapboards. Like other frames from this period, the jambs and head piece were only deep enough to receive the upper sash, measuring 1 ¼ inches thick. The window frames rested against the wall boards and were face- nailed through each jamb with five machine- cut nails having rounded tips and sheared from a common side. Identical nails of various sizes were used to fasten other replacement parts ca. 1825, such as the wall sheathing boards, corner boards, verge boards, verge board trim, soffit boards, and clapboards.

Cornice and Roof

The coved plaster cornice along the south wall was altered to cove also at its east and west ends (fig. 50); the remainder of the cornice was repaired with machine- cut lath and new plaster. A new shingled roof may have been installed.

Finishes

Whitewash may have been used on the exterior of the house.

Lean- to Ell

A gable- roofed ell was built against the east end of the north wall of the ca.- 1730 lean- to (see figs. 10- 11). A cellar was dug under this ell, measuring approximately 13 feet by 21 feet.

Interior Elements

Interior changes dating around the 1825 period are not clearly defined. They probably included the installation of new mantels in the West Parlor and West Chamber. The hearth in the East Chamber may have been widened. Remains of mantel surrounds found in the West Parlor and West Chamber may date from this time.

In the West Parlor, based on the measurements of an existing stile containing rail mortises, the ca.- 1825 mantelpiece had a fireplace opening of 3 feet 4 inches by 6 feet 5 inches. The stiles measured $6\frac{1}{4}$ inches wide and the rail 15 inches. A mantelshelf, based on remnants in place, measured seven- eighths of an inch thick by $4\frac{3}{4}$ inches and was 7 feet 6 inches long. It was nailed into the jambs and rail with machine- cut nails. Machine- cut nails were also used to fasten the jambs to the vertical side boards. Overall height of the mantelshelf above the floor was 4 feet 4 inches. Between the mantelshelf and the chimney girt is machine- cut lath and plaster.

In the West Chamber, only the mantelshelf and the north fireplace jamb with its molding remain (fig. 81). The fireplace opening for this room was computed to be 3 feet 4 inches by 4 feet 2 inches. An opening of this proportion suggests that the fireplace of ca. 1692 may not have been altered in the 1750s.

The existing beaded stile measures 10 inches wide, while the top rail is $1\frac{3}{4}$ inches wide. Over this is a mantelshelf measuring $1\frac{3}{8}$ inches thick by 7 inches wide, and is 6 feet long. It is 4 feet 4 inches above the floor. Between the mantelshelf and the chimney girt is machine- cut lath and plaster.

Other possible alterations to the house ca. 1825 included the hanging of new paneled doors at existing interior doorways, and the lathing and plastering of the east end of the lean- to. For example, the door to the original closet north of the West Parlor's fireplace appears to date to about this time.



Figure 77. Main House: East Parlor, north wall, ca.- 1810 doorway to ca.- 1730 lean- to (after removal of ca.- 1956 paneling and shelves).



Figure 78. Main House: West wall, south corner, showing west sill replaced ca. 1825.



Figure 79. Main House: West wall, north corner, showing west sill tenoned into north sill.

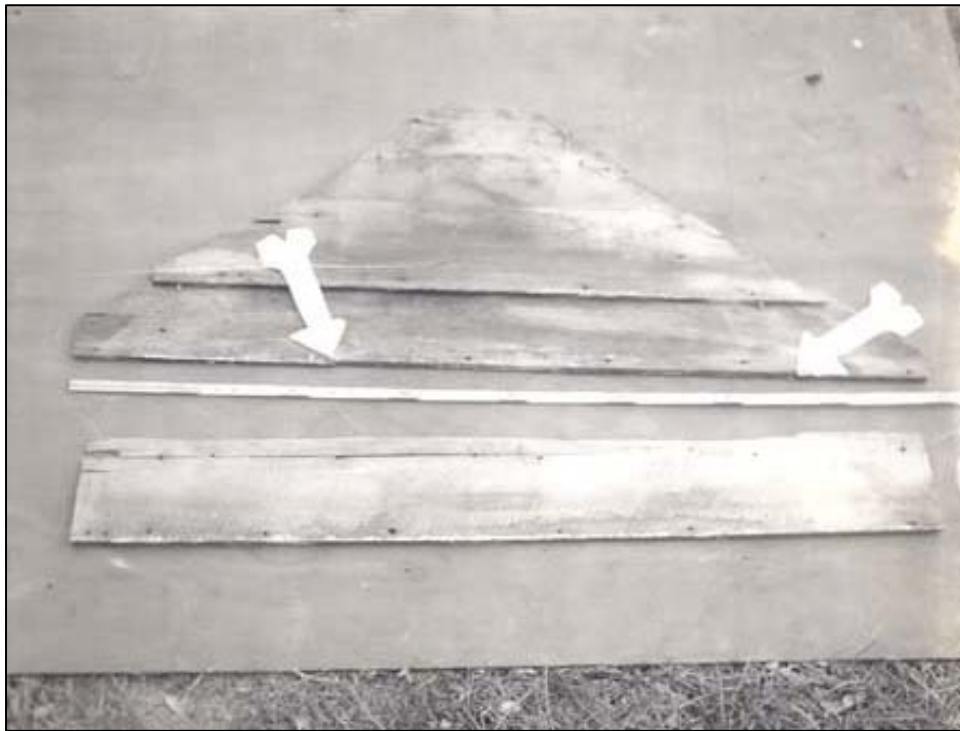


Figure 80. Clapboards from west wall of main house; ca.- 1825 boards from peak of west gable at top, ca.- 1900 board below.



Figure 81. Main House: West Chamber, east wall, showing ca.- 1825 mantel elements and ca.- 1910 wainscot infill and flue thimble.

ALTERATIONS

CIRCA 1900

In 1890, the Captain William Smith House and property was purchased by James and Mary Butcher, who carried out extensive renovations to the structure around 1900. Prior to 1900, the only apparent change made to the house by the Butchers was the removal of the old multi-paned sashes and their replacement with two- over- two double- hung sashes. Also, new screen doors were hung at the two doorways, and window screens were installed on the lower sashes of several windows (see figure 10).

About 1900, the Butcher family decided to remodel the old Smith House into a two- family dwelling. This objective was achieved by razing the old lean- to and its northeast ell, and replacing it with a new two- story addition and northeast ell. The new addition was as long as the lean- to, but 3 feet deeper (13 feet, vs. 10 feet). Likewise, the ell was as long as the lean- to's ell (18 feet), but was 5 feet 6 inches wider. This meant that while the new ell's east and north walls could be built on the east and north foundation walls of the old ell, its west wall could not reuse its earlier counterpart, and so had to be supported on stones.

The roof of the new two- story addition had to be built differently from that of the lean- to, in order to accommodate a full second story. The east and west sections of the addition were each covered with a gable roof running perpendicular to the ridge of the main house; the narrow section between these two was covered with a shed roof (see Appendix C, sheet no. 1).

Incorporated into the new addition were reused pieces of pine sills, hand- hewn and containing mortises for joists and diagonal braces, and a few pieces of oak studding (possibly dating from ca. 1692) worked into the frame of the gable ends. The feather- edged wall boards of ca. 1692 were removed from the north wall of the house and reused for roof sheathing. Other boards, equally as old but of unknown origin, were also reused on the roof.

Two aspects of the demolished ca.- 1825 ell were replicated in the new ell; the location of the rear doorway in the east wall, and the lower floor level, which sat one step below that of the rooms to the south. Nothing definite is known about the interior room arrangements of the new addition between 1900 and 1910, but it is thought that the interior doorways remained unchanged during this time. Since the central chimney was left intact, it is assumed that the fireplaces were not removed; instead, stovepipes for cooking and heating stoves were probably connected to their flues.

After the remodeling work was completed, the exterior of the house was painted white with dark green trim, as seen in figure 12. It should be noted that no changes other than painting were made to the south, east, and west walls of the ca.- 1692 house; these walls retained all of the architectural features installed ca. 1825.

REMOVAL OF THE CENTRAL CHIMNEY CIRCA 1910

The Butcher family launched their final assault upon the Smith House between 1905 and 1917. Much of the work related to the removal of the massive original central chimney. The chimney was replaced with the two separate brick chimneys that exist today (see figure 29). On the interior, the removal of the central chimney caused the loss of four fireplaces in the main house, and the ca.- 1750 kitchen fireplace and bake oven in the addition.

In the West Parlor, the stepped- back section of east fireplace wall (measuring 7 feet 6 inches wide) was reduced to 5 feet, and rebuilt with a brick fireplace having an opening of 3 feet 6 inches by 2 feet 8 inches. This freed up space north of the new fireplace; it was converted to a closet measuring 2 feet 5 inches wide by 5 feet 5 inches deep. The original closet at the north end of the chimney bay regained its original width once the lean- to fireplace was removed. However, it was converted into a passageway running along the north wall of the bay connecting the two parlors.

The ca.- 1730 doorway at the east end of the West Parlor's north wall was closed off with wide horizontal boards that were then wallpapered. A new doorway measuring 3 feet 5 inches by 6 feet 4 inches was created in the center of the north wall, by cutting through wall construction of ca. 1692 (fig. 82). This opening was cased but apparently never had a door. Also, the original doorway from the West Parlor to the Entry Hall was widened (fig. 83) and cased to match the new doorway in the north wall. (When the casings of ca. 1910 were removed from both doorways, identical wallpaper was found under them.)

Identical wallpaper was also found under the window casings of the south and west windows, indicating that the window trim was installed at the same time. The summer beam may have been cased during this activity, and the ceiling either replastered or skimmed with a rough- cast coat of plaster. The old pine floorboards in the West Parlor were removed and replaced with a new oak floor. The projecting sills were either cased at this time or reused in place from an earlier remodeling.

The East Parlor underwent even more change when the central chimney was removed, along with the northwest corner cupboard that abutted it. No fireplace was rebuilt here, only a small brick flue with a thimble for a heating stove. A new west wall was built that extended from the Entry- Hall doorway just past the new brick flue. This wall consisted of studding covered with vertical, beaded, tongue- and- groove boards that were then wallpapered; it had a hole through which the heating stove's smoke pipe could pass, as seen in figure 56. The remaining walls of the East Parlor may have retained their finishes dating to ca. 1800 and ca. 1825. However, the old doorway in the center of the north wall was blocked off with two vertical beaded boards (fig. 77). The floors and ceiling do not appear to have been changed at this time.

As in the West Parlor, space freed up north of the new brick flue was converted to a closet. However, this walk-in closet was square in shape; it opened not into the East Parlor, but into the new passageway to the West Parlor. The north wall of the passageway received a new doorway to the kitchen in the addition. The remainder of the bay's north wall was restudded and furred out with reused pieces of lumber.

In the second story, the fireplace openings in the East and West Chambers were closed off with vertical, beaded, tongue- and- groove boards, except for a rectangular opening large enough to accept a stovepipe (see figure 81).

By 1917, the addition probably had three finished rooms in the first story: an east pantry (5 feet 6 inches by 12 feet 6 inches) containing a sink and a pump; the center kitchen (12 feet 6 inches by 17 feet 6 inches); and a west room approximately 12 feet square. The kitchen and the west room had a doorway between them at the north end of the house, but were separated from each other on the south side by an enclosed cellar stairway and brick chimney. Excluding the space in the northeast part of the ell, which was initially as a woodshed, the first- story rooms of the addition were finished with a high wooden wainscot consisting of vertical, V- joint, tongue- and- groove boards with a cap molding.

The walls above the wainscot and the ceilings were finished with lath and plaster. The floors were covered with tongue- and- groove pine boards less than 8 inches wide. It is thought that all of the rooms in the second story of the addition were left unfinished during the occupancy of the Butcher family, and were accessible only by a stairway located in the northeast ell. A conjectural floor plan showing the layout of the first story ca. 1910 can be seen on sheet no. 2 of Appendix I.



Figure 82. Main House: West Parlor, north wall, foundation sill cut out for ca.- 1910 doorway to ca.- 1900 addition.

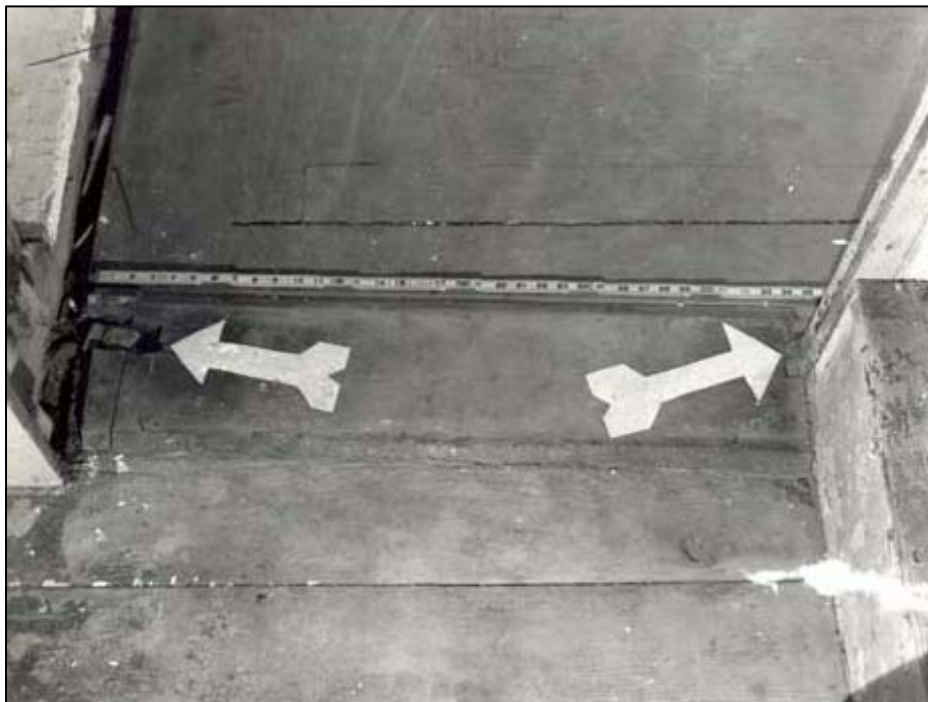


Figure 83. Main House: Entry Hall, threshold of ca.- 1910 doorway to West Parlor, showing probable location of original doorway; arrows point to locations of former vertical boards forming doorway jambs and stops.

FINAL ALTERATIONS

1910- 1975

John and Lena Primak purchased the Smith House in 1921 and occupied it until 1923, when they sold the property to Manuel and Mary Silva. During the Primaks' occupancy, the second-story rooms of the addition may have been finished off. Used building material was brought in to grid off the walls and ceilings to receive 4- by 8- foot sheets of plasterboard. The plasterboard was manufactured by the U.S. Gypsum Company, whose label was affixed to the back of the sheets with a patent date of June 1912/July 1921. The existing doorways in the north walls of the East and West Chambers seem to be of concurrent construction. Figures 17- 18, taken between 1921 and 1922, also show a metal gutter along the south eave and a downspout at the southeast corner of the old house.

Sometime prior to ca. 1930, the Silva family removed the front door and the surrounding frontispiece of ca. 1825 and replaced it with a flat, square- edged architrave (fig. 19) and new door containing glass in its upper panel (fig. 84). The natural slope of the ground approaching the house and along the east wall was cut down approximately 3 feet and graded nearly level, as seen in figure 20. The interior walls of the hallway on each side of the new doorway were relathed, plastered, and wallpapered. Electricity was installed and lightning rods were mounted to the roof with aerial rods attached to the three chimneys, as seen in figure 21.

Ca. 1956, after the Silva family had more or less dispersed from the Smith House, they decided to convert the building into four apartments. Architectural investigation revealed that they found much of the original fabric to be in poor condition. Sixty- five percent of the original studs and braces were removed from the east wall of the East Parlor and replaced with pieces of discarded cross arms from utility poles. Most of the wall boards along the east and south walls up to the second- floor girts, and all of the wall boards in the east gable of the ca.- 1692 house, were removed and replaced with newer boards as seen on sheet nos. 15 and 16 of Appendix I. Some roof boards were replaced, and the existing asphalt shingles were probably installed at this time. The window frames of ca. 1825 were removed from the first story of the ca.- 1692 house and replaced with new frames having flat, square- edged casings. A 32- light fixed sash was installed in the east wall of the East Parlor, while the remaining openings received frames holding double- hung, weighted window sashes with two- over- two lights. The attic windows were removed and replaced with small louvered ventilators. The front doorway was altered again by the application of new casings and the installation of a new three- panel door with six upper lights. Two windows in the addition, lighting the kitchen and west room, were changed into doorways. The clapboards of ca. 1825 were stripped from the walls of the ca.- 1692 house and replaced with red cedar siding, but the plaster cornice, the second- story window frames, and the gable trim (including the soffit boards, bed molding, and corner boards dating to ca. 1825) were left in place with little alteration.

A two- story gable- roof addition measuring 12 by 14 feet was built against the north wall of the addition at the west end. The space between it and the existing east ell was made into an enclosed porch with a stairway connecting the two levels. Access to the porch from the first

story was created by converting a north- wall window to a doorway. Access from the second story was through a doorway converted from a west- wall window in the east ell. A fourth brick chimney similar in design to the other three stacks was constructed in the east ell. After these changes were completed, the exterior of the house was painted brown with white window and doorway trim. White window blinds were hung on both stories of the south wall.

Numerous changes were made to the interior of the house. In the East Parlor, the ca.- 1810 lath and plaster was removed from the east and south walls. The ca.- 1910 closet north of the brick flue was also removed. Plasterboard and new baseboards were applied to the south wall and the west end of the north wall. The east and west walls were sheathed with vertical “knotty- pine” paneling. The floor was removed in its entirety and replaced with used sills, joists, and subflooring. Over this was laid a new pine floor. Shelving was built into the recess of the north doorway and under the south window stool. Paint was removed from the girts and summer beam.

The passageway between the East and West Parlors was greatly changed. A wall was built across its west end, and another across its east end. This converted it to a closet area for the center kitchen in the addition.

Changes to the West Parlor included painting the woodwork, wallpapering the walls, and the possible addition of a fire frame at the fireplace. The recessed area above the fireplace was made flush with plasterboard, then wallpapered. The deep closet north of the fireplace was retained. Also retained was the old doorway north of that closet: it served a shallow closet created by the closure of the passageway to the East Parlor.

Minor changes were made to the Entry Hall: several floorboards dating to ca. 1750 were replaced, the woodwork was painted, and the walls were papered.

Changes to the second story were more restrained. Both chambers were wallpapered; the woodwork and plaster ceilings were painted; the floors were sanded and varnished; doorways to the hall and closets were enlarged; plasterboard was applied to the fireplace walls; and baseboards were installed. The original bolection molding surrounding the fireplace in the East Chamber was removed, while the recessed fireplace opening in the West Chamber was covered. Paint was removed from the summer beam in the West Chamber and a trim board covering the southeast corner post. The front hall had new wallpaper applied, and its plaster ceiling and woodwork were painted. During the course of enlarging the doorway between the hall and the East Chamber, the splayed portion of the post was cut away. The space north of the chimneys received a new floor before being converted into two closets. Access to the attic was gained by ladder.

When the house was converted into apartments, it was divided approximately down the middle from north to south, with two living units on each story. A kitchen and bathroom was installed in each unit in addition to other living spaces. For example, the east apartment in the first story had a living/dining room, kitchen, bathroom, and three bedrooms. All rooms were electrified, and natural gas was piped in for heating, hot water, and cooking. The attic and cellar spaces were virtually untouched, except for a new cellar stairway installed in the addition of ca. 1900.



Figure 84. Main House: South exterior wall, door installed ca. 1956.

NATIONAL PARK SERVICE OWNERSHIP (1975- PRESENT)

The National Park Service acquired the Smith House in 1975. The water had been turned off and the gas line disconnected. Park employees removed the enclosed porch because of severe deterioration and boarded up the windows and doorways. A fire- detection system was installed by the park and connected to the Lincoln Fire Department via telephone. Architectural investigation of the building took place during the summer and fall of 1980, with the writer's time divided between the Smith House project and the ongoing restoration work at the Hartwell Tavern. About 80 percent of the clapboards were removed from the ca.- 1692 house, allowing the wall boards to be studied for evidence of previous architectural details. This information was recorded in HABS field notebooks, then transferred to Mylar drawing sheets. After this work was completed, the clapboards were renailed and given one coat of brown stain. The same procedure was followed on the interior: rooms, attics, and cellars were photographed to show "as- found" conditions, then rephotographed as work progressed to record the architectural evidence found in situ. Plasterboard was removed from the walls of the ca.- 1692 house and partly from the walls of the ca.- 1900 addition. Lath, plaster, and wainscoting applied as an interior finish to the north wall of the ca.- 1692 house in 1900- 1910 was partially removed to reveal evidence of earlier wall finishes. It also permitted a first- hand inspection and recording of the original wall framing members, as shown on sheet no. 12 of Appendix I.

Modern wall paneling was removed from the East Parlor, and a small portion of the floorboards in this room were taken up for inspection purposes. A 2- inch- thick, badly cracked concrete floor was removed from within the chimney bay in the first story to reveal original bricks outlining the shape and size of the ca.- 1692 and ca.- 1750 fireplaces in the East Parlor and lean- to. Under the closet floor in the West Parlor, however, only a portion of the mortar bed laid under the 17th- century brickwork survived the destruction of the central chimney. Imprints left in the mortar from the bricks corroborated the location of the north fireplace jamb and hearth in this room. Evidence for the size, shape, and location of the fireplace in the lean- to kitchen was found under the passageway floor within the chimney bay. Sheet no. 4 of Appendix I shows the evidence found for these fireplaces and a conjectural plan drawing for their reconstruction. Wallboards from the 17th century, removed and reused ca. 1900 as roof sheathing, were recovered by park employees in 1980 and returned to their original location by the writer. Paint and wallpaper samples were taken from the rooms of the ca.- 1692 house for future analysis and encapsulation.

PART 4.

ARCHITECTURAL DESCRIPTION

By Orville W. Carroll

EXTERIOR ELEMENTS

Figures 85- 92 depict the exterior of the Captain William Smith House in 1977.

Plan

The existing building is U- shaped in plan. The southernmost section is the original ca.- 1692 house. Running along the north wall of this structure is the addition built ca. 1900; an ell extends from the east end of the addition's north wall. In order to achieve a full two stories in the addition, its roof had to be built as two gabled sections separated by a shed roof (see fig. 84). Another addition was built ca. 1956, overlapping the northwest corner of the ca.- 1900 addition. It also has a gable roof.

Size

Length and Width

Main House with Former Lean- to

Frame of former lean- to, first and second stories:	10 feet 0 inches by 40 feet 0 inches
Frame of main house with former lean- to:	29 feet 0 inches by 40 feet 0 inches

Existing House

Frame of main house in the first and second stories:	19 feet 0 inches by 40 feet 0 inches
Frame of main house at attic level:	20 feet 2 inches by 40 feet 10½ inches
Extent of overhang along the south wall:	1 foot 2 inches
Extent of attic overhang along east and west walls:	5¼ inches
Overall dimensions of main house:	19 feet 2 inches by 40 feet 2 inches
Overall dimensions, main part of ca.- 1900 addition:	39 feet 3 inches by 13 feet 0 inches
Overall dimensions, north ell of ca.- 1900 addition:	17 feet 9 inches by 18 feet 0 inches
Overall dimensions, ca.- 1956 (west) addition:	14 feet 4 inches by 12 feet 4 inches

Height

Main House

Number of stories:	two stories with attic and half- cellar
West cellar, earth floor to first floor:	slopes from 6 feet 0 inches to 6 feet 8 inches
East cellar, earth floor to first floor:	slopes from 6 feet 0 inches to 6 feet 6 inches
First floor to second floor, main house:	varies between 7 feet 6 inches and 7 feet 11 inches
Second floor to attic floor, main house:	varies between 7 feet 8 inches and 7 feet 11 inches
Attic floor to peak of roof, main house:	varies between 7 feet 4 inches and 7 feet 6 inches

Addition of ca. 1900

Number of stories:	two stories with partial cellars
First- story south rooms, first floor to second floor:	approx. 7 feet 9 inches
First- story north rooms, first floor to second floor:	7 feet 11 inches
Second- story south rooms, second floor to finished ceiling:	6 feet 4 inches to 7 feet 1 inch
Second- story north rooms, second floor to finished ceiling:	7 feet 1 inch

Addition of ca. 1956

Number of stories:	two stories
First floor to second floor:	7 feet 10 inches
Second floor to finished ceiling:	7 feet 6 inches

Foundations

Main House

The existing foundations above ground level consists of light blue- gray quarry- cut granite stones, except on the east and west walls, where occasional fieldstones and bedrock are interspersed among the granite. The underpinning along the south wall, with the exception of the space between the chimney posts where there are no foundation stones, consists of a single course of cut granite stones ranging in length from 1 foot 1 inch to 5 feet 5 inches, in thickness from 7 to 10 inches, and in depth from 10 to 14 inches. Eight stones support the foundation sill under the East Parlor wall, and five stones support the foundation sill under the West Parlor

wall. The stones are butted together and have their vertical joints pointed with a cement mortar. Only 3 to 6 inches of the stones are exposed above ground level.

The underpinning along the east wall of the ca.- 1692 house consists of six cut granite stones ranging in length from 10 inches to 6 feet. At the center of the east wall, two of the stones are supported at ground level by three additional stones that are partly embedded in the ground. At the north end of the east wall is a tan- colored piece of bedrock projecting 16 inches above the ground and extending 2 to 3 feet under the house. It forms the last 4 feet of underpinning along the east wall.

The underpinning along the west wall consists of several square pieces of granite stones that appear to have been cut, but which do not show any mason's drill marks. These stones range in length from 10 inches to 4 feet, and are heavily mortared at the joints. Several small fieldstones are wedged between the granite to fill in the voids. The west foundation wall is also one course of stones, with an exposure between 4 and 10 inches above ground level. The underpinning of the north wall of the ca.- 1692 house exists only under the east 27 feet of the structure; the foundation sill of the West Parlor runs unsupported for 13 feet over the cellar here. At the northwest corner, the sill rests upon the foundation wall of the cellar. The underpinning of the north wall can only be seen in part at the present time if one is in the east cellar and is looking southward between the floor joists with the aid of an electric light. About 10 lineal feet of the stonework can be visually examined from a distance of 13 feet. It appears to be loosely laid fieldstones with gaps up to 20 inches between some stones. No mortar is visible. A close inspection and recording of the north foundation wall will be done when the existing additions of ca. 1900 are removed in preparation for the proposed restoration work.

Circa- 1900 Addition

The main part of the addition built in 1900 is 13 feet deep, and it runs along the entire length of the main house. Looking at the west wall of the addition, the south 10 feet rest on the existing foundation walls of the ca.- 1730 lean- to cellar. The north 3 feet of the west wall, and the north wall, were built specifically for the ca.- 1900 addition. The underpinning of the north wall can be seen only between two floor- joist bays in the cellar; it appears to be one course of loosely laid fieldstones, protruding just above ground level. The exterior foundation walls of the addition are concealed by its woodwork, which extends to the ground.

The ell that projects from the east end of the north wall of the addition is 17 feet 9 inches wide by 18 feet deep. The east and much of the north wall of the ell rest on the old cellar walls of the ca.- 1825 east ell. However, the new ell was wider than the old ell, so the rest of its walls were set over loose stonework.

The underpinning along the east wall of the ell consists of 21 feet of stonework from the ca.- 1825 cellar (less the opening in this wall), and 10 feet of stonework at the south end that might have been part of the old lean- to foundation. The stonework at the south end of the east wall is pointed with a natural cement mortar, while the north 9 feet of cellar wall has been parged with a concrete mortar.

The underpinning along the north wall of the ell consists of 12 feet of the old cellar wall plus an additional 5 feet 9 inches of ca.- 1900 stonework. Built against this wall is an additional fieldstone foundation measuring 1 foot 4 inches by 1 foot 0 inches by 20 feet 0 inches. It was constructed by Mr. Harold Shaw ca. 1956 to divert surface water away from the cellar.¹ This masonry work is in poor condition.

No underpinning along the west wall of the ell is visible, since the woodwork extends to the ground. At grade level is a wall- to- wall concrete floor slab between the east and west sections of the addition.

The only access into the cellar under the ell is through the previously mentioned east- wall opening, which measures 2 feet 4 inches by 3 feet 8 inches. At the approach to the opening is a concrete slab at ground level. The frame for this opening has been removed and placed in the cellar. The opening is presently covered with plywood.

Circa- 1956 Addition

The addition of ca. 1956 rests upon a concrete block foundation that extends 2 to 8 inches above the ground.

Wall Construction

Main House

Sheets nos. 12- 14 of Appendix I show the basic framework of the main, ca.- 1692 house. Sheet nos. 15- 17 show the existing boards that cover the exterior walls of the framework, and which will be described shortly. If one studies these drawings, it is obvious that the colonial structure, in its entirety, was built at one time. The most obvious features supporting this point of view are the full- length wall plates and end girts; the uniform size and shape of the structural members found throughout the building; and the uniform method of framing these structural members, many of which are identified at their joints with Roman numerals chiseled into the wood. Wherever the wall frame was exposed for study purposes, these numerals were found to run consecutively counter- clockwise around the building in the first story, and clockwise around the building in the second story. In the attic, beginning at the west end, Roman numerals running from I through VI are chiseled into the base of the six principal rafters.

The type of construction techniques used in framing the house are adaptations of 17th - century English building modes employed in colonial New England. Its style of design, however, represented by the overhanging gable ends and the overhanging common rafters along the eaves, is a form of construction rarely seen in the Lincoln- Concord area. Even rarer is the

¹ Interview by the writer with Mr. Harold Shaw at the Captain William Smith House in 1980. Mr. Shaw did much of the remodeling work ca. 1956.

plaster cove cornice that runs the full length of the south wall. It is the only known plastered cornice found in the local area.

The form of construction used in building the house is best described as a “girt house,” or post-and- beam. There are three major structural bays in the north and south walls, each defined by very large sills, girts, plates, principal rafters, and two- story posts. The two outer bays are equal in width, measuring 14 feet 7 inches between corner and chimney posts, while the center chimney bay measures 8 feet between posts. The east and west walls each consist of one structural bay measuring 19 feet wide.

There are a total of eight two- story posts: four along the north wall and four along the south wall. The posts are made from hand- hewn oak and fashioned into what are often called “splayed” posts. At their bases and for approximately three- quarters of their height, the posts measure $8\frac{3}{4}$ inches square (+/- $\frac{1}{2}$ inch); at plate level, where the splays are the largest, they measure $8\frac{3}{4}$ inches (+/- $\frac{1}{2}$ inch) by 11 to 16 inches, depending upon the post. The posts are tenoned at their base into hand- hewn oak foundation sills measuring 8 inches (+/- $\frac{1}{2}$ inch) by $7\frac{1}{2}$ inches (+/- 1 inch). The sills, in turn, are mortised, tenoned, and pinned into each other at the corners.² Bearing upon the posts at the top, but notched into them full depth and held with pinned mortise- and- tenon joints, are full- length oak plates measuring 7 inches square (+/- $\frac{1}{2}$ inch). The plates extend past the corner posts $5\frac{1}{2}$ inches to support the overhanging girts at the gable ends.

Surmounting the posts and plates and spanning in a north- south direction are four full- length, hand- hewn girts that are mortised and pinned into tenons in the posts. The end wall girts vary in size between 8 to $8\frac{1}{2}$ inches by $9\frac{1}{2}$ to $10\frac{1}{2}$ inches, while the two inner (chimney) girts measure $8\frac{1}{4}$ inches by $10\frac{3}{4}$ inches. Framed halfway between the chimney girts and the end girts are the summers dividing the chamber rooms into two bays. These massive pine beams measure 13 inches (+/- 1 inch) wide, 10 inches deep, and (initially) 25 inches long; they are half- lapped 2 inches into the top of the plates with half- dovetail joints held together with wooden pins. The girts and summers project 14 inches beyond the plate on the south wall from which the plastered cornice is hung. Built over the plates, girts, and summers is the roof structure.

Spanning between each post on the exterior walls, and tenoned into them at second- story level, are hand- hewn oak girts that support the joists and floorboards of the second floor; the exterior wall studding; and the diagonal braces found only in the outer bays and end walls. Only the north chimney girt is missing. Girts found in the east half of the house measure between 6 to 9 inches by 10 to 13 inches; girts found in the western half measure $7\frac{1}{2}$ inches (+/- $\frac{1}{2}$ inch) by 9 inches (+/- $\frac{1}{2}$ inch). The girt in the south chimney bay measures $6\frac{1}{2}$ inches by $8\frac{1}{2}$ inches.

The two outer bays in the north and south walls and the two end wall bays have two “falling” and two “rising” diagonal braces per bay, as shown in Appendix I. There are no other exterior or internal braces found elsewhere in the house. The braces are made from vertically mill- sawn oak members. The most common size measures $2\frac{3}{4}$ inches by $4\frac{1}{2}$ inches, with the broad side of the brace set parallel to the wall. They are mortised and tenoned between posts and girts and are pinned at both ends with “tree nails,” or pegs. The majority of braces have framing numerals chiseled into each end of the brace, with a corresponding numeral found opposite them chiseled

² Only the north and south sills are original. The east and west sills appear to date from repairs made ca. 1825; neither sill is mortised to receive studding.

into either a post, stud, or girt. The numbering system used to identify the location of the braces is independent of the numbering system used to identify the location of the wall studding.

The most common size of the studding is 2 ¾ inches by 3 ¾ inches. Like the braces, the studs are made from vertical mill- sawn oak, and have their broad sides set parallel to the wall. Originally there were seven studs per story in each of the two outer bays in the north and south walls, and eight studs per story in each of the two end wall bays. The chimney bays were each framed with three studs, except for the south wall of the first story; this is the location of the central doorway, and only two studs were used. There were no studs used for internal partitions until ca. 1750, when the existing west and north walls of the central stair hall in the second story were reconstructed. This was done with individual studding fashioned out of reused building materials, covered with rived lath and plaster (see figure 72).

The ends of the studs are mortised and tenoned into the sills and girts in the first story, and into the girts and plates in the second story. They are pinned with tree nails only through their upper tenons, except for studding sharing the same mortise as a diagonal brace, in which case both ends of the studding are pinned. All of the tree nails were driven from the exterior side of the frame; they are today cut off flush with the inside edge of the girts and plates.

The gable ends of the roof structure of ca. 1692 are differ slightly from each other. The studs are of same material – vertically mill- sawn oak pieces of varying sizes, tenoned into the girts at their base and nailed into the rafters with one hand- wrought, rose- headed nail per stud. However, the studs in the east gable end are all turned with their broad side parallel to the girt, while the studs of the west gable are mixed, with both narrow and broad sides set parallel to the girt.

Wall framing indicates that the existing doorway and window openings in the three exterior walls are basically in the same location as those of the original ca.- 1692 house. In the south wall, the window openings occur in the center of each bay on both stories. The original openings were formed by spacing the two center full- length studs 45 inches apart in the outer bays and approximately 26 inches apart in the center bay in the second story. Under the center of each window sill was a “cripple” stud, now cut off to accommodate the increased height of the existing window openings. The original window openings in the end walls on both stories were placed approximately 8 inches north of the center line of the wall frame. This location left three stud spacings to the north and four stud spacings to the south of the openings. Like the south wall, the original openings were 45 inches wide and have a “cripple” stud under the center of each sill.

About 1750, all of the window openings were altered to the size of the existing openings. Most of the openings were reduced in width from 45 inches to 35 inches, and increased in height from approximately 37 inches to 60 inches. Apparently the east- wall windows in both the first and second stories were only heightened, since the remaining second- story window opening retains its original width of 45 inches (see figure 10, taken ca. 1899).

Reducing the width of the window openings ca. 1750 involved the insertion of a “cripple” stud approximately 60 inches long within each opening, which reduced the openings’ width to 35 inches. A board three- quarters of an inch thick by 10 inches wide was then nailed over the unused space, as seen in figure 45. All of these changes have remained within the framework of the original openings, and can be seen on sheet nos. 12 and 13 of Appendix I.

The writer was not able to determine the existence or size of the south- wall window opening in the center bay in the second story, due to the presence of the existing ca.- 1825 window frame. If a previous opening existed, it would have been slightly smaller than the existing one.

The existing opening for the central doorway sits about 4 inches west of center. It measures 40 inches wide by 75 inches high. The opening is framed on the east side by 3- by 4- inch sawn spruce studding, and on the west side by oak studding measuring 2 ¾ inches by 3 ½ inches. The oak studding was reused; it has tenons at both ends and is notched out 10 inches below the upper tenon, as if to receive a header piece. The studding also contains hand- wrought lath nails along one edge of its length, suggesting a member formerly in close proximity to a doorway jamb. The original doorway opening appears to have been in the center of the chimney bay, where two vacant mortises exist in the overhead girt. These mortises are spaced 34 inches apart. Figure 10 shows the frontispiece as it was altered about 1825. Figures 20 and 26 show the doorway as it was altered ca. 1900 and again ca. 1956.

Circa- 1900 Addition

The construction methods used for the frame of the ca.- 1900 addition, both the main part and the ell, were not studied or recorded in great detail. Basically, the type of construction used in the outer walls can be termed “balloon frame,” with studded walls extending two stories and capped with a plate. The floor joists for the second floor rest on top of inner partition walls and on ledger plates on the outer walls. The members are fastened primarily with a mixture of machine- cut and wire- drawn nails.

The foundation sills under the north and east walls of the ell (which are visible from the cellar) are reused pieces of mill- sawn spruce sills and posts, typical of those found in buildings constructed after the mid- 19th century. For example, the north sill measures 6 ½ inches by 7 inches and contains 2- by 2- inch mortises spaced 29 inches on center. The east sill contains two mortises measuring 1 ½ inches by 8 inches that were obviously used for diagonal braces in a former post. The south and center sills of the ell are reused pieces of hand- hewn pine approximately 7 inches square, and containing empty mortises. These latter pieces probably came from another building.

The wall studding above the sills is a hodgepodge of used and new materials. The studs of the first story are predominately spruce, measuring 2 ¾ inches by 3 7/8 inches (+/- 1/8 inch). Most are rough, vertically mill- sawn pieces toe- nailed into the sills at the base and into a girt at second- story level 2 ¾ inches by 5 inches. Fire stops the same size as the studding are nailed horizontally between the studs at mid- point in the wall. The studs in the second story are circular- sawn pine, spaced 16 inches (+/- 1 inch) on center. They are nailed into the second- story girt at the base, and into a single rough- sawn plate measuring 2 by 4 inches that rests flat on top of the studding. Only one diagonal brace was found, near the west end of the north wall of the addition.

As explained previously, the ell and the west end of the addition have gable roofs running perpendicular to the roof ridge of the main house. Thus, the north side of the addition has two gable- end wall sections, separated by a narrow shed- roofed section (see Appendix C, sheet no. 1). The gable- end sections are framed with reused studs. All but one of the 12 studs used are

pine and show 19th- century origins. One stud in the west section is oak and identical to those found in the ca.- 1692 house frame.

Circa- 1956 Addition

This portion of the house was not examined except where it was exposed on the east exterior wall. The northeast corner post was found to be a reused piece of pine, two stories high, and measuring 3 ½ by 5 inches. The exposed wall studding was found to be nominal- size 2 by 4 pieces of Douglas fir spaced 16 inches on center.

Wall Covering

Main House

Sheathing Boards

The existing boards that cover the three exterior (east, south, and west) walls of the colonial building frame were measured and recorded after the clapboards were partially removed. Sheets no. 15- 17 of Appendix I are recorded measurements of these boards found in place. More than half of the total wall area is still covered with boards that were installed ca. 1692. With a few exceptions (as noted on the drawings), the balance of the wall areas are covered with boards that were installed ca. 1956.

The wall boards of ca. 1692 are vertically mill- sawn, white pine boards with their edges squared. They are three- quarters of an inch (+/- ³/₁₆ inch) thick, and have lengths ranging from 3 feet to 14 feet 7 inches. (A number of boards have been shortened by repair work and later alterations – e.g., see figures 90- 91.) Widths vary according to use. Some filler boards have crudely chopped edges and measure 3 to 4 inches wide. The widest board measures 19 inches, but the average width is about 16 inches. Most of the boards taper from end to end, such as one board that measured 16 ½ inches at one end, but 14 ½ inches at the other end. The boards are fastened with 8d wrought nails with rose heads; usually two nails were used per stud, but as many as three nails were used at the end joints, which are butted together.

The east gable end is entirely covered with circular- sawn pine and cedar boards installed around 1956. However, the majority of the sheathing boards on the west gable end appear to be original (see figure 42). They are a mixed lot of square and bark- edged boards nailed with hand- wrought, rose- headed nails. Width of the boards varies between 8 and 16 inches. With the exception of two boards covering the length of the overhanging girt, each board originally ran the full length of the gable, stopping about 2 inches short of the roof boards.

