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Historical, Architectural, & Archeological Research at Brattonsville (38YK21), York County, South Carolina

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Historical, Architectural, & Archeological Research at Brattonsville (38YK21), York County, South Carolina

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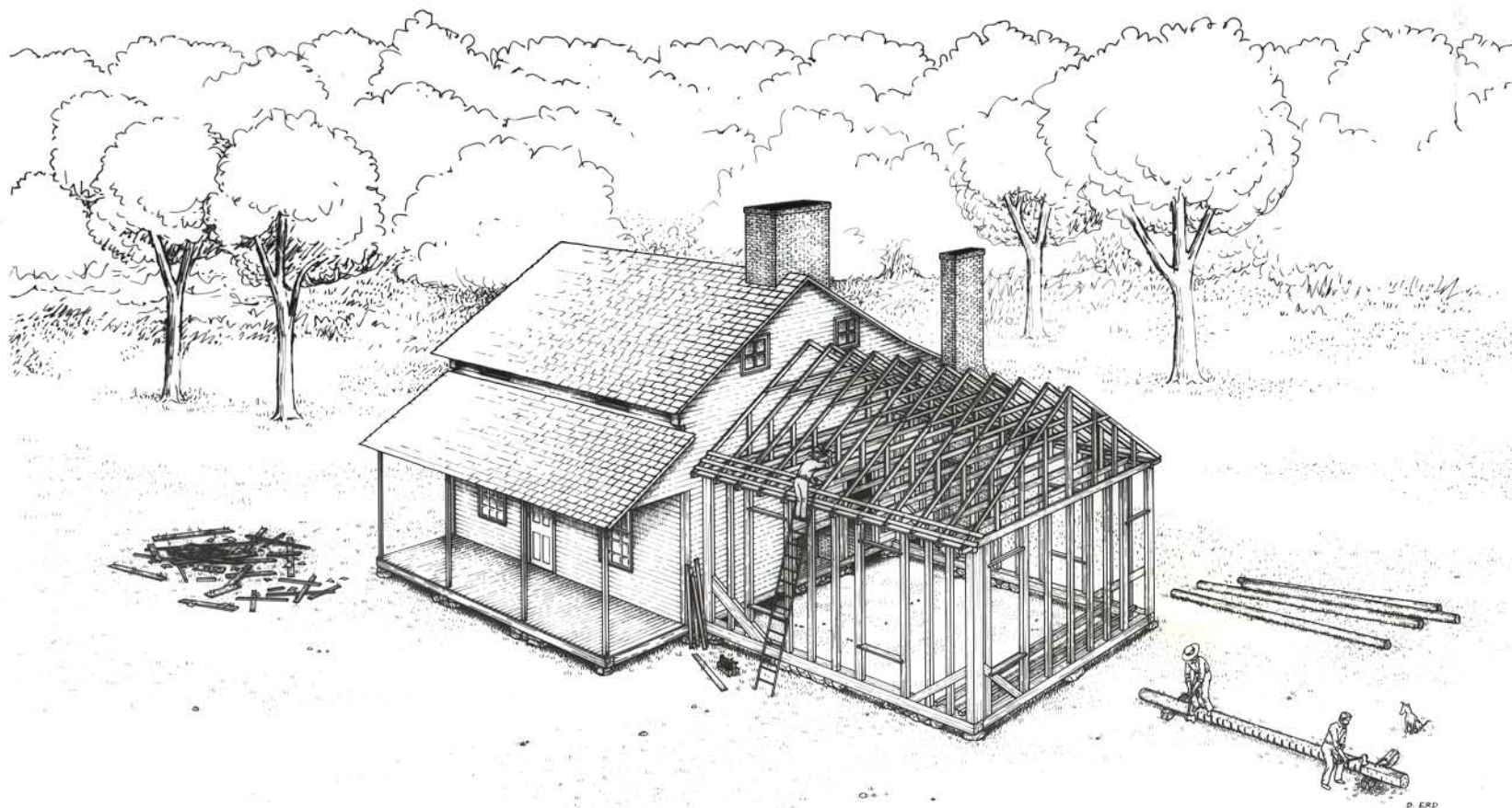
HISTORICAL, ARCHITECTURAL, & ARCHEOLOGICAL RESEARCH
AT BRATTONSVILLE (38YK21),
YORK COUNTY, SOUTH CAROLINA

by

Joseph C. Wilkins, Howell C. Hunter, Jr.,
and Richard F. Carrillo
Research Manuscript Series, No. 76

This project has been partially funded with assistance from the National Park Service, Department of the Interior, under the provisions of the National Historic Preservation Act, through the South Carolina Department of Archives and History.