Three of these boards have been cut out at the center to accommodate a later window opening; this is now blocked up, except for a ca.- 1956 louvered vent measuring 14 by 22 inches. Another alteration is evident at the south end of the overhanging girt, in the form of a patch in the wall boards measuring 14 by 24 inches. The patch is comprised of two boards nailed with machine-cut nails having rounded ends and shear marks appearing on one surface. The patch seems to correspond with the repair work done on the west end of the plaster cove cornice, which is thought to have occurred ca. 1825.

The north wall of the ca.- 1692 house was stripped of its last original boards ca. 1900. At this time several boards were reused as sheathing on the roof of the east addition. During July 1980, nine boards were removed from the roof (fig. 91) and temporarily replaced in their original location on the north wall of the second story, as shown in figures 42- 43 and sheet no. 17 of Appendix I. These boards are similar to the walls boards described, but have feather edges and lapped ends, indicating that the north wall was probably not covered with clapboards in its original condition. A certain amount of water staining and weathering on these boards seems to support this observation. Also, there are none of the nail holes that would have been left from the use of either clapboards or wall shingles.

There are eight boards at or near sill level on the west end wall that have tentatively been assigned the date of ca. 1825. Several bits of architectural evidence were found to suggest this date. First, the boards are nailed with 8d machine- cut common nails that have rounded tips and shear mark on one side. Nails having these characteristics are identical to those found throughout the house that have been identified as belonging to remodeling work done ca. 1825. Second, the west sill lacks the customary mortises for the wall studding (fig. 78); instead, the studs are toe- nailed into the sill. Third, there is no tenon at the south end of the west sill; instead, it abuts the south sill without any form of connection. This suggests that the west sill is a replacement and was simply slipped into place from the exterior. Finally, there is a lack of vagrant nail holes in the sill, which would indicate that it was formerly covered with older wallboards and/or clapboards, such as was found with other original sills.

The wall boards of ca. 1956 are all rough, circular- sawn pine boards, seven- eighths of an inch thick, with a uniform width of 12 inches and lengths up to 16 feet. They are fastened with 8d wire- drawn common nails.

Clapboards

The exterior walls of the ca.- 1692 house, including the east and west gable ends, are covered with clapboards. These are mill- sawn red- cedar clapboards, tapered in section, 5 ½ inches wide with a butt thickness of seven- sixteenths of an inch. They are spaced 4 ½ inches to the weather, laid with butt joints, and nailed to the wall sheathing with 4d galvanized wire- drawn box nails. The clapboards butt against the exterior trim of the doorway and window openings and the corner board, but extend under the verge boards in the gables. The clapboards found on the ca.- 1692 house do not exceed 4 feet in length. The exterior surface is painted with a brown oil stain and is in fair condition.

Corner Boards

The existing corner boards on the southeast and southwest corners of the ca.- 1692 house are a mixture of ca.- 1825 and ca.- 1956 pieces. The boards of ca. 1825 originally ran full length, extending from the foundation stones to the plaster cornice. Today, only the west board remains full length.

The corners are trimmed with vertical boards nailed together in an L- shape. The boards of ca. 1825 are flat, square- edge, pine stock of two sizes. On the south wall the boards overlap those on the east and west walls and measure seven- eighths of an inch by $6\frac{7}{8}$ inches. The boards on the east and west walls measure seven- eighths of an inch by 6 inches, but visually appear $6\frac{7}{8}$ inches wide. They are nailed with 12d machine- cut common nails having rounded tips and shear marks on one side. The back side of each ca.- 1825 corner board, adjacent to the clapboards, is routed out three- sixteenths of an inch by seven- sixteenths of an inch to receive a thin lath- like wooden strip. The strip was nailed in place before the clapboards were applied, thus forming an effective weather seal.

The replacement corner boards of ca. 1956 are three- quarters of an inch thick and the same width as those of ca. 1825. They are face- nailed with 8d wire- drawn box nails. At the southwest corner, the lower 8 feet of corner board is a replacement. At the southeast corner, on the south side, 13 feet 6 inches of the corner board is new. On the east side, the lower 3 feet 10 inches of the corner board has been replaced.

Circa- 1900 Addition

Sheathing Boards

The existing boards that cover the exterior walls of the ca.- 1900 addition were examined from the interior of the house after selective removal of interior wall coverings, which were predominately plasterboard (see figure 38).

The boards were found to be vertically mill- sawn, square- edged boards averaging seven- eighths of an inch thick. Widths vary in quarter- inch increments between 7 and 11 inches. The boards taper as much as 1 inch from end to end. Lengths were not determined, but two boards measured were found to be 13 feet long. They are attached to the studs with 8d machine- cut common nails.

Many of the sheathing boards, especially on the two gable- end sections of the north wall, were found to have been reused from an earlier building. Several boards contained edge notches of various sizes (i.e., $1\frac{1}{2}$ by 2 inches); others contained holes measuring 1 inch in diameter. A common denominator found throughout the examination of the wallboards was the use of brown building paper. Scraps of paper were found attached to the boards with 2d machine- cut common nails having shear marks on one side. The earliest use of building paper has not been ascertained by the writer, but a similar brown paper was used in 1854 under the slate roof of the Custom House in Salem, Massachusetts.

Clapboards

The exterior walls of the ca.- 1900 addition are mostly covered with circular- sawn pine clapboards, tapered in section, 6 inches wide with a butt thickness of one- half inch. (There are a few areas of replacement red- cedar clapboards.) They are spaced about 4 ½ inches to the weather, laid with butt joints, and face- nailed along the lower edge at 11- inch (+/- 1 inch) intervals with 6d machine- cut box nails. The clapboards butt against the exterior trim of the doorway and window openings, the trim boards in the gable end, and the corner boards. Lengths of the clapboards do not exceed 4 feet. The exterior surface is painted brown and is in poor condition.

Corner Boards

The corner boards on the north end of the ell are similar to those on the ca.- 1692 house, i.e., made with vertical boards nailed to the corners in an L- shape. The boards are made from flat, square- edge pine stock, and are nailed with 8d wire- drawn casing nails, set and puttied. In each instance the east and west boards overlap those on the north wall. At the northeast corner, both boards measure seven- eighths of an inch by 5 ¼ inches. At the northwest corner, the boards measure seven- eighths of an inch by 5 ⅝ inches. All of the boards are spliced at the lower end with pieces measuring between 3 feet 2 inches and 3 feet 6 ½ inches.

On the east wall, at the junction of the ca.- 1692 house and the ca.- 1900 addition, there is a vertical board (in two pieces) separating the clapboards between the two sections. It is part of the ca.- 1900 construction and measures seven- eighths of an inch by 5 ¼ inches.

The inside corner where the west wall of the ell meets the north wall of the main part of the addition is trimmed with two full- length, circular- sawn boards. The exposed faces measure seven- eighths of an inch by 3 inches, and seven- eighths of an inch by 4 inches. These are painted brown, with areas missing.

The only visible portion of corner boards left at the west end of the main part of the addition is a full- length vertical board at the north end of the west wall. It is partially covered by the addition of ca. 1956. The exposed face of the board varies from 2 inches at the top to 3 inches at the bottom. It is painted brown, with areas missing.

Circa- 1956 Addition

Sheathing Boards

The sheathing boards used on the addition of ca. 1956 were not examined, except for two that were found exposed on the exterior of the east wall, and those seen on the north wall in the attic. They appear to be reused boards about seven- eighths of an inch thick, vertically mill- sawn, 12 inches wide and running the full length of the wall. They are fastened with 8d wire- drawn common nails.

Clapboards

These are similar in materials, finish, and condition to those on the original part of the house. They differ in that some of them are up to 7 feet long, whereas those on the original house do not exceed 4 feet in length.

Corner Boards

The three exterior corners of the ca.- 1956 addition are trimmed with spliced pieces of novelty siding with the back (rough- sawn) side turned outward and the molded edge, one- half inch thick, butted at the corners. Each board measures three- quarters of an inch by 4 ½ inches, and is face- nailed into the wall with 8d wire- drawn box nails and into the edges with 8d wire- drawn casing nails. Exposed surfaces are stained brown and are not deteriorated.

Doorways

There are a total of five exterior doorways located throughout the house. Four doorways are located in the first story, and one doorway is located in the second story. All of the existing openings have frames, trim, and doors that were installed after ca. 1956.

Main House

The ca.- 1692 portion of the house has one exterior entrance, in the center of the south wall (fig. 88). It leads into a small entry hall in the first story. The doorway opening appears to have been installed when the clapboards were changed ca. 1956. The exterior head and jamb casings are made from flat, square- edge pine stock measuring three- quarters of an inch by 5 ⅝ inches; they are face- nailed to the wall with 8d wire- drawn box nails. The sill (which is broken off along the front edge) measures 1 ½ inches thick, and once extended to the outer edge of the jamb casings. The overall size of the doorway frame is 4 feet 11 ½ inches by 7 feet 7 inches. The door measures 1 ¾ inches by 3 feet 0 inches by 6 feet 10 ½ inches, and has three lower vertical panels (6 ½ inches by 3 feet 10 inches) surmounted by six lights, each measuring 8 by 9 inches. The door is hung on one pair of loose- pin butt hinges measuring 3 by 3 ½ inches. A lock is mortised into the side stile; it has a brass face plate on the exterior measuring 2 ¾ inches by 10 ½ inches, which contains a brass doorknob 2 ¼ inches in diameter. The outline of a former door knocker can be seen on the upper center panel.

Circa- 1900 Addition

The main part of the ca.- 1900 addition has two exterior doorways. One is centered in the first-story north wall. The exterior casings are made of flat, square- edge pine stock. The east jamb casing measures three- quarters of an inch by 7 ⅝ inches; the west jamb casing measures three-

quarters of an inch by $7\frac{5}{8}$ inches; and the head casing measures three-quarters of an inch by 3 inches. All casings are face-nailed with 8d wire-drawn box nails. The sill measures $1\frac{1}{4}$ inches thick and projects 1 inch beyond the jamb casings. The overall size of the exterior doorway frame measures 3 feet $10\frac{1}{4}$ inches by 6 feet $3\frac{1}{2}$ inches. The door measures $1\frac{3}{8}$ inches by 2 feet $5\frac{1}{2}$ inches by 5 feet 10 inches, and has three lower horizontal wooden panels ($6\frac{1}{2}$ by 21 inches) surmounted by a single pane of glass (now broken) measuring $21\frac{1}{4}$ by 18 inches. Above the glass is another horizontal wooden panel ($4\frac{1}{2}$ inches by 21 inches). The existing lock is of the "Kwik-Set" variety. Mounted to the door above the lock is a small sliding dead bolt.

The second exterior doorway is centered in the first-story west wall of the main part of the addition. The exterior head and jamb casings are made from flat, square-edge pine stock measuring three-quarters of an inch by $5\frac{1}{2}$ inches; they are face-nailed with 8d wire-drawn box nails. The overall size of the exterior frame measures 3 feet $4\frac{3}{4}$ inches by 7 feet 4 inches, including the missing doorway sill. The overall size of the door is $1\frac{1}{4}$ inches thick by 3 feet wide by 6 feet $7\frac{1}{2}$ inches high; it has four lower horizontal wooden panels ($4\frac{1}{2}$ inches by 23 inches) surmounted by a single pane of glass (now broken) measuring $23\frac{1}{2}$ inches square. Above the glass is another horizontal wooden panel of equal size. The door is hung on one pair of loose-pin butt hinges measuring 3 inches by $3\frac{1}{2}$ inches. A brass lock is mortised into the side stile and is operated by a black ceramic doorknob $2\frac{1}{4}$ inches diameter.

The north ell of the addition also has two exterior doorway openings. The first is a side entrance located at the south end of the ell's east wall. The exterior jamb casings measure three-quarters of an inch by $4\frac{1}{2}$ inches, while the head casing measures three-quarters of an inch by 5 inches. The sill is missing. The overall size of the frame measures 3 feet 7 inches by 7 feet 2 inches. At the present time, it has an aluminum storm door (2 feet $8\frac{1}{2}$ inches by 6 feet 7 inches) hinged to the outside casing.

The ell's second exterior doorway is in the second story of the west wall. This doorway once led to an outside porch that has since been removed. The exterior head and jamb casings are made from flat, square-edge pine stock measuring three-quarters of an inch by $2\frac{1}{2}$ inches. The overall size of the exterior doorway frame measures 2 feet $11\frac{1}{2}$ inches by 6 feet 11 inches, exclusive of the missing doorway sill. The door measures $1\frac{3}{8}$ inches thick by 2 feet 8 inches wide by 6 feet $7\frac{1}{2}$ inches high, and has two lower vertical wooden panels (9 inches by $21\frac{1}{4}$ inches) surmounted by six lights measuring $7\frac{1}{2}$ by 13 inches. The door is hung on one pair of loose-pin butt hinges measuring $3\frac{1}{2}$ by 4 inches. It has a brass lock mortised into the side stile that is operated by a brass doorknob $2\frac{1}{4}$ inches in diameter.

Windows

There are a total of 28 window openings throughout the house. Nine are in the ca.- 1692 main house; 14 are in the ca.- 1900 addition; and five are in the addition of ca. 1956. There are no cellar windows.

Main House

In addition to the nine extant windows, the main house is thought to have had two attic windows during the historic period, one in each gable end. These have been replaced with louvered vents. Of the remaining nine window openings, four are in the first story: two in the south wall, and one each in the east and west end walls. The second story has three window openings in the south wall, and one each in the east and west end walls. See Appendix C, sheet nos. 5- 7.

Window Frames

First Story

The four window openings in the first story have frames and sashes that date from the ca.- 1956 remodeling. Three of the openings (the two in the south wall and the one in the west wall) have an overall exterior size of 3 feet 3 ½ inches by 4 feet 11 ½ inches. The window in the east wall measures 7 feet 3 inches by 4 feet 11 ½ inches. All window casings are made from square- edge pine stock measuring three- quarters of an inch by 4 ½ inches, and are rabbeted into a frame measuring three- quarters of an inch by 5 ¼ inches. The casings are face- nailed to the wall with 8d wire- drawn box nails and into the frames with 6d wire- drawn finish nails. The sills are sloping pieces of pine with a uniform thickness of 1 ½ inches by 6 inches; their ends are cut flush with the vertical casings. On the south wall, the casings are doubled in thickness to approximate the size of the older window frames in the second story.

Second Story

The five window openings in the second story of the main house have “Plankd” window frames that date to the ca.- 1825 alterations. All of the frames are intact except the one on the east wall, which has a replacement sill with a uniform thickness of 2 ¾ inches.

There are three sizes of ca.- 1825 window frames. The largest frame is located in the east wall and has an overall measurement of 3 feet 11 inches by 4 feet 9 ⅞ inches. The smallest frame is located in the center of the south wall (Front Hall) and has an overall measurement of 2 feet 8 inches by 4 feet. The three remaining frames have an overall measurement of 3 feet 3 ¼ inches by 4 feet 8 ½ inches. Approximately 2 ⅞ inches of the head and jamb pieces of the three south window frames are embedded under the plaster cove cornice. The east and west windows have the upper 1 inch of their frames concealed by a surrounding soffit board nailed to the overhanging girt above.

The window frames of ca. 1825 were constructed with “superior” jambs, i.e., with jambs running by the head pieces. The head pieces, in turn, are tenoned into jamb mortises and the joints pinned together with quarter- inch exposed wooden pins.

The jamb and head pieces were fabricated from pine stock of uniform thickness, 1 ¼ inches by 3 ⅞ inches. The inner edges of these pieces have a continuous half- inch bead that is mitered at the upper corners. The jambs are mortised and tenoned through the sill, and the joints are held together with concealed half- inch wooden pins driven from the back side. The sills are flat on

the bottom but taper on the upper surface from 1 ⁷/₈ inches at the outer edge to 2 ³/₄ inches at the back. The ears of the sills extend 1 ¹/₂ inches beyond the jambs. The window frames are nailed through each jamb into the wall with 12d machine- cut common nails.

Window Sashes

First Story

All of the sashes in the first story of the ca.- 1692 house date to ca. 1956. The window opening in the east wall of the East Parlor has one large fixed sash that has an overall size of 1 ³/₈ inches by 6 feet 7 inches by 4 feet 4 inches. It has 32 lights, each measuring 9 by 12 inches. It sits in a ca.- 1956 frame, and is held in place by the exterior casings, which project beyond the inside frame to form the stops.

The three remaining sashes in the East and West Parlors are ca.- 1956 reproductions of the sashes in the second story, but with slightly smaller dimensions in width and thickness compared to their ca.- 1900 counterparts. The overall sash openings measure 2 feet 6 ¹/₂ inches (west) and 2 feet 7 ¹/₂ inches (south) by 4 feet 4 ¹/₂ inches. The sashes are double- hung, two-over- two sashes with lights measuring 14 by 24 inches; they are held in place by casing stops as described above.

Second Story

All of the sashes in the second story of the main house date from the remodeling of ca. 1900. They are double- hung, two- over- two sashes. The large window in the east wall has an overall sash opening of 3 feet 4 ¹/₄ inches by 4 feet 2 ³/₄ inches, with a glass size of 18 ³/₈ by 23 ¹/₄ inches. The small window in the center of the south wall has an overall sash opening of 2 feet 1 ¹/₈ inches by 3 feet 5 inches, with a glass size of 10 ³/₄ inches by 18 ¹/₄ inches. The three remaining windows have openings that vary in width from 2 feet 8 ¹/₂ inches to 2 feet 8 ³/₄ inches, and in length from 4 feet 1 ³/₄ inches to 4 feet 2 ¹/₄ inches. However, they all have a consistent glass size of 14 ³/₄ by 22 ⁷/₈ inches.

Only the upper sash is held within the frame, which is routed out to receive it. The lower sash butts or slides against the frame on the inside and is held in place with applied stops. The lower rail of the bottom sash has an outer lip three- quarters of an inch square that extends below the window stool to form a weather seal against the sill.

Circa- 1900 Addition

There are 14 window openings in the addition of ca. 1900. The east wall contains five window openings: two in the first story and three in the second story. The north wall of the ell has four window openings: two each in the first and second stories. The north wall of the main part of the addition has two windows, one each in the first and second stories. The west wall of the ell also has two windows, one each in the first and second stories. The west wall of the main part has one window opening, in the second story.

Window Frames

East Wall

The frames and trim of the north and south windows in the second story date to ca. 1900. They are made from flat, square- edge pine stock measuring seven- eighths of an inch by $4 \frac{9}{16}$ inches. The exterior casings are face- nailed with 8d wire- drawn finish nails, with the heads set and puttied. The north window's frame has its jamb casings butted against the frieze board, which serves as the head casing, while the south window has its frame and casings cut 6 inches into the frieze board, which corresponds to the change of floor level between the two interior rooms.

The window sills are sloping pieces of pine with a uniform thickness of $1 \frac{3}{4}$ inches by 6 inches; they have "ears" that extend 1 inch beyond the jamb casings.

The remaining east- wall windows – the center window in the second story, and both windows in the first story – have exterior trim dating to ca. 1956. Their exterior casings are made from flat, square- edge pieces measuring three- quarters of an inch by $4 \frac{1}{2}$ inches, which are face- nailed into the wall with 8d wire- drawn box nails and into the frame with 6d wire- drawn finish nails. The overall size of the second- story window frame is 3 feet 0 inches by 3 feet 7 inches. The jamb casings of this window butt against the frieze board, which serves as the head casing. The overall size of the first- story window frames is 3 feet $3 \frac{1}{2}$ inches by 5 feet 2 inches (+/- $\frac{1}{2}$ inch). The window sills for the three openings are made from pine stock of uniform thickness, $1 \frac{1}{2}$ inches by 6 inches. They are cut off flush with the side casings in the first story, but extend three- quarters of an inch beyond the jamb casings in the second story.

North Wall

Ell. Of the four window openings in the north wall of the ell, three have frames original to the ca.- 1900 construction. These are the two windows in the second story, and the west window in the first story. Their exterior head and jamb casings are made from flat, square- edge pine stock measuring seven- eighths of an inch by $5 \frac{1}{2}$ inches, and are face- nailed with 8d wire- drawn finish nails, set and puttied. Nailed to the top of each head casing is a piece of molding, $1 \frac{1}{2}$ inches by $2 \frac{1}{8}$ inches, having a quarter- round face measuring $1 \frac{1}{2}$ by $1 \frac{1}{8}$ inches. The ends of the molding project $1 \frac{1}{2}$ inches beyond the casings and have a coped quarter- round return. The window sills are sloping, and are made from uniform pine stock varying in thickness from $2 \frac{1}{4}$ inches to $2 \frac{3}{4}$ inches. The ends of the sills are cut off flush with the jamb casings. Overall size of the three window frames is 3 feet $10 \frac{1}{2}$ inches by 5 feet $10 \frac{3}{4}$ inches (+/- $\frac{1}{2}$ inch). The head casings project a quarter of an inch beyond the jamb casings.

The east window in the first story of the ell's north wall has a frame resembling those of ca. 1956 in the east wall, with jamb and head casings measuring three- quarters of an inch by $4 \frac{1}{2}$ inches, face- nailed with 8d box and 6d finish wire- drawn nails. The overall size of the frame is 3 feet $7 \frac{3}{4}$ inches by 5 feet $5 \frac{3}{4}$ inches. Sills are $1 \frac{1}{2}$ inches thick and cut flush with the jamb casings. A quarter- round molding dating from ca. 1900 remains above the head casing, but projects (as a result of the window change) some 3 inches beyond the east jamb casing.

Main Part. The north wall of the main part of the addition has two window openings. One is centered in the first story, abutting the addition of ca. 1956; it dates to ca. 1956. It has an overall frame size of 2 feet 8 $\frac{3}{4}$ inches by 2 feet 4 inches. The frame, including a flat sill, is constructed from square- edge pine stock 1 $\frac{1}{2}$ inches thick. The exterior window casings are missing.

The other window opening is at the east end of the second story. The construction of this window's frame is similar to those described in the ell. Its exterior head and jamb casings measure seven- eighths of an inch by 4 $\frac{3}{4}$ inches. The sloping sill is made from pine stock of uniform thickness (1 $\frac{3}{4}$ inches). The ears project 1 inch beyond the jamb casing. The overall size of the frame measures 3 feet 0 inches by 5 feet 1 inch.

West Wall

Ell. The west wall has two window openings, one in each story. The window opening in the second story appears to be original to the ca.- 1900 construction. Its frame butts against an interior corner board, which serves as the south jamb casing, and against the frieze board, which serves as the head casing. The north casing measures seven- eighths of an inch by 5 inches and butts against the frieze. The window sill is sloping and is made from pine stock with a uniform thickness of 2 $\frac{3}{4}$ inches. The north ear of the sill projects three- quarters of an inch beyond the jamb casing. The overall size of the window frame, exclusive of the frieze and corner board, is 3 feet 7 $\frac{1}{2}$ inch by 4 feet 7 $\frac{1}{2}$ inches.

The bathroom window opening in the first story of the west wall may be an original opening, but the existing frame and sashes probably date to ca. 1956. It has an overall frame size of 3 feet 7 $\frac{1}{2}$ inches by 2 feet 2 $\frac{3}{4}$ inches, with exterior casings measuring three- quarters of an inch by 3 $\frac{3}{4}$ inches. The sill is made from flat, three- quarter- inch pine stock, and is set flush along its outer edge and at the ends with the side casings.

Main Part. The west wall here has one window opening, in the second story; it dates to ca. 1900. It has its frame and casings cut 5 $\frac{1}{2}$ inches into the frieze board, with the bed molding against the soffit serving as the head trim. The exterior casings are made of flat, square- edge pine pieces measuring seven- eighths of an inch by 4 $\frac{9}{16}$ inches, which are face- nailed with 8d wire- drawn nails, set and puttied. The window sill is a sloping piece of pine with a uniform thickness of 1 $\frac{3}{4}$ inches, and has ears (partially cut away) that project 1 inch beyond the jamb casings. The overall size of the frame is 3 feet 7 $\frac{1}{2}$ inches by 5 feet 3 inches.

Window Sashes

Ell

The sashes in the ell's window openings are a mixture of ca.- 1900 sashes and ca.- 1956 reproductions. The first- story window in the west wall has a six- light casement sash measuring 2 feet 4 inches by 1 foot 11 $\frac{1}{2}$ inches, with 8- by 10- inch glass. All other openings have double- hung, two- over- two sashes. Overall sash- opening sizes vary as follows: five openings measure approximately 3 feet 1 inch by 5 feet 1 inch; one opening measures 2 feet 11 $\frac{1}{2}$ inches by 4 feet 9 inches; one opening measures 2 feet 9 $\frac{1}{2}$ inches by 4 feet 4 $\frac{1}{2}$ inches; two openings measure 2 feet 7 $\frac{1}{2}$ inches by 4 feet 4 $\frac{1}{2}$ inches; and one opening measures 2 feet 4 $\frac{1}{2}$ inches by 3 feet 5 inches. The double- hung sashes are held in place by the inner projecting head and jamb casings

(measuring three- quarters of an inch) and parting beads. Glass size in the double- hung sashes varies as follows: 16 inches by 28 inches; 16 ½ inches by 27 ¾ inches; 16 inches by 26 inches; 14 inches by 24 inches; and 12 inches by 18 inches. (These correspond to the dimensional sizes of the windows listed above.)

Main Part

The sash opening of the first- story north- wall window measures 2 feet 6 inches by 2 feet 1 inch, but the sashes are missing. The second- story north- wall window frame holds a pair of double- hung, two- over- two sashes. Overall opening size is 3 feet 0 inches by 5 feet 1 inch, with 16- by 28- inch glass.

The west window at second- story level has a pair of double- hung, two- over- two sashes dating to ca. 1900. Glass size is 16 inches by 28 inches; the overall sash opening measures 3 feet 0 inches by 5 feet 1 inch. The sashes are held in the frame as previously described for other ca.- 1900 openings.

Circa- 1956 Addition

The addition of ca. 1956 has five window openings: one in the second- story south wall, and one each in the first and second stories of the north and west walls.

Window Frames

South Wall

The overall size of the second- story window frame measures 1 foot 11 ⁵/₈ inches by 2 feet 1 ³/₄ inches. It has exterior head and jamb casings made of flat pine stock measuring three- quarters of an inch by 3 ¹/₄ inches. The sill is level and also made of flat pine stock, seven- eighths of an inch thick and cut in between the jamb casings.

North and West Walls

First Story. The first- story window openings in the north and west walls are similar in design but vary in width. Both openings are divided into two sash openings by a mullion 6 ⁵/₈ inches wide. Both have frames and trim dating from ca. 1956, but contain late 19th- century sashes that were salvaged from a house razed in Concord, Massachusetts. The exterior head and jamb casings are made from flat, square- edge pine stock measuring three- quarters of an inch by 5 ¹/₂ inches; they are face- nailed with 8d wire- drawn box nails. The sills are sloping and are constructed of pine stock of uniform thickness (1 ³/₄ inches). The ears are cut off flush with the jamb casings. The sill of the window opening in the west wall consists of two pieces joined at the center; the sill of the window opening in the north wall consists of three pieces – a long center piece with a 2- inch piece attached to each end.

The overall size of the frame of the north- wall window opening is 4 feet 10 ½ inches by 6 feet 1 ½ inches, with each sash opening measuring 1 foot 10 inches by 5 feet 5 ½ inches. Overall size of the frame of the west- wall window opening is 4 feet 2 ½ inches by 6 feet 1 ½ inches, with each sash opening measuring 1 foot 5 inches by 5 feet 5 ½ inches.

Second Story. The two second- story window openings are also similar to each other in appearance but of different widths. The exterior jamb and head casings are made from flat pine stock; they measure three- quarters of an inch by 3 ¼ inches, and butt against a sloping sill 1 ¾ inches thick without ear extensions. The north- wall window opening is divided by mullions 1 ⅛ inches thick into four sash openings of equal size. The west window is divided into three equal sash openings.

Window Sashes

South Wall

The south- wall window frame holds a single, fixed, four- light sash with glass measuring 7 ¼ by 9 ¾ inches.

North and West Walls

First Story. The sashes of the paired windows in the north and west walls are double- hung, one- over- one sashes with a glass size of 18 by 30 inches (north) and 13 ½ by 30 inches (west).

Second Story. As indicated above, the north- wall window opening contains four sashes. These are single- light sashes measuring 20 ¼ inches by 39 ½ inches. The two outer sashes are fixed, while the inner sashes are casement- hung and crank- operated. The west- wall window opening contains three sashes. These also are single- light sashes measuring 15 ½ inches by 39 ½ inches. The center sash is fixed, while the two outer sashes are casement- hung and crank- operated. The west window has an aluminum storm sash installed on the exterior frame.

Roof Shape

The gable roof of the main house rises steeply at a pitch of approximately 39 degrees, or 9 ½ inches in 12 inches (1:.775). The gable roofs of the east and west sections of the ca.- 1900 additions also have a pitch of approximately 39 degrees, while the gable roof of the ca.- 1956 addition has a pitch of 37 degrees. The shed roof over the center section of the ca.- 1900 addition has a slope of approximately 16 degrees. A plan of the roof can be seen on sheet no. 1 of Appendix C. Two plumbing vents and four brick chimneys emerge from the roofs.

Roof Construction

Main House

The roof structure of ca. 1692 is intact and can be seen on sheet nos. 12- 17 of Appendix I. Support for the roof structure is provided by the summer beams, and by the end and chimney girts that run north- south. At the south wall, the summers and girts project 14 inches beyond the wall frame; at the north wall, these members are now cut flush with the wall plate.

There are six pairs of principal rafters, all hand- hewn and made from pine. They are mortised, tenoned, and pinned at their feet into the summers and girts. At the peak of the roof, each pair of rafters is mortised and tenoned together. The south rafters have a full- depth tenon measuring 1 ¼ inches thick by 4 inches long, which extends into a mortise of equal size cut out of the north rafter. The mortises are not cut completely through the north rafters, but stop approximately 1 inch away. Each joint is pinned together with irregularly shaped oak “tree nails” approximately 1 inch in diameter, tapering to varying lengths and driven through predrilled holes 1 inch in diameter.

The principal rafters increase in both width and depth from the peak of the roof to their feet. The minimum and maximum increases in width range from seven- eighths of an inch to 2 inches. The minimum and maximum increases in depth range from 1 ⅛ inches to 2 ¼ inches. Measurements for each rafter are listed in Appendix I. At the base of each principal rafter is a Roman numeral incised into the side of the piece, starting at the west end with the numeral I and ending at the east end with the numeral IV. A corresponding numeral is incised into the girts and summers.

Placed between each set of principal rafters and running full length of the roof (except at the chimney bay) are two pairs of common rafters. They are supported at mid- span by purlins that are mortised, tenoned, and pinned into the principal rafters. At the peak of the roof, each pair of common rafters is half- lapped and pinned together with oak tree nails.

The majority of common rafters increase in both width and depth from the peak of the roof to their feet. The minimum and maximum increases in width vary from one- sixteenth of an inch to 1 ¼ inches. The minimum and maximum increases in depth vary from one- sixteenth to three- eighths of an inch.

At the north wall plate, where today the common rafters are cut off flush with the outer edge of the plate, the lower edges of the rafters are cut away to a depth of 1 ½ inches where they sit in a sloping notch of corresponding size cut out of the north wall plate. In addition to the above notch, each rafter has a “bird’s mouth” or “crow’s foot” stop that sits in a corresponding notch cut out of the plate. The rafters are pinned through their top sides to the plate on an oblique angle with oak tree nails.

At the south wall, the common rafters are supported by a secondary purlin plate, hewn from oak and measuring 4 ½ inches by 6 inches. The purlins comprising the purlin plate are mortised, tenoned, and pinned into the overhanging ends of the summers and girts. The ends of the

common rafters are cut away to a depth of 1 ⁵/₈ inches and sit in a sloping notch of corresponding size cut out of the purlin plate. They also have the “bird’s mouth” stop that sits into a corresponding gap cut out of the purlin plate. The rafters are pinned to the purlin plate with oak tree nails. Unlike the north rafters, the south rafters project 8 inches beyond the purlin plate to form a continuous overhang along the south wall of 1 foot 5 ³/₄ inches. Two inches of each rafter foot extends past the existing crown molding and is visible from the exterior.

The colonial housewright utilized common rafters in a unique manner. The two outside pairs of rafters at each end of the roof are mill- sawn oak, while all of the inner rafters are cut from pine saplings, flatted with an axe on four sides but retaining the curvature of the bole at the corners. Eight pairs of common rafters have Roman numerals incised into either their east or west sides at the peak of the roof. The two pairs of rafters located within the chimney bay are cut short of the peak and contain no visible markings. The numbering system used to identify the rafter locations is not consistent. The numerals listed below are those found on the common rafters starting at the east end and proceeding to the last common rafter at the west end of the roof.

WEST END

EAST END

Common Rafters		XI X		N VI		chimney bay		III V		III II	
Principle Rafters	I		II		III		III		V		VI

Circa- 1900 Addition

There are three distinct sections of construction that make up the roof structure built ca. 1900: the gable roofs covering the east and west sections of the addition, and the shed roof in the valley between the two. The gable roofs are constructed of new, rough, mill- sawn rafters containing both vertical and circular- sawn markings (figs. 87- 88). They measure 1 ⁷/₈ inches (+/- ¹/₈ inch) by 3 ⁷/₈ inches (+/- ¹/₈ inch) and are spaced 29 inches (+/- ¹/₂ inch) on center. At the peak of the roof the rafters are fastened in opposing pairs to a ribband board measuring seven-eighths of an inch by 4 ⁵/₈ inches. The rafters are not notched over, but are nailed into, a single rough mill- sawn plate measuring 2 by 4 inches. The rafter feet extend beyond the exterior wall plates to form an overhang of approximately 12 inches. There are no collar ties, but both sections of roof have reused boards nailed as vertical ties between the rafters and the ceiling joists.

The shed roof is constructed from similar building material. The rafters are spaced 30 ¹/₂ inches (+/- 1 inch) on center and are supported by three purlins, one of which has unused tenons at each end.

Circa- 1956 Addition

The roof frame of the ca.- 1956 addition consists of rough, vertically mill- sawn rafters measuring 2 by 6 inches, set on 16- inch centers and nailed in opposing pairs to a 2- by 7- inch ribband board. The rafters are reused material: many contain fragments of machine- cut nails. Most of the rafters have Roman numerals incised into their sides.

Roof Covering

Main House

Roof Sheathing Boards

The majority of the existing roof boards appear to be original, except for an occasional replacement, and those boards used to enclose the space once occupied by the central chimney. The original boards are rough, vertically mill- sawn pine boards, measuring between five- eighths and 1 inch thick. Widths vary from 8 to 17 inches, the average width being about 15 inches. Most boards are square- edged, but many retain their wane, or bark edges. The longest board measured 16 feet 7 inches, and tapered 1 ¼ inches from end to end. The ends are butted together and they are fastened to the rafters with hand- wrought, rose- headed nails. The roof boards have been measured and recorded on sheet nos. 15 and 17 of Appendix I.

Shingles

The roof covering from ca. 1692 until ca. 1935 would have been wood shingles. Wood shingles dating back to ca. 1890 still remain on the north side of the ca.- 1692 roof, and can be seen from the attic spaces of the ca.- 1900 addition (fig. 92).

The wooden shingles remaining on the north roof slope of the ca.- 1692 house appear to have been about 15 years old when the roof of ca. 1900 was built over them. They are circular- sawn white- cedar shingles 16 inches long; they range in width from 3 to 11 inches. They are laid 5 inches to the weather and are nailed with 4d machine- cut common nails. About 1935, asphalt shingles were introduced on the roof. The existing roofs have asphalt shingles (commonly called “three- tab” shingles) of varying ages, dating between 1935 and 1960.

Circa- 1900 Addition

Roof Sheathing Boards

The existing roof boards covering the gable sections are a mixture of new (ca.- 1900) and older reused boards. The east slope of the east section contains nine pine boards that have feathered edges with partially lapped ends. These boards have an average width of 17 inches and range in length between 12 and 14 feet. There is no question that these boards were removed from the north wall of the ca.- 1692 house and reused as roof boards ca. 1900. In addition to the nine wall boards, the east roof contains approximately eight additional old reused boards, 8 to 17 inches wide, that have rows of machine- cut shingle nails visible from the attic side. One 18- inch- wide reused roof board has hand- wrought, rose- headed nails in addition to machine- cut shingle nails. The remaining boards covering the east section's roof are circular- sawn and date from ca. 1900.

The roof boards covering the west section are predominately reused boards supplemented with ca.- 1900 circular- sawn boards. The reused boards are pine and have vertical saw markings. Their widths vary from 9 to 13 inches. They have an assortment of edge treatments, including wane, shiplapped, and square edges. Most boards have rows of machine- cut shingle nails exposed on the attic side, as well as heads remaining from 8d machine- cut common nails. One 19- inch- wide board has shiplapped edges, exposed hand- wrought nails, and a hand- planed surface; it seems to be one of the horizontal wainscot boards installed ca. 1825 on the north wall of the East Parlor.

On the shed roof, the roof boards are circular- sawn, seven- eighths of an inch thick, with widths varying from 12 to 16 inches.

Shingles

Wood shingles were used ca. 1900 on the roof of the new addition. These were replaced with asphalt shingles after 1935.

Circa- 1956 Addition

The roof sheathing boards are new, circular- sawn boards averaging 12 inches in width. The shingles are asphalt. The roof is covered with asphalt shingles applied after 1935.

Lightning Rods

Anchored to the various roofs are lightning rods that have the following manufacturer's name and patent date: "KRETZER SHURHOLD PAT Aug 19 – 19 ST. LOUIS." Sheet no. 1 of Appendix C shows the location of the lightning rods on the roof plan.

Cornice and Eaves

Main House

South- Wall Cornice

There is no reason to doubt that the greatest part of the existing cornice extending along the south eave of the main house is part of its original construction. During the architectural investigation of the cornice, five areas were found that showed definite changes to the original work. These areas are located at the three window openings; at the ends of the cornice; and possibly along the upper edge of the bed molding.

The existing cornice runs the full length of the south wall; it terminates at the corner boards with a scotia- like coping that curves upward and outward until it stops against the wall construction of the overhanging gable ends. The cornice can be viewed as consisting of four parts: a crown molding; a fascia board; the lath and plaster coving; and the bed molding. These parts of the cornice are visible from the exterior and, as a whole, present a most pleasing composition to the eye. See sheet no. 18 of Appendix I for a cross- sectional drawing of the coved cornice.

The basic structure of the cornice is hung from the overhanging girts and summers that extend 14 inches beyond the wall. They have their lower ends shaped to a radius somewhat less than that of the existing cornice. These members in turn support a purlin plate to which is attached, in part, the fascia board, the crown molding, and the many “form” boards that are coped to create the radii of the existing plasterwork. The lower ends of the form boards and the bed molding are nailed to the wall boards. The height of the plasterwork above the bed molding is approximately 14 inches, whereas the width is approximately 12 inches – a proportion of 1 to 1.166.

The back side of the plasterwork can be partially seen from the attic, where several floorboards have been removed to reveal the construction details in full. The basic support for the plaster work is furnished by the form boards. They are made from 1- inch pine stock; the pieces have been cut to the desired radius of the cornice, and nailed in place at the top through the fascia and at the bottom into the wall boards. In the space between the chimney posts, where six of the form boards can be seen and measured, they are spaced 17 to 19 inches apart. Since no toenails were observed, it is assumed that the form boards here are nailed as described above.

Nailed to the curvature of the form boards are hand- riven laths measuring one- half to three- quarters of an inch wide. A few of the lath nails have missed their target and protrude from the sides of the form boards. They are hand- wrought nails with drawn points. The lath is plastered with a mixture of lime, sand, and hair. The plaster thickness is such that it is level with the lower edge of the fascia, and with the outer edge of the bed molding. The age of the plaster is not known.

The plaster coving is interrupted by the three existing window frames. The center window frame measures 2 feet 8 inches wide, and the two outer window frames measure a little over 3 feet 3 inches. The tops of the frames are located 9 inches above the bed molding and can be seen

from the attic, where they extend about 2 inches above the lath. Approximately 3 inches of the head and stiles of the window frames are concealed behind the plaster coving.

Hairline cracks occur in the plaster coving at the sides and over the heads of each window opening. These breaks coincide with the width of the original window openings, as determined by the evidence uncovered during the architectural investigation. For example, if one examines the lath work above each window opening from the attic, one can see machine- sawn lath. Thus it seems that the window frames and the replacement lath and plaster surrounding them probably date from the same period, or ca. 1825.

The wooden pieces making up the south cornice consists of the crown moldings, the fascia board, and the bed molding. The crown molding measures about 4 inches wide and is cut around the projecting feet of the common rafters, which extend as much as 2 ¼ inches beyond the molding. The crown molding displays two different profiles: the section to the east appears to be original stock, while the west section appears to be relatively new stock (ca. 1956). The older, east section itself consists of two pieces: an east piece measuring 17 feet 9 ½ inches long, and a west piece measuring 7 feet 1 inch long. Both pieces are butted at the joints and are nailed with hand- wrought T- headed nails; both pieces have a base coat of red paint. The ca.- 1956 west section of crown molding likewise consists of two pieces. Both of these are nailed with wire- drawn finish nails, and are painted with coats of white paint.