Prepared by the
INSTITUTE OF ARCHEOLOGY AND ANTHROPOLOGY
UNIVERSITY OF SOUTH CAROLINA
July, 1975



FRONTISPIECE: Conjectural illustration based on interpretation derived from archeological excavations at the Colonel William C. Bratton house.

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INTRODUCTION

In early 1974, the Institute of Archeology and Anthropology was approached by State Senator Samuel D. Mendenhall, of York County, who has been very active in maintaining and revitalizing interest in York County's history, particularly at Brattonsville. The Bratton log house has been Senator Mendenhall's focus and he sought advice from the Institute regarding restoration.

The research conducted at the site of Brattonsville involved a three-phase project including historical, architectural and archeological studies of the Colonel William C. Bratton log house (Figs. 1 and 2). The house is believed to have been constructed between 1774 and 1780 (Wilkins, Part I).

Brattonsville is located in York County on secondary highway S-46-165 approximately two miles from the intersection with Highway 322. The nearest town is McConnells, located about three miles east, and about ten miles southwest of Rock Hill. In addition to the Bratton house, several other structures (not shown) antedating the log house are located on the west side of Highway 165, and south of the log structure (Fig. 3).

After a survey of the log structure was conducted, a proposal was submitted to Senator Mendenhall outlining the necessary research required to adequately interpret the building (Carrillo 1974). The proposed research consisted of historical, architectural, and archeological components.

Historical Component

A research specialist would be assigned to search out documents in the South Carolina Department of Archives and History, and in county and

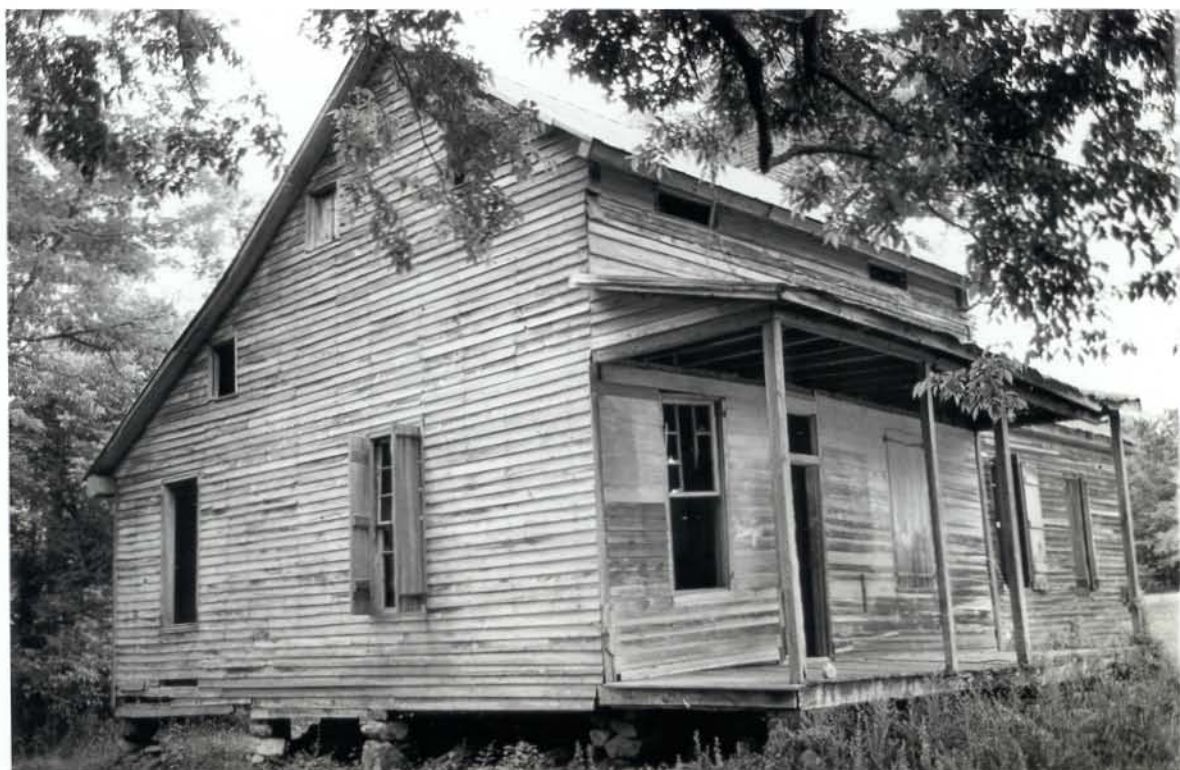
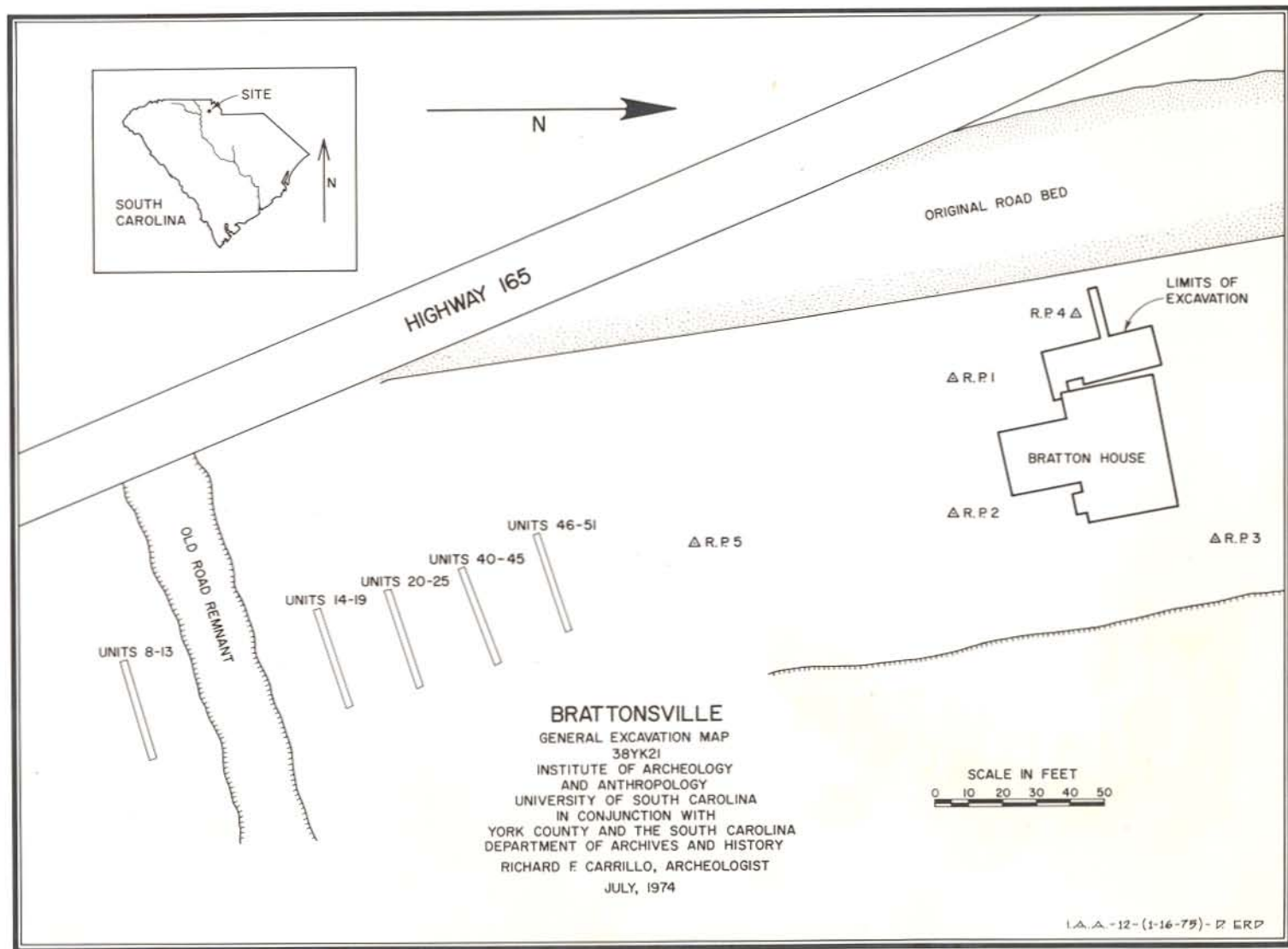