The upper 2 inches of the crown molding is molded with a cyma recta curve stopped by a center fillet; the lower 2 inches is molded with an ovolo curve stopped by a base fillet. The crown molding is butted against the underside of the roof boards at the top, and against the fascia board at the bottom edge. The crown molding conceals all but the lower 1 ½ inches of the fascia board.

The fascia is made up of four boards that appear to be original. The easternmost board measures approximately 14 feet long and abuts the verge board at the east end. Its west end has a lapped joint where it meets the second board, which measures 13 feet 2 inches long with each end lapped. The third board measures 3 inches long and has both ends lapped. The fourth board measures 13 feet 6 inches long; its east end is lapped, while its west end abuts the verge board. These boards are fastened to the purlin plates and into the ends of the summers and girts with hand- wrought T- headed nails. The fascia boards measure about three- quarters of an inch thick by 4 to 5 inches wide. They are molded along the lower edge with a cyma reversa (ogee) curve that measures seven- eighths of an inch high. The plaster coving is struck flush with the lower edge of the fascia. As with the older pieces of crown molding, the first base coat of paint on the fascia boards is a red iron- oxide color.

The bed molding terminates the lath and plaster coving against the wall. The molding is cut between the corner boards and the window frames, and between the window frames. It measures approximately 2 inches thick by 2 ¾ inches wide. The upper portion consists of a fillet measuring five- eighths of an inch above a 1- inch scotia (cavetto); the lower 1 ¼ inches is squared off. The molding is nailed through the top fillet with 12d machine- cut common nails, and through the lower part with 4d machine- cut common nails. These nails were not examined, but appear similar to those used in other changes related to the ca.- 1825 period.

East and West Raking Eaves

The gable ends of the main house are finished along the eaves with square- edge rake boards nailed over the existing clapboards. The rake boards measure seven- eighths of an inch thick by 5 $\frac{3}{4}$ inches wide. A square- edge rake molding measuring three- quarters of an inch by 2 $\frac{3}{4}$ inches is nailed along the top edge of the rake board. Both pieces are mitered at the peak, and terminate at the south end in a square cut and against the additions with a plumb cut.

The rake members are nailed with a mixture of machine- cut and wire- drawn nails. The original nails are 12d machine- cut common nails (used in the rake boards) and 6d machine- cut common nails (used in the rake molding). Both sizes of nails have rounded ends and shear markings on one surface. The wire- drawn nails probably date from the ca.- 1956 renovations of the clapboards.

The soffit of the overhanging girts on each gable end are covered with full- length, square- edge pine boards measuring seven- eighths of an inch by 5 inches. Each board is cut around the window frame and nailed into the overhanging girt with 12d machine- cut common nails having rounded ends and shear markings on one surface.

The projecting ends of the north and south wall plates are covered with pieces of boards seven- eighths of an inch thick, nailed with 8d machine- cut common nails having rounded ends and shear markings on one surface.

Circa- 1900 Addition

The existing cornice of the ca.- 1900 addition projects 12 inches beyond the walls and the two north gable ends. The cornice consists of a 5- inch cyma recta crown molding and a separate three- quarter- inch base fillet, fastened to the fascia board. The fascia board measures seven- eighths of an inch thick, and has an exposure of 2 $\frac{3}{4}$ inches. The space between the fascia and frieze board (nailed against the wall) is filled with a soffit board measuring 8 inches wide. The intersecting angle between the soffit and frieze board is covered with a 1 $\frac{1}{2}$ - inch- square bed molding displaying an ovolo/fillet/cove profile. The soffit board lies in a horizontal plane along the gable ends, but lies in a raking position along the eaves where it follows the slope of the roof.

Circa- 1956 Addition

The cornice of the ca.- 1956 addition is similar to that of ca. 1900, except that the soffit board along the eaves lies in a horizontal position. As a result, the projecting ends of the cornice are boxed off with additional pieces of boards nailed onto the rake board.

Chimneys

Main House

The two existing chimneys located near the center of the roof in the ca.- 1692 house were built about 1910 when the old central chimney was removed. They were built within the space once occupied by the original chimney and sit on the same base at first- story level. Many of the bricks from the original chimney were reused below the roof in the construction of the two chimneys. Their size conforms to the measurements prescribed in the brick laws of 1677 and 1684 as passed by the Great and General Court of Massachusetts Bay Colony. Measurements vary as follows: thickness, 2 to 2 ½ inches; width, 4 to 4 ½ inches; and length, 8 ½ to 9 ½ inches. The color of the bricks range from red- orange to red. Some bricks still retain traces of whitewash, while others are coated with carbon.

Above the roof, the two interior chimneys are built of hard, red, water- struck bricks measuring 2 ⅛ inches thick by 3 ½ inches wide by 7 ½ to 7 ¾ inches long. The chimneys sit 6 inches north of the roof peak and are spaced 4 feet apart. The east chimney measures 1 foot 8 inches by 2 feet 1 inch; it stands 5 feet above the peak of the roof, and contains one terra- cotta flue liner. The west chimney measures 1 foot 8 inches by 4 feet 8 inches; it stands 4 feet 8 inches above the peak of the roof, and contains two terra- cotta flue liners. The chimney caps are similar in design, with three courses of bricks each stepped outward about three- quarters of an inch, topped by two courses of bricks each stepped inward the same amount. The bricks were laid in a lime, cement, and sand mortar, with the vertical and horizontal joints varying between three- eighths and one- half inch in thickness. The mortar in the east flue has almost disappeared. Both caps are covered with a cement mortar wash. Attached to the chimneys are lightning rods as shown on sheet no. 5 of Appendix C.

Circa- 1900 Addition

The ca.- 1900 addition has two brick chimneys. One is on the west roof slope of the ell; the other is on the east roof slope of the west gable- roofed section (see Appendix C, sheet no. 1). The ell chimney was built about 1956. It measures 16 inches square and projects about 18 inches above the roof. It is built of hard, red, water- struck bricks similar in size to those of the other chimneys. The design of the chimney cap differs from the others. It has one brick course stepped outward about one- half inch, topped by two flush brick courses stepped outward three- quarters of an inch. Above this is one brick course stepped inward three- quarters of an inch. The cap of the chimney is covered with a cement mortar wash.

The chimney on the west gable- roof section was built about 1900. It measures 16 inches square and contains a single flue once connected to stoves (now missing) in the first- story center kitchen and west room of the addition. The base of the chimney begins at floor level in the cellar and extends about 2 feet above the peak of the roof. Most of the bricks used in its construction in the cellar are the small, reddish, hand- made type, measuring 1 ⅞ inches by 3 ¾ inches by 7 ½ inches. Above the second- story level where the chimney is visible again, the

bricks are the hard, water- struck variety previously described, laid in a similar type of cement mortar. The chimney cap is similar to those of the chimneys on the main house, but it has only two outward projecting brick courses, topped by two inward projecting brick courses. The cap of the chimney is covered with a cement mortar wash. A lightning rod is attached to the flue.

Exterior Finishes

Original Finishes

There is a strong possibility that the exterior wall surfaces of the Smith House – at least the east, west, and south walls – were painted red during the initial construction ca. 1692. The north wall, without its lean- to, would have been covered with wide, horizontal, unpainted, feather- edged boards. Even if the east, west, and south walls were not painted, it seems clear that their architectural trim – such as the doorway and window surrounds, the crown molding, the fascia boards, the bed molding along the south cornice, and the gable- end belt boards – was painted red.

Evidence of red iron- oxide paint similar to Munsell Company color notation 2.5YR 3/6 was found on surviving pieces of 17th- century trim such as fascia, and on original crown molding trim reused during the remodeling of ca. 1750. An identical color of red paint survives on the 17th- century wall boards, where the outline of five casement- type window frames can be detected. These markings can be seen on sheet nos. 15 and 16 of Appendix I; they indicate that the frames were painted after they were nailed to the wall, but before the clapboards were installed. Sheet no. 15 also shows the location of the original bed molding, indicated by a red paint line located about three- quarters of an inch below the existing molding. The paint line extends across the length of the south wall, suggesting that the bed molding projected beyond the corners of the house, as shown on sheet no. 3 of Appendix I.

The inclusion of a gable- end belt board, as shown on sheet no. 6, is based upon an existing paint line 48 inches long, found on the west gable end and shown on the west elevation of sheet no. 16. Since no clapboard nail holes dating before ca. 1825 were found in the original wallboards below the paint line, the writer assumes that a belt board 13 inches wide was used in this location. Like the window frames, the belt board was nailed in place and painted red before the clapboards were installed.

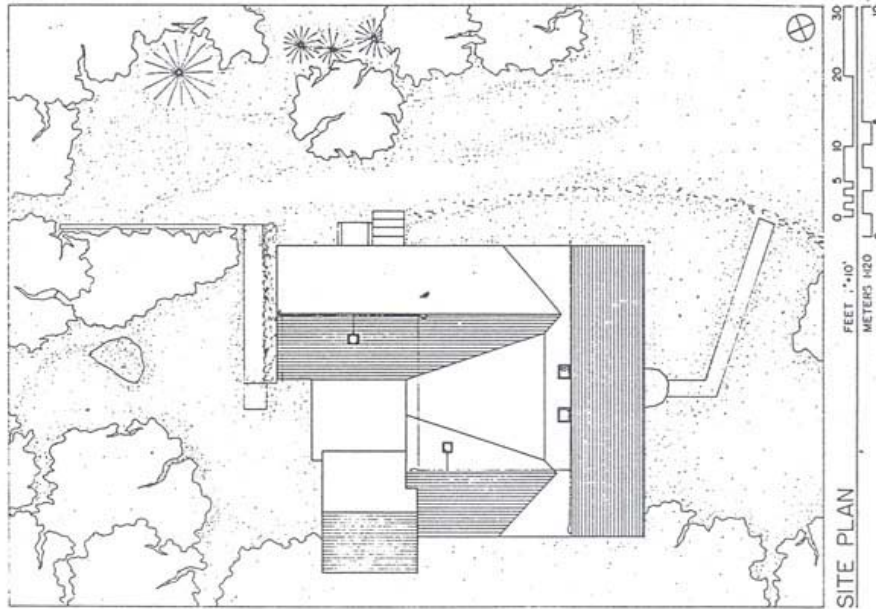
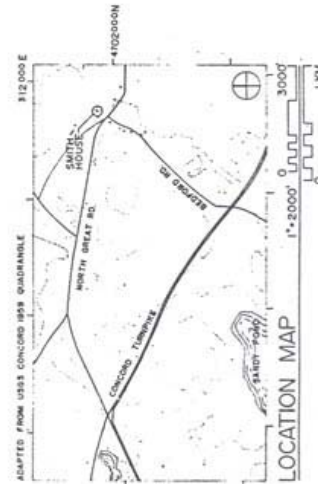
Red paint was found on five of the nine window openings, but no trace of paint was found to indicate the actual size of the south doorway frontispiece. Also, no trace of paint found along the rake boards, which might suggest that these trim pieces were installed after the clapboards were nailed in place. The first identifiable paint layer on the plaster cove cornice is a white lime- wash.

Finishes in 1775

By 1775, as previously described, the original house had undergone significant alterations on both the exterior and interior. Based on the architectural evidence listed in previous sections, the writer assumes that portions of the ca.- 1692 trim survived the remodeling of ca. 1750. These pieces were the rake boards and belt boards on the gable ends, and the bed molding, crown molding, and fascia board along the south cornice. Knowing that these pieces were painted red, it is possible that the new architectural trim – the doorway and window surrounds, frontispiece, and corner boards – were painted red to match. The clapboards, however, may not have been painted. Two short pieces of unpainted clapboards were found to have been used as shims under the existing verge board. If these pieces were original material reused during the ca.- 1750 remodeling, one could conclude that the clapboards were not painted in 1775.

CAPTAIN SMITH HOUSE

THIS PROJECT WAS UNDERTAKEN BY THE HISTORIC AMERICAN BUILDINGS SURVEY IN COOPERATION WITH THE NATIONAL PARK SERVICE. MEASURED AND DRAWN DURING THE SUMMER OF 1977 UNDER THE DIRECTION OF JOHN POPPELIERS, CHIEF OF H.A.B.S. AND MARK L. HALL (HARVARD UNIVERSITY), PROJECT SUPERVISOR, BY BOB LOUTON (UNIVERSITY OF ARKANSAS) AND GORDON OLSCHLAGER (NORTH DAKOTA STATE UNIVERSITY), AT THE MINUTE MAN NATIONAL HISTORICAL PARK.



DRAWN BY MARK L. HALL		NAME AND LOCATION OF STRUCTURE		HISTORIC AMERICAN BUILDINGS SURVEY	
CONCORD, MASSACHUSETTS SURVEY 1977		CAPTAIN WILLIAM SMITH HOUSE		SHEET 1 OF 8 SHEETS	
UNITED STATES DEPARTMENT OF THE INTERIOR		MIDDLESEX COUNTY			
BATTLE ROAD					

Figure 85. Captain William Smith House: Site plan (1977).



Figure 86. Captain William Smith House: South elevation (1977).



Figure 87. Captain William Smith House: East elevation.



Figure 88. Captain William Smith House: West elevation.

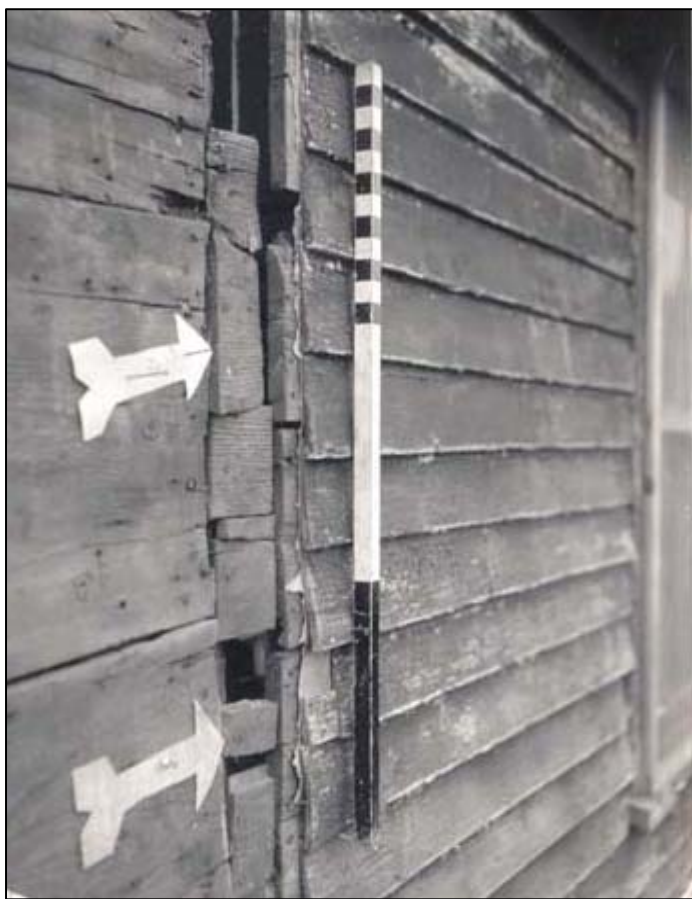


Figure 89. West- wall
junction of main (ca.- 1692)
house and ca.- 1900
addition.



Figure 90. East- wall
junction of main (ca.- 1692)
house and ca.- 1900
addition.



Figure 91. Ca.- 1900 Addition:
East roof slope, after removal of
reused ca.- 1692 wall boards.



Figure 92. Ca.- 1900 Addition: Attic, looking south at roof of ca.- 1692 house.

INTERIOR ELEMENTS

The Captain William Smith House was apparently converted into a four- unit apartment building around 1956. There is now an east and a west apartment on each story. Each of the apartments occupies one room in the main ca.- 1692 house, plus a varying number of rooms in the additions of ca. 1900 and ca. 1956.

Cellars

There are two separate cellars under portions of the Smith House – one at the west end, the other at the northeast corner (fig. 93).

West Cellar

The west cellar is located under the West Parlor of the main house and most of the west room of the ca.- 1900 addition. As explained previously, the south 19 feet of the cellar was constructed ca. 1692; the north 10 feet was added ca. 1730 under the west end of the lean- to built at that time.

The cellar is rectangular in plan. Its width varies from 12 feet 8 inches along the south wall to 13 feet 5 inches along the north wall. In length, it measures 27 feet 10 inches (+/- 2 inches). Headroom varies from 5 feet 10 inches at the south end to 6 feet 7 inches at the north end. The floor of the cellar is loose sandy soil.

The existing foundation walls consist mostly of uncut stones, commonly called fieldstones. Most of the stones are granite and were probably picked up from the surrounding fields. The stones can be considered small; two men could probably carry the largest one. The predominant color of the stones is a light gray having a bluish cast. Mixed in occasionally with these are stones that are tan colored. Supplementing the fieldstones are nine quarried stones that show half- round drill markings. Seven of these stones are found in the east wall; the remaining two are in the 17th- century portion of the west wall.

The foundation walls of the cellar rest directly upon the hard gravelly soil without projecting footings. The stonework is laid in a random manner, with each stone set in a clay mortar bed, with the exposed joints pointed with a lime and sand mortar. The wall thickness appears to be one stone deep, but there are probably loose stones placed below grade as fill against the outer wall.

Several differences in the foundation walls seem to reflect the former location of the north wall of the original cellar, which was removed when the cellar was expanded northward under the lean-to of ca. 1730. First, there is a definite change in the surface of the east wall of the cellar at a point directly below the north wall of the main house. From floor level to approximately a height of 4 feet, the wall protrudes inward about 6 inches. No such projection is found on the opposite west wall, but the stonework of that wall seems to change slightly in character from the same point northward.

Second, the granite underpinning for the south part of the west wall stops at that point. The original exterior cellar walls – the south wall, and the south part of the west wall – consist of fieldstones brought up just short of ground level, where they are topped with cut granite stones on the exterior, and with a mixture of bricks and stones on the interior. The remaining 10 feet of the cellar's west wall to the north has fieldstone brought up a few inches above ground level, where it supports the foundation sill of the west wall of the ca.- 1900 addition.

The floor joists of the West Parlor can be seen from the cellar, running east- west. Their ends rest upon flat granite stones set flush with the foundation walls. The voids between the five southernmost joist bays in the west wall are infilled with bricks laid in mortar, while the remaining joist bays are infilled with small granite stones. Bricks are used along the south wall above grade as backing against the cut granite stones. The northernmost joist has the heads of machine- cut nails embedded along its whole length, suggesting that the cellar may have been subdivided by a partition after the 1820s.

The only opening in the cellar foundation occurs in the east wall, approximately 42 inches north of the southeast corner (see fig. 94). The opening leads to a bulkhead measuring 3 feet wide and approximately 10 feet long. The bulkhead appears to be an original feature that contained the first stairway from the cellar to the first story, which led directly into the East Parlor. The stonework at the corners of the bulkhead is set in alternating courses of headers and stretchers. As the stonework continues eastward, it follows the upward slope of the stairway for a distance of 10 feet, then returns to enclose the structure. The north wall of the stairwell also forms the base for the brickwork of the (now missing) central chimney.

The upper half of a stairway survives in the bulkhead; the physical evidence indicates that it is not the original one. Extant are the remains of two hand- hewn oak stringers, which show signs of having been reused. For example, the north stringer tapers from 5 ¾ inches by 5 ½ inches at the top to 5 inches square at the lower end. Near the top end, and almost opposite each other, are two vacant mortises, 4 and 6 inches long, with 1- inch pinning holes through each mortise. The south stringer also tapers from end to end but contains no visible mortises. A stair carriage is attached with machine- cut nails to the inner side of each stringer. They are cut out to receive risers 7 ½ inches high and treads 10 inches wide, of which two risers and five treads remain partially intact.

A second stairway exists against the east wall at the north end of the cellar. It is 29 inches wide, and is supported by two rough- sawn stair carriages measuring 2 by 12 inches, cut out to receive seven risers 8 ½ inches high and six treads 8 ¾ inches deep. The tops of the stair carriages rest against two posts measuring 3 by 4 inches. Two additional steps are formed at the head of the stairway by the sill and floor. This stairway was created ca. 1900 when the present addition was built.

East Cellar

The east cellar lies under the north ell of the ca.- 1900 addition. It seems to have been created ca. 1825 for a one- story ell built at that time at the north end of the ca.- 1730 lean- to (see figure 10).

The cellar is rectangular in plan. Its average width and length is 10 by 20 feet, with headroom of almost 6 feet. The foundation walls consist of fieldstones slightly larger than those used in the west cellar. Like the west cellar, the stones are laid in a random manner, each stone set in a clay mortar bed and pointed on the interior with a lime and sand mortar. The walls are generally plumb, except for a slight inward bulge at the center of the west wall. A 7- foot- long section of the east wall has been reinforced on the interior with concrete. The floor of the cellar is sandy soil mixed with sawdust.

Access into the cellar is through a ground- level opening 2 feet 7 inches wide by 3 feet 8 inches high located near the center of the east wall. At the present time, the opening is covered by plywood. However, a deteriorated frame formerly in this opening rests on the cellar floor.

A 4- inch cast- iron house drain crosses the cellar at the ceiling level, then turns downward and exits out the east wall below ground level.

Main House

First Story

The first- floor plan of the main house (see fig. 95) consists of the East and West Parlors, which are of equal size and separated by the chimney bay. This bay contains an entry hall and a stairway to the south, and a former chimney area and two closets to the north. The existing way to the cellar is through a doorway located under the stairway in the entry hall.

East Parlor

Figures 96- 98 depict the East Parlor as it appeared at the beginning of the architectural investigation conducted for this report. Material from several building periods is visible. The oldest exposed elements are the east and west girts and the summer beam, which date to ca. 1692. These members are hand- hewn pine timbers that are smoothed only on those surfaces visible from the room. The east girt projects 4 inches inward from the paneled wall and 6 inches below the plaster ceiling. The west girt projects 3 inches inward from the paneled wall at the south half of the room and 8 inches below the plaster ceiling. (In the north half of the room, there is no wall below the girt; see fig. 96.) The increase in depth of the west girt over the east girt was necessary because it was framed without supporting studs.) The summer beam, which is slightly twisted, projects 4 ½ inches to 5 inches below the existing plaster ceiling.

The lower edges of the summer are relieved with 45- degree chamfers 1 ¾ inches wide, which extend within 5 inches of the intersecting girts. Here the chamfers are terminated by a combination lamb's- tongue and diamond- shaped stop 3 inches long. The girts have similar but slightly narrower chamfers; these extend to within 5 inches of the summer beam on either side, where they terminate with stops as described above.

The east girt contains nine holes 1 inch in diameter drilled through the chamfer into the center of the studding and brace mortises. The holes are spaced approximately 2 feet apart, except at the brace locations, where two holes are spaced 5 inches on center. Eight of the nine holes still retain the tip ends of oak tree nails, which are cut off flush with the inner surface of the girt. The west girt has no internal studs or braces, and so no pinning holes. Two pinning holes, 1 ¼ inches diameter and 7 inches on center, can be seen on the soffit side of the girts. These contain oak tree nails that lock the girts and summer- beam joints together.

The surface of the girts and summer beam were severely scarred with a disc sander about 1956 during paint- removal operations. The work was done so heavy- handedly that three of the stops were almost sanded away.

An unpainted quarter- round molding has been nailed at the intersection of the plaster ceiling, the girts, and the summer beam, possibly when the paint was removed.

The next oldest element visible in the East Parlor is probably the plaster ceiling. The ceiling is divided into two parts by the summer beam. All of the plaster is intact; that on the north side of the summer is badly cracked, but appears to be tightly bonded to the lath. Despite the numerous cracks and many layers of scaling paint, the plaster ceiling seems to be in good condition.

The lath and plaster on the north wall is probably the third- oldest room element. The wall is plastered from the northeast corner to within 30 inches of the east chimney post, where it is covered with plasterboard. A 6- inch baseboard runs the full length of the wall. Near the center of the north wall is an open- shelf cupboard, 8 inches deep by 20 inches wide by 75 inches high, constructed of "shadow- edge," knotty- pine boards (see fig. 97). The surround of the opening is cased at the sides and top with 1- by 4- inch pine boards. The cupboard surround is accented from the baseboard to the ceiling with a band of black paint.

The east and west walls are finished with shadow- edge, knotty- pine boards, installed vertically in a repeating pattern of 9, 7, and 4 inches wide. The east wall has a built- in shelf, 10 inches wide and 39 inches high, running the full width of the room (fig. 97). Between the shelf and the east girt near the center of the wall is located a fixed sash 6 feet long containing 32 lights. The window surround is cased at the sides and top with pine boards measuring 1 by 4 inches. In addition, there is a molded pine valance extending across the top of the opening.

The west wall has two jogs in the north half of the room that step back into the chimney bay (fig. 96). In the far northwest corner is a full- height closet (31 by 37 inches) with a board- and- batten door made of shadow- edge, knotty- pine stock. The door is embellished with modern "antique" hardware. The ceilings of the indented spaces are covered with plasterboard. At the south end of the west wall is a doorway to the entry hall. This opening is cased with shadow- edge, knotty- pine boards, and has a board- and- batten door made of the same material. All of the woodwork in the East Parlor has a natural wood finish.

The south wall of the East Parlor is covered with plasterboard that conceals the girt, posts, and sill of the ca.- 1692 framing. Near the center of the wall is a double- hung window cased with a cupboard- like arrangement that has two open shelves below a ledge at window- stool level (see fig. 98). The opening is entirely cased with 1- by 4- inch boards. A 6- inch baseboard abuts the cupboard on either side.

The existing floor in the East Parlor consists of nominal- size, tongue- and- groove, yellow- pine boards measuring 1 inch thick by 3 ¼ inches wide; the majority run the full length of the room. The floorboards are blind- nailed, sanded, and finished with a clear varnish. In the northwest corner of the room, where the closet space occurs, the floor consists of one 8- inch and three 10- inch tongue- and- groove pine boards, face- nailed with 8d wire- drawn nails. The boards are sanded and varnished to match the floor elsewhere in the room.

The subfloor in the East Parlor is made of reused boards – possibly original finish floorboards used in the room before the most recent changes were made. The floor joists and beams used to support the floor are reused pieces of building material possibly taken from a Victorian- era structure. One timber can be seen from the cellar area. It is an 8- by 10- inch mill- sawn member having empty joist cogs measuring 2 by 4 inches and spaced 16 inches on center. Also seen from the cellar area is the remains of a log joist, 8 inches in diameter, 42 inches long, and flatted on the top side. This joist may be the sole survivor from the original floor construction.

The ground level under the East Parlor is just below the existing joists and timbers. The timbers are supported by small flat rocks resting upon the ground.

West Parlor

Figures 99- 100 depict the West Parlor as it appeared at the beginning of the architectural investigation. The oldest visible components of the room are the four wall girts and the two west wall posts, which project beyond the plaster walls and ceiling. The summer beam, sills, and east wall posts are hidden from view by recent trim.

The girts consist of hand- hewn pine timbers that are somewhat smoothed on the surfaces that are visible from the room. The south, east, and north girts project approximately 3 inches beyond the plaster walls and ceiling. The lower edges of the girts are relieved with chamfers varying in width from three- quarters to 1 ¼ inches. Only the south girt has lamb's- tongue and diamond stops similar to those in the East Parlor. The west girt has chamfering terminating with single lamb's- tongue stops that begin at each corner and stop just short of the summer beam on either side. The north girt is chamfered from post to post. The east girt is chamfered, but its chamfer is concealed by boards as follows: south of the fireplace by four vertical chamfered and molded- edged boards that have their upper ends sloped to fit the angle of the chamfer; above the fireplace opening by a horizontal board having a half- inch beaded edge; and north of the fireplace opening by plain vertical boards that form the trim of two doorway openings. The south, west, and north girts contain holes 1 inch in diameter drilled through the chamfers opposite the studding and brace mortises. The holes are spaced 2 feet on center for the studding and 5 inches on center for the braces. All pinning holes have oak tree nails cut flush with the interior surface of the girts.

The summer beam, which runs east- west, is cased with boards that are nailed with wire- drawn finish nails, set and puttied. The vertical trim boards measure seven- eighths of an inch thick, and have their lower edges molded with a quarter- inch bead.

Except for the fireplace wall, which has a predominately wooden finish, the south, west, and north walls are lathed and plastered and covered with wallpaper painted white. Projecting 5 inches inward from the west wall at each corner are the wall posts of the original house frame. They have been stripped of all former paint and wallpaper finishes and are now unpainted. The leading edge of each post has a chamfer terminated at both ends by simple lamb's- tongue stops. Both posts display two pinning holes each, 20 inches and 24 inches above the projecting sills, that contain oak tree nails for securing the falling braces to the post.

The posts sit upon 6- inch- high oak foundation sills that project 5 inches into the room. The sills, seen along the south, west, and north walls, are cased along the top with plain boards that are nailed with machine- cut nails. The edges of the sills are cased with tongue- and- groove, 1- by 3- inch oak boards matching those found on the floor. They are nailed with wire- drawn finish nails, set and puttied. A section of the north foundation sill 41 inches long has been cut away at the center of the room at the location of a doorway into the ca.- 1900 addition.

This doorway measures 3 feet 5 inches by 6 feet, and is cased at the jambs above the projecting sill with plain 1- by 4- inch pine stock, while the head is trimmed with plain 1- by 5- inch stock projecting approximately 1 inch beyond the jamb trim. The trim is fastened with wire- drawn finish nails, set and puttied. The opening contains no door.

Near the center of the south wall and west walls are window openings containing double- hung, two- over- two sashes. The openings are cased with plain 1- by 6- inch pine stock nailed with wire- drawn finish nails, set and puttied. Because the west window frame abuts the west girt, the top of this opening is trimmed with a head casing only 1 inch wide. The casings of both windows sit on a stool three- quarters of an inch thick. Below the stool is an apron made from 1- by 4- inch stock that is slightly chamfered on three sides. The sashes are held in place with pine stock measuring one- half by 1 ½ inches, with slightly rounded edges facing the interior of the room. The stops are nailed with wire- drawn finish nails, set and puttied.

The east wall of the West Parlor (fig. 99) has a fireplace opening near the center of the room that contains a cast- iron fire frame set partly into an existing fireplace. The fire frame projects 5 inches into the room, and is surrounded by wooden trim that forms a makeshift mantelpiece. Above the mantelpiece is an opening measuring 38 by 61 inches, which is covered with quarter- inch- thick plasterboard that has been partly vandalized.

North of the fireplace opening are two closets. The closet nearest the fireplace measures 30 inches wide and 65 inches deep. The interior is sheathed in wallboard covered with wallpaper, and the floor is covered with linoleum. The door to this closet is of board- and- batten construction, and measures 2 feet 1 inch by 6 feet; it is made from two boards that are molded and chamfered matching those found south of the fireplace. The horizontal edges of the battens are molded with a quarter- round shape. The boards and battens are hand- planed and nailed together with hand- wrought, T- headed nails. On the batten side of the door can be seen the imprint of an early "arrow- head" thumb latch. The door is hung with two modern solid- pin butt hinges, and held closed with a modern "antique" lift latch. The closet opening is cased at

the jamb, from floor to ceiling, with one board measuring 1 by 4 inches and one board measuring 1 by 5 inches. The space above the doorway is filled in with two horizontal boards.

The north closet in the east wall is 7 inches deep and 32 inches wide. The interior is unfinished. The doorway opening is cased at the jambs, from floor to ceiling, with two boards: one board measuring 1 by 4 inches, the other measuring 1 by 3 ½ inches (cut down to 2 inches at the doorway opening). The space above the doorway is filled in with one horizontal board. The door to the closet is a four- panel door measuring 28 by 76 inches; it probably dates from the mid- 19th century, with through tenons, applied moldings on the room side, and recessed panels on the reverse side. The door is hung on two loose- pin butt hinges measuring 3 by 3 inches with round finials. It has a 3- inch mortise lock operated by a round ceramic doorknob.

The existing doorway between the West Parlor and the hallway is a mid- 20th century introduction. The size of the present opening is slightly larger than the original opening; it extends from the chimney post at the south wall to the stairway, and from the floor to the east girt (a space measuring 2 feet 10 inches by 7 feet 9 inches). The opening is cased on the north side with a 5- inch board, and on the south side with an 8- inch board that extends to the plaster wall concealing the wall post. The head casing is a plain 1- by 5- inch board that projects 1 inch beyond the north casing. All of the casing members are fastened with wire- drawn nails, set and puttied. The existing door measures 1 ½ inches thick by 30 inches wide and 78 inches high, and has five horizontal molded panels on both sides. Each panel measures approximately 10 by 21 inches. The door is hinged with two loose- pin butt hinges measuring 3 by 3 ½ inches. It has a mortise lock operated by cut- glass doorknobs.

The plaster ceiling is divided in half by the exposed summer beam. The existing ceiling consists of an underlayment of “gypsum” lath covered with one coat of gray gypsum plaster that is painted with one coat of white paint with a sanded texture. The plaster abuts the exposed girts at the walls and the trim boards casing the summer beam. The plaster is good condition and has no visible cracks.

The existing floor consists of tongue- and- groove, quarter- sawn oak 1 inch thick and 3 ½ inches wide. The boards are laid parallel to each wall in a descending order, creating a parquetry effect, until they reach the center of the room where the pattern terminates in a small square. At the fireplace opening, the boards are cut around the existing brick hearth. They were originally blind- nailed with machine- cut nails, but now have rows of wire- drawn heads that are surfaced- nailed. The floor displays a bright red paint that is now badly worn.

The subfloor consists of rough- sawn shiplapped boards, 11 ½ inches to 17 inches wide and tapering as much as 1 ½ inches from end to end. Except for occasional patching, the boards run the full length (17 feet 6 inches) of the room. The floorboards are supported by oak log joists that appear to be original. They are small oak trees with the bark left on but flatted on the upper side. Butt diameters range between 7 and 12 inches, and every row has the butts pointing in opposite directions. The joists are severely damaged from insects and fungus; five of the joists are now supported at mid- span by a stringer held up by three cedar posts.

Entry Hall and Stairway

Hall

The entry hall and its staircase occupy an area measuring 7 feet 1 inch by 8 feet 5 inches within the first- story chimney bay. Figures 74- 75 depict this area prior to the architectural investigation.

The floor of the entry hall is 4 feet 1 inch wide, but this dimension is reduced by protrusions at the northwest and northeast corners – the bottom of the stairway, which projects 10 inches by 2 feet 10 inches, and the woodwork of the cellar doorway, which projects 6 inches by 38 inches, respectively. The floor is supported by two full- length oak logs that are flatted on their upper sides to receive the subfloor. The log joists and floorboards can be seen from the cellar bulkhead area. The subfloor boards are a combination of old and new butted boards five-eighths of an inch thick. The older boards are rough, mill- sawn, and up to 18 ½ inches wide, while the newer boards (ca. 1956?) are machine- planed and range from 3 ½ to 7 ½ inches wide. The finish floor consists of 17 butted boards, seven- eighths of an inch thick and ranging in widths from 7 to 9 ½ inches. Five of these boards, three at the west end and two at the east end of the hallway, appear to be much older. They are face- nailed with T- headed, hand- wrought nails and have remnants of brown paint on their exposed surface. Where the ends of these boards can be seen from the cellar stairway, the top surfaces are hand- planed and unpainted. The remaining 12 boards are face- nailed with wire- drawn headed common nails and have surfaces that are machine- planed and unpainted. The floorboards in front of the exterior doorway show considerable wear.

The south wall of the entry hall contains the only exterior doorway opening into the ca.- 1692 house. The interior opening is cased on either side with two boards, sandwiched together to obtain double thickness, that extend from the floor to the overhead girt trim. Each board is a plain, nominal- size board measuring 1 by 6 inches. The girt trim, which serves as the head casing for the doorway opening, consist of a plain soffit board and a molded- edge vertical board. Identical trim boards also case the projecting girt along the west wall. These trim boards are fastened with hand- wrought, T- headed nails, while the doorway trim is held with wire- drawn, headed common nails. The east girt in the hallway is exposed. Its rough, hand- hewn surface is presently painted a bright yellow, along with two plain vertical trim boards in the southeast corner measuring seven- eighths of an inch by 5 ¼ inches. These trim boards are fastened with machine- cut nails. The projecting post in the southwest corner of the hallway is covered with similar plain boards, also fastened with machine- cut nails.

Stairway

The staircase is the most decorative feature in the house. The staircase is of the open- well type, that is, with freestanding newel posts and balustrades. It is a right- handed stairway built against the north wall of the entry hall, and occupies approximately half of the hall area. In construction terms, the stairway can be called a triple- run stairway with two intermediate landings connecting three flights of steps. The two newel posts at the foot of the stairway, and the two newel posts at the head of the stairway, are separated by only one baluster, while the intermediate newel posts are separated by five balusters. In the second story, the balustrade turns along the landing and stops at an engaged newel post against the west wall.

The newel posts are made of plain pine stock about 4 inches square with molded caps. The handrails are molded on both sides and their ends butt against the newel posts where they are mortised, tenoned, and secured with newel post wooden pins. The newel post caps and handrails are molded with a combination of torus and cyma curves separated by fillets.

The ends of the treads and risers are concealed behind a boxing or string board that has its top outer edge molded with a profile identical to the handrail. Like the handrail, the ends of the string boards butt against the newel posts where they are mortised, tenoned, and secured with wooden pins to the handrail. The string board is surmounted by a half- inch- thick cap with bull- nosed or torus- curved edges, to which the lower ends of the balusters are attached.

The balusters are made from pine stock about 1 ¼ inches square, with approximately 6 inches of the square stock left at each end. Next to each square end, the balusters are turned with molding curves in the following order: torus, fillet, scotia, fillet, torus, and fillet. Between the above moldings are long sweeping, vase- like stems with the swelled portion of the stem nearer the top rather than the bottom. The overall length of the balusters used in the stairway balustrade is 22 ¾ inches whereas those used across the landing in the second story measure 24 ¼ inches long, the difference being made up in the shape of the center stem.

In the second story, where the balustrade has pulled apart, one can see the rectangular tenons of the balusters projecting into the handrail mortises. At floor level, each baluster is held in place with two rose- headed, hand- wrought nails driven from the underside of the overhanging floorboards.

There are two 7- inch steps, 34 inches long, at the foot of the stairway, with three risers measuring from the floor 9, 8 ½, and 8 inches high. These steps connect the first story with the lower intermediate landing. The landing measures 30 by 31 inches and is floored with two wide pine boards. From the landing, the stairway turns eastward and rises five steps to a intermediate second landing that measures 31 by 35 inches. This landing is floored with three boards of nearly equal widths. The steps between the landing have treads 9 inches wide and 31 inches long; their risers average 8 ½ inches high. The upper two steps are similar to those in the first story, with treads 7 inches wide but only 32 inches long. The risers measure 9, 8 ½, and 9 inches in height above the landing.

The treads and landing boards vary in thickness between three- quarters of an inch and 1 inch. They are face- nailed with T- headed, hand- wrought nails, set flush with the surface of the wood. There is practically no overhang along the front edge of the treads or platform boards – a quarter- inch at most. The upper edges have a slight chamfer to relieve what would other wise be a square nosing.

The intermediate and upper flight of steps are housed into plain raking skirt boards that miter, at each platform, against plain baseboards measuring 5 ¼ inches high. On the north wall these members are nailed to vertical wall boards, but on the west and east walls they are set within the plasterwork. The treads, risers, platform boards and skirt boards are painted gray to match the color of the balustrade. The condition of the staircase is good, but some wear is beginning to show at the center of the treads.

The wall areas below the stairway are paneled (see fig. 74). The panels are raised and have chamfered edges that fit into rabbets under the molded edges of the stiles and rails. The baseboard here is a separate piece, 3 ¼ inches high, nailed against the lower rail of the paneling. Its top edge is molded with torus and cyma curves. It is assumed that the paneling dates to the construction of the present stairway ca. 1750.

To the right, or east, of the paneled stair wall is the present- day doorway to the west cellar. It contains a four- panel door consisting of molded stiles and rails and raised panels identical to those used on the adjacent wall (fig. 76). The physical evidence indicates that this doorway was created sometime after ca. 1750, and that the stationary wall paneling here was cut out and hinged to serve as the door. The door measures slightly more than three- quarters of an inch thick, 3 feet wide, and 5 feet 7 inches high. It is constructed with mortise and tenon joints that are held together with wooden pins. The upper panels measure 11 by 31 inches, and the lower panels measure 11 by 25 plus inches. The front of the door is hand- planed, but the reverse side is rough- sawn, showing vertical saw markings. The door is hung on one pair of modern, surface- mounted T- strap hinges secured with screws. Earlier nail holes for H- hinges can be seen on the front side, which correspond to clinched (wrought) nail marks found on the back side. The cellar door contains one other piece of hardware, a white ceramic door pull measuring 1 ¼ inches in diameter.