Fig 3



local repositories. This research would be directed toward ascertaining as much historical information as possible concerning the log structure and all relative events pertaining to the Battle of Williamson's Plantation. The historical research would incorporate documentation into a narrative account of the Bratton house and the battle. It was felt that such research might reveal the location of Revolutionary War Period architectural features and consequently serve as a general orientation for archeological research. One feature of particular interest was a corn crib believed to have been located near the log structure and used during the battle.

Architectural Component

The second proposed phase of the project would be to engage the services of an architectural specialist to conduct a structural analysis of the building. The architectural style of the log cabin could then be described, resulting in scale drawing of the interior and exterior portions of the house.

Archeological Component

Archeological research would follow up the results of the historical research and augment the architectural study. The primary goals consisted of examining the front porch area for evidence of a Revolutionary War Period porch and attempting to locate the corn crib purportedly used during the Battle of Williamson's Plantation (Stinson 1867). The third goal, if time permitted, would be to locate the Revolutionary War Period trash dump area to expand the artifact inventory from this period.

The goals as outlined in the research proposal and reiterated above were achieved. The historical research served to place the sequence of

events relative to the Bratton house in proper perspective. The architectural research was one of the most exhaustive examinations ever undertaken on such a structure in South Carolina and produced a complete set of detailed architectural drawings. The archeological research produced significant specific data providing a basis for further understanding of some general aspects of human behavior.

ACKNOWLEDGEMENTS

Senator Samuel D. Mendenhall's unyielding interest and endeavor has resulted in the following study and I wish to extend my sincere gratitude to him. Acting in the capacity of sponsor, Senator Mendenhall provided a base from which meaningful information could be obtained. He helped significantly with the understanding of the Bratton log house and also provided a source of information of general interest to students of history, architecture, and archeology.

Mr. Joe C. Wilkins, historical specialist, did an exhaustive documentary search and Mr. Howell W. Hunter, Jr., architectural specialist, did a remarkable job of measuring and drawing the architectural features of the Bratton log house. Deep appreciation is expressed to both these scholars.

The South Carolina Department of Archives and History provided both financial and advisory assistance to the project. As the state funding agency for the National Historic Preservation Act, the Department partially funded the project. Mrs. James W. Fant, Coordinator, Historic Preservation Division and William Brabham, Grants Administrator, coordinated the

project and offered helpful advice. The Department is to be thanked for their good efforts in behalf of the investigations.

Dr. Robert L. Stephenson, Director of the Institute of Archeology and Anthropology, University of South Carolina, who was responsible for overall supervision and administration of the project, in addition to editing the final version of this report; John D. Combes, Assistant Director; and Kenneth Lewis, Archeologist, are thanked for their helpful advice. Special thanks are extended to Leland G. Ferguson, Archeologist, and Stanley South, Archeologist, for their assistance in editing the final manuscript. I wish to especially thank Albert C. Goodyear, Highway Archeologist, for his assistance in the statistical analysis of the data and encouragement towards viewing the archeological data in the manner in which it is presented. The rest of the Institute's staff, Leslie Beuschel, Laboratory Supervisor; Gordon Brown, Photographer; Carleen Sexton, Accounting Clerk; Jane Rhett, Research Analyst; and Sandra Anderson, Secretary are thanked for providing the technical assistance necessary to complete this report. R. Darby Erd, Illustrator, in addition to contributing the technical illustrations, is highly commended for his excellent artwork in the form of the interpretive drawing which serves as the frontispiece for this report.

In addition I wish to thank the students who acted in the capacity of crewmembers for providing their diligent and effective intellectual and physical labors: Beth Bower, Crew Chief, Brown University; Kent C. Taylor, Wayne State University; Evan Smith, University of Kansas; Sarah Goodnight, East Carolina University; Kathy Beidleman, Donald Simon, and Nina Thanz, all from the University of Florida; and Donna C. Willis, who handled the cooking duties.

The following acknowledgements are directed towards the individuals who contributed their time and services in aiding Mr. Howell C. Hunter, Jr., with the architectural research: Senator Samuel D. Mendenhall, sponsor and for providing useful background information; Mr. Vernon S. Hodges, Professor of Architectural History, Clemson University for visiting the site and offering his opinions and advice; Dr. Harold N. Coolidge, Jr., Alumni Professor of Architectural History, Clemson University for his comments and advice; Dr. Robert L. Stephenson, Institute of Archeology and Anthropology, University of South Carolina, acting as overall administrator of the project; and Richard F. Carrillo, Archeologist, Institute of Archeology and Anthropology, University of South Carolina, who directed the overall project and provided considerable advice.

PART I

*HISTORICAL NARRATIVE OF BRATTONSVILLE
RELATIVE TO THE BATTLE OF WILLIAMSON'S PLANTATION
AND THE COLONEL WILLIAM C. BRATTON HOUSE*

by Joseph C. Wilkins
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BATTLE OF WILLIAMSON'S PLANTATION

A significant event in the history of the War for Independence in South Carolina was the Battle of Williamson's Plantation, often referred to in earlier narratives as the Battle of Huck's Defeat. The defeat of Captain Christian Huck and his men on July 12, 1780, by irregular South Carolina militia, was the first success for the South Carolinians since the fall of Charleston in May, 1780 (Wallace 1934: 211).

After the fall of Charleston the British dispatched troops to all sections of the state to disperse patriot activities and to secure the countryside for the crown. The British regulars were aided in this exercise by numerous South Carolina Tories.

In late June 1780, a group of patriots from the Brattonsville area in York County, led by Colonel William Bratton, Captain John McClure and Richard Winn, attacked and defeated a group of Tories meeting in Mobley's Meeting House in Fairfield County. Upon hearing of this defeat, Colonel Turnbull, the British commander at Rocky Mount, dispatched Captain Christian Huck (also spelled Houck or Huyck) to punish the American patriots in this vicinity for their actions. The number of men under Huck's command varies from account to account of the Battle. In 1897, Wright credited Huck with 400 men (Wright 1897: 250), and Wallace credited him with 150 (Wallace 1934: 210). Lord Cornwallis in a letter to Sir

Henry Clinton put the number at 105. Cornwallis' account is probably the most accurate (Tarleton 1968: 121). As Wallace pointed out in his comprehensive history of the state, it has been the tendency for American historians, especially contemporaries of the event, to exaggerate the number of personnel engaged in these small battles.

Captain Christian Huck was a Philadelphia lawyer who had come from New York with Tarleton's legion and was noted by the American patriots of the district for his cruelty. During the month of June 1780, Huck and his men plundered the patriot's property in York County. Colonel William Hill's Iron Works on Allison Creek was burned as well as the parsonage of Reverend John Simpson at Fishing Creek Presbyterian Church. On July 11, 1780, Huck and his men plundered the McClure's farm in York County and took James McClure and Edward Martin, who were making bullets for the patriots, prisoners. Mrs. McClure sent her daughter, Mary, to General Sumter's camp thirty miles away to inform the men of Huck's activities.

Colonel William Bratton, Captain John McClure, and Captain Jameson were immediately dispatched with 130 men to find Huck. In the interim Colonels Edward Lacey, William Hill, and Andrew Neel had also heard the news and were marching to the rescue. Meanwhile, Huck and his men had moved from the McClure's to the Adair's and after plundering on the way, finally arrived at the Bratton Plantation. Huck demanded of Colonel William Bratton's wife where her husband was. She replied that he was with Sumter. The tory leader then proposed giving her husband a royal commission if he would join the Tories. To this she replied that she "desired that he should remain in Colonel Sumter's command even if he lost his life" (Wright 1897: 250). According to a later account, the

Bratton's five year old son, John, had been sitting on Huck's knee during this discussion. Upon hearing Mrs. Bratton's response to his proposal, Huck threw John to the floor, bloodying his nose. One of Huck's soldiers then grabbed a reaper and held the tool to Mrs. Bratton's throat but was stopped from killing her by Huck's second in command.