The date of the doorway's creation is unknown. The use of H hinges and wrought nails suggest the late 18th century.³ At that time, the stairway to the west cellar would have been on the other side of the new doorway. The new doorway would thus have provided direct access from the front doorway to the cellar, eliminating the need to disturb occupants of the East Parlor.

Above the doorway are three horizontal boards that finish off the underside of the stairway to the second story. These boards can be seen in figure nos. 75- 75. The center board is canted to follow the angle of the stair stringers, while the upper board is vertical and finishes off the ends of the stringers. These boards are fastened with hand- wrought nails. All of the pieces comprising the staircase that are exposed are hand- planed and painted gray, except the cellar door and the five pieces surrounding it, which are painted black.

The walls of the entry hall and stairway are lath and plastered, except for a short section of the north wall between the steps and the second- story level, which is covered with vertical, tongue- and- groove, machine- planed boards measuring 7 ½ to 10 ½ inches wide. The boards are face- nailed with 8d wire- drawn common nails, and are partially covered with wallpaper.

The ceiling of the entry hall in the first story is covered with a lime, sand, and hair plaster (painted white) that butts against the three wall girts and north trim boards of the stairway.

³ Donald Streeter, "Early American Wrought Iron Hardware: H and HL Hinges, Together with Mention of Dovetails and Cast Iron Butt Hinges," *APT Bulletin*, Vol. V, No. 1, 1973, p. 22.

Former Central Chimney Area

The space formerly occupied by the central chimney in the first story is accessed by entering the cellar doorway and crossing the cellar stairway. This interior space is bounded on the south by the exposed framing of the main stairway, and to the west by the brickwork of the West Parlor chimney. The backsides of partition walls, constructed of 2 by 4 studding covered partly with wallboard and vertical tongue- and- groove boards, enclose the space on the north and east. Another, smaller brick chimney is located in the northeast corner of the space.

The south, stairway wall is covered with a maze of electrical and telephone wires, some connected to the fire- alarm panel mounted on the east wall under the stairway. An abandoned natural- gas supply pipe crosses the space at floor level above the cellar stairway. The floor of the space is covered with a thin slab of concrete that is badly cracked.

The ceiling is formed by the exposed circular- sawn joists and floorboards of the second story. The broad- axed surfaces of the second- story chimney girts are partially visible from this area. Both girts have deep charred holes directly opposite the original fireplace locations, due to former fires.

The base of the west chimney measures 2 feet 3 inches by 4 feet 2 inches. At second- story level, the chimney narrows down to approximately 1 foot 10 inches square, the same size as the east chimney. Both chimneys are constructed of reused bricks, mostly the large 17th- century variety, which suggests that bricks from the old central chimney were reused to build the existing chimneys.

Second Story

The floor plan of the main house at second- story level is almost identical to that of the first story (see fig. 101). It consists of the East and West Chambers of equal size, separated by the chimney bay containing a front hall and the stairway to the south, and a former chimney area and two closets to the north. Access to the attic is by ladder located in the former central- chimney space.

East Chamber

Figures 102- 105 depict the East Chamber prior to the architectural investigation. The visible elements date to several periods in time. The oldest exposed features of the room are the west chimney girt; the north and south plates; the summer beam; the four corner posts; the majority of the floorboards; and probably the lath and plaster ceiling and walls. These features appear to be original to the building, and may date back to ca. 1692.

The north and south plates and the four corner posts are hand- hewn oak timbers that were neither smoothed nor chamfered after the initial field axing. The west chimney girt and summer beam, however, are smoothed and chamfered, and contain end stops identical to those found in the East Parlor. Both plates project 3 inches inward from the plaster walls and 7 inches below

the plaster ceiling. The south plate has six holes 1 inch in diameter, containing tree nails, that occur at each studding location. Except at the center of the room, where the spacing is 4 feet, the pinning holes occur on 2- foot centers. The north plate has seven holes 1 inch in diameter, also containing tree nails, that occur on 2- foot centers opposite the studding. The tree nails are cut flush with the plates.

The west girt projects into the room as far as the plates, but it had no studding or braces, and so no tree nails. The summer beam, running north- south near the center of the room, measures 14 inches wide and projects 4 inches below the plaster ceiling. It is the only structural member having a painted surface (brown); the dark brown color of the other members appears to be a stain, rather than a paint.

The corner posts are splayed in a north and south direction some 40 inches above the floor, widening from a 5- inch room exposure to as much as 10 inches at ceiling level where they support the girts and plates.

The two east corner posts contain two opposing sets of holes 1 inch in diameter with tree nails, while the two west corner posts contain only one pinning hole each, all located approximately 57 inches above the floor. The purpose of the tree nails was to secure the tenons of the falling braces to the posts in the exterior walls. The southeast corner post contains an empty pocket with a pinning hole, suggesting that a mistake was made in locating the falling brace in the east wall. This post also contains holes for a possible iron staple on its west side, 61 inches above the floor. It resembles the iron staple found in the northeast corner post 30 inches above the floor, but driven into the south side of the post.

Except for more recent boards closing the former hearth area, the existing floor in the East Chamber appears to be original to the room. It is a single- thickness floor made from pine boards that run east- west the full length of the room. The boards are three- quarters of an inch thick and grooved along each edge; wooden splines inserted into the grooves of adjacent boards seal the joints.

The boards are surface- nailed to the floor joists with hand- wrought brads, generally two brads per joist, although some of the widest boards have a third brad driven at the center. The brad heads are set flush with the top surface. Several boards contain additional machine- cut and wire- drawn nails, such as the board in the center of the room, which apparently was lifted to permit electrical wiring to be installed in the first story, then railed after the work was completed.

All but two boards taper from end to end, with the average taper measuring 1 ½ inches. Widths of the boards vary between 14 and 17 inches, except for the north board, which is cut to fill in a space of 10 ¾ inches against the wall. There are eight butted boards that close the former hearth location against the west wall. The south board measures 3 ⅞ inches wide by 3 ⅝ inches long, and may indicate an earlier hearth width of 6 feet 9 ¾ inches. The remaining boards close a hearth opening of 2 feet 2 inches by 6 feet 5 ⅞ inches. These boards average about 11 ½ inches wide, except for the two outer boards, which are about 4 inches wide. The boards are surface- nailed with machine- cut nails. The entire chamber floor has been sanded and varnished within the past 20 years.

A modern baseboard painted black surrounds the room, being mitered around each corner post. It consists of a plain, nominal- size board measuring 1 by 4 inches surmounted by a half- inch base molding, all nailed with wire- drawn finish nails.

The plaster ceiling of the East Chamber is divided into two nearly equal sections by the summer beam. The construction of the ceiling is unique in the way that it coves downward along the north and south walls (fig. 62). The coving was formed by springing the hand- rived lath down from the ceiling joists until it wedged against a wood strip nailed to the top rear edge of the plate (fig. 63). The drop in coving is about 4 inches in 2 feet, and covers what otherwise would have been a 4- inch space between the plates and the joists, had the plaster run level.

Above the northeast and southeast corner posts are small triangular spaces left between the plaster coving and posts, which are presently filled with plaster painted brown to match the adjacent woodwork.

The height of the ceiling above the finish floor, except at the coving, averages 7 feet 2 inches. Because of the settlement in the house frame at the southeast corner, the floor and ceiling drop more than 3 inches in this direction. Along the north and south walls where the coving occurs, the drop in plaster is just sufficient to cover the top edge of the plates.

The condition of the plaster ceiling appears to be good; that is, without any serious cracks or defects. The paint covering the ceiling, however, is peeling badly.

The north, east, and south walls of the East Chamber are lath and plastered and presently covered with wallpaper painted yellow. The west wall is covered with plasterboard, also wallpapered and painted yellow. Near the center of the west wall, 24 inches above the floor, is a metal vent pipe and collar measuring 4 inches in diameter and painted black (fig. 102). Below, at baseboard level, is a half- inch gas- supply pipe projecting through the wall.

One of the two closets in the north end of the chimney bay opens to the northwest corner of the East Chamber. It measures 5 feet wide by 7 feet long and has a ceiling height of 6 feet 4 inches. The walls and ceiling of the closet are finished with plasterboard, except for the partition between the closets, which is built with packing- crate material. The interior walls are wallpapered with scraps of paper. The floor is covered with machine- planed pine boards measuring 1 inch thick by 6 inches wide. These run east- west, extending the full length of the chimney bay. At the south end of the closet is a board- and- batten door, 2 feet wide by 6 feet high, hung on one pair of T- strap hinges. The opening provides access into the former central- chimney area and attic via a ladder.

The East Chamber has three doorways: one at either end of the west wall, and one in the north wall. The west doorways lead to the front hall and the northwest closet. Their surrounds are identical except in width and height. Both are cased with plain, nominal- size pine stock measuring 1 by 5 inches, nailed with wire- drawn finish nails, set and puttied. Both doorways have a jamb casing scribed against a flared corner post. Each opening contains a two- panel door hung on one pair of five- knuckle, brass butt hinges having loose pins with flat tips. The south door to the front hall measures $1\frac{3}{8}$ inches thick, 2 feet 6 inches wide, and 6 feet high. At the lock rail there is an "inside" mortise- lock set operated by brass- plated knobs, and a dead bolt operated by a turn knob. In addition, there is a brass rim night latch.

The closet door to the north is identical in appearance to the south door, but measures 2 feet 4 inches wide by 6 feet high. It contains an “inside” latch set, but without the dead bolt.

The doorway opening in the north wall leads to the addition of ca. 1900. It is cased with plain nominal- size pine boards measuring 1 by 5 inches, nailed with wire- drawn finish nails, set and puttied. The opening contains a five- panel door measuring 2 feet 4 inches by 6 feet 2 inches. It is hung on one pair of five- knuckle, brass butt hinges measuring 3 inches by 3 ½ inches, having loose pins with ball tips. The hardware consists of a mortise- latch set operated by brass- plated knobs.

All of the doors and doorway trim facing the East Chamber are presently painted black.

There are two windows in the East Chamber, one in the east wall and one in the south wall. The window in the east wall is located 8 inches north of the wall’s center line and approximately 28 inches above the floor. The head trim extends within 8 inches (+/- 1 inch) of the plaster ceiling, and is covered by a board 3 ½ inch wide that extends 1 ½ inches beyond the trim of the jambs. The overall size of the opening, excluding the head board, measures 3 feet 7 inches wide and 4 feet 3 inches high. The head and jamb boards are set plumb and square to the wall, and form a frame around the interior of the opening. The boards are made from molded- edge pine stock measuring five- eighths of an inch thick; they butt against the exterior window frame, while projecting a fraction of an inch beyond the interior plaster wall. The window stool is made from pine stock seven- eighths of an inch thick, with its outer edge slightly rounded; it is flush with the jamb at each end, but it projects inward slightly more than the jambs. The stool butts against the sill of the exterior plank window frame, and has a half- inch rebate to receive the lower rail of the sashes.

The window frame holds only the upper sashes; the lower sashes are contained by the jamb boards on either side and held in place by applied sash stops. Hardware consists of a painted sash lock mounted to the meeting rails, and two metal brackets attached to the head board for holding a roller shade.

The south window is located in the center of the wall; the summer beam above it is offset approximately 6 inches to the left of center. The overall size of the opening averages 2 feet 10 ¾ inches wide by 4 feet 3 inches high, or 8 inches narrower than the east window. The opening is trimmed in a manner identical to the east window, with jamb and head boards five- eighths of an inch thick, and a stool five- eighths of an inch thick set square and plumb with the wall, all framing the interior of the opening. The head trim touches the plate at the east end, but shows a 1- inch gap at the west end due to the plate being out- of- level. The height of the stool is 25 inches above the floor. There is no apron under the stool, and the window has no hardware. The woodwork of both window openings is painted white.

West Chamber

Figures 106- 109 depict the West Chamber prior to the architectural investigation. Like the East Chamber, it contains features representing several building periods in time. The oldest visible parts of the room are the north and south plates, the summer beam, the west corner posts, the floorboards, and possibly the plaster ceiling. The north, south, and west plaster walls could also be original to ca. 1692.

The north and south plates and the two corner posts are made of hand- hewn oak that received little or no smoothing after the initial field axing. Unlike the East Chamber, the plates and posts are chamfered.

Both plates project 3 inches inward from the plaster walls and 7 inches below the plaster ceiling. The south plate contains six holes 1 inch in diameter, containing tree nails, that occur at each studding. Except near the center of the room, where the pin spacing is 4 feet apart, the pin holes occur on 2- foot centers. The plate is chamfered from each corner toward the center as far as the last pin hole, leaving 4 feet of the plate near the center of the room with a square edge. The north plate contains five (two are missing) visible holes, 1 inch in diameter and containing tree nails, that occur on 2- foot centers opposite the studding. The plate is chamfered from the east corner for a distance of 10 feet where it dies into a wane edge extending to the west corner.

The summer beam measures slightly more than 13 inches wide and projects one- half inch below the plaster ceiling. It is made from hand- planed pine, and has its lower edges chamfered and stopped like the summer in the East Chamber. The beam is twisted from end to end with deep diagonal checks. An early attempt was made to prevent the twisting by inserting wrought- iron dogs at each end of the beam. The north dog is extant but the south dog is missing, leaving only its imprint in the wood. The summer beam has no paint on it, but appears at one time to have been painted.

The corner posts are splayed in a north- south direction. The splay in the southwest post starts approximately 40 inches above the floor and widens from an exposure of 5 ½ inches to 9 inches at plate level. The splay in the northwest post starts at the floor, where 5 ½ inches of the post is exposed, and widens to 8 ¼ inches at plate level. Both posts have chamfers starting at the floor and extending to the tops of the posts, where they are terminated by lamb's- tongue stops.

The corner posts each contain two opposing sets of holes 1 inch in diameter, containing tree nails, located approximately 58 inches above the floor. The purpose of the tree nails was to secure the tenons of the falling braces to the posts in the exterior walls. The corner posts are unpainted.

The existing floor in the West Chamber appears to be original. It is a single- thickness floor made from pine boards that run east- west the full length of the room. The boards are three- quarters of an inch thick and grooved for splines. Each board is face- nailed to the floor joists with hand- wrought brads, generally two brads per joist, set flush with the top surface. The boards average about 17 inches wide, with some boards tapering from end to end as much as 2 inches. The floor has been sanded and varnished within the past 20 years.

A modern baseboard is found on three walls of the room, mitered around the corner posts. It consists of a plain, nominal- size pine board measuring 1 by 6 inches, nailed to the wall with wire- drawn finish nails, set and puttied. The east wall has a nominal- size, 1- by 6- inch baseboard surmounted by a three- quarter- inch molded cap, all nailed with wire- drawn finish nails, set and puttied. The baseboards are painted white.

The plaster ceiling in the West Chamber is divided into two nearly equal sections by the summer beam. Like the East Chamber, the ceiling is coved along the north and south wall, dropping about 4 inches to conceal the top edge of the plates. Above the southwest and northwest corner posts are small triangular spaces left between the plaster coving and the tops of the posts. This

space is filled in with two thin boards (painted brown) above the southwest post, but above the northwest post the space is unfilled except for the coving, which curves down to the back part of the post. The condition of the plaster appears to be good, i.e., without any serious cracks or defects. The paint covering the ceiling, however, is peeling.

The north, south, and west walls of the West Chamber are lath and plastered and presently covered with wallpaper painted green. The east wall is covered with plasterboard that is also wallpapered but painted yellow. Near the baseboard at the center of the east wall, a large chunk of the wallboard has been broken away, revealing a former stove vent and gas- supply pipe. Since no cracks are visible in the wallpaper, it appears that the plaster has no serious defects.

One of the closets in the north end of the chimney bay opens to the northeast corner of the West Chamber. It measures roughly 4 feet 6 inches square and has a ceiling height of 6 feet 4 inches. The walls and ceiling are finished with plasterboard left in its original state. The interior of the doorway opening is cased with plain, unpainted, nominal- size pine boards measuring 1 by 5 inches and nailed with wire- drawn nails. The floorboards are an extension of the boards found in the adjacent closet for the East Chamber.

There are three doorways in the West Chamber: one at either end of the east wall, and one in the center of the north wall. The west- wall doorways lead to the front hall and a northeast closet; the north- wall doorway leads to the addition of ca. 1900. The doorway surrounds are made of plain, nominal- size pine stock measuring 1 by 5 inches, nailed with wire- drawn finish nails, set and puttied. Each of the two east- wall doorways contains a two- panel door hung on one pair of brass butt hinges, measuring 3 by 3 ½ inches and having five knuckles and loose pins with flat tips. Both doors measure 1 ¾ inches thick and 2 feet 6 inches wide. The door to the front hall measures 6 feet 6 inches high, while the closet door measures 5 feet 11 inches high. Both doors have a mortise latch operated by cut- glass knobs. In addition, the hall door is equipped with a hand- operated door bell, a broken cain bolt, and one rim night latch; the closet door has a sliding dead bolt. The lower panel in the south door has been removed. The north- wall doorway has no door. The doorway trim and doors are painted white.

There are two windows in the West Chamber, one in the center of the south wall, and one located 9 inches north of center in the west wall. Both openings are approximately the same width – 3 feet 2 inches, including the jamb casings – and located about 24 inches above the floor. The overall height (4 feet 6 inches) of the cased openings varies only because the west window has a casing covering the head board, and the south window does not, since its head board butts against the plate. The window openings are finished in the same manner as those in the East Chamber, except that the side jambs are slightly splayed and covered with an ogee- molded casing measuring 2 ⅛ inches wide. The head casing above the west window is nailed with T- headed, hand- wrought nails set flush with the surface, while the other casings seem to be nailed with a mixture of machine- cut and wire- drawn nails. Neither window opening has any hardware. The window trim and sashes are painted white.

Front Hall

Figures 110- 111 depict the front hall. It occupies an area within the chimney bay roughly equal to the entry hall in the first story. Running along the south wall of the house, it measures 3 feet wide and connects the two chambers in the second story. It has a single- thickness floor covered

with 10 pine shiplapped boards measuring seven- eighths of an inch thick and between 8 ½ to 11 7/8 inches wide. (The average width is about 10 ¾ inches.) Several of the boards taper from end to end as much as five- eighths of an inch. They are nailed with T- headed, hand- wrought nails set flush with the floor surface. The floor is painted brown, with the paint badly worn near the center of the passage. Nailed over the floorboards along the south wall are two pieces of wood, resembling cleats made of shoe- base molding. These measure three- quarters of an inch thick by 1 ½ inches wide, with a rounded edge; they may have been used to cover a floor crack. These pieces are painted gray.

Along the north edge of the front- hall floor is the balustrade of the stairway. It stops against an engaged newel post that is attached to a casing measuring three- quarters of an inch by 3 inches. The casing extends from the floor to the ceiling and finishes the north side of the doorway opening into the West Chamber. The casing is hand- planed and attached to the wall with T- headed, hand- wrought nails. Connecting this trim with the trim on the West Chamber wall is an 8- inch jamb piece, machine- planed and nailed with machine- cut nails. This board is set on an angle of about 30 degrees, since the two openings are not opposite each other.

Opposite this in the southwest corner of the hall is an exposed, hand- hewn, splayed oak chimney post supporting the plate and the chimney girt, which is exposed for a distance of 30 inches above the doorway. The surface of the post is axed, and the east edge contains a full- length chamfer. The surface of the girt is also axed, but without a chamfer on the east side. Both structural members are stained dark brown.

The southeast corner of the hall does not have a corner post protruding into the space. Instead, the doorway opening adjacent to the post is built out approximately 3 inches into the hall with plasterboard and cased with nominal- size, 1- by 5- inch boards nailed with wire- drawn nails, set and puttied.

The south wall contains one centered window with overall measurements of 2 feet 7 inches by 3 feet 9 inches, including trim. The sashes have no hardware. The top of the window stool is 3 feet above the second floor and has a 1- by 4- inch apron beneath it. The opening is finished off much like the south window in the West Chamber. It has splayed jambs that are covered at the sides with casings measuring 2 1/8 inches wide and having an ogee edge. There is no head board as there is in the West Chamber; instead, the jamb boards and casings butt against the soffit board covering the plate. The plate is covered with a 4- inch- wide soffit board and a vertical board that measures 12 inches wide and has a molded (quarter round) lower edge. Both boards are nailed with T- headed, hand- wrought nails. All of the woodwork in the hall is painted gray.

The walls of the hall above the second floor are all lath and plaster, and are covered with an “Independence Hall Liberty Bell” wallpaper. The ceiling is lath and plaster painted white. The height of the ceiling above the floor is 7 feet 2 5/8 inches.

Former Central Chimney Area

The space formerly occupied by the central chimney in the second story is accessed through the closet off the East Chamber. It now has two smaller chimneys running through it, one at the east wall and one at the west. Both chimneys measure approximately 18 inches square, and are built from large reused bricks laid in a lime, cement, and sand mortar.

The space is L- shaped in plan; it occupies the full width of the chimney bay, or 8 feet. The west wall is 6 feet wide, measuring from the south (stairway) wall to the north closet wall. The east wall measures 2 feet 6 inches between the stairway wall and the chimney, then jogs around the east chimney to a depth of 3 feet 6 inches, where a board- and- batten door leads to the closet.

The walls are constructed from a mixture of building materials. The oldest visible members are the hand- hewn, pine chimney girts along the east and west walls. Equally as old may be the rough- sawn, vertical pine boards exposed for a distance of 30 inches along the east wall. The boards appear to be tongue- and- groove, and are set back 1 inch under the soffit of the east girt, where they are held in place by a wooden cleat nailed to the girt with rose- headed, hand- wrought nails. Although these boards are not now visible from the East Chamber, they must be part of an earlier finish in that room.

The south wall is a stud wall covered on the stairway side with lath and plaster. The four studs and the bottom plate that comprise the structural part of the wall are reused pieces of building material that contain empty mortises and diagonal cuts unrelated to the construction of the existing wall. The east stud consists of two reused pieces that are spliced together. The second stud from the east appears to have been a fence rail. The two west studs are mortised into the plate at floor level, while all the studs are mortised into a 3- by 5- inch joist at attic level. The lath is made from individual pieces of hand- rived oak, 1 ¼ to 3 inches wide. There are two lengths of lath, 5 feet 3 inches and 2 feet 9 inches, meeting on the second stud from the west end. The lath ends extending from the hall ceiling can be seen at joist level. They are identical to the lath found on the wall just described. The plaster used on the walls and ceiling of the hall is a mixture of lime, sand, and hair.

The finish of the west wall within the former central- chimney area is a composite of circular- sawn, machine- planed, and hand- planed boards. One hand- planed board is found against the studding in the southwest corner. It is partly painted and may provide evidence of an earlier mantelpiece in the West Chamber. Between the mantelshelf and the chimney girt are circular- sawn vertical boards; those north of the chimney are covered with wallpaper.

The east wall is constructed of nominal- size, 2- by 4- inch studding, covered on the closet side with plasterboard. Above the plasterboard ceiling of the north closets is an older board ceiling running between the lower edges of the chimney girts. The boards are supported by a single cross member located 30 inches east of the west girt.

Attic

The attic of the original house is reached by a ladder in the former central- chimney area in the second story. It is a single loft space interrupted at the center of the house by an open well containing two brick chimneys.

The floor of the attic is supported by oak joists with butt ends dropped into open cogs cut into the sides of the girts and summer beams approximately 2 feet on center (+/- 2 inches). The joists over the East Chamber and front hall average 2 ¾ inches thick by 5 inches deep, whereas those over the West Chamber average 4 ¾ inches deep.

Roman numerals, carved into the top of each joist and adjoining timber to identify them during the erection of the house frame, are absent from the many joists that have their ends exposed.

The floor of the attic has settled very irregularly due to the sagging and/or twisting of the summer beams. Generally, the summer beams have sagged approximately 3 inches, in the center of each chamber.

The attic floor over the East Chamber and the front hall is of single thickness, made of pine boards that are rough- sawn on the underside and hand- planed on the top surface. The boards are about seven- eighths of an inch thick and have a half- inch- deep groove (five thirty- seconds of an inch wide) along both edges to receive a wooden spline to seal the joint. The widths of the boards vary from 14 ½ to 17 inches, and taper from end to end as much as 1 ¾ inches. All of the floorboards above the East Chamber butt against the roof boards on the north slope, but stop 12 inches short of the south roof boards. The boards are fastened into each floor joist with two rose- headed, hand- wrought nails. Several boards over the hall have a diagonal cut about 1 inch long falling over a floor joist. These boards are loose, and may mark the location of an early stairway to the second story.

The attic floor over the West Chamber is of double thickness. The subfloor is made from plain, rough, mill- sawn pine boards five- eighths of an inch thick, with widths up to 18 inches. The finish floor is made of plain, rough mill- sawn pine boards that are seven- eighths of an inch thick and hand- planed on the upper surface. These boards range in widths from 14 to 20 inches, and taper from end to end as much as 1 ⅛ inches. Both subfloor and finish floorboards are notched around the rafter feet, and they butt against the roof boards on both sides of the attic. Each row consists of two boards fitted together to produce a tight joint against the roof. The double floor is nailed together with rose- headed, hand- wrought nails, two nails per joist.

No whitewash was found on the underside of the floorboards or joists above the chambers or front hall.

Several rose- headed, hand- wrought nails remain along the west side of principal rafter number three, located directly over a cleat nailed to the floor with rose- headed, hand- wrought nails. Apparently a vertical- board partition existed across the attic here at an early date.

In the west gable end, and located 5 feet 6 inches above the attic floor, is a hand- planed shelf board three- quarters of an inch thick, 13 inches wide, and 4 feet 6 inches long. It is nailed to the roof boards at each end with rose- headed, hand- wrought nails. It appears to be a very old feature.

The floor over the north closet is 10 inches below the level of the rest of the attic floor. It is partially constructed of reused boards.

Additions of Circa 1900 and Circa 1956

The additions of ca. 1900 and ca. 1956, built along the north side of the main house, created a U- shaped floor plan with legs of unequal length. The northeast ell of the ca.- 1900 addition is about 6 feet longer than the addition of ca. 1956. Both additions are two stories high. After 1956, a two- story porch was built between the two additions, as seen in figure 31. By 1978, the porch had deteriorated to the point where it had to be removed; this was accomplished by the employees of the Minute Man National Historical Park.

First Story

Ca.- 1900 Addition

The first story of the main part of the ca.- 1900 addition contains three rooms: a west and a center room of about the same size, and a smaller east room (see fig. 95). The northeast ell contains two rooms, and a bathroom and a hallway. This apartment has access to the west cellar via a stairway off the kitchen.

Center Room

Figures 112- 113 depict this room prior to the architectural investigation. It was originally (ca. 1900) a kitchen for one of the two residential units in the house at that time. The center room may have initially included the small room to its east, but the physical evidence indicates that the current division occurred at an early date. When the house became a four- unit apartment building ca. 1956, the room became the kitchen of the first- story east apartment. The room currently measures 12 feet 10 inches by 15 feet 2 ½ inches. The ceiling height varies from 7 feet 0 inches along the south wall to 6 feet 6 inches along the north wall.

The existing floor, which dates to ca. 1956, was installed over the original (ca.- 1900) floor. It consists of 2- by 4- inch joists and sheet plywood covered with linoleum. The raised floor is now level with that of the main house, but in the northeast corner of the room it ramps down 4 inches to join the floor in the rear hallway. The exposed portions of the walls are covered at floor level with a 1- by 4- inch baseboard having a molded cap.

Originally the walls were covered with a wainscoting consisting of vertical, V- jointed boards measuring 1 by 3 ¼ inches by 36 inches high and capped with a molded horizontal board measuring 1 by 3 inches. Above the wainscot the walls and ceiling were covered with circular-sawn lath and mortar containing lime, sand, and hair. About 1956, all of the wainscoting and wall plaster (except on the south wall) was removed and replaced with the existing plasterboard. A built- in base cabinet was constructed along the south wall, and a free- standing metal sink cabinet was set against the north wall at this time. The kitchen stove stood against the center of the west wall.

The center room has one exterior doorway and four interior doorways. The only interior doorway containing a door is that at the head of the cellar stairway. The cellar door has four vertical panels with applied moldings and measures 2 feet 2 inches by 6 feet 2 inches. It is hung on one pair of split- leaf hinges measuring 3 by 3 ½ inches and having loose pins with ball tips. The door has a mortise lock operated by ceramic doorknobs. There is also a brass night latch.

The cellar stairway is contained in a small room measuring 4 feet by 5 feet 5 inches, with a ceiling height of 7 feet 1 inch. The walls and ceiling are lathed and plastered, and there is a baseboard with a molded cap measuring 1 by 14 inches at floor level.

East Room

This room may have been part of the adjacent kitchen ca. 1900; it has the same ceiling heights, floor construction, and wall and ceiling finishes as the kitchen. The room currently measures 8 feet by 12 feet 3 inches. There may have been an earlier partition at the current location of a projecting ceiling beam running north- south at a distance of 5 feet 9 ¾ inches west of the east wall. This beam measures 1 ½ inches by 5 ½ inches. Baseboards and window casings measure 1 by 6 inches, and doorway casings measure 1 by 4 inches. All woodwork is painted black.

West Room and Bathroom

Figure 114 depicts this room prior to the architectural investigation. This room was originally (ca. 1900) a sitting room for Mrs. Butcher. A short hallway in the northeast corner connected the room to the adjacent kitchen. When the house was divided into four apartments ca. 1956, the room became the kitchen for the first- story west apartment. The northeast hall was converted into a modern bathroom (see fig. 95).

The room currently measures 11 feet 2 inches by 12 feet 6 inches. It retains its ca.- 1900 plaster ceiling and wainscot, which consists of vertical V- joint pine boards measuring 1 inch thick by 3 ½ inches wide by 36 inches high. However, the plaster walls above the wainscot were covered with a composition tile- patterned paper ca. 1956. New base and wall cabinets were built against the southwest corner of the room at that time, and a sink cabinet was installed in the northwest corner. The floor is partially covered with sheet linoleum tile, laid over a softwood floor of tongue- and- groove boards measuring 1 by 3 inches. (These boards are visible where the linoleum is missing.) The floor level is even between the West Parlor and this room.

Other changes ca. 1956 included the creation of a doorway in the north wall, to access the two- story addition built at that time. A second, exterior doorway was created in the west wall from an original window.

Ell: Northeast Room

This room was most recently part of the first- story east apartment. It measures 8 feet 5 inches by 12 feet 4 inches, and has a ceiling height of 7 feet 1 inch. The walls and ceiling are covered with painted plasterboard. The floor is original to ca. 1900, consisting of tongue- and- groove pine boards measuring 1 inch thick by 6 feet 1 inch long by 7 inches wide. These are sanded and varnished. The reused ca.- 1850s door into this room has four recessed panels on each side trimmed with an ogee molding, and a mortise lock operated by white ceramic knobs. The door is hung on loose- pin, ca.- 1956 butt hinges.

Ell: Northwest Room

Figure 115 depicts this room prior to the architectural investigation. It also was most recently part of the first- story east apartment. Originally it measured 8 feet 10 ½ inches by 12 feet 4 inches, but its south wall was moved 1 foot 6 inches northward to provide additional space for the adjacent bathroom. The ceiling height measures 6 feet 9 inches (+/- ½ inch). A closet along the south wall measures 2 feet deep by 4 feet 5 inches long. The walls and ceilings of the room are covered with plasterboard; the ceiling is painted, but the walls have wallpaper that is painted over.

The floor, which is original to ca. 1900, consists of yellow- pine, tongue- and- groove floorboards measuring 1 inch thick by 3 ¼ inches wide, which are sanded and varnished. The baseboard is a plain board measuring 1 by 4 inches and painted black. The reused door (ca. 1860s- 70s) between this room and the hallway has four recessed panels with a “Grecian ogee” molding; it is hung on one pair of loose- pin butt hinges measuring 4 by 4 inches. The mortise lock is operated with ceramic knobs.

Ell: Bathroom

This room, in the southwest corner of the ell, was the bathroom for the first- story east apartment. It measures approximately 5 feet 10 inches by 6 feet 5 inches, with a ceiling height of 6 feet 11 ½ inches. A space measuring 1 foot 6 inches deep was taken from the northwest room and added to this room to accommodate a brick flue and a metal shower cabinet. The walls have a composition wainscot 40 inches high capped with a 2 ½- inch horizontal board. Above the wainscot the walls are covered with plasterboard that has been wallpapered. The ceiling is covered with plasterboard that is painted. The floor appears to be covered with a combination of sheet vinyl and tile. The bathroom door is a modern six- panel door with a mortise lock; it is hung on one pair of cast- iron, five- knuckle, solid- pin butt hinges measuring 3 ½ by 4 inches.

Ell: Hall

This space connects the ell rooms to those in the main part of the addition, and provides exterior access as well. It is rectangular in plan, and is divided into two parts – a southeast vestibule measuring 4 feet 0 inches by 4 feet 10 inches, and a center hallway measuring 4 feet 10 inches by 6 feet 10 inches. The east wall of the vestibule contains the exterior doorway. The hallway floor is raised about 2 inches above the original floor, and is partially covered with sheet linoleum. The walls and ceilings are covered with plasterboard that is painted.

Ca.- 1956 Addition

The addition of ca. 1956 had only one room in the first story. It was a bedroom for the first- story west apartment. It measures 11 feet 9 inches by 13 feet 7 inches, and has a ceiling height of 6 feet 8 inches. The floor level is 5 inches higher than that of the adjoining room to the south. The symmetry of the room is broken by a slight offset measuring 3 ½ inches deep by 4 feet long in the southwest corner, and by a closet measuring 1 foot 7 inches deep by 3 feet 8 inches wide along the south end of the east wall.

The walls are finished with a vertical- stripe pattern consisting of alternating bands of blue and red. Wallpaper dating from ca. 1956 can be seen on the walls of the closet. The ceiling is finished with 4- by 8- foot sheets of “Homosote,” a wood- fiber board, that are painted white. The floorboards, which are full length, measure 11 ½ inches wide and were resawn from old beams that were removed from a house demolished in Concord, Massachusetts. The 1- by 5- inch baseboards and doorway and window trim pieces were also cut from reused material. The demolished house in Concord also furnished the four window sashes in this room. They are two single- pane sashes measuring 1 foot 10 inches by 2 feet 9 inches, set in pairs in the north and west walls. All of the sashes have brass sash fasteners that resemble those manufactured in the 1860s.⁴

Second Story

Ca.- 1900 Addition

The second story of the main part of the ca.- 1900 addition contains three rooms: a larger west room, and a center and east room of about the same size (see fig. 101). The ell contains one large northeast room, a bathroom, and a hallway.

Center Room and Bathroom

Figures 116- 117 depict the center room prior to the architectural investigation. It was created ca. 1900 as the kitchen for the second of the two residential units in the house at that time. Ca. 1956 the room was remodeled to serve as the kitchen for the second- story west apartment. This remodeling included the creation of a doorway in the north wall, leading to a hallway along the west side of the ell. From this hallway, residents of the second- story west apartment could access the enclosed north porch built ca. 1956. There is a bathroom off the northeast corner of the room, partitioned out of space in the ell.

The center room currently measures 11 feet 7 inches by 12 feet 8 inches. The ceiling height varies from 6 feet 6 inches along the south wall to 6 feet along the north wall, due to a slope in the ceiling. The ceiling is reinforced at mid- point by a 7- inch- square beam running north- south, which is supported at each end by a post measuring 5 ½ by 7 inches. The existing floor dates to ca. 1956; it is ramped above the ca.- 1900 floor in order to level it. The present floor covering is sheet linoleum. The walls and ceiling are finished with painted plasterboard, except for the west wall, which is covered with a vinyl brick- pattern wallpaper. (A gas kitchen range once stood here). The east wall has a kitchen- sink base cabinet and wall cabinets.

The center room has three interior doorways: one to the ell hallway, one to the northeast bathroom, and one to the adjacent west room. These doorways are identical, each containing a door with five horizontal recessed panels having molded edges, and hung on one pair of loose- pin butt hinges measuring 4 inches square. All doors have mortise locks; two doors are operated by cut- glass knobs, and one by brass knobs.

⁴ Russell and Irwin catalog, 1865, p. 77.

The bathroom measures 5 feet 11 inches by 6 feet 5 inches. Its ceiling height varies from 6 feet 10 inches to 7 feet 1 inch, due to a step- down into the room of 5 inches. An interior window with a single- light sash in the west wall admits borrowed light from the adjacent hallway.

East Room

This room, used most recently as a bedroom for the second- story east apartment, measures 11 feet 3 inches by 12 feet 2 inches, with a ceiling height of 6 feet 1 ½ inches. The floor level is even with that of the East Chamber to the south, but 6 inches higher than the room to the north, located in the ell. The floor consists of smoothed, tongue- and- groove pine boards measuring 6 ½ inches wide. They are finished with a dark stain. The walls are finished with plasterboard that was wallpapered, then painted. The ceilings are finished with painted plasterboard. The baseboard measures 4 ¼ inches high and is surmounted by a quarter- round molding. The doorway leading into the East Chamber has a five- panel door hung on a pair of loose- pin, brass butt hinges measuring 3 by 3 ½ inches having round finials top and bottom. The door, which also has a mortise lock operated by brass- plated knobs, probably dates to ca. 1900. All of the woodwork elements in the room, as well as the north wall, are painted black. The remaining walls are painted a light yellow.

A space measuring 1 foot 10 inches by 2 feet was partitioned off from the northwest corner of the room, to contribute space to the previously described bathroom off the adjacent kitchen.

West Room

This room was most recently used as a bedroom for the second- story west apartment. It measures 12 feet 3 inches by 16 feet, and has a uniform ceiling height of 6 feet 11 inches. A closet measuring 4 feet 1 inch by 7 feet 2 inches is located in the southeast corner of the room and contains, in part, an enclosed brick chimney and five pull- out drawers.

The floor of the room is level with that of the West Chamber, but is 5 inches lower than that of the center room to the east and the bedroom to the north, which is part of the ca.- 1956 addition. The floorboards are tongue- and- groove yellow pine measuring 1 inch thick by 3 ½ inches wide; they are sanded and varnished. A baseboard runs continuously round the room, with an overall measurement of 1 inch by 7 ¼ inches, including a molded cap piece.

The walls and ceiling are finished with 4- by 8- foot sheets of plasterboard. On the ceiling, the joints are covered with strips of wood measuring one- half by 1 ½ inches. The walls and ceiling are painted.

The doors in the doorways to the closet and center room are identical in design and construction. They have five horizontal recessed panels with molded edges on both sides, and mortise locks operated by cut- glass knobs. Both are hung on one pair of loose- pin butt hinges measuring 4 inches square. The door to the West Chamber is missing.

Ell: Northeast Room

This room was outfitted ca. 1956 as a kitchen for the second- story east apartment. It measures roughly 12 feet by 17 feet 3 inches, with a ceiling height of 7 feet 2 ½ inches. A base cabinet is in the northwest corner of the room. South of the cabinet is a broom closet measuring 2 feet by 4 feet that contains a 16- inch- square brick flue. The walls are finished with a mixture of coverings. The predominant wall covering is plasterboard, but “Homosote” board is found above the kitchen sink, in the southeast corner of the room. The ceiling is covered with plasterboard and, like the walls, is painted white. The floor is partially covered with sheet vinyl and tile squares. In areas where the floorboards are exposed, they are seen to be tongue- and- groove pine measuring 1 by 4 ½ inches.

Ell: Bathroom

This room was created by partitioning off the southeast corner of the northwest room in the ell. It measures 6 feet by 6 feet 3 inches. The floor level is 3 inches higher than that of the northwest ell room, making the ceiling height 6 feet 11 inches. The bathroom door is a modern five- panel door hung on 4- inch, loose- pin, brass butt hinges.

Ell: Hall

On the west side of the ell is the previously mentioned hallway that gave both second- story apartments access to the north enclosed porch. The hallway measures 2 feet 8 inches by 11 feet 3 inches, with a ceiling height of 7 feet 2 ½ inches. The hallway extends along the southern two- thirds of the wall. The walls and ceiling are finished with plasterboard and the floor with sheet linoleum. In addition to the west- wall doorway to the enclosed porch, the hallway has two other doorways: an east one leading to the northeast (east- apartment) kitchen, and a south one leading to the center (west- apartment) kitchen. The floor in the hallway is 8 inches lower than the floor in the center room to the south.

Ca.- 1956 Addition

As in the first story, the ca.- 1956 addition has only one room at second- story level. This is a bedroom that measures 11 feet 9 inches by 13 feet 7 inches, with has a uniform ceiling height of 7 feet 6 ½ inches. A jog measuring 1 ½ inches by 3 feet 7 ½ inches projects into the room at the southwest corner, matching that in the room below. A beam measuring 7 inches square and running east- west supports the ceiling at mid- point. On either side of the beam the ceiling is finished with knotty- pine boards 7 ¼ inches wide having V- joints. The walls are finished with vertical knotty- pine boards measuring 7 ¼ inches wide and having V- joints. There is a continuous cove molding at the ceiling and base- shoe at floor level. The floorboards are identical to those in the first- story room below. All the woodwork is stained to achieve a “natural” finish. The south doorway has no evidence that a door was ever hung here.

Attics

There are no attics as such in the rear additions. Because there are no floorboards, the ceiling construction is exposed. The ceiling of the east addition is covered with approximately 4 inches of loose “rock wool” insulation.

Interior Finishes

The following list of interior paint finishes is based upon the architectural investigation of the interior spaces completed in 1979 and 1983.

Original Finishes

Cellar

The stone and brick masonry and the woodwork of the cellar are unpainted.

East Parlor (Kitchen, ca. 1692- ca. 1742)

A portion of the original, unpainted wall sheathing and unpainted sections of the north wall girt, chimney post, and foundation sill survive in the northwest corner of the room, having been protected in the past by a now- missing corner cupboard. It is assumed from this evidence that the original walls, doorway and window openings, mantel surround (if any), girts, summer beam, floorboards, and ceiling plaster were left unpainted until the 18th century.

West Parlor

The finish of the original woodwork in this room is unknown, but it is assumed it was left unpainted.

Entry and Front Halls, First and Second Stories

The original structural members, floorboards, doorway openings, and staircase were probably left unpainted when the house was constructed ca. 1692, based on common practices of the day. The only physical evidence for this is the unpainted cleat found to have been reused in the ceiling of the West- Chamber closet. If this is indeed a piece of the handrail of the ca.- 1692 stairway, the hall woodwork – or at least the original staircase – was not painted during its lifetime.

However, it is possible that the walls and ceiling were whitewashed prior to ca. 1750, when the original main stairway and attic stairway were removed. Whitewash was found at the second-story level on the vertical-board wall that formed the west wall of the original stairway; the finish outlines the underside of the original attic stairway. (Sheet no. 19 shows a conjectural outline of the attic stairway, based upon this evidence.) If the walls were whitewashed, then the ceilings were probably treated in the same manner.

East Chamber

No original paint finishes were identified in this room. The vertical wood paneling on the west fireplace wall has a coat of blue lime-wash applied over a white lime, but this appears to be a late 18th-century wall finish. It is assumed that the woodwork and plaster surfaces in this room were left unpainted ca. 1692.

West Chamber

No original paint was identified in this room. The soffit of the chimney girt remains unpainted, since it was protected first by a plaster cove cornice until the mid-19th century, then afterward by a trim board. If any finish was used in this room during the 17th century, it would have been whitewash.

Finishes in 1775

East Parlor

The writer assumes that by 1775, the lean-to across the north wall of the Smith House had existed for many years, and that the kitchen function originally located in the East Parlor had been moved into the lean-to, where a new fireplace and oven were built. The 17th-century square-backed fireplace in the parlor was altered by filling it in with splayed jambs and an arched fire back. The jamb trim was most likely widened to cover the extra thickness of bricks added for the new firebox, but the mantelshelf and finish above it dating from the original construction may have been retained. The writer further assumes that the original hearth was removed and a new one built to the dimensions of the new fireplace. The void left by reducing the size of the hearth would have been filled in with new floorboards.

Before 1800, and presumably by 1775, a new lath and plaster ceiling was installed in the East Parlor, replacing the one damaged by fire. Upon the completion of the new ceiling, a "china closet" was built in the northwest corner of the room from floor to ceiling. Then, it and the exposed wall sheathing, the plaster ceiling, girts, summer, and corner posts, and probably the doorway frames and doors, were given a coat of whitewash. Later, but also prior to 1800, the wall boards, corner posts, and corner cupboard, and possibly the doorway frames and doors, were given a coat of blue lime-wash.

The floorboards may have been painted red. The window frames and sashes are also conjectured to have been painted red. This is based on a single sash stile found in the attic, tentatively dated to 1775, that has one coat of red paint on its interior surface.

West Parlor

Several layers of yellow lime- wash were found on the original wall plaster, and on the plaster patches at the window openings dating to the mid- 18th century. The original plaster ceiling also displayed several layers of yellow lime- wash, suggesting that the color of the walls and ceiling – including the girts, summer beam, and west corner posts – was yellow in 1775. The finish of the east fireplace wall is less conclusive. Black is the first paint color found on the southeast corner post, the vertical wall boards, the south jamb surviving from the ca.- 1825 mantelshelf surround, and the 17th- century doorway frame in the north wall. Black is also found under the ghost outline of the ca.- 1825 mantelshelf, perhaps indicating its presence before the shelf was erected. Black is the first color found on the foundation sill projecting into the room along the north wall, but it is not found on the ca.- 1825 sill of the west wall, nor on the original foundation sill along the south wall.

Although the evidence is inconclusive, there is a strong possibility that black paint was used on the above- mentioned woodwork, including the doorway frames and doors. Because the original floor is missing, there is no evidence of finish, but it very well may have been painted red. More investigation of reused building materials found in the existing additions might provide additional evidence.

Entry and Front Halls, First and Second Stories

Paint studies indicate that neither oil nor lead- based paints were used in the halls until ca. 1825. Instead, lime- washes were found in the halls matching those used in the East Parlor: a whitewash covered with a blue lime- wash. The writer was unable to determine precisely which surfaces in the halls were covered with the lime- washes. These probably included the plaster walls and ceilings, corner posts, girts, girt trim boards, and doorway frames and doors; neither the staircase nor the floorboards seem to have been painted.

East Chamber

As in the hallways, no oil or lead- based paints were used in the East Chamber before ca. 1825. Whitewash with a coating of blue lime- wash over it still exists on the vertical wall boards covering the west fireplace wall. These lime- washes were later covered with wallpaper, beginning in the last quarter of the 19th century.

West Chamber

As in the East Chamber, no oil or lead- based paints were used in the West Chamber before ca. 1825. The woodwork was probably whitewashed in 1775. Whitewash remains on the vertical wall boards under the present wallpaper; however, there is no way of dating the age of the whitewash. If whitewash was used on the walls of the adjoining hall before ca. 1750, it is likely that it was also used to finish the chamber walls and ceilings as well. The blue- gray paint found as the first coat on the window trim probably dates from ca. 1825.

Attic and Cellar

Both areas are devoid of painted finishes.

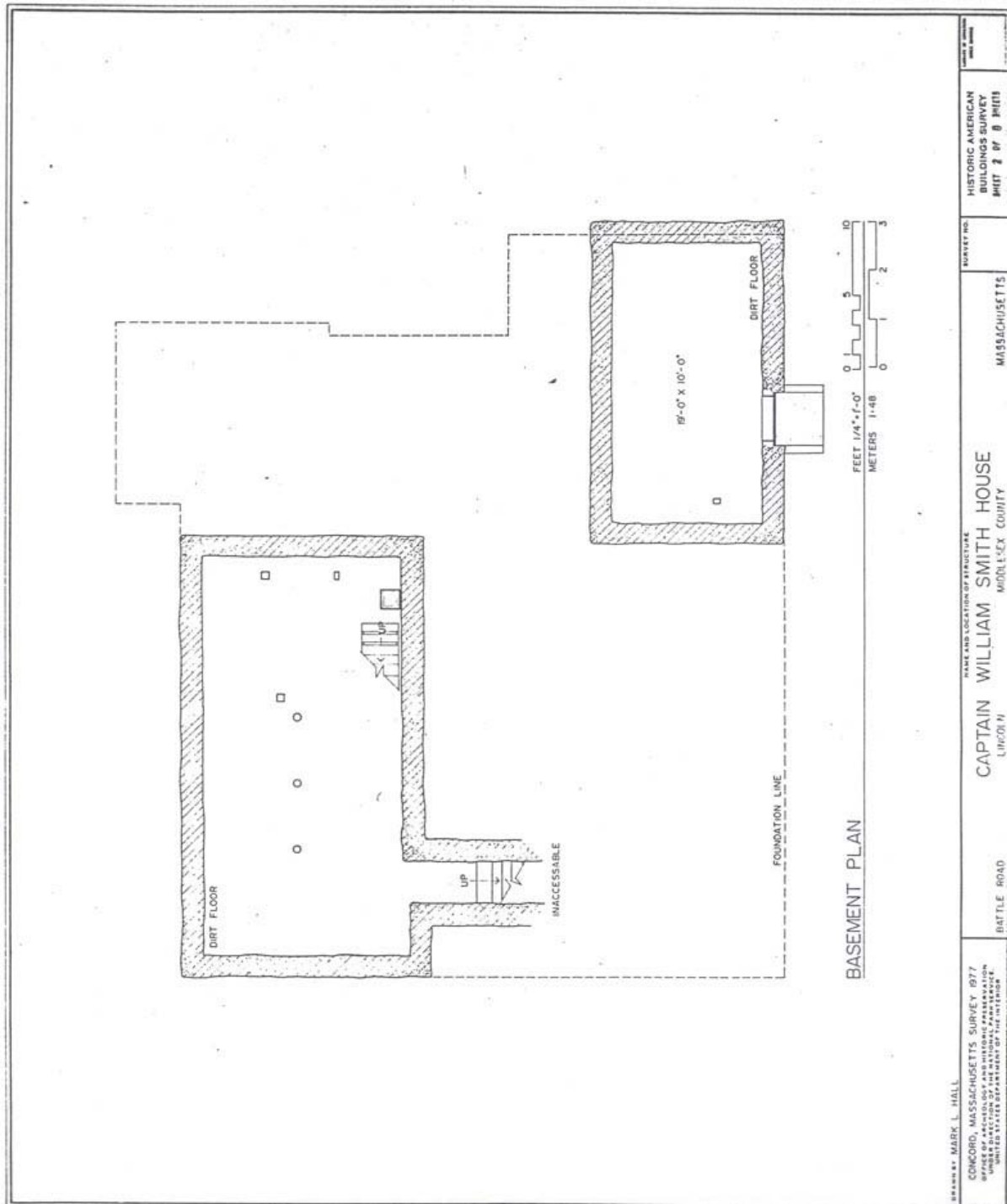


Figure 93. Captain William Smith House: Basement plan (1977).

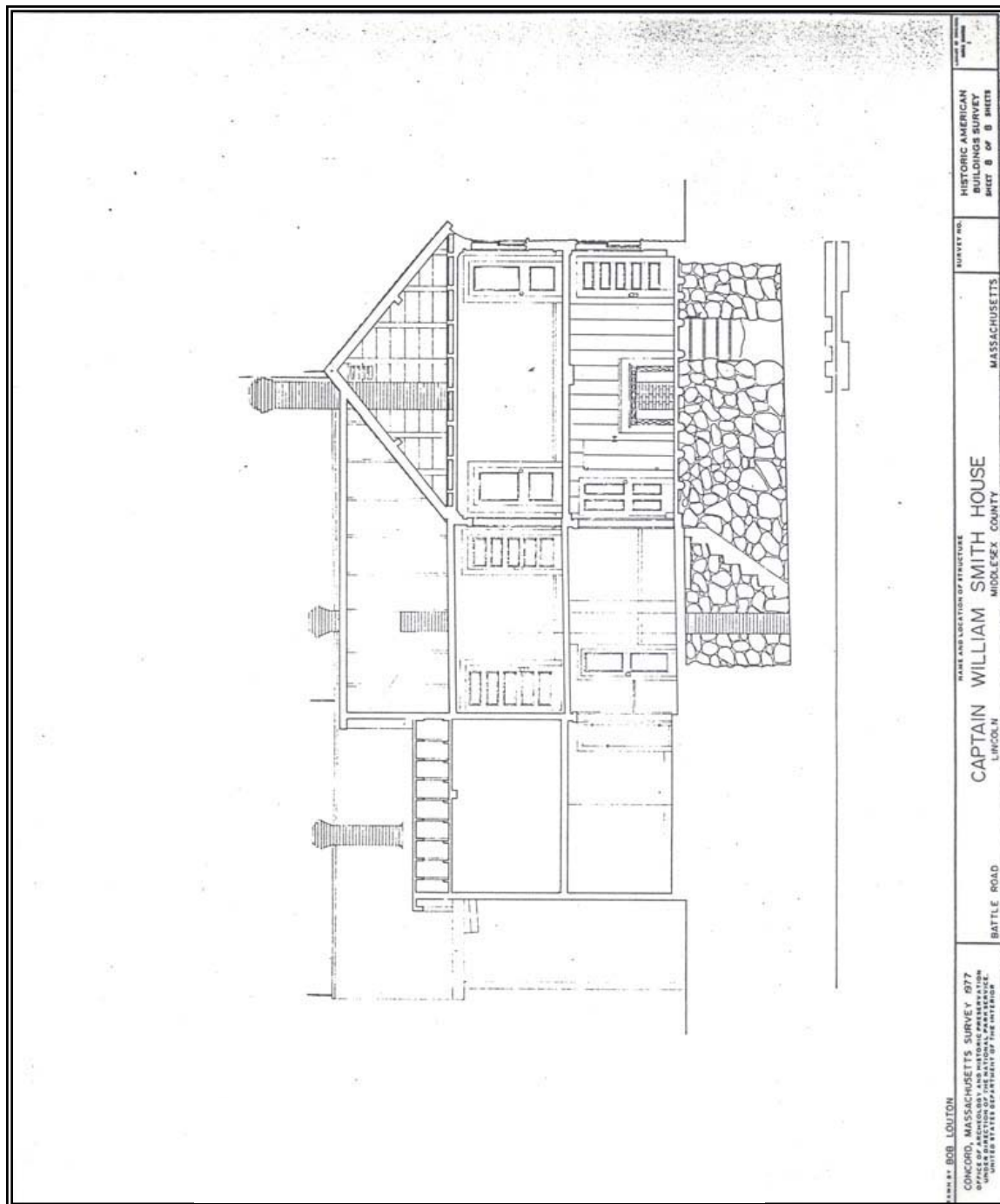


Figure 94. Captain William Smith House: Section (1977).

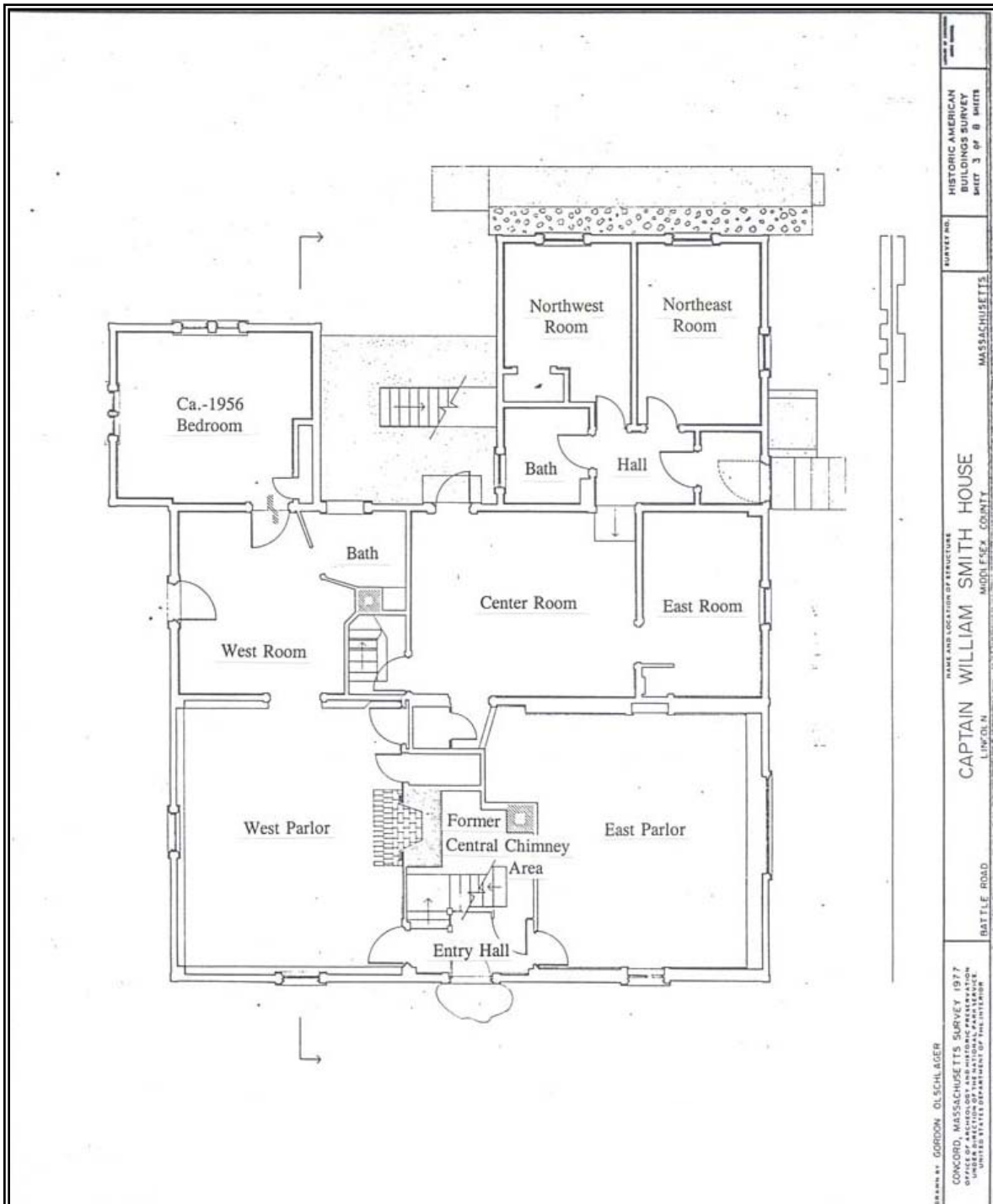


Figure 95. Captain William Smith House: First- floor plan (1977).



Figure 96. Main House: East Parlor, northwest corner prior to architectural investigation.



Figure 97. Main House: East Parlor, northeast corner prior to architectural investigation.



Figure 98. Main House: East Parlor, southeast corner prior to architectural investigation.

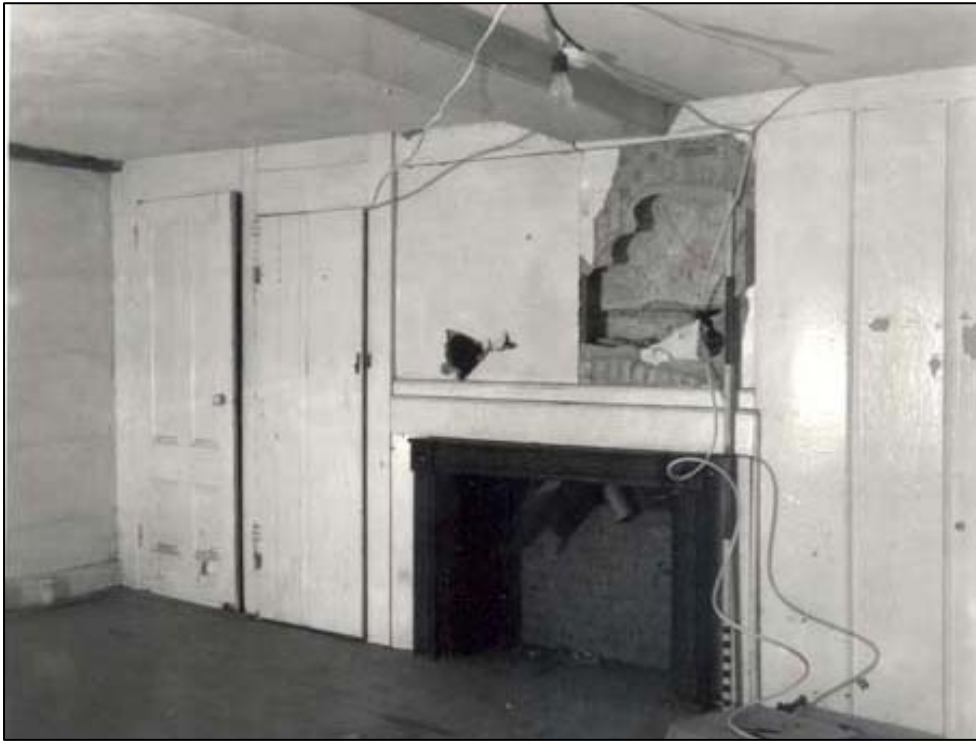


Figure 99. Main House: West Parlor, east wall prior to architectural investigation.

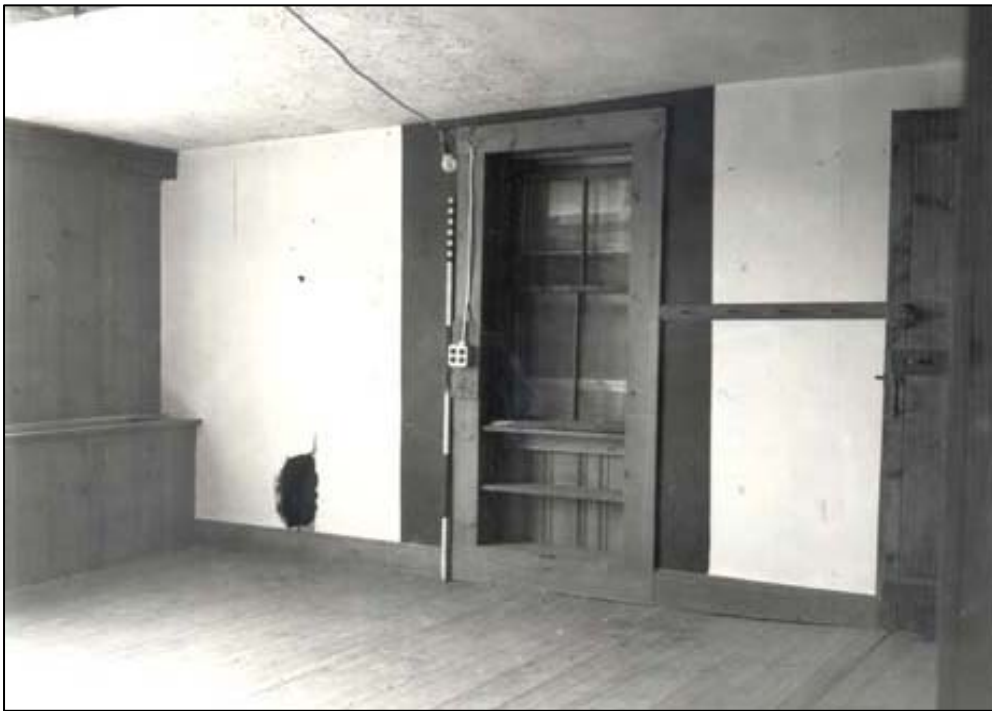


Figure 100. Main House: West Parlor, south wall prior to architectural investigation.

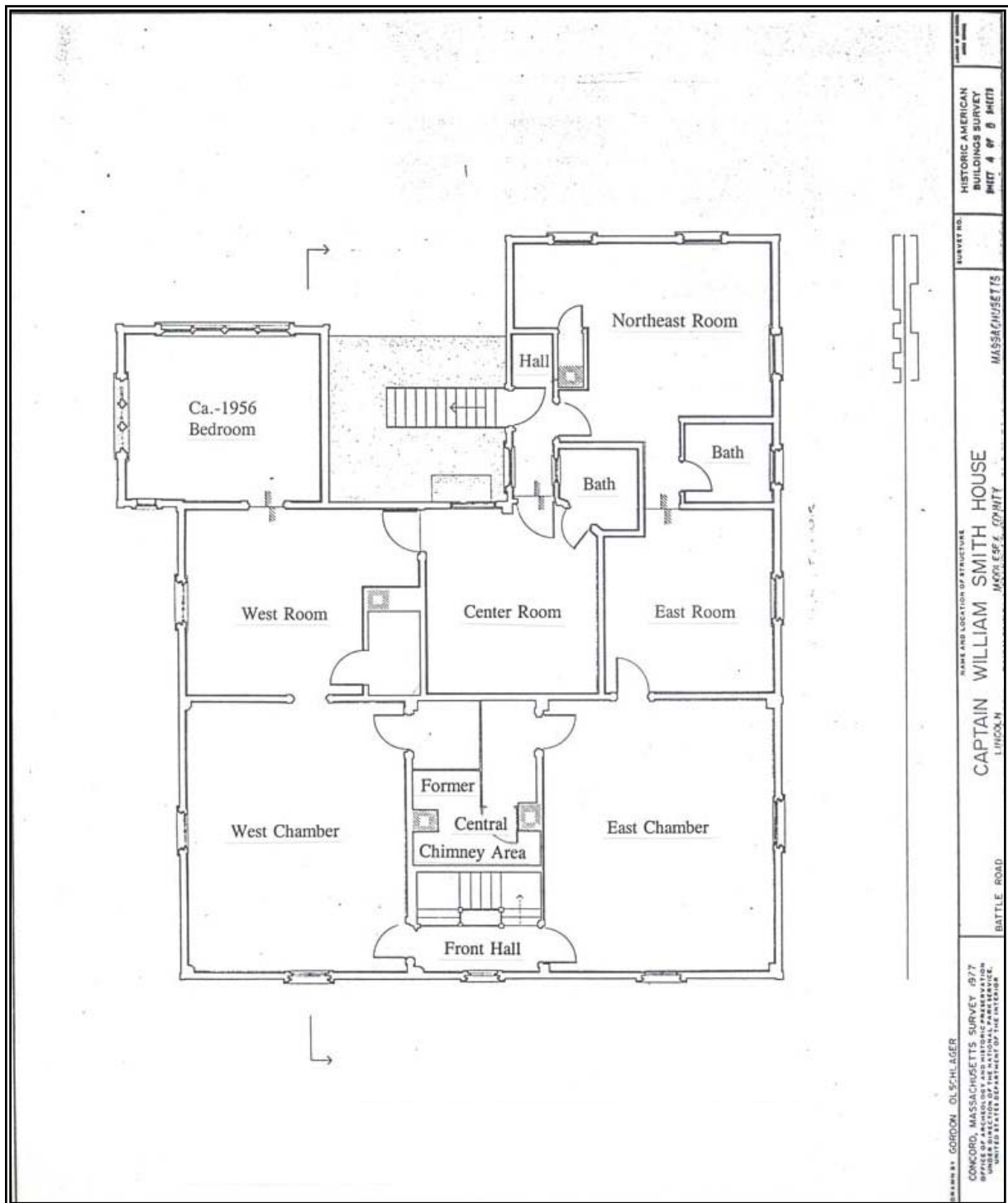


Figure 101. Captain William Smith House: Second- floor plan (1977).



Figure 102. Main House: East Chamber, west wall prior to architectural investigation.



Figure 103. Main House: East Chamber, south wall prior to architectural investigation.



Figure 104. Main House: East Chamber, west- wall doorway to Front Hall.



Figure 105. Main House:
East Chamber, east- wall
window.



Figure 106. Main House: West Chamber, east wall prior to architectural investigation.



Figure 107. Main House: West Chamber, south wall prior to architectural investigation.



Figure 108. Main House: West Chamber, north wall prior to architectural investigation.



Figure 109. Main House: West Chamber, southwest corner prior to architectural investigation.



Figure 110. Main House: View of Front Hall, looking east.



Figure 111. Main House: View of Front Hall, looking west.



Figure 112. Ca.- 1900 Addition: First- story center room, north wall prior to architectural investigation.



Figure 113. Ca.- 1900 Addition: First- story center room, west wall prior to architectural investigation.



Figure 114. Ca.- 1900 Addition: First- story west room, southwest corner prior to architectural investigation.



Figure 115. Ca.- 1900 Addition: First- story northwest room in ell, north wall prior to architectural investigation.



Figure 116. Ca.- 1900 Addition: Second- story center room, northeast corner prior to architectural investigation.



Figure 117. Ca.- 1900 Addition: Second- story center room, northwest corner prior to architectural investigation.

UTILITY SYSTEMS

Heating System

Natural gas was installed underground to the Smith House about 1956. This service was disconnected at Virginia Road in 1975. The existing service is no longer usable, according to a company employee who handles new accounts.

Space heaters fired by natural gas were used in each room for heating purposes. Low- pressure gas was furnished throughout the house in half- inch iron pipes. In addition, the West Parlor had a workable fireplace. By the time the Park Service acquired the house in 1975, all of the space heaters had been removed.

Electrical System

The electrical service was probably installed around 1927, the year electricity was installed in the Hartwell Tavern. Service is furnished by the Boston Edison Company on aerial wires running from Virginia Road and attached to the southwest corner of the house, where an entrance cable drops to the foundation and enters the cellar. Here it is connected to a fuse- and main- line switch box. In place of the house's first circuits, which have been disconnected, new "Romex" cables attached to electric bulbs and convenience outlets were installed in 1980 in the first and second stories as temporary service during the architectural investigation. Most of the existing lighting fixtures were installed ca. 1956.

Plumbing System

The house is connected to the Town of Lincoln water supply. Water has been shut off since 1975. The nearest fire hydrant is located at Virginia Road. An abandoned rock- lined well is located about 30 feet east of the house.

Fire- Detection System

The fire- detection system at the Smith House is connected to the park's master box fire- alarm system, which in turn is relayed to the Lincoln Fire Department via a red- colored aerial cable. The system was installed by the park on a temporary basis and consists of smoke detectors, an exterior perimeter "Protectowire," and an outside warning horn, wired to an automatic dialer.

PART 5.

PROPOSED TREATMENT AND USE

By Orville W. Carroll

The following recommendations are based on the assumption that the Captain William Smith House will be restored to its appearance on April 19, 1775 – the general theme of Minute Man National Historical Park. However, the retention of compatible architectural details from somewhat later periods would be commendable from a preservationist’s point of view. These recommendations include the retention of such details. The recommendations are depicted in graphic format as restoration drawings in Appendix I.

EXTERIOR ELEMENTS

Demolition and Removal

Remove the additions of circa 1900 and circa 1956; salvage building materials. Fill in the additions' cellars, leaving the ca.- 1825 stone foundation walls intact.

Remove the following fabric: clapboards (ca. 1956), verge and soffit boards (ca. 1825), corner boards (ca. 1825 and ca. 1956), exterior doorway surrounds and doors (ca. 1956), first- story window frames and sashes (ca. 1956), second- story window sashes (ca. 1900), attic vents (ca. 1956), and the modern studding and sill from the south wall of the first- story chimney bay (ca. 1930). Salvage building materials.

Remove lightning- arrestor system from roof.

Remove chimneys (ca. 1910); salvage original ca. 1692 bricks for reuse.

Remove asphalt roofing (ca. 1956); remove rotted roof boards.

Restoration and Reconstruction

Main House: Repairs and Restoration

Restore new granite underpinning in south chimney bay; replace missing stone underpinning along north wall, but provide for ventilation. Repoint existing stone joints.

Repair framework as follows: consolidate deteriorated members with epoxy and/or wood replacement.

Replace missing frame members with new material.

Repair roof and wall boards; insulate walls.

Remove modern crown molding at west end of south eave, and replace with new molding made to match existing original pieces.

Remove ca.- 1825 plasterwork at both ends of the south cornice, and replace with new lath and plaster. Repair plaster cornice where needed.

Remove sill of second- story window in east wall, and replace with new sill made to match existing sills of second- story windows in south wall.

Remove paint from frames of second- story windows; remove paint from bed molding, fascia, and crown molding along south cornice. Renail where needed.

Restore attic belt boards and end boards of south cornice at each gable end.

Fabricate and install new frames and hoods for windows in the gable ends, and for all first- story windows in the south, east, and west walls; spike to studding with handmade nails.

Fabricate and install new window sashes throughout; use antique glass.

Restore doorway in south wall as follows: fabricate new frontispiece, transom sash, and door. Install period hardware.

Install new corner boards.

Install new clapboards as follows: rive and smooth new white- pine clapboards in lengths not to exceed 4 feet 6 inches. Clapboards are to be nailed over the wall boards and into the studding using the spacing and nailing pattern determined from the architectural investigation. The ends of the clapboards are to be lapped in the traditional manner. Nail with new wrought nails matching those found in the wall boards (ca. 1750).

Install new soffit boards, verge boards, and verge board trim on the gable ends.

Build a new chimney above attic level using 17th- century bricks salvaged from removed chimneys. Provide for ventilation shafts and flue for one working fireplace. Cap top of chimney.

Install new wood shingle roof.

Apply water- repellent coating to shingled roof, clapboards, and brick chimney after work is completed.

Paint wooden trim with red iron- oxide paint the following: the window frames [and sashes?], the south doorway and its door, the south cornice, the belt boards, the corner boards, and the verge boards and trim.

Ca.- 1730 Lean- to: Reconstruction

Build new fieldstone foundation; treat soil for insect control.

Build new framework for lean- to, including new sills, joists, posts, studding, braces, plates, and rafters. Use studding salvaged from additions of ca. 1900. Use pressure- treated lumber whenever possible.

Sheath outer walls and roof with boards salvaged from the additions of ca. 1900.

Fabricate and install new window frames and hoods; spike to studding with wrought nails.

Fabricate and install new window sashes throughout; use “antique” glass.

Fabricate and install new doorway and door in east wall; install reproduction hardware.

Install new corner boards.

Rive and smooth new white- pine clapboards; apply to wall as recommended for original house.

Install new wood shingle roof.

Paint wooden trim with red iron- oxide paint the following: the window frames and sashes, the east doorway and its door, and the corner boards.

Apply water- repellent coating to clapboards and shingled roof after completion.

Install new stone steps at east doorway.

INTERIOR ELEMENTS

Demolition and Removal

Main House

Cellar

Remove gas pipes, electrical wiring, chimney base, and rear stairway.

East Parlor

Remove entire floor structure (ca. 1910- 1956), gypsum wallboard (ca. 1956), wall studs and vertical wall boards (ca. 1910- 1956), doorway trim and doors (ca. 1956), closets (ca. 1956), shelves in ca.- 1730 north- wall doorway, window trim (ca. 1956), and ceiling molding (ca. 1956). Salvage building materials.

West Parlor

Close up doorway in center of north wall (ca. 1900).

Remove fire frame (ca. 1956?), fireplace and hearth (ca. 1910), oak flooring (ca. 1910), sill boards (ca. 1910 or earlier), and doorway frames and doors installed after 1900. Remove window trim (ca. 1910), wallpaper (ca. 1956), plaster ceiling, and summer- beam trim (pre- 1956), and strip paint from woodwork. Salvage building materials.

Entry Hall (First Story)

Remove floorboards (ca. 1956), lath and plaster from south wall (ca. 1910), vertical boards from north wall (ca. 1910), doorway trim (ca. 1910- 1956), and wallpaper (ca. 1956); strip paint from woodwork.

East Chamber

Close up doorway in center of north wall (ca. 1922); remove doorway frames and doors (ca. 1921- 1956), baseboard (ca. 1956), plasterboard from west wall (ca. 1956), infill boards from fireplace opening, and wallpaper (ca. 1956); strip paint from woodwork.

West Chamber

Close up doorway in center of north wall (ca. 1922); remove other doorway frames and doors (ca. 1956), infill boards from fireplace opening (ca. 1910), baseboard (ca. 1956), and wallpaper (ca. 1956).

Front Hall (Second Story)

Remove doorway trim (ca. 1956), wallpaper (ca. 1956); strip paint from stairway.

Chimney Bay, First and Second Stories

Remove chimneys and salvage bricks; remove electrical and telephone wiring, closets and floors (ca. 1910- 1956), gas pipes; remove concrete slab in first story (ca. 1910).

Restoration and Reconstruction

Main House: Repair and Restoration

General Work

Repair deteriorated framework throughout the house as follows: consolidate with epoxy and/or wooden replacement parts.

Repair walls and ceilings in first and second stories as follows: replace missing members of house frame and missing sections of lath and plaster, and consolidate existing plaster.

Cellar

Repoint stone and brickwork where needed.

Fabricate and install new window frame and sashes in south wall.

Repair cellar stairway.

Consolidate original log joists with epoxy injection.

Reinforce log joists with additional pressure- treated material.

East Parlor

Sift soil below the floor for artifacts, then treat soil for insect control; insulate under floorboards.

Reconstruct floor as follows: examine subflooring of existing floor to determine if these boards were once the finish floor in this room; reuse if possible, or use as a model for milling new finish floorboards. If no new information is obtained, lay new finish floor over the existing subfloor as follows: use wide, tapered, plain, red or white pine boards having a hand- planed surface, running the full length of the room and nailed with T- headed wrought nails, two per joist.

Remove lath and plaster from north wall; salvage wall lath and nails from ca.- 1800 period. Replace missing section of oak foundation sill.

Restore horizontal shiplap boards on north, east, and south walls; nail with T- headed wrought nails.

Install new doorway and window trim; fabricate new board- and- batten doors; install reproduction hardware. Replace pine thresholds.

Reconstruct west wall with new doorway to entry hall and cellar; fabricate and install new corner cupboard at north end of room. Build new fireplace, hearth, and surround. Use bricks salvaged from removed chimneys; install reproduction crane.

Remove excess coatings from plaster ceiling.

Apply finishes according to the recommendations in Appendix J.

West Parlor

Restore north wall as follows: replace section of missing oak foundation sill, and repair plaster wall, where ca.- 1900 doorway was removed; reopen ca.- 1730 doorway at east end of north wall, and fabricate new board- and- batten door for it.

Lay new finish floor over the existing subfloor as follows: use wide, tapered, plain, red or white pine boards having a hand- planed surface, running the full length of the room and nailed with T- headed wrought nails, two per joist.

Install new window and doorway trim; fabricate new board- and- batten doors; install reproduction hardware.

Build new fireplace and hearth using salvaged bricks and/or new tiles; install reproduction crane.

Replace lath and plaster ceiling.

Apply finishes according to the recommendations in Appendix J.

Entry Hall (First Story)

Reinforce floor joists.

Replace missing floorboards with material to match existing boards dating from ca. 1750.

Repair door to existing cellar stairway, and return it to its original location as part of a solid panel wall under the main stairway.

Install new doorway frames and trim; repair north trim of doorway to West Parlor; restore pine thresholds.

Replaster north wall above main stairway, all the way to the level of the second floor; replaster south wall of hallway.

Apply finishes according to the recommendations in Appendix J.

East Chamber

Remove varnish from floorboards; repair where necessary.

Repair hearth boards.

Install new window trim; fasten with T- headed wrought nails.

Repair north wall where doorway was removed.

Install new doorway frames and trim; fabricate new board- and- batten doors; install reproduction hardware; restore pine thresholds.

Repair vertical boards in west wall; fabricate and install new bolection molding surrounding the fireplace opening, and fasten with T- headed wrought nails.

Remove paint from the woodwork.

Apply finishes according to the recommendations in Appendix J.

West Chamber

Remove varnish from floorboards; repair where necessary.

Install new window trim; use existing ogee backband from ca. 1750; nail with T- headed wrought nails.

Repair north wall where doorway was removed.

Install new doorway frames and trim; fabricate new board- and- batten doors; install reproduction hardware; restore pine thresholds.

Repair existing mantelshelf; replace missing jamb, head trim, and corner molding below mantel.

Rebuild fireplace using bricks salvaged from removed chimneys.

Apply paint according to the recommendations in Appendix J.

Front Hall (Second Story)

Install new doorway frames and trim. Install new sash stops.

Apply finishes according to the recommendations in Appendix J.

Chimney Bay, First and Second Stories

Build concrete- block support for fireplaces in first and second stories, and for new chimney above the roof. Install metal duct work within the chimney for ventilating the interior of the house. Provide a space for a metal flue to vent a future gas furnace. Provide a metal flue for one operating kitchen fireplace in the lean- to.

Rebuild fireplaces in first and second stories according to a design used in 1775.

Re- create original doorway to lean- to at west end of chimney bay, second story, as follows: build doorway opening, install new doorway frame and trim, fabricate new board- and- batten door, and install reproduction hardware.

Rebuild floors for north closets in second story.

Build new closets for West Parlor and East and West Chambers. Build new stairway to attic in closet off East Chamber.

Ca.- 1730 Lean- to: Reconstruction

First Story

Sift soil under proposed floor area for artifacts; treat soil for insect control.

Build new floor system.

Partition off west room; build new stairways to cellar and second story.

Install new doorway frames and trim; fabricate new board- and- batten doors; install reproduction hardware; install pine thresholds.

Install feather- edge wall boards on east end of south wall (north wall of original house).

Install new window trim and baseboards.

Build new kitchen fireplace, oven, and ash hole. Reconstruct mantel over fireplace and fireplace surround. Build cupboard above mantel. Build brick hearth; install reproduction crane in fireplace.

Convert west room to employee rest area; install kitchenette and toilet. Connect house drain to existing sewer line.

Second Story

Build new floor system.

Install feather- edge wall boards on entire south wall (north wall of original house).

Install new window trim.

Install a board partition along west side of stairway to first story, to partition off west room; install a new doorway frame with trim and door at the south end of the partition.