While at the Bratton's, Huck arrested three old men, James McRandle, Thomas Clendenin and Robert Bratton and charged them with being patriot sympathizers. These men were confined to a corn crib where they were found and released following the battle. After finishing with the Bratton's Huck moved on to the adjoining plantation of James Williamson. The Williamson House was surrounded by a fence and a small lane passed before the house. There was also a main road that ran close to the house (Fig. 4). Huck posted sentinels and he and his officers, including a Colonel Ferguson of the Tory militia whose main duty was to plunder and raid, quartered in the house while the remainder of his men slept in tents (Johnson 1851: 336-337).

Colonel Bratton and Captain McClure with 125 men (here again the figures vary according to the source) left Sumter's camp at Old Nation Ford on the Catawba River just below the North Carolina line, to encounter Huck. During the march about 50 men dropped out bringing the patriot force to 75 men. Bratton had originally planned to attack Huck and Ferguson at White's Mill but upon arriving July 11th, he was informed that Huck had moved north to Brattonsville; the area of Colonel Bratton's home. After consultation the leaders decided to pursue Huck and attack him before morning.

Legend has it that upon arriving in the Brattonsville area Colonel Edward Lacey and Captain John Mills were dispatched to determine the

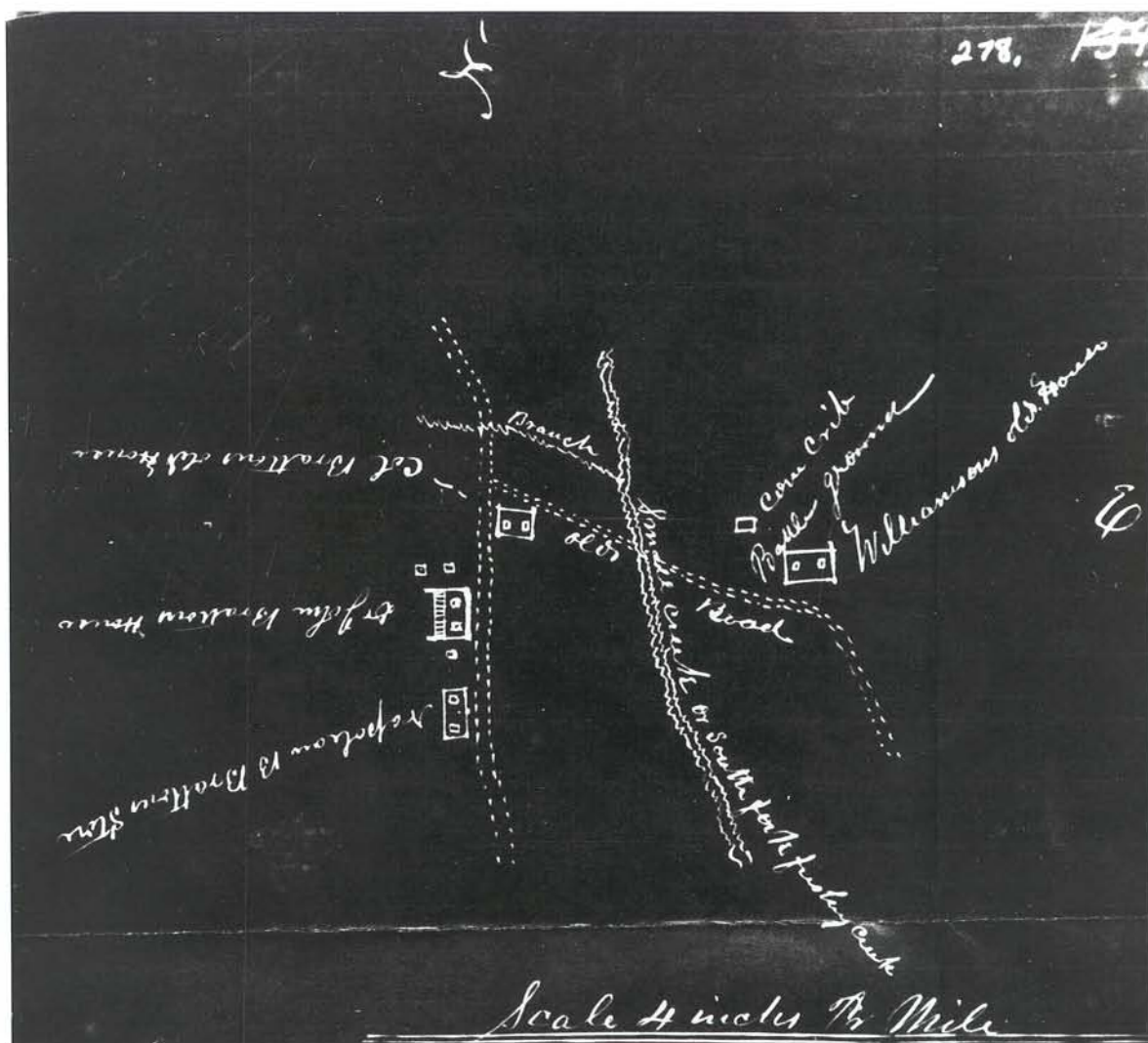


FIGURE 4: Initial Stinson Map, March 1876

exact position of the enemy's camp. Edward Lacey, whose blind brother Ruben was a Tory, deceived Ruben into revealing the exact location of Huck's sentinels by disguising his voice and causing Ruben to believe that friends of the British were present and needed to enter the camp (Lathan 1876). Lacey and his men immediately rode back to the patriot camp and informed their companions of the location of the sentinels. Colonel Bratton scouted the area around the British camp, dismounted his men and concealed his horses in a swamp nearby. The plan of attack was to divide the force into two divisions; one led by Bratton and Neel and the other by Lacey, John McClure and a Captain Moffit. The forces under Bratton and Neel were to advance to the road passing the Williamson House. The other forces under Lacey, McClure and Moffit were to proceed from the opposite direction. At the first sound of battle the sentinels were to be killed by men appointed to watch each guard. The patriots had advanced to within 75 yards of the Tories and members of Tarleton's Legion when the attack began.