Install a handrail along east side of stairway.

Leave walls and ceiling of reconstructed lean- to unfinished.

PROPOSED UTILITIES AND SITE WORK

Electrical System

Remove existing aerial wires; remove two of three existing utility poles belonging jointly to the New England Telephone and Boston Edison companies.

Install 200- ampere electrical service from the remaining utility pole located near North Great Road; place in galvanized steel conduit laid in trench created by the replacement of the old water line (see Plumbing System, below).

Install a new electrical distribution panel and meter in the lean- to.

Install lighting and appliance circuits as needed.

Plumbing System

Excavate and remove existing deteriorated three- quarter- inch copper water pipe extending to the Lincoln town water main in Virginia Road; install new pipe, reusing the same trench.

Connect water supply pipes to plumbing fixtures in staff area in lean- to.

Remove existing house drains and vents, and install new drains and vents for the plumbing fixtures planned for the lean- to.

Install a new sewer line running to an existing sewage collector located northwest of the house; connect new drains and vents to this line.

Telephone Service

Remove existing aerial wire as far back as the existing utility pole near North Great Road.

Install multiple- circuit telephone cable in underground galvanized steel conduit. Use the trench created by the replacement of the old water line (see Plumbing System, above).

Mount telephone junction boxes on new panel board located in the lean- to.

Protection Systems

Fire Detection

Remove existing aerial “FCI” red cable attached to utility poles.

Install FCI cable in proposed telephone conduit; connect to Town of Lincoln Fire Department and NPS.

Remove exterior- mounted Protectowire, and install new Protectowire under sill clapboard.

Remove exterior alarm horn and reinstall in lean- to.

Relocate existing control panel to lean- to.

Relocate existing smoke detectors and rewire with new materials.

Intrusion Protection

Install perimeter intrusion- alarm system (at doorways and windows); connect to Town of Lincoln Police Department and NPS.

Install new entry- control switch on interior wall near the east- wall doorway of the lean- to; mount control panel in lean- to.

Site Work

Well

Remove existing concrete well cover; stabilize stonework of the well; reconstruct conjectural well- head.

Ground Contours

Give high priority to the restoration of the original ground contours, as follows: remove the existing stone and wood retaining walls along the south, east, and north sides of the house, filling in the ca.- 1930 cut with soil until the original ground level is reached; restore the small hillock southeast of the house to its original height, as recalled by the Butcher family.

Landscape

Replant elm trees in their historic locations, and rebuild stone walls as they appear in photographs from the early 20th century.

PART 6.

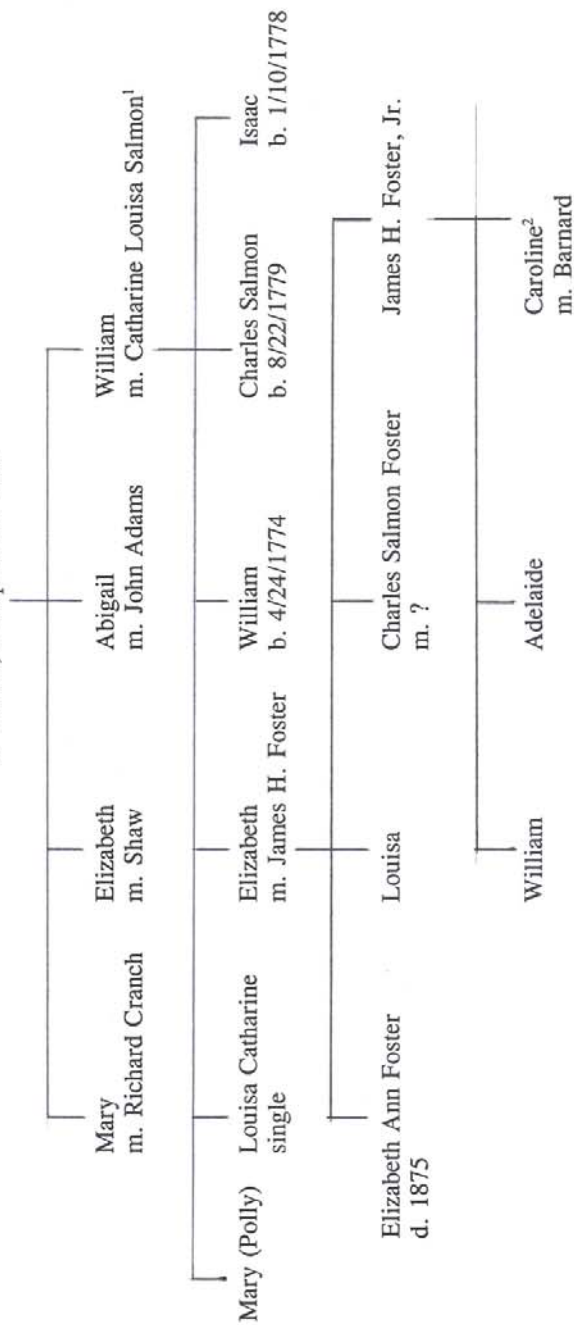
APPENDICES

APPENDIX A.

Genealogies

SMITH FAMILY

Rev. William Smith (Weymouth)
b. 1706/7, d. September 1783

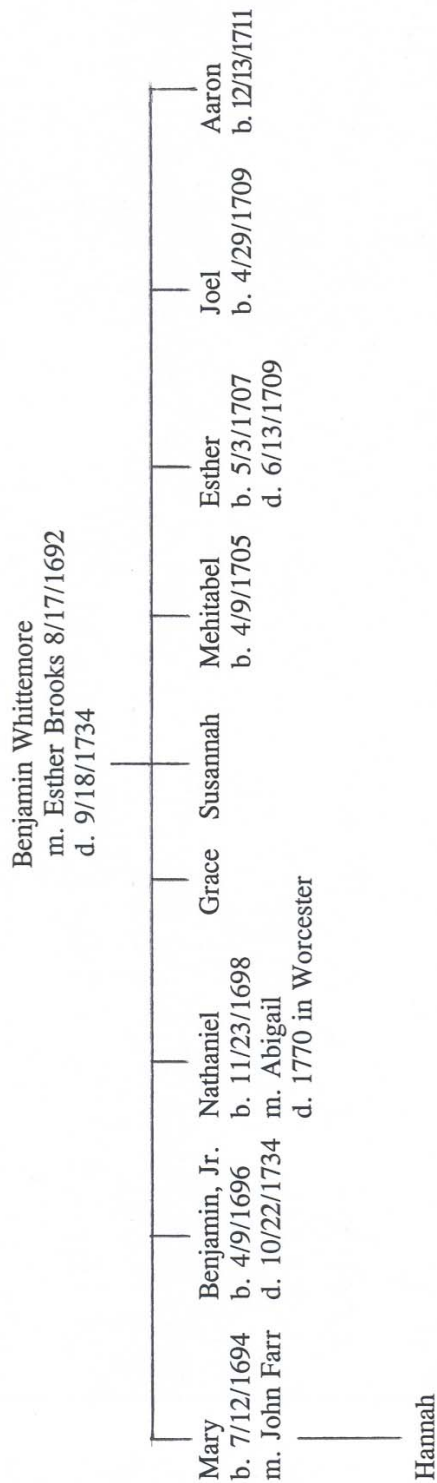


Sources:
 Lincoln Vital Records
 Middlesex Deeds 123:355, Jan. 19, 1797 (Catharine Louisa, Elizabeth, Mary, and William to N. Austin)
 Adams Family correspondence, p. 232.

¹ The First Census of the U.S. in 1790 stated that the Smiths had six children, according to the First Census of the U.S. in 1790. Catharine Louisa Smith was listed as the head of family. No free white males over 16 were listed; the family was recorded as consisting of two boys under 16 and four girls. It appears that the census was wrong, and that there were three girls and three boys.

² Probate of Louisa Catharine Smith refers to her as "daughter of my said nephew," i.e., James H. Foster, Jr. Source: Probate of Louisa C. Smith, Docket 41169, Suffolk County Registry of Probate (Louisa lived in Quincy).

WHITEMORE FAMILY



Source: Concord Vital Records
Mrs. Peg Grason

APPENDIX B.

Tables

- Table 1. Lincoln Assessment Records, 1764- 1790
- Table 2. Smith Farm Valuation, 1774- 1796
- Table 3. Lincoln Assessment Records, 1791- 1816
- Table 4. Invoice Book, Lincoln, 1790- 1841
- Table 5. Federal Direct Tax, 1798
- Table 6. Abel Hartwell's Assessment

Table 1.

५

Table 2.
Smith Farm Valuation, 1774-1796

Occupant	Year	Book	Page	Rolls	Real Estate	Personal Estate	Total
	1771			1			
William Smith	1778	6	6	1	1450	359	
"	1779	7	6	1	1520	481	
"	1780	10	8	1	760	288	1048
	1782						
Catherine L. Smith for Y2 / Aaron Brooks	1784	13	6		362	91	
	1786						
Catherine L. Smith	1788	16	8		362	45	
Catherine L. Smith	1790	19	8		350	61	
Catherine L. Smith for Y2	1792	22	6		166	50	
Catherine L. Smith for Y2	1793	23	4		166	26	
	1794						
	1796						
	1798						
	1800						

Table 3.

[illegible]

Table 4.
Invoice Book, Lincoln, 1790-1841

year	Bk pg	Name	Polis	money & stocks	for sale	Horses	Value	Oven	Value	Cows	3yr sold	2yr sold	1yr sold	Alfalfa	Order	Rye	Barley	Hay	Sheep	Value
1790		C.L. Smith									1 1/2		0							
91	198	C.L. Smith				3					1 1/2		3							
92		C.L. Smith																		
93																				
94																				
95	211	Jones Peirce	1	-	-	1	4	2	13	3	-	3	-	2	240	-	1	-	-	46 17/10
96		W.H. Smith	-	-	-			2												
97																				
99		Caldwell																		
99	254	Caldwell	1			1	40	5	40	6	4	5	-	300	3	5	8		250	
1800																				
1802	266	Caldwell	2			1	30	2	50	7				300	1	10	18		9.18	
1802																				
1803																				
1804																				
1805																				

Table 4 (continued)

Year	Book	Page	Name	dwelling house	value	Barn	Value	Other buildings	Value	Stables	Value	Hayrack	Value	Q. Y. Meadows	Value	Q. Y. Pasture	Value	Unimproved	Value	Value	for opda	Real Estate
1792	21	7	Jonas Perce Junr	1/2 35	1/2 4	-	4	4	4	16	4	16	12 1/2 37	15	45	22	11	22	11	1	160	
"	21	7	Cuthbert Smith	1/2 35	1/2 4	-	4	4	4	16	4	16	12 1/2 38	15	45	22	11	22	11	1	160	

Table 4 (continued)

year	Bk	pr	Name	Polls	money & sheeps	fourty	Horses	Value	Oven	Value	Cows	3yr old	2yr old	1yr old	Advine	.	.	.	Hay	Sheep	Value
1909																					
1910																					
11			Abel Hartwell																		
12																					
13	32	6	Abel Hartwell	1					2.50												
14																					
15																					
16																					
17	27	3	Abel Hartwell	1					2.40	5	1	3			250	1	6				120
18	24	6	Abel Hartwell	1					2.65	5	2	3			120						160
19	29	12	Abel Hartwell	1					2.48	4	5	3	2		300	3	12	10			240
20	27	19	Abel Hartwell	1					2.46	2	55	6	2	-	400	4	10	45			170
21																					
22																					
23																					
24																					
25	24	26	Abel Hartwell	1					2.10	4	90	7	1	-	400	3	0	22			300
26																					

Table 4 (continued)

year	bk	name	polls	money & stocks	farm & trade	horses	Value	own	Value	Cows	3yr old	2yr old	1yr old	Adone	.	.	.	Hay	Sheep	Value
1930																				
31	21		1				1	40	4	7	1	.	.	350	4	4				16
32																				
33																				
34																				
35																				
36																				
37																				
38																				
39																				
40																				
41																				
42																				
43																				
44																				

(Assessment District 8 in the Fifth Division, Middlesex County, line no. 5, p. 693)

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Table 6.

Year	Book	Page	Dwelling house	Barn	Value	Other buildings	Value	Acres of tillage	Value	Acres of English mowing	Value	Acres of meadow mowing	Value	Acres of meadow	Value	Acres of pasture	Value	Acres of woodland	Value	Acres of improved land	Value	Acres of unimproved land	Value	unimproved bottom land	Value	no data
1811	28	36	1																							
1821	28	6	1	4	0	1	1	0	0	7	7	25	10			40	25	18 ⁰	14	4	65					
1831	28	20	1	100	1	140	-	0	100	7	140	25	250			60	1000	25	920	20	6				13980	

20028 "The following pages contain several articles of real estate and their value at 6 per cent except woodland and unimproved land which was taken at two percent"

CT 18212

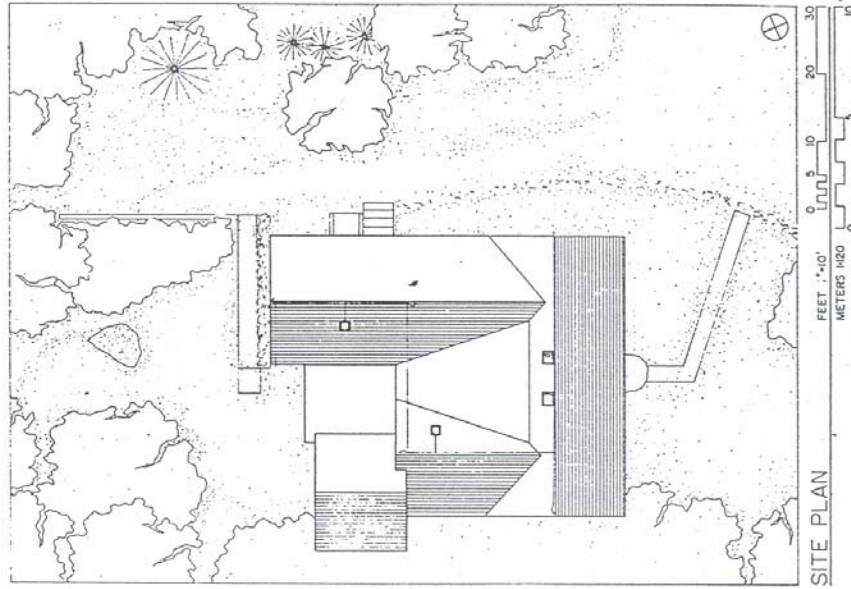
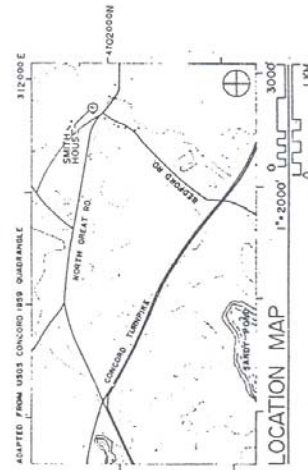
APPENDIX C.

Measured Drawings, Historic American Buildings Survey

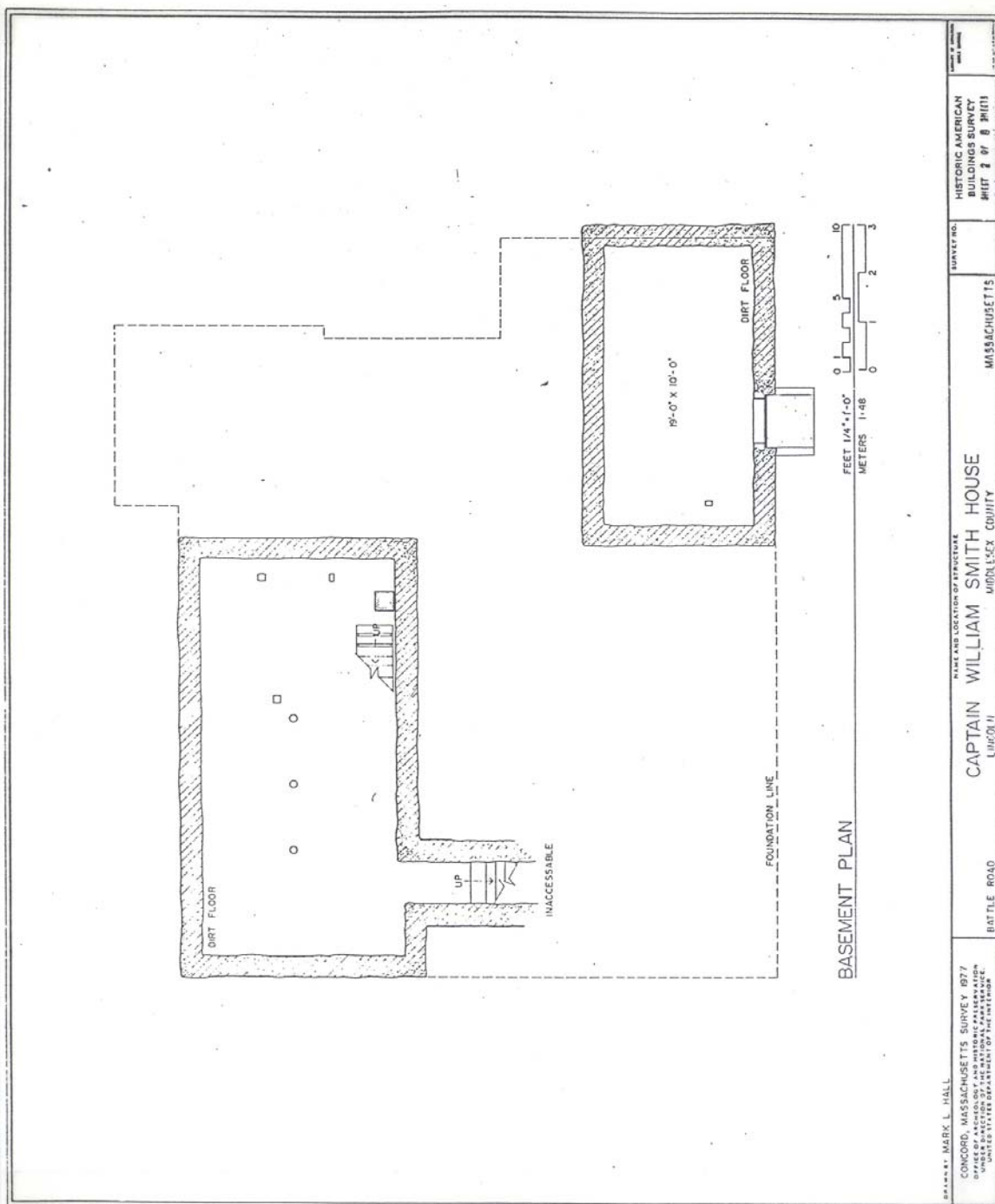
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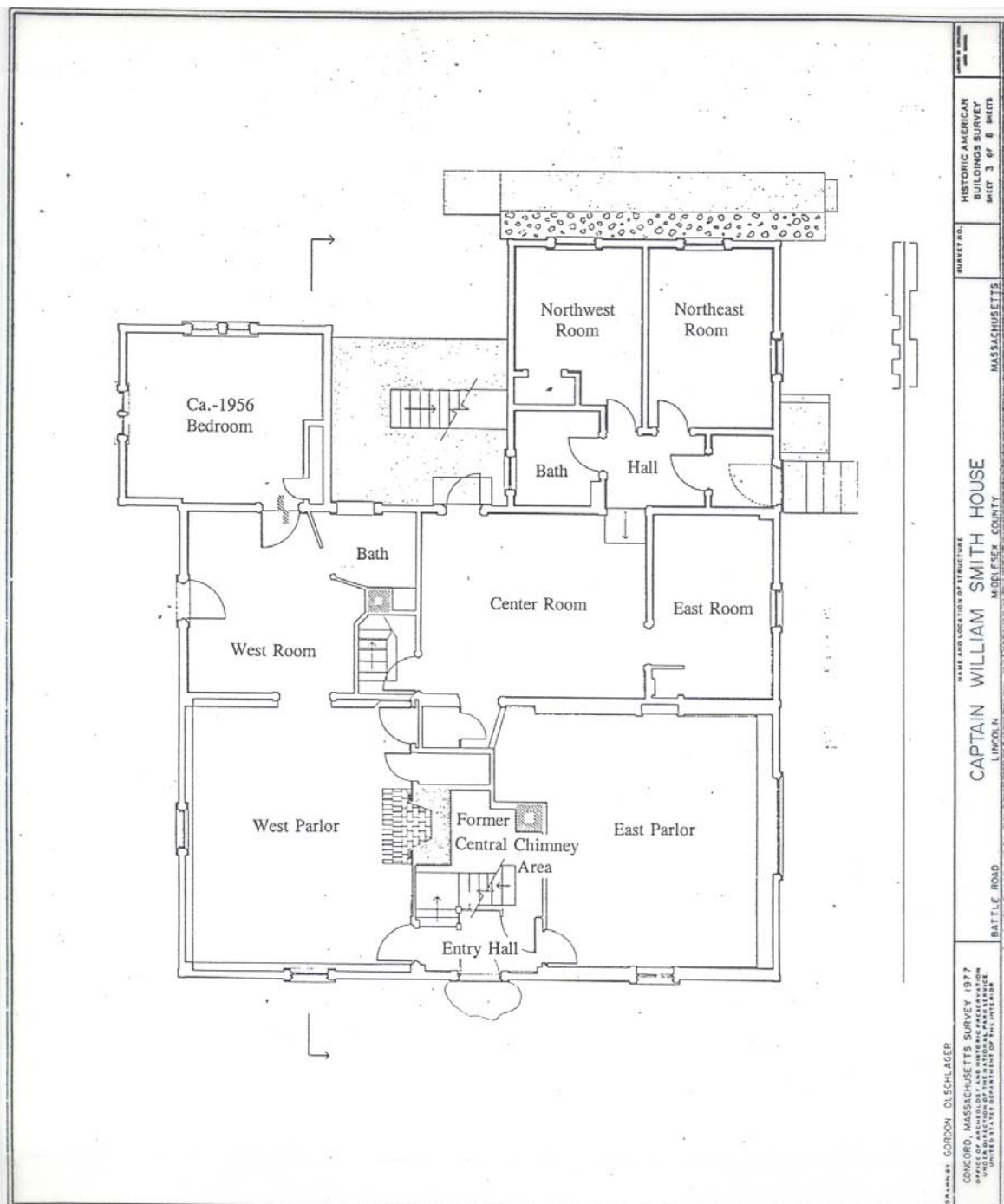
CAPTAIN SMITH HOUSE

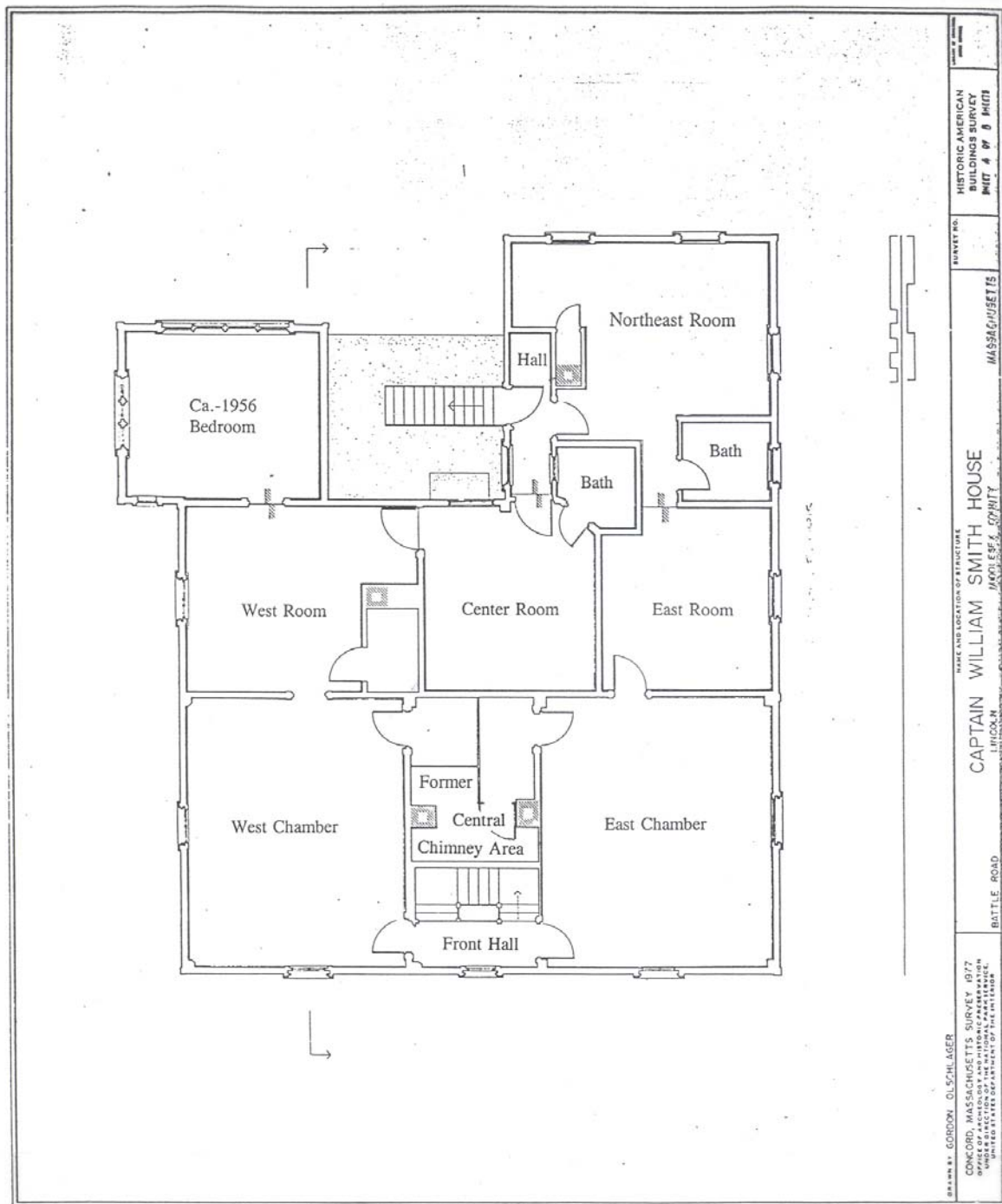
THIS PROJECT WAS UNDERTAKEN BY THE HISTORIC AMERICAN BUILDINGS SURVEY IN COOPERATION WITH THE NATIONAL PARK SERVICE. MEASURED AND DRAWN DURING THE SUMMER OF 1977 UNDER THE DIRECTION OF JOHN POPPELIERS, CHIEF OF H.A.B.S. AND MARK L. HALL (HARVARD UNIVERSITY), PROJECT SUPERVISOR, BY BOB LOUTON (UNIVERSITY OF ARKANSAS) AND GORDON OLSCHLAGER (NORTH DAKOTA STATE UNIVERSITY), AT THE MINUTE MAN NATIONAL HISTORICAL PARK.

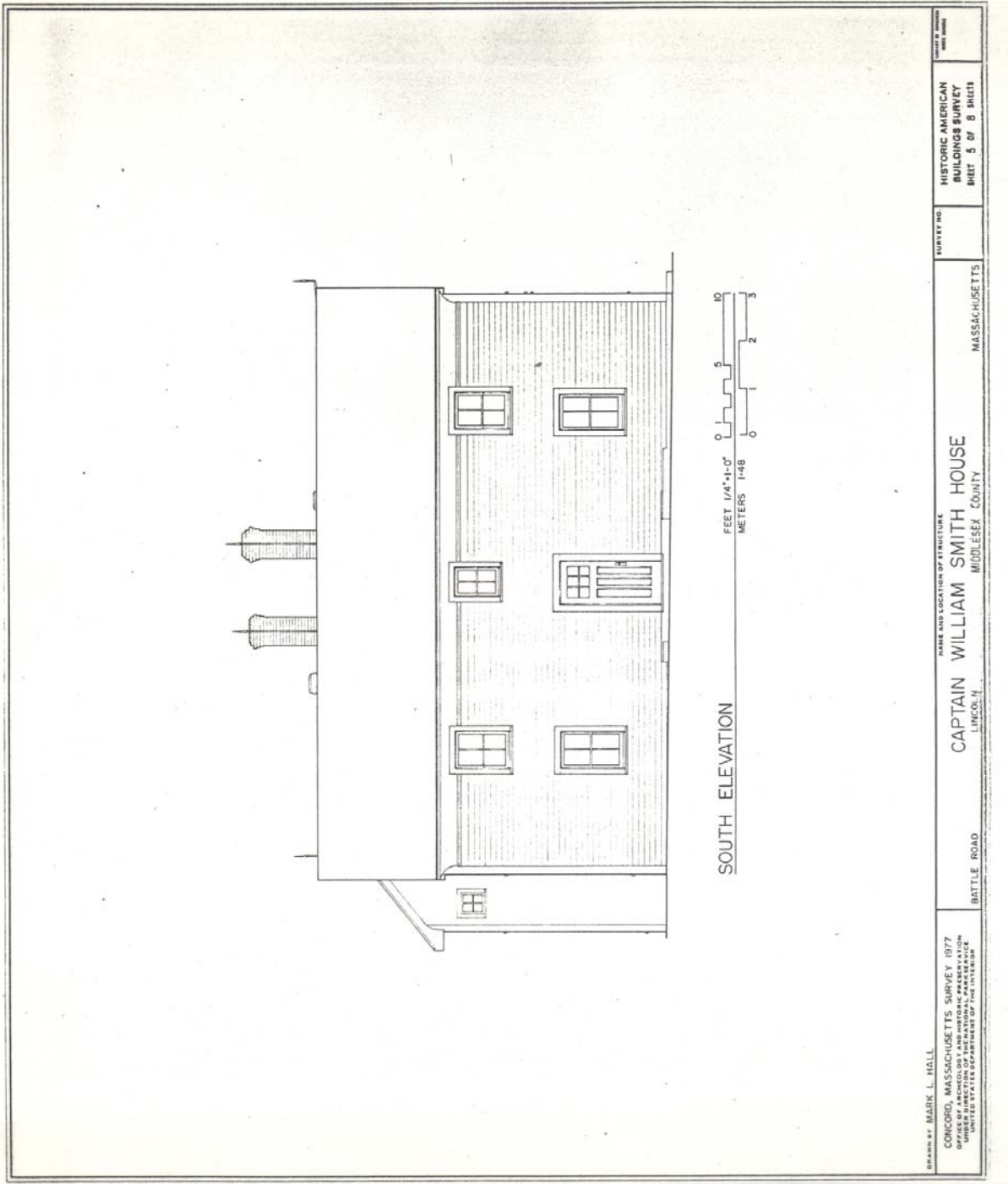


<p>CONCORD, MASSACHUSETTS SURVEY 1977 OFFICE OF THE NATIONAL PARK SERVICE UNITED STATES DEPARTMENT OF THE INTERIOR</p>	<p>BATTLE ROAD</p>	<p>NAME AND LOCATION OF STRUCTURE CAPTAIN WILLIAM SMITH HOUSE WINDHAM COUNTY MASSACHUSETTS</p>	<p>SURVEY NO. HISTORIC AMERICAN BUILDINGS SURVEY SHEET 1 OF 8 SHEETS</p>
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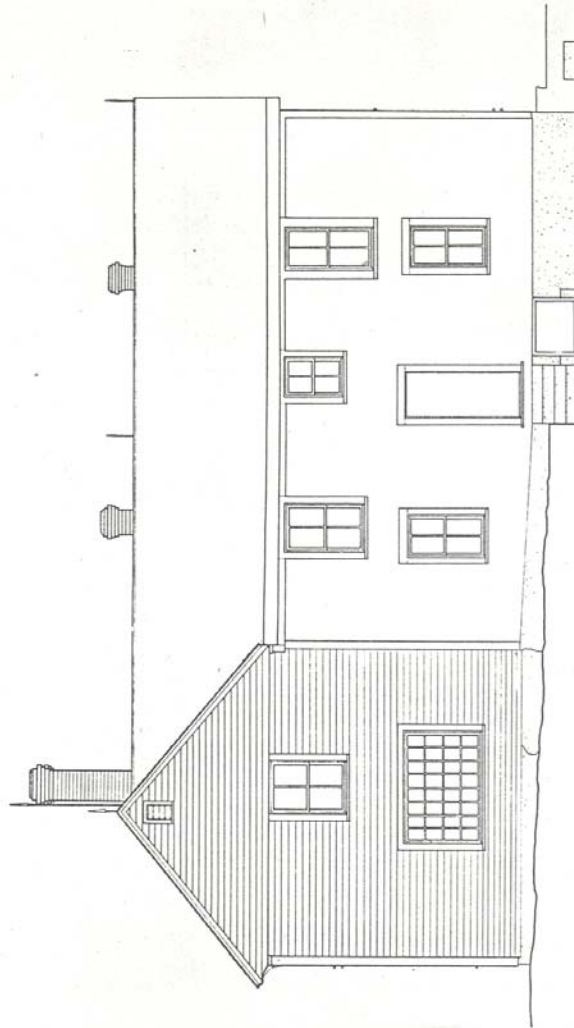






DRAWN BY MARK L. HALL	CONCORD, MASSACHUSETTS SURVEY 1977 OFFICE OF ARCHITECTURE AND HISTORIC PRESERVATION UNITED STATES DEPARTMENT OF THE INTERIOR	BATTLE ROAD	CAPTAIN WILLIAM SMITH HOUSE LINCOLN	MASSACHUSETTS	SURVEY NO.	HISTORIC AMERICAN BUILDINGS SURVEY SHEET 5 OF 8 SHEETS	DATE OF SURVEY 1977
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DRAWN BY: BOB LOUTON CONCORD, MASSACHUSETTS SURVEY 1977 OFFICE OF ARCHITECTURE AND HISTORIC PRESERVATION UNITED STATES DEPARTMENT OF THE INTERIOR		NAME AND LOCATION OF STRUCTURE CAPTAIN WILLIAM SMITH HOUSE LINCOLN MIDDLESEX COUNTY		SURVEY NO. MASSACHUSETTS	HISTORIC AMERICAN BUILDINGS SURVEY SHEET 6 OF 8 SHEETS	SCALE 1" = 16'-0"
NORTH						



EAST ELEVATION

FEET 1/4"=1'-0"
METERS 1:48

DRAWN BY GORDON OL SCHLAGER

CONCORD, MASSACHUSETTS SURVEY 1977
UNDER DIRECTION OF THE NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

BATTLE ROAD

CAPTAIN WILLIAM SMITH HOUSE
LINCOLN

NAME AND LOCATION OF STRUCTURE

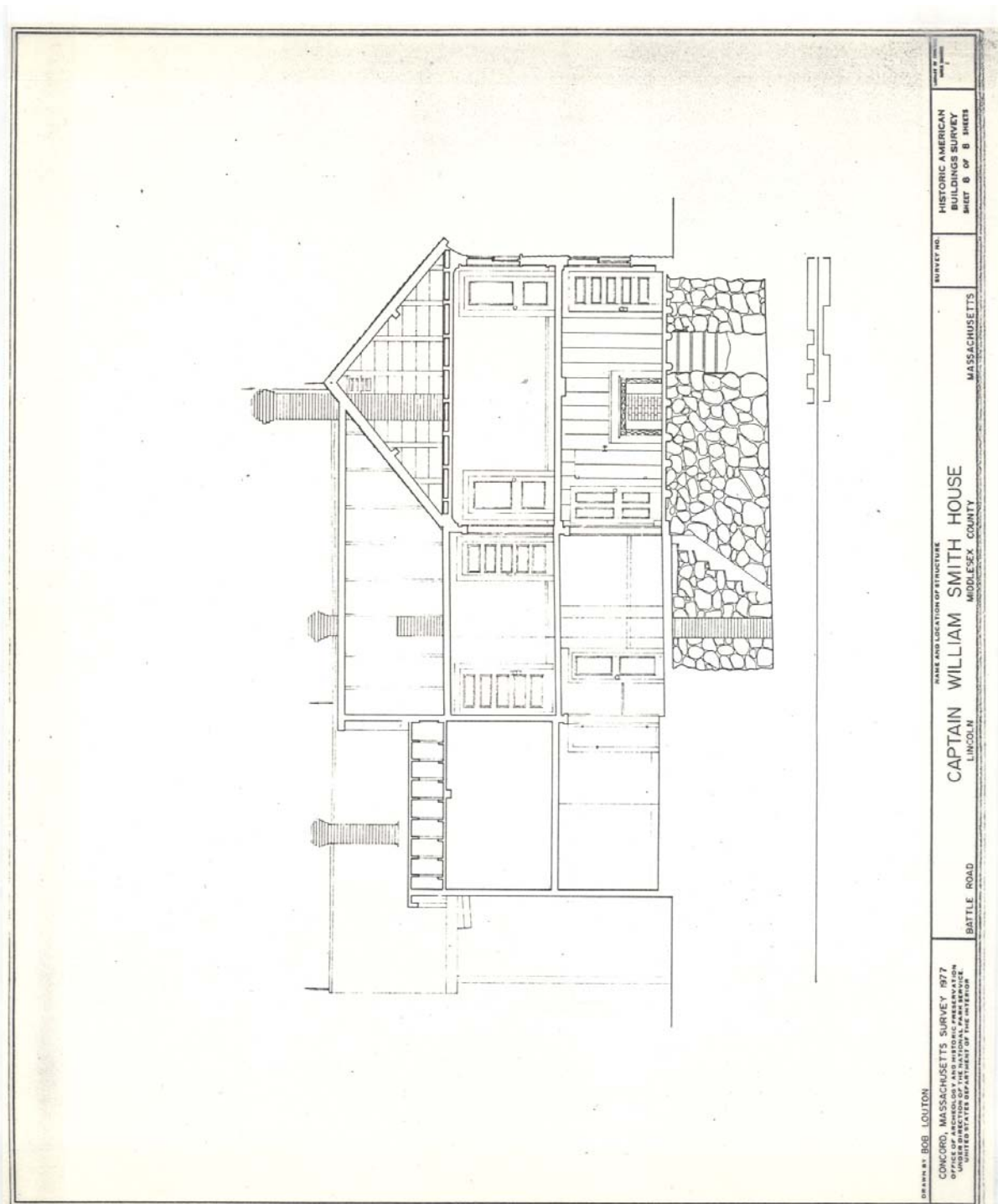
MIDDLESEX COUNTY

MASSACHUSETTS

SURVEY NO.

HISTORIC AMERICAN
BUILDINGS SURVEY
SHEET 7 OF 8 SHEETS

DATE OF DRAWING
1977



DRAWN BY: BOB LOUTON	CONCORD, MASSACHUSETTS SURVEY 1977 OFFICE OF ARCHITECTURAL AND HISTORIC PRESERVATION UNITED STATES DEPARTMENT OF THE INTERIOR	BATTLE ROAD	CAPTAIN WILLIAM SMITH HOUSE LINCOLN MIDDLESEX COUNTY	MASSACHUSETTS	SHEET NO.	HISTORIC AMERICAN BUILDINGS SURVEY SHEET 8 OF 8 SHEETS
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APPENDIX D.

**Clapboard Spacing on South Wall:
Circa 1692 and on April 19, 1775**

CLAPBOARD SPACING C1692 CLAPBDS EAST WALL

ST/ 2ND FLOORS. MEASUREMENTS OF EXISTING NAIL HOLES TAKEN
FROM SOFFIT OF OVERHANGING GIRT AT ATTIC LEVEL
CPT. WM. SMITH HOUSE LINCOLN, MASS.

SOUTH EAST CORNER POST	STUD	STUD	STUD	STUD	STUD UNDER WINDOW	STUD	STUD	STUD	NORTH EAST CORNER POST	
ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.
OVERHANGING GIRT ON EAST GABLE END										
1/2" 2 1/2" CAP NAIL	FROM OF POST								HOLE 1/2" 2 1/2" CAP NAIL	
3 1/2	3	2 3/4	2 5/8	2 3/4		2 3/4		2 1/4	2 3/4	
5 3/8	6 3/4	6 1/4	6 1/8	6 5/8		6 5/8	6 3/4	6 3/4	6 1/2	
7 1/4										
11 1/2	10 1/4	9 3/8	10	10 1/4		9 3/8	10 1/2	10 1/4	10	
1-2 1/4	1-2	1-1 3/4	1-1 5/8	1-1 3/4		1-1 3/8	1-2 1/4	1-2 1/8	1-2 1/4	
1-5 1/2	1-5 1/2	1-5 1/4	1-5 5/8	1-5 3/8		1-5 1/2	1-6	1-5 5/8	1-5 1/2	
1-9 1/4	1-9 1/2	1-9 3/8	1-9 1/4	1-9		1-9	1-9 1/4	1-9 1/4	1-9	
2-0 5/8	2-1	2-1	2-0 5/8	2-0 5/8		2-0 1/2	2-0 3/4	2-0 3/4	2-1	
2-4 3/4	2-4 1/2	2-4 1/2	2-4 3/8	2-4 1/2		2-4	2-4 3/8	2-4 1/8		
2-8 3/4	2-8 1/4	2-8	2-8 3/8	2-8 1/4		2-7	2-7 1/4	2-7 3/8	2-6 1/2	
3-0 5/8	2-11 3/4	2-11 7/8	2-11 3/4	2-11 5/8		2-11 3/4	2-11 1/2	2-11 3/4	2-11	
3-4 3/8		3-3 3/8	3-3 1/2	TOP SILL		TOP SILL	3-3 3/4	3-3 1/2	3-3	
3-7 3/4	3-7 5/8	3-7 1/2	3-6 1/8				3-7	ON STUD	3-6 3/8	
3-11 3/8	3-11 1/4	3-11 3/4	3-11 1/2				3-11 1/4	3-6 3/4	3-10	
4-3 3/8	4-3 1/4	4-3	4-3				4-2 3/4	4-2 3/8	4-2	
4-6 3/4	4-7	4-6 1/2	4-6 5/8				4-6 1/2	4-5 1/4	4-5 1/2	
4-10 3/8	4-10 1/2	4-10	4-10				4-10 3/4	4-9 3/8	4-9 1/4	
5-1 1/2	5-1 5/8	5-2	5-2				5-1 1/2	5-0 1/8	5-0 1/2	
5-6	5-5 3/4		5-5 1/2					5-4 1/4	5-4 1/4	
5-9 1/4	5-9	5-9	5-8 3/4				5-8 1/2	5-8	5-8	
6-1 1/8	6-0 3/8	6-0 1/2	6-0 1/2	C-1			6-0 1/2	6-0 3/4?	5-11 1/2	
6-4 1/2		6-4 1/2	6-4 1/2				6-4 1/8	6-3 3/4	6-3 1/2	
6-8 1/2		6-7 3/4					6-7 5/8	6-7	6-7	
7-0 1/2									6-11 1/4	
7-4 3/8										
							8-4?			
							8-7 3/4?			
9-3 3/4										
10-0										
10-3 1/4										
14-10 1/4	< BOTTOM OF SILL						BOTTOM OF SILL			

↑
NAIS NOT
ALIGNED
↓

CLIPBOARD SPRING APRIL 19-1775 - SOUTH WALL 1ST/2ND FLOORS
 MEASUREMENTS TAKEN FROM RED PAINT LINE OF C692 BED MOLDING
 JUST UNDER EXISTING BED MOLDING. CPT. WM. SMITH HOUSE
 EAST CHAMBER/PARLOR SOUTH WALL

STUD	STUD	SOUTH EAST CORNER POST								
ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.
3 5/8	3 5/8	3 5/8								
6 1/8	6 1/8	7								
9 1/8	10	10								
1-0 1/2	1-1 3/8	1-1 1/4								
1-5 1/4	1-5 1/4	1-5 3/8								
1-9 1/4	1-9	1-9								
2-0 5/8	2-0 3/4	2-1								
2-4 3/8	2-4 3/8	2-4								
2-8	2-8 3/8	2-8 1/2								
3-0	2-11 7/8	3-0								
3-3 1/2	3-3 3/4	3-3 5/8								
3-7 1/2	3-7 1/4	3-7 1/4								
3-11 1/8	3-11 1/4	3-11								
4-3	4-3									
4-6 1/2	4-7									
4-10 3/4	4-10 3/4	4-10 1/2								
5-2 1/8	5-3	5-2 3/4								
5-7	5-7	5-7								
5-10 3/4	5-10 5/8	5-10 3/4								
6-2 3/8	6-2 3/8	6-2 1/2								
6-6 1/4	6-6	6-6								
6-10 1/4	6-10									
7-2	7-2	7-2								
7-5 5/8	7-5 3/4	7-5 3/4								
7-9 1/8	7-9 1/8	7-9								
8-1	8-1	8-0 3/4								
8-4 1/8	8-4 3/4	8-4 3/4								
8-8 1/2	8-8 1/2	8-8 1/4								
9-0 1/4	9-0	9-0 1/4								
9-4	9-3 1/8	9-3 1/2								
9-7 3/4	9-7 3/8	9-7 1/4								
9-11	9-11 1/8	9-11 1/4								
10-2 1/8	10-3 3/8									
10-6 3/8										
10-10 5/8										
11-2 1/2										
11-5 3/4										
11-10										
12-2										
12-5 1/2										
12-10										
13-2										
13-6										
↑ AND MISSING ↓ BOTTOM OF SILL										

← HALLWAY * EAST CHAMBER/PARLOR SOUTH WALL →

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CLAPBOARD SPACING APRIL 19-1775 SOUTH WALL 1ST/2ND FLOORS
MEASUREMENTS TAKEN FROM RED PAINT LINE OF C1692 BED MOLDING
JUST UNDER EXISTING BED MOLDING. CPT. WM. SMITH HOUSE

[illegible]

CLAPBOARD SPACING APRIL 19-1775 EAST WALL
 1ST/2ND FLOORS. MEASUREMENTS OF EXISTING NAIL HOLES TAKEN
 FROM SOFFIT OF OVERHANGING GIRT AT ATTK LEVEL.
 CPT KIM. SMITH HOUSE LINCOLN, MASS.

SOUTHEAST CORNER POST	STUD	STUD	STUD	STUD	STUD UNDER WINDOW	STUD	STUD	STUD	NORTHEAST CORNER POST	
ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.	ft-in.
<	OVERHANGING GIRT ON EAST GABLE END									>
4 1/2	4 3/4	4	4	3 7/8		4 1/4	5	4 1/2	4 3/8	
6 1/2	7 3/4	7 3/8	7	6 7/8		8 3/8	9	8 3/4	8 1/2	
11 1/2	11 1/2	11 1/2	11 3/8	10 7/8		1-1	1-1 3/8	1-1 1/4	1-1	
1-4 1/4	1-4 3/8	1-3 7/8	1-3 7/8	1-3 3/4		1-5 1/2	1-6 1/8	1-5 1/2	1-5 1/4	
1-9	1-9	1-8 1/2	1-8 3/8	1-8		1-9 7/8	1-10 1/4	1-10	1-10	
2-1 1/2	2-1 1/2	2-1 1/8	2-1 1/8	2-1		2-2 1/8	2-2 1/2	2-2 5/8	2-2 3/4	
2-6	2-6	2-5 1/2	2-5 3/4	2-5 1/2		2-6 5/8	2-7 1/8	2-7	2-7 3/8	
2-10 1/2	2-10 1/4	2-10 1/8	2-10 1/4	2-10 3/8		2-10 7/8	2-11	2-11 1/4	2-11 3/8	
3-3	3-4 ?	3-2 1/2	3-2 3/4	3-2		3-3	3-3 7/8	3-3 1/2	3-3 1/2	
3-6 1/2	3-7	3-7	3-7	3-6 5/8		3-7 1/4	3-8 1/8	3-7 3/4	3-7 3/4	
3-11 3/4	3-11 3/4	3-11 1/4	3-11 3/8	3-10 3/4		4-0	4-1	4-0 1/4	4-0 1/2	
4-9 3/8	4-4	4-3 3/4	4-4	4-3 1/4				4-5	4-5	
4-8 1/2	4-8 1/2	4-8 3/8	4-8 3/8	4-8 3/8					4-9 1/4	
5-1 3/8	5-1	5-0 3/4	5-0 1/2	5-0 1/2		5-1 1/2			5-1 3/4	
5-6	5-6	5-5 3/4	5-5 3/4	5-5 1/2		5-6			5-6 1/2	
5-10 3/4	5-10 1/4	5-10	5-10	5-10		5-10 1/2			5-11 1/2	
6-3 3/4	6-2 3/4	6-2 1/4		6-1		6-3		6-3 1/4	6-4	
			6-7 3/4	6-7 1/2		6-7 1/4		6-7 1/2	6-7 1/2	
7-1 1/2								7-11 1/2	6-11	
								8-3 3/4	8-3 3/4	
								8-8 1/2	8-8 1/2	
								9-2 1/2	9-1 1/2	
								9-5 3/4	9-5 3/4	
								9-10 1/8	9-10 3/8	
								10-2 1/4	10-2 3/4	
									10-7 1/4	
									10-11 3/4	
									11-4 1/4	
									11-9	
14-10 1/4	< BOTTOM OF SILL					BOTTOM OF SILL >				14-11

CLAPBOARD SPACING APRIL 19-1775

WEST GABLE END - 1ST/2ND FLOORS - MEASUREMENTS
OF EXISTING NAIL HOLES TAKEN FROM SOFFIT OF OVERHANGING
GIRT AT ATTIC LEVEL. CPT. KIM SMITH HOUSE

[illegible]

APPENDIX E.

Houses Having Plaster Cove Cornices

England

Moxon, Mechanic Exercises, London, 1698, line drawing [not shown here]

Pennsylvania

House, 114- 116 Cuthbert Street, Philadelphia
Wright's Ferry (ca. 1726), Chester

Connecticut - existing examples

Parmelee House, Guilford
Pardee House (ca. 1725), North Haven

Massachusetts - lost examples

Pillsbury House, Newburyport
Joseph Blaney House, Swampscott

Massachusetts - possible examples

Bray House, West Gloucester
Schiff House, Topsfield [not shown here]
Spear House, Lynnfield (restored cornice) [not shown here]

Massachusetts - existing examples

White- Ellery House, Gloucester
Rea- Putnam- Fowler House (ca. 1700), Danvers [not shown here]
Whittemore- Smith House (ca. 1692), Lincoln
Parker- Orne House, Marblehead [not shown here]
Benaiah Titcomb House (ca. 1700), Newburyport [re- erected in Essex]
Hovey- Boardman House (ca. 1710), Ipswich

Rhode Island - lost examples

Gabriel Bernon House, Providence

Rhode Island - existing examples

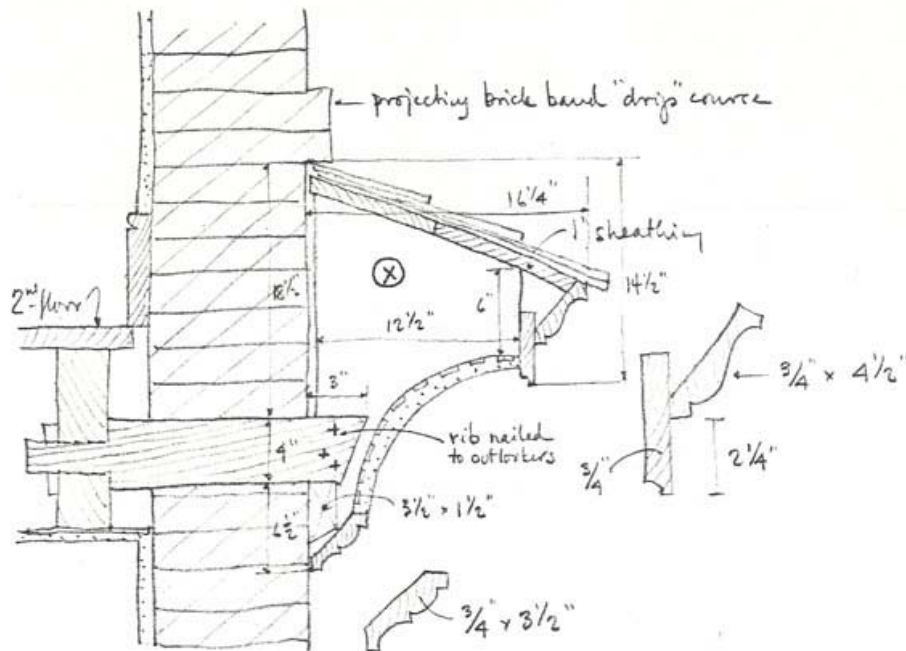
Wanton- Lyman- Hazard House (ca. 1695), Newport
Monroe House, Newport
Joseph Reynolds House (ca. 1698), Bristol (cornice removed)
Coggeshall- Redwood House (ca. 1743), Portsmouth

also called:

✓ "plastered cove eave" or
 ✓ "coveing paint house" ← [ie Pent House] see attached

PENT EAVE - 114 - 116 CUTHBERT STREET, PHILA.

measured by Penelope Hartsborne
 January 1960.



⊗ this is a solid board cut to fit slope and curved soffit and used as ribs placed ± 3'-0" o.c.

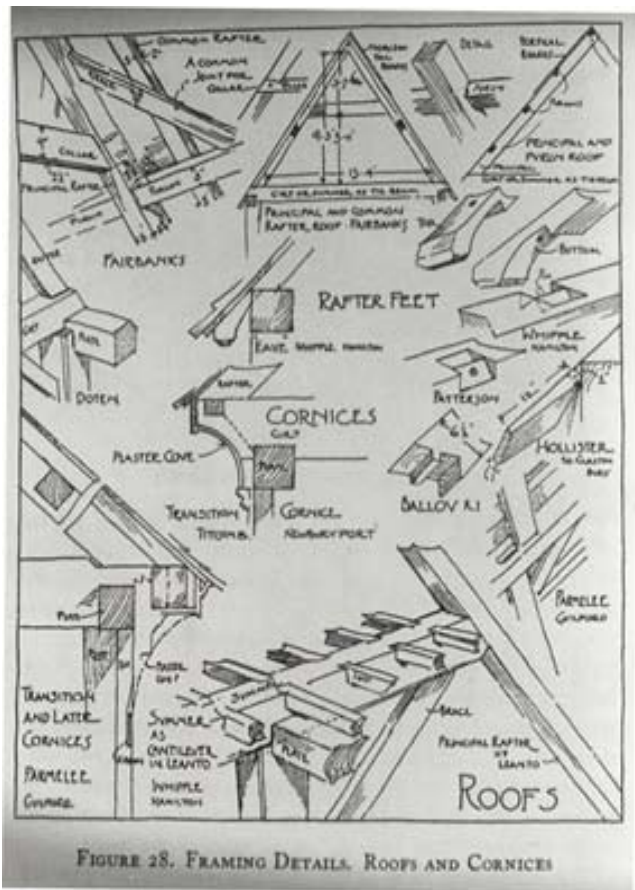
The end of the pent is capped with a board cut to the complete profile -



Pl. II. East façade of Wright's Ferry Mansion. The placement of the elongated windows with small panes opposite each other on both sides of the house, the pent eave between the first and second stories, and the cove cornice are all characteristics of the early Georgian style as interpreted by the English Quakers in Pennsylvania. The long, narrow plan of the house is also typically English and was common in early Philadelphia houses. Despite the predominance of such English characteristics, the side-lapped shingles, among other elements, are indicative of the local German workmen who undoubtedly helped construct the house (see Pl. III).

From *The Magazine Antiques*, December 1982, p. 1243.

Cornice Construction,
Parmelee and Benaiah
Titcomb Houses [Norman
M. Isham, *Early American
Houses, The Seventeenth
Century* (American Life
Foundation, 1968), p. 34]



Pardee House [J.
Frederick Kelly, *Early
Domestic Architecture of
Connecticut* (1924;
Dover, 1963), p. 84]

Pillsbury House
 [Abbott L. Cummings,
*The Framed Houses of
 Massachusetts Bay,
 1625- 1725*
 (Cambridge: Harvard
 University Press, 1979),
 p. 115]



Figure 144. Pillsbury house, Newburyport, Mass., traditionally ca. 1700, with later additions. Partially destroyed by fire in 1885.



Figure 178. Joseph Blaney house, Newburyport, Mass., ca. 1700. Demolished 1934.



Figure 175. Benaiah Titcomb house, Newburyport, Mass. Detail of excised base of plaster corner with rabbet for clapboards, probably after 1700. (Frame dismantled and re-erected in Faneuil, Mass.)

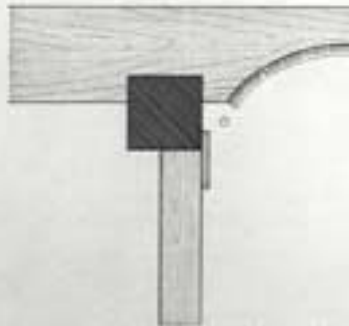
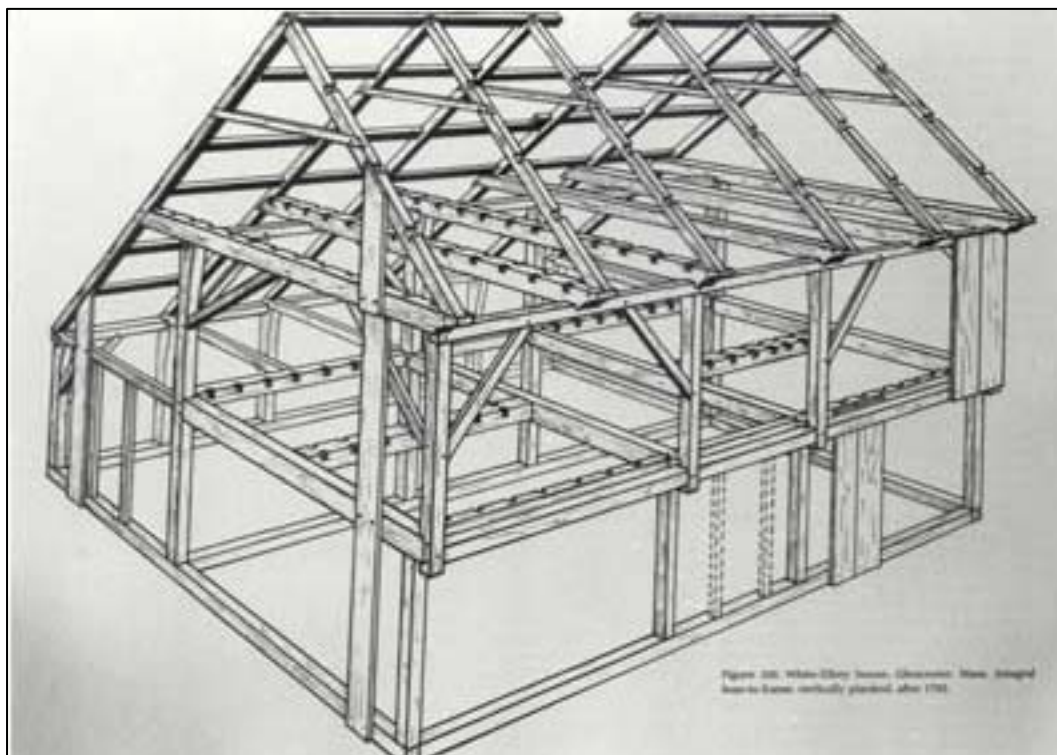


Figure 180. Hovey-Boardman house, Ipswich, Mass. Detail of plaster corner, with new window sill, ca. 1700-1710.

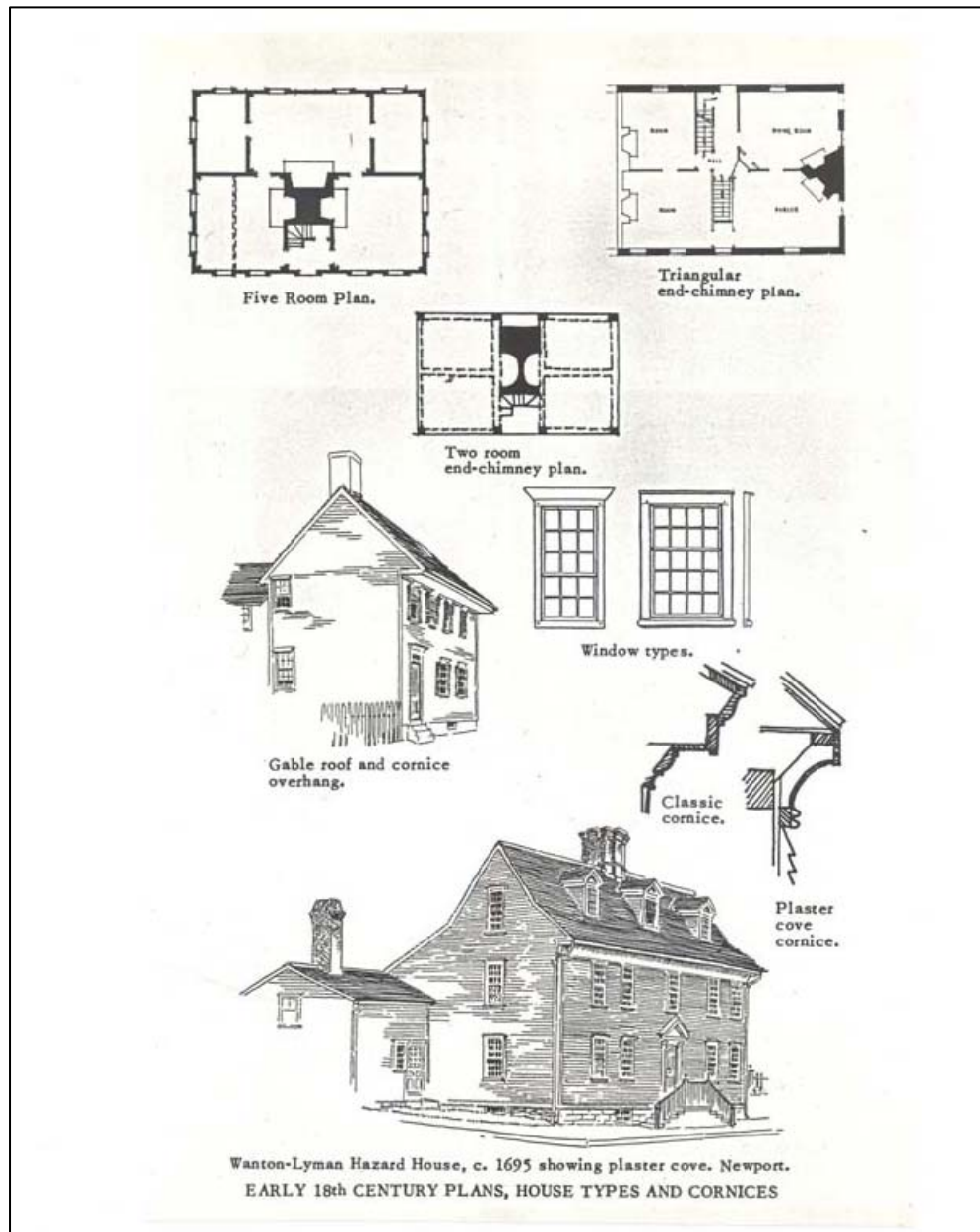
Details of the Joseph
 Blaney House (top),
 Benaiah Titcomb
 House (left), and
 Hovey- Boardman
 House (right)
 [Cummings, p. 133]



The Bray House [*White Pine Monograph Series*, Vol. 1, No. 1 (1915), p. 6]



White- Ellery House [Cummings, p. 86]



Wanton- Lyman- Hazard House [*College Hill*, 2nd ed. (City Planning Commission, Providence, RI, 1967), p. 43]

APPENDIX F.

Houses Built in Massachusetts Before 1800 With Attic Overhang

(Partial Listing)

<u>Town</u>	<u>Date</u>	<u>Number of examples</u>
Acton	late 17th century	one
Allston	ca. 1790	one
Andover		one
Bedford	late 17th century	one
Billerica		one
Boston		one
Carlisle		two
Concord		three (one demolished)
Enfield		one
Groton		one
Harvard		one
Ipswich		three
Lancaster		one
Lincoln		one (the Captain William Smith House)
Littleton		one
Sudbury		one
Topsfield		one
Wayland		one
West Boylston		one
Westford		one
Weston		one

APPENDIX G.

Houses Having Arch-Paneled Chimneys

England

Drawings in *A Dictionary of English Domestic Architecture*, by A.L. Osborne (New York: Philosophical Library, 1965), p. 24

Massachusetts

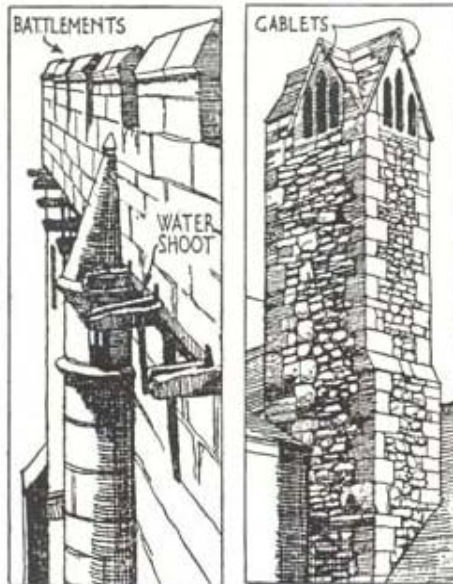
Tremer House, Boston (ca. 1674)	two arches
Craft House, Tremont Street, Boston (1709)	two arches
Bowman House, Lexington	two arches
Poore Tavern, Newbury (ca. 1700)	one arch
Abbott House, Andover (n.d.)	one arch
Coffin House, Nantucket (1686)	one arch

Connecticut

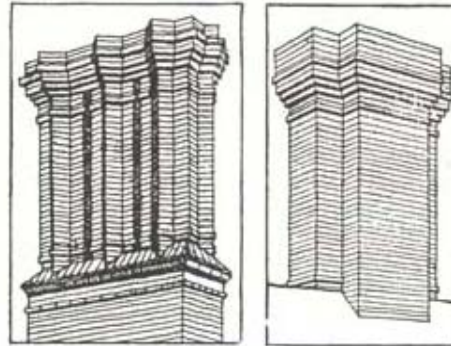
General Walker House, Stratford (ca. 1740)	one arch
--	----------

New Hampshire

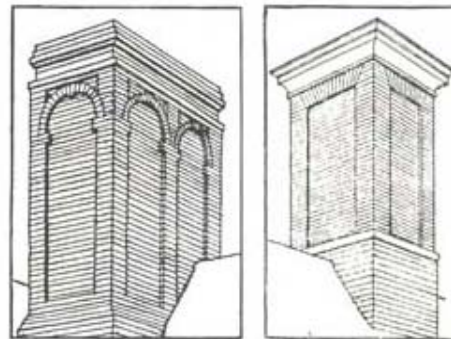
Wentworth "Mansion," Salmon Falls (1701)	two arches
--	------------



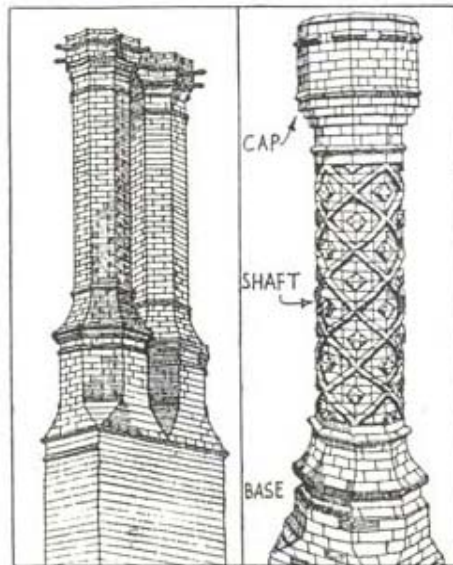
Left: A CHIMNEY on a 13c. CASTLE: the smoke escaped through the side vents just below its pointed top. Right: 13c. GOTHIC type with LANCET-shaped smoke outlets in the GABLETS, built of RUBBLE MASONRY with dressed stone QUOINS.



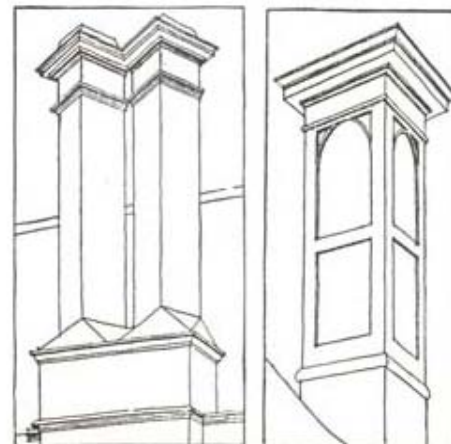
Left: LATE TUDOR. Right: JACOBEAN, of a type in common use throughout the 17c.



CHIMNEYS of the 17c. Left: dated 1634, the last phase of the traditional brick stack. Right: late 17c., early 18c. brick with stone CAPPING.



TUDOR CHIMNEYS with characteristic MOULDED BRICKWORK. Left: 1575. Right: 1536.

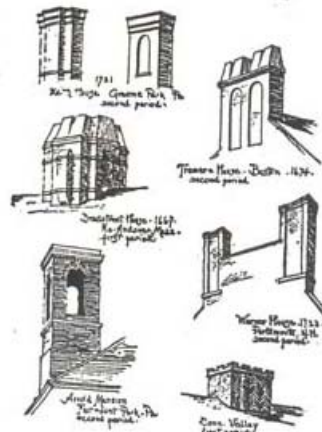


Stone CHIMNEYS. Left: first half 17c. Right: mid-17c.

THE COLONIAL HOUSE

the Philipse Manor House (Pl. 9) where, however, they are not so happy in disposition, offer suggestions for attractive arrangements, the one at Mount Pleasant (Pl. 73) being decidedly the most beautiful.

The door-frames, from following pretty closely English precedent as in the two beautiful entrances of the Royall

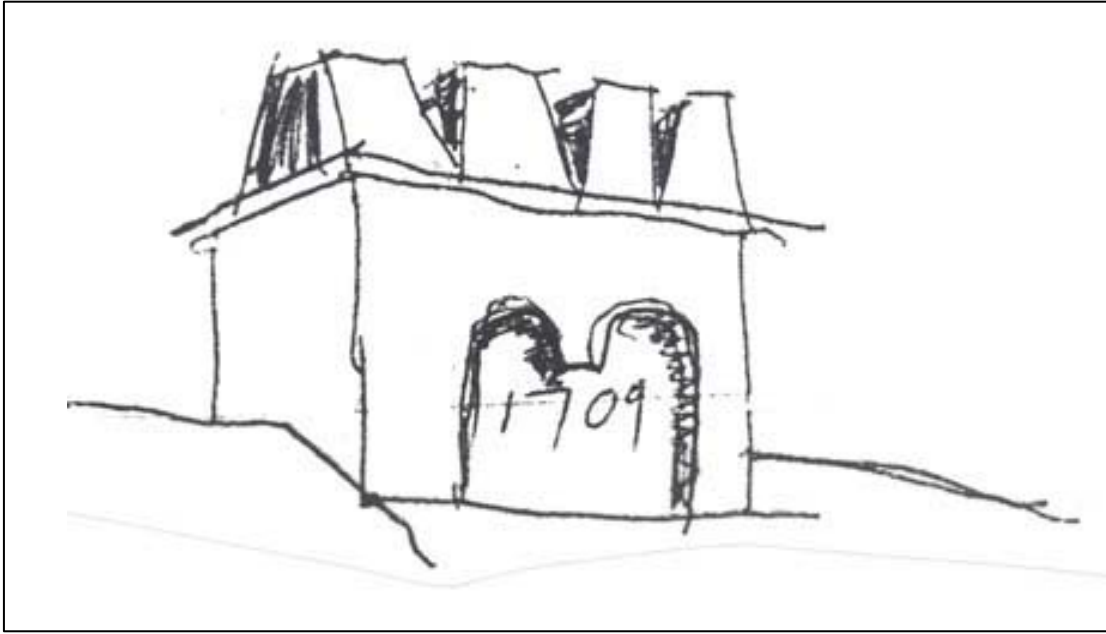


VARIOUS TYPES OF CHIMNEYS

House (Pl. 85), the front entrance of the Warner House (Pl. 86), and many others, gradually broke away into more individual renderings, until in the Third Period they became quite distinct. In this Second Period, however, they seem to have come from various sources, such an extremely unusual doorway as that of the Winslow House in Plymouth (Pl. 56), having a very indefinite legend attached to it concerning its origin in a "monastery near Quebec"; and certainly the extraordinary carving shows it to be but remotely connected with other efforts. The door-frame was gradually enlarged into a

[118]

Chimney of the Tremora House (upper right) [Joseph E. Chandler, *The Colonial House* (New York: Robert McBride & Co., 1924), p. 118]



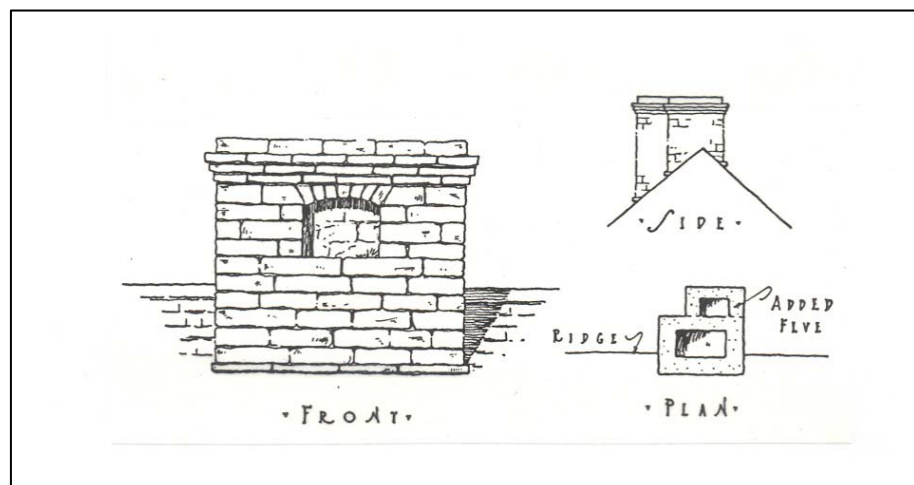
Chimney of the Craft House [Edwin Whitfield, *Homes of Our Forefathers* (1889), p. 52]



Bowman House [photograph from the Worthen Collection, Cary Memorial Library, Lexington]



Poor Tavern [Cummings, p. 125]



Chimney of the General Walker House, with a recessed arched niche about 18 inches square and 3- 4 inches deep [Kelly, p. 77]



Front Door of the Wentworth Mansion

been a closet or small room. This space is now partly filled with the flue from the kitchen fireplace, and a shallow closet back of one of the doors opening into this space from one of the upper bedrooms. But the old window frame is for a small casement sash, which was probably the original form of opening, though the frames now in the house are undoubtedly of quite ancient date, only the fifteen-light sash themselves having mostly been replaced. These windows are protected in the lower rooms by inside sliding shutters which disappear within the thickness of the wall. When the rear leanto was added, the central part became the usual long narrow kitchen, the fireplace and oven being built at the back of those in the front rooms, and the flues carried up against the stack, until they were taken into its area at about the attic floor level. At the west end, the leanto is flush with the end of the house, and containing a small end room beyond the kitchen, with a staircase to the space above, and a large pantry opening off of the kitchen. A bedroom, so often found opening off these old kitchens, is at the east end, which projects some four feet or so beyond the end wall of the main house, and gives opportunity for a side door, with southern frontage, opening into a vestibule connecting

Chimney of the Wentworth "Mansion" [*Old-Time New England*, The Bulletin of the Society for the Preservation of New England Antiquities, Vol. XIX, No. 2 (October 1928), p. 58]

APPENDIX H.

Section- 106 Form for Restoration Work

ASSESSMENT OF EFFECT ON CULTURAL RESOURCES
(Attach additional sheets as necessary.)

A. Originating Office

1. Park: Minute Man National Historical Park
2. Description of and justification for proposed action: Located north of Virginia Road in Lincoln, Mass., the Capt. William Smith House is one of two 17th century houses located within the proposed boundaries of the Park. In the approved Master Plan of 1965, it has been proposed to restore the exterior appearance of the house to its condition on April 19, 1775, the date that is significant to the establishment of the Park. This action will initiate the start of an architectural investigation of the structure needed to analyze and document the existing physical evidence required in the preparation of the Architectural Data Section of the Historic Structure Report.
3. Cultural resources affected by proposed action (name and LCS number, if applicable): Capt. William Smith House, Building No. 221, LCS No. 06553. The removal of the existing early 20th century two-story addition may be accomplished as part of the architectural study.
4. In affecting cultural resources, the proposed action will (check as many as apply):
 - ☐ Destroy historic fabric
 - ☐ Remove historic fabric
 - ☒ Replace historic fabric in kind
 - ☒ Replace missing historic fabric
 - ☐ Add nonhistoric elements to a historic structure
 - ☒ Remove nonhistoric elements from a historic structure
 - ☐ Alter historic terrain, groundcover, or vegetation
 - ☐ Introduce nonhistoric elements (visible, audible, or atmospheric) into a historic setting or environment
 - ☒ Reintroduce historic elements in a historic setting or environment
 - ☐ Remove historic elements from a historic environment
 - ☐ Remove nonhistoric elements from a historic environment
 - ☐ Disturb, destroy, impair, or render inaccessible archeological (surface or subsurface) resources
 - ☐ Possibly disturb presently unidentified archeological resources or historic fabric
 - ☐ Incur gradual deterioration of historic fabric, terrain, or setting
 - ☐ Other

Describe concisely: The existing two-story early 20th century ell additions are in poor condition. About four years ago the collapsed stairway and porch connecting the additions were removed by Park personnel. The removal of the additions will aid in the architectural study and in no way will adversely affect the 17th century structure.

- Yes No
5. The proposed action is limited to cultural resources maintenance [] [X]. If not, or if it is a maintenance action covered by an approved preservation guide, identify supporting approved plan(s), comment and/or action thereon by Advisory Council on Historic Preservation, dates of ACHP action and NPS approval, and section(s) of the plan(s) pertaining to the action. If none, so state: None.
Proposed plans supported by an Approved Master Plan of 1965.

6. Identify any important relationships between the proposed action as it affects cultural resources and pertinent NPS management policies, standards, and guidelines:

This proposal is in agreement with the Park's Administrative Policy and Development Plan and with the policies stated in Chapter V, Cultural Resource Management and Preservation section of the NPS Management Policies Handbook of 1978.

7. Describe any measures planned to minimize or lessen the loss or impairment of historic fabric, setting, integrity, or data:

An exterior restoration will enhance the physical setting of the house and present an appearance less susceptible to acts of vandalism. Protective devices such as fire and intrusion detection systems will be used. Measured drawings of present structure completed in 1977; photographs taken prior to proposed changes.

8. Identify supporting study data and date(s) of preparation (attach if feasible):

Approved Master Plan of 1965. Park research studies and late 19th century photographs in Park files.

9. Prepared by Annie Y. Connel Title Historical Architect-NPS Feb 14,

10. Signature of Park Superintendent _____ Date _____

B. Regional Professional Review and Certification

- The foregoing assessment of effect is adequate; the proposed action is consistent with all applicable NPS management policies, standards, and guidelines reviewed and concurred in by the Advisory Council; and the proposal incorporates all feasible measures to minimize adverse effects to cultural resources.
- The proposed action is limited to cultural resource maintenance and/or it is authorized by an approved planning document reviewed and concurred in without relevant exceptions by the Advisory Council.

	Yes	No	N/A		
(Negative certifications must be justified on attachments.)	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Regional Archeologist _____ Date _____
	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Regional Historian _____ Date _____
Qualifying comments:	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Regional Hist. Architect _____ Date _____

C. Regional Director Approval

Regional Director _____ Date _____

D. WASO Record

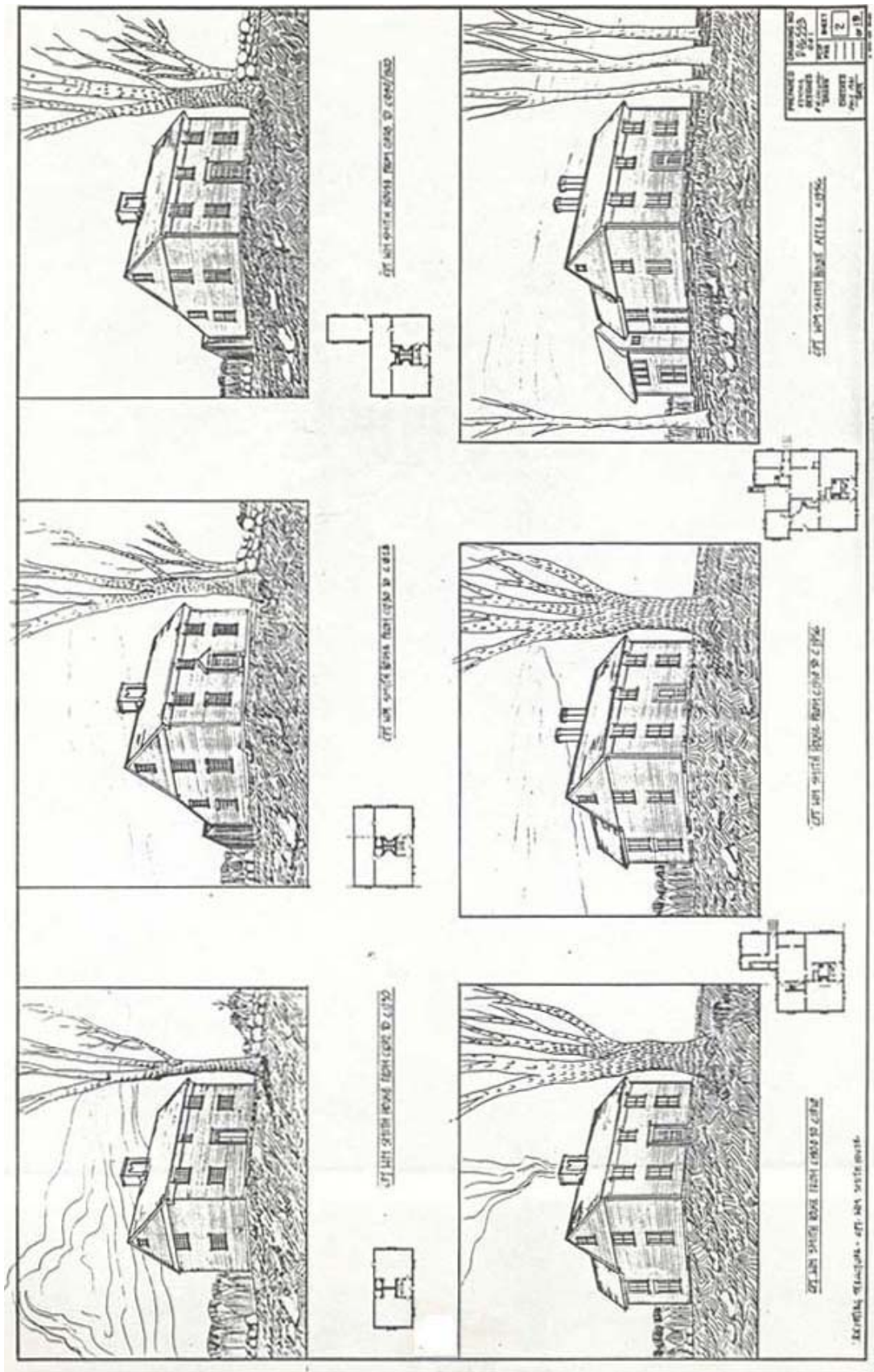
Assessment received and noted:

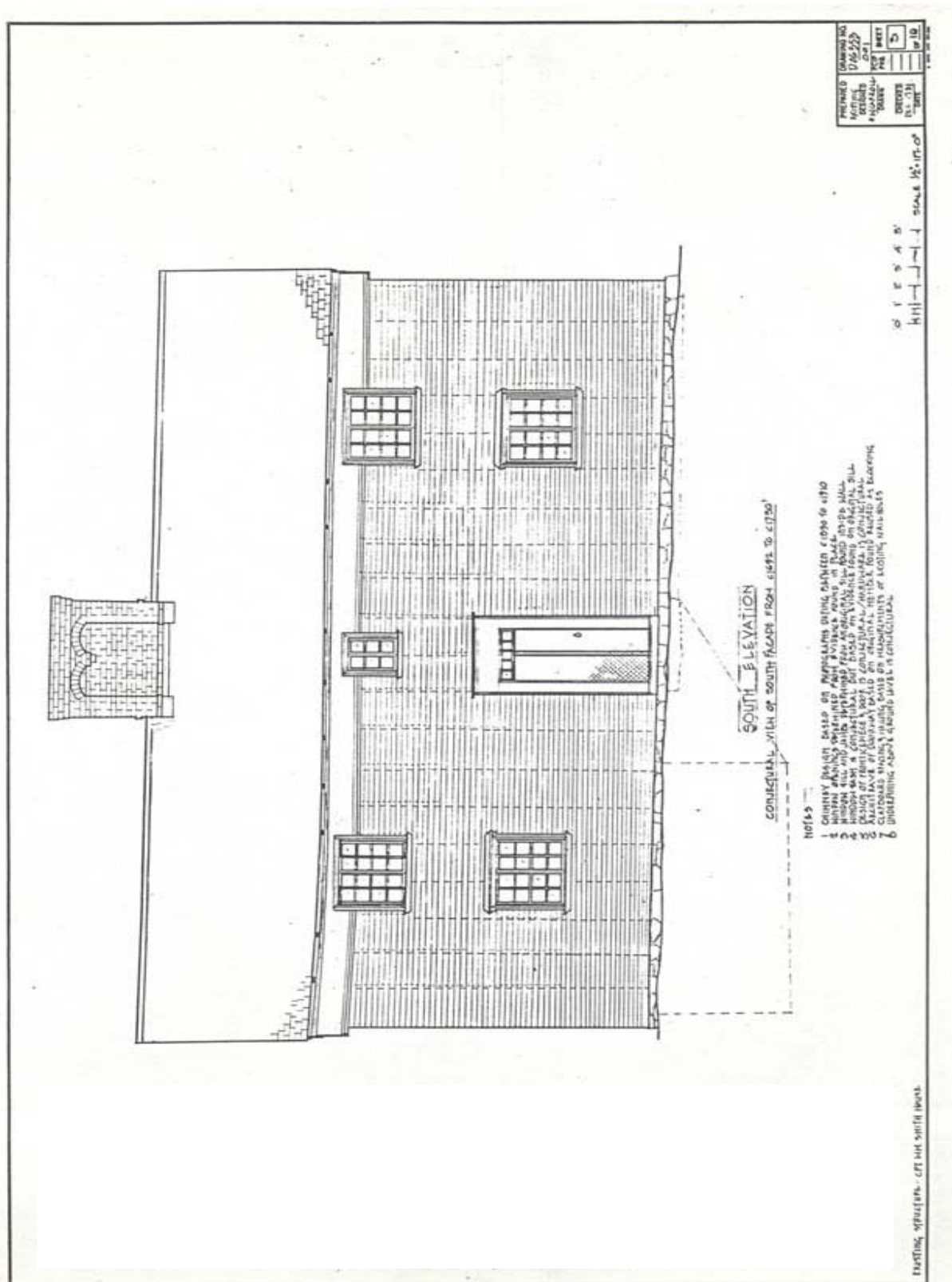
Chief, Cultural Resources Management Division _____ Date _____

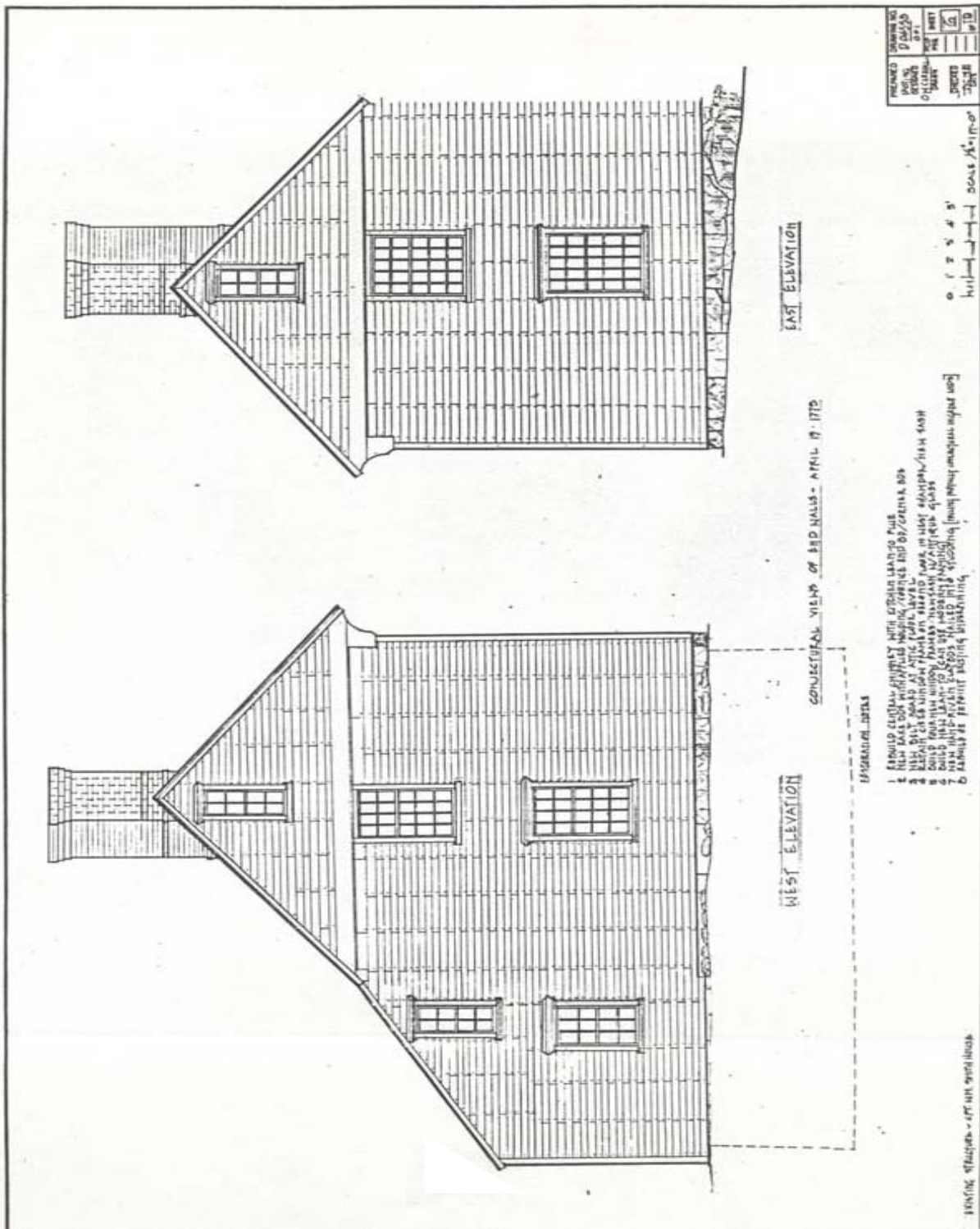
APPENDIX I.

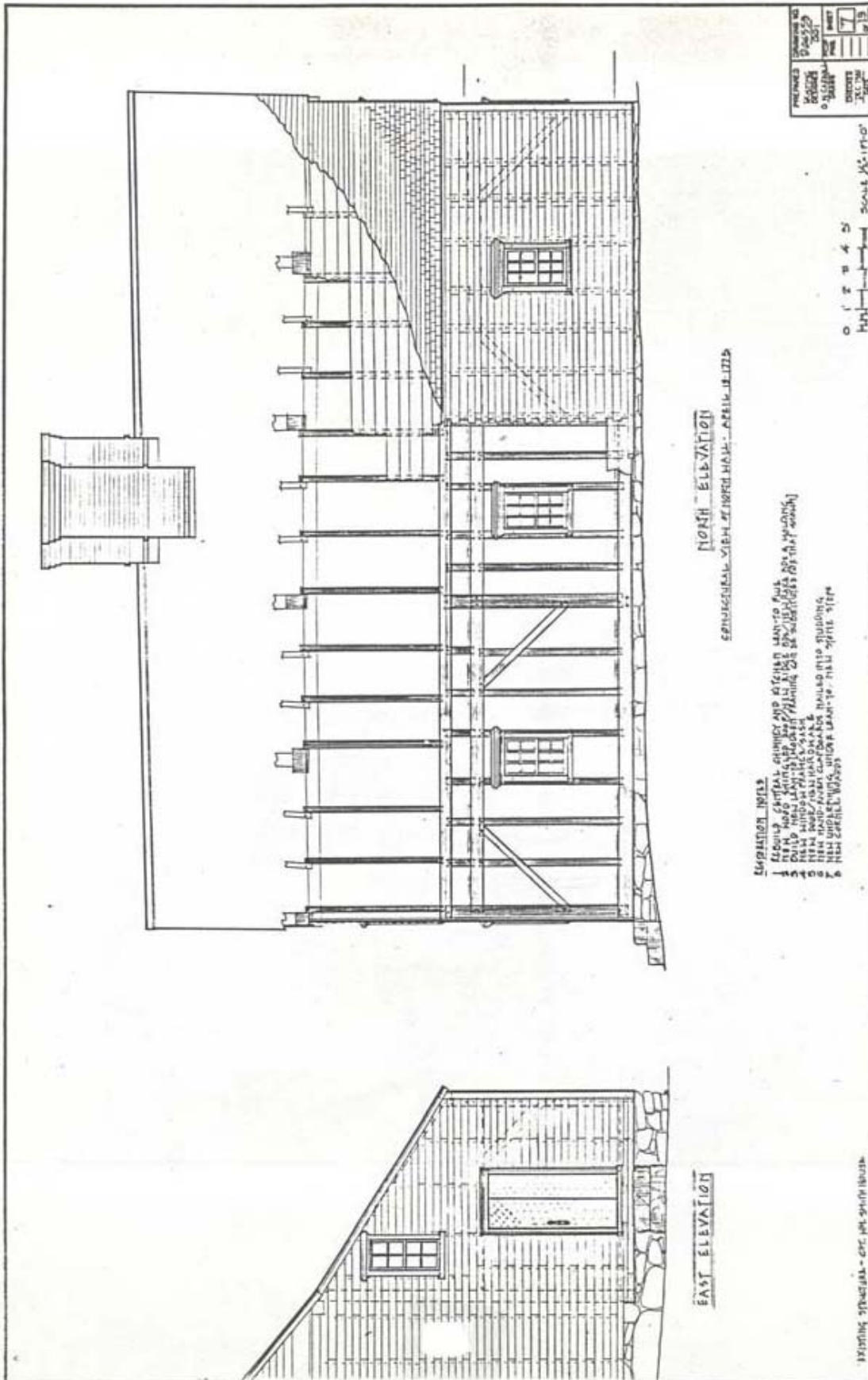
Restoration Drawings, 1981

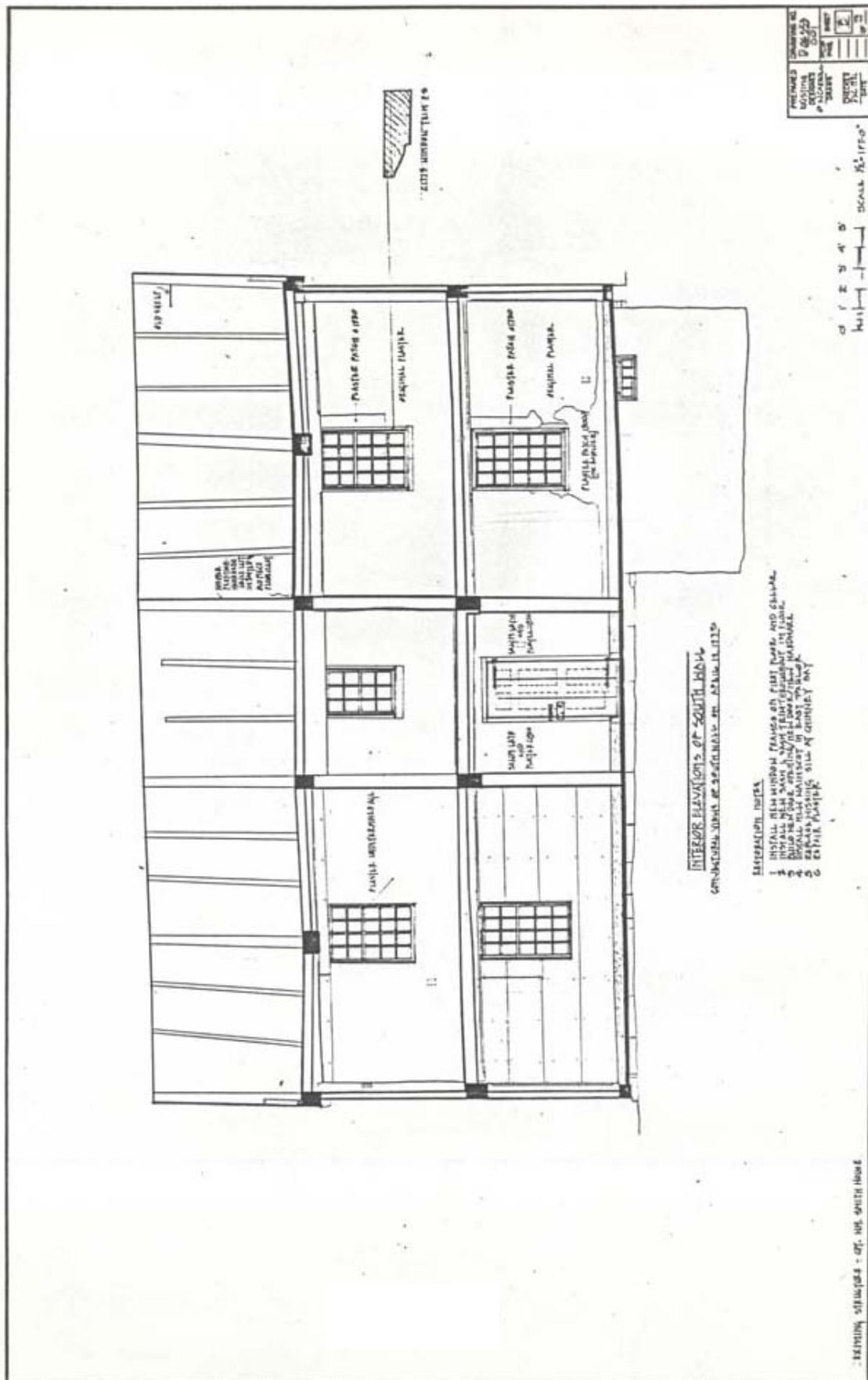
(19 Sheets)









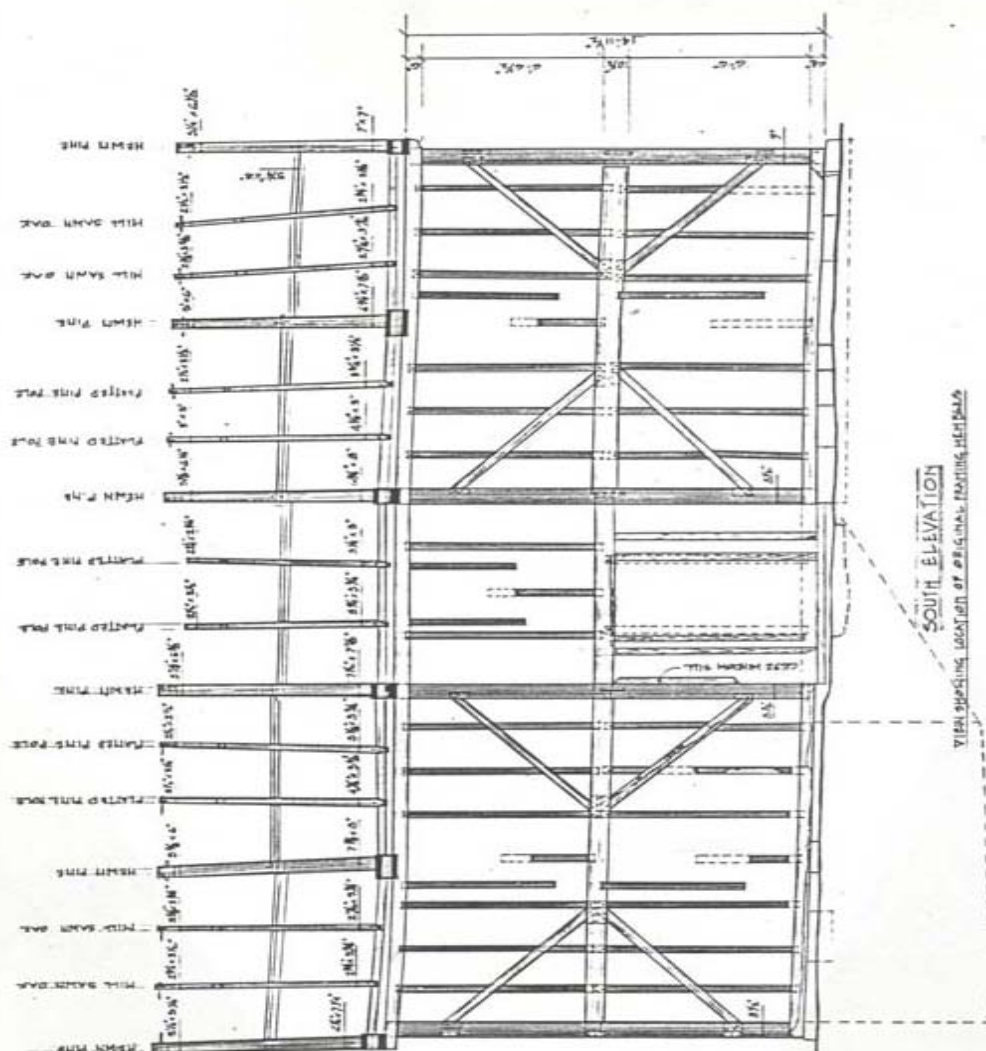


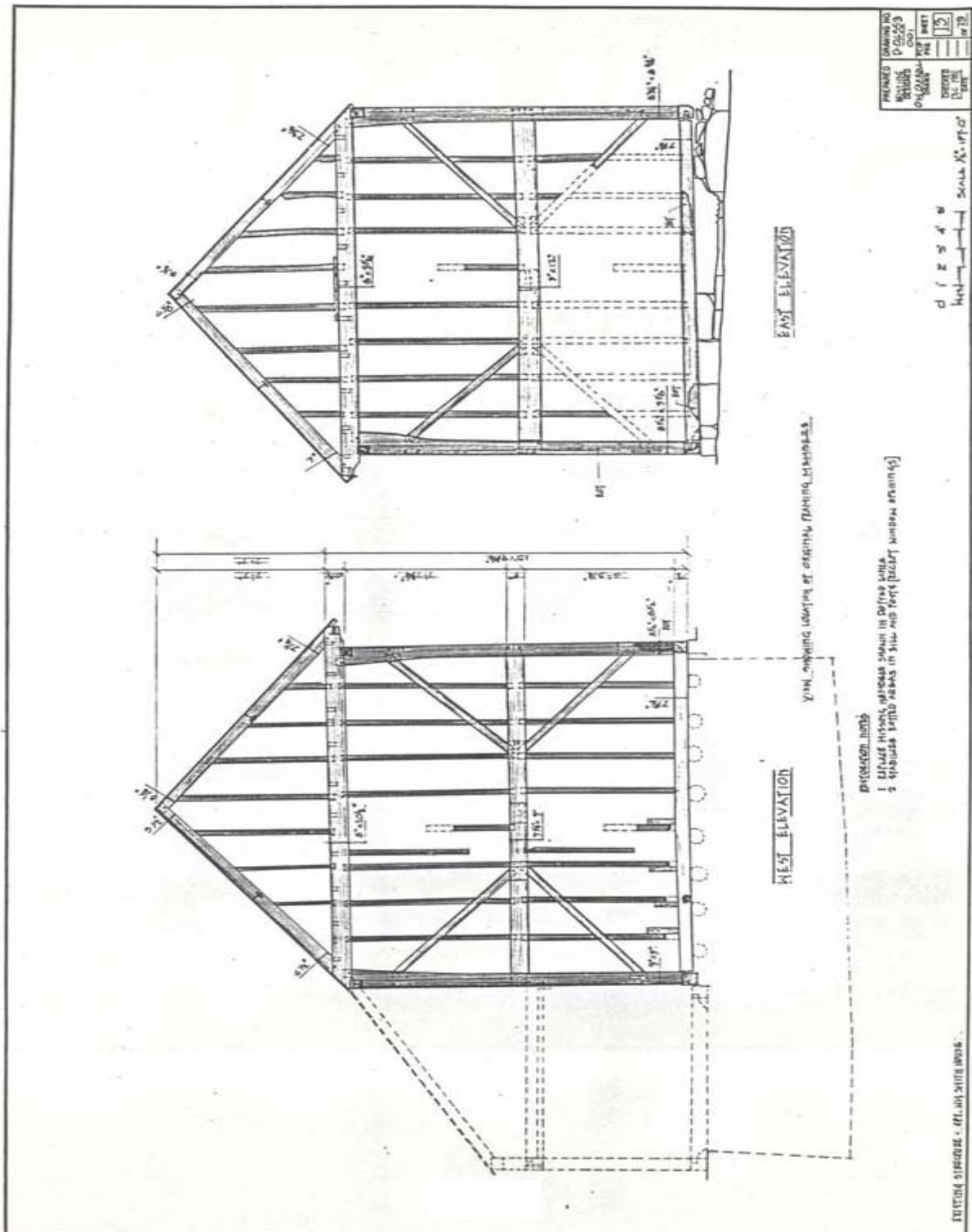
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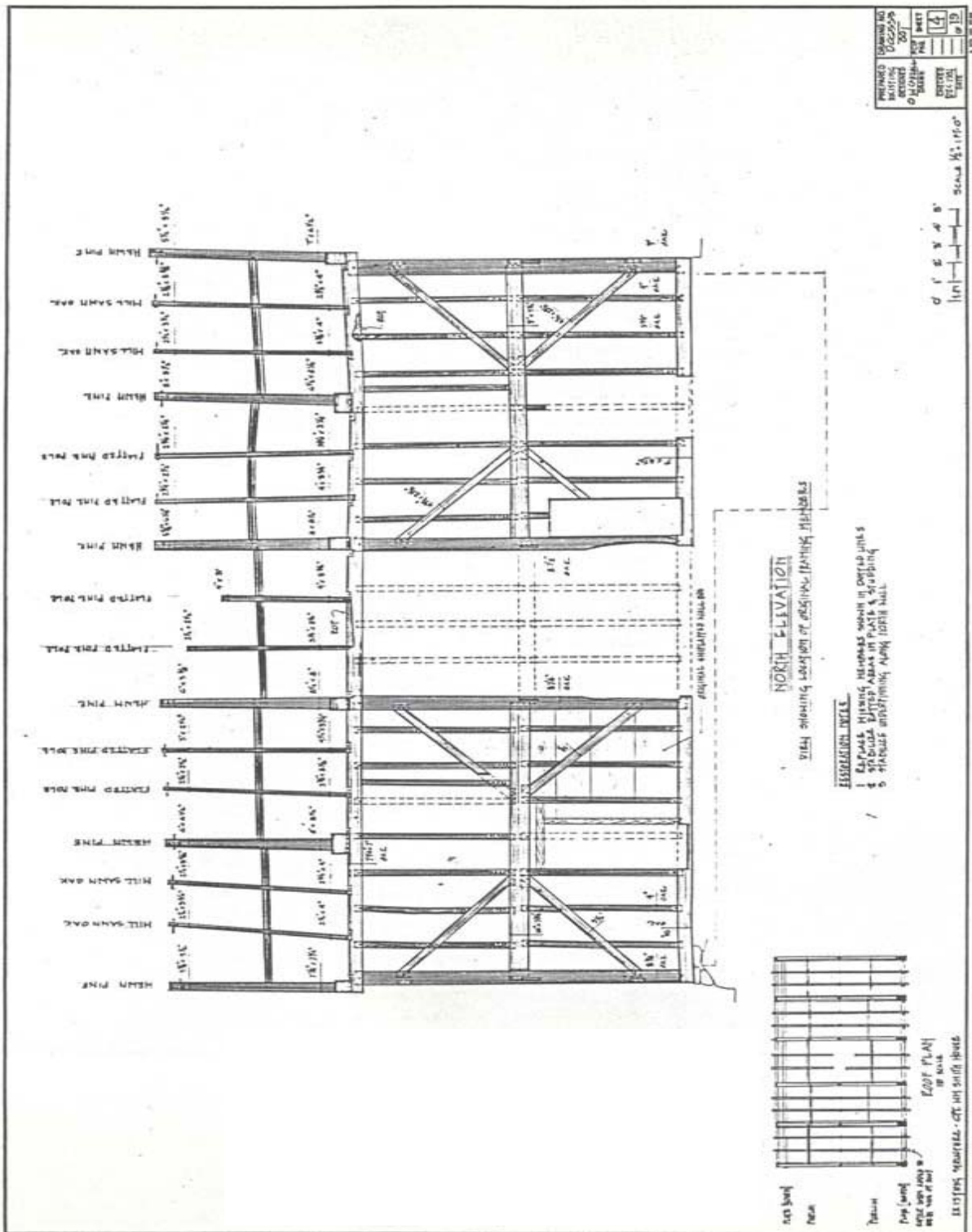
BASIC NOTIONS

WALSH HOLTHUIS

EXISTING STRUCTURE - ARE NOT QUALIFIED









APPENDIX J.

Finishes Analysis: Proposed Colors for 1775 Restoration And Existing Colors

EXTERIOR PAINT COLORS CPT. WM. SMITH HOUSE

PROPOSED COLORS FOR ITS RESTORATION

EXTERIOR PAINT COLORS

LOCATION	
DOOR & WINDOW FRAMES - DOORS & SASH - GABLE BELT BOARDS - CORNER BOARDS - CROWN HOLDING & FASCIA BOARD & BED HOLDING ALONG COVE CORNICE VERGE BOARDS & VERGE BOARD TRIM - Rafter ENDS	IRON OXIDE RED 2.5 YR 3/6 COLOR BASED ON ASSUMPTION THAT CORNICE, BED HOLDING, GABLE END VERGE BBS, BELT BBS WERE NOT ALTERED DURING THE FIRST MAJOR ALTERATION BETWEEN 1740 AND 1753. THESE MEMBERS WERE PAINTED RED IN 1692.
PLASTER COVE CORNICE	LIMEWASH
CLAPBOARDS	UNPAINTED [APPLY HYDROZO] [UNPAINTED CLAPBOARD FOUND THOUGHT TO DATE BETWEEN 1740-1825]
UNDERPINNING	UNPAINTED
COMB BOARDS	UNPAINTED [APPLY HYDROZO]
WOODEN ROOF SHINGLES	UNPAINTED [APPLY HYDROZO]
PARGING UNDER CHIMNEY DRIP COURSES	WHITE [WHITE CHENT/LIME/SAND]

INTERIOR PAINT COLORS CPT WM SMITH HOUSE

PROPOSED COLORS FOR THIS RESTORATION

HALLWAY FIRST FLOOR

LOCATION	
PLASTER CEILING - EAST GIRL PLASTER WALLS - CORNER POSTS	WHITENASH
STAIRCASE - PAINTING	UNPAINTED
DOOR FRAMES & DOORS GIRL TRIM BOARDS	WHITENASHED [ASSUMPTION]
FLOORS	UNPAINTED

HALLWAY SECOND FLOOR

LOCATION	
PLASTER CEILING - CHIMNEY POSTS PLASTER WALLS - DOOR FRAMES/DOORS	WHITENASH
STAIRCASE	UNPAINTED
WINDOW FRAMES TRIM & SASH	LIGHT BLUE 10 B G/T [PROBABLY 19TH CENTURY COLOR]
FLOORS	UNPAINTED

INTERIOR PAINT COLORS CPT. WM. SMITH HOUSE PROPOSED COLORS FOR 1775 RESTORATION

EAST CHAMBER	
LOCATION	
WOOD PANELING - WEST WALL - DOOR FLAME & DOOR	WHITENASH
PLASTER CEILING & SILLER- PLATES & WEST GIRT	WHITENASH
PLASTER WALLS CORNER POSTS	PLASTER WALLS AND CORNER POSTS CAN BE LEFT AS IS [REMOVE WALLPAPER]
WINDOW FRAMES - TRIM of SASH	BLUE-GRAY 10 B 6/1 [POSSIBLY 18TH CENTURY]
FLOOR BOARDS	UNPAINTED
WEST CHAMBER	
LOCATION	
PLASTER CEILING & WALLS - SILLER - PLATES - GIRT WEST CORNER POSTS - RESTORED PLASTER SOFFIT OVER MANTEL	WHITENASH [CORNER POSTS CAN BE LEFT AS - UNPAINTED BUT STAINED]
WOOD MOULD IN EAST WALL	WHITENASH
WINDOW FRAMES, TRIM of SASH	BLUE-GRAY 5 B 6/1 [POSSIBLY 18TH CENT. COLOR]
FLOORS	UNPAINTED

INTERIOR PAINT COLORS CPT WM SMITH HOUSE PROPOSED COLORS FOR 1775 RESTORATION

EAST PARLOR - PAINT SCHEDULE - 1775.

LOCATION	PAINT COLOR & HUESSELL CO. COLOR NOTATION
PLASTER CEILING - GIRTS & SUMMER BEAM	WHITEWASH
WALL SHEATHING & CORNER POSTS	WHITEWASH. [FOUNDATION STILL FEET UNPAINTED]
WINDOW FRAMES - TRIM & SASH	RED 2.5 YR 4/8 [ASSUMPTION BASED ON POSSIBLE C 1775 SASH STYLE FOUND IN ATTIC]
FLOOR BOARDS	UNKNOWN [POSSIBLY RED]
CORNER CUPBOARD	OFF WHITE [ASSUMPTION BASED ON PAINT FOUND ON REVERSE [SUB FLOOR] BD. IN EAST PARLOR]

WEST PARLOR - PAINT SCHEDULE - 1775

PLASTER WALLS & CEILING - SUMMER BEAM - N-S & W GIRTS - NW & SW CORNER POSTS	YELLOW LIMEWASH 2.5 Y 8.5/4
WINDOW FRAMES, TRIM & SASH	RED 2.5 YR 4/8 [BASED ON LOOSE SASH STYLE FOUND IN ATTIC]
EAST WALL PANELING - DOORS & DOOR FRAMES SE CORNER POST NORTH FOUNDATION STILL WHITE	UNKNOWN [POSSIBLY BLACK]
FLOORS	UNKNOWN [POSSIBLY RED]

EXISTING PAINT LAYERING IN EAST PARLOR - CPT. W. SMITH & S.

[illegible]

EXISTING PAINT LAYERING IN WEST PARLOR-EAST WALL-CPT.WM.SMITH HS.

COLOR NOTATION

LOCATION	SUBSTRATE	BLACK	RED	TAN	CREAM	BLUE/GREEN	TAN	TAN	TAN	WHITE		
DERESSED JAMB BOARD-SOUTH SIDE OF FIREPLACE 4" ABOVE ORIGINAL (?) MANTEL CHOST	WOOD	BLACK	RED 2.5 YR 3/6	TAN	CREAM	BLUE/GREEN	TAN	TAN	TAN	WHITE		
DERESSED JAMB BOARD-SOUTH SIDE OF FIREPLACE 1" ABOVE ORIGINAL (?) MANTEL CHOST	WOOD	BLACK	RED 2.5 YR 3/6	TAN	CREAM	BLUE/GREEN	TAN	TAN	TAN	NO		
CHIMNEY POST-SE CORNER OF WEST PARLOR	WOOD	BLACK	RED	SURFACE COAT PK. CREAM								
VERTICAL WALL-PANELING-EAST WALL-SOUTH OF THE FIREPLACE	WOOD	BLACK	RED	GREEN GRAY	PAINTED CORNER	POST COVERED WITH GREEN	ON THE WALL	WALL PAPER	CREAM			
DOOR TRIM-ON NORTH SIDE OF OPENING-DOOR WAY TO STAIRHALL	WOOD	BLACK	RED	GREEN GRAY	BLUE GRAY	TAN	TAN?	WHITE? PRIME	CREAM			
EXISTING MANTEL JAMB-SOUTH JAMB-19TH CENTURY-WEST PARLOR	WOOD	BLACK	RED 2.5 YR 3/6	TAN	CREAM	BLUE/GREEN	TAN	TAN	WALL PAPER-TWO LAYERS UNDER DOOR TRIM OF 1900			
DERESSED JAMB BD. BEHIND MANTEL-SOUTH SIDE OF FIREPLACE	WOOD	BLACK	RED	19TH CENTURY	MANTEL	PIECE INSTALLED	W/H MACHINE CUT	NAILS				
HORIZONTAL BD. ABOVE CLOSET DOOR ADJACENT TO FIREPLACE-WEST PARLOR	WOOD	NO	NO	NO	NO	NO	WHITE PRIME	CREAM	WHITE PRIME			
THREE PIECE DOOR-GROUND TO NORTH CLOSET-EAST WALL-WEST PARLOR	WOOD	NO	RED	GREEN GRAY	BLUE GRAY	TAN	TAN	CREAM	CREAM			
17TH CENTURY DOOR FRAME WITHIN NORTH WALL EAST CORNER THIRD WALL	WOOD	BLACK	RED	GREEN GRAY	BLUE GRAY	MANTEL	DOOR JAMB	CLOSED OFF N/BOARDS & WALL PAPERED OVER				
NE CORNER POST COVERED BD. BETWEEN OLD DOOR FRAME & CLOSET DOOR TRIM	WOOD	BLACK	RED	GREEN GRAY	BLUE GRAY	TAN	TAN	CREAM	CREAM			
CHIMNEY GIRD ABOVE FIREPLACE VERTICAL SURFACE BEHIND CEILING	WOOD	WHITENESS OR GROUNDING	WHITENESS OR GROUNDING	NO	NO	TAN	WHITE PRIME?	CREAM	CREAM			

EXISTING PAINT LAYERING IN WEST CHAMBER-APT. WM. SMITH HS.

LOCATION	SUBSTRATE	N 5.5 BLUE GRAY	10B 5.5/ BLUE GRAY	MANTLE	PROBABLY MID-19TH CENTURY	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	HEAD THIN NAILED W/ST HEAD H/HAIR NAILS - RUBBY MACHINE CUT MACHINE CUT NAILS IN BOTH N/S JAMBS & STOPS CORRODION DOWN ON CORNER SIDE MACHINE CUT NAILS IN STOPS LATE 19TH CENTURY NAILPAPER NEED MIST NAIL
NEST CHAMBER - MANTLE SHELF BY FIREPLACE	WOOD	N 5.5 BLUE GRAY	10B 5.5/ BLUE GRAY	MANTLE	PROBABLY MID-19TH CENTURY	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	HEAD THIN NAILED W/ST HEAD H/HAIR NAILS - RUBBY MACHINE CUT MACHINE CUT NAILS IN BOTH N/S JAMBS & STOPS CORRODION DOWN ON CORNER SIDE MACHINE CUT NAILS IN STOPS LATE 19TH CENTURY NAILPAPER NEED MIST NAIL
NEST CHAMBER - BEADED BORDERS COVERING FIREPLACE OPENING	WOOD	10B 5.5/ BLUE GRAY	10B 5.5/ BLUE GRAY	IDENTICAL PAINT COLOR FOUND ON BEADED BORDERS IN EAST CHAMBER	PROBABLY 1910.					
NEST CHAMBER - SOFTLY PAVED WALKED TO SOFTLY BEGINT RAKE-MANTLE	WOOD	UNPAINTED	COVERED W/ WAXPAPER							
NEST CHAMBER - NORTH JAMB & FIREPLACE EAST WALL	WOOD	N 5.5/ GRAY	N 5.5/ GRAY	N 4.5/ GRAY						
NEST CHAMBER - 2" HEAD PIECE WIDE FIREPLACE MANTLE EAST WALL	WOOD	N 5.5/ GRAY	N 5.5/ GRAY							
NEST CHAMBER - EDGE OF NORTH JAMB AT FIREPLACE [PLASTER]	WOOD	BLACK	GRAY	GRAY	RED GREEN DIRT					
NEST CHAMBER - ONE-WINDOW TOMB NEST WINDOW	WOOD	5P 2.5/ BLUE GRAY	5P 2.5/ BLUE GRAY	N 5.5/ DARK GRAY	10Y 7/6 DARK GREEN	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	HEAD THIN NAILED W/ST HEAD H/HAIR NAILS - RUBBY MACHINE CUT MACHINE CUT NAILS IN BOTH N/S JAMBS & STOPS CORRODION DOWN ON CORNER SIDE MACHINE CUT NAILS IN STOPS LATE 19TH CENTURY NAILPAPER NEED MIST NAIL
NEST CHAMBER - WEST WINDOW DRAYED JAMB & EAST STOP	WOOD	5P 2.5/ BLUE GRAY	5P 2.5/ BLUE GRAY	N 5.5/ DARK GRAY	10Y 7/6 DARK GREEN	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	HEAD THIN NAILED W/ST HEAD H/HAIR NAILS - RUBBY MACHINE CUT MACHINE CUT NAILS IN BOTH N/S JAMBS & STOPS CORRODION DOWN ON CORNER SIDE MACHINE CUT NAILS IN STOPS LATE 19TH CENTURY NAILPAPER NEED MIST NAIL
NEST CHAMBER - TOWARD WALL, CARVED PIDS NORTH SIDE OF DOORWAY	WOOD	10B 5.5/ BLUE GRAY	10B 5.5/ BLUE GRAY	10Y 7/2 DARK GREEN	10Y 7/2 DARK GREEN	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	5Y 8.5/2 LT CREAM	HEAD THIN NAILED W/ST HEAD H/HAIR NAILS - RUBBY MACHINE CUT MACHINE CUT NAILS IN BOTH N/S JAMBS & STOPS CORRODION DOWN ON CORNER SIDE MACHINE CUT NAILS IN STOPS LATE 19TH CENTURY NAILPAPER NEED MIST NAIL
NEST CHAMBER - WEST JAMB AND BORDERS & N/S FILL OF CHIMNEY W/ST	WOOD	W/STONISH	W/STONISH							

PART 7.

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