The attack which was on the north and east sides of the house took the British by complete surprise. Apparently Huck did not immediately realize the extent of the exchange as he suddenly rushed from his tent coatless, mounted a horse, and tried to rally his men. Sighting the coatless Huck, Thomas Carroll shot him through the head. Meanwhile, Ferguson, to no avail, tried to rally his troops and attempted to drive the patriots away by bayonet. After Huck fell the patriots charged the British force, capturing many and routing the rest. Ferguson pleaded for quarter but was executed on the spot because of his alleged shooting of William Strange. Other elements of the defeated force were scattered with many being killed on the run by the patriots. In all, the battle

lasted approximately one hour (Wright 1897: 249-251; Lathan 1876: XV; McCrady 1969: 588-600).

According to Cornwallis' report of the battle to Sir Henry Clinton, 12 men of Tarleton's legion and 12 of the militia were either wounded or killed, the rest being taken prisoners (Tarleton 1968: 121). The Americans reported that Huck and 34 of his men and the Tory militia were killed, while 29 were captured. James McClure and Edwin Martin who were to be hanged that morning, were released.

The defeat of Huck and his men had a profound effect upon the patriot cause. This was the first success for the South Carolina Militia against regular British forces since the capture of Charleston in May of 1780. Subsequently this victory brought men rallying to General Sumter's banner.

LOCATION OF THE SITE OF THE BRATTON LOG CABIN

William Bratton bought 200 acres of land situated in Mecklenburg County, North Carolina, on August 11, 1765, from Thomas Rainey; the original grantee of a tract of 400 acres. By a later survey of the boundary between North and South Carolina the land became part of Craven County, South Carolina and the memorial was filed by William Bratton, November 10, 1772, indicating the change (Bratton Memorial: 501). The land was surveyed on December 10, 1774 with the plat being bounded on the northeast by lands granted to John Moor and Richard Sandler, on the northwest by James Williamson's land (where the Battle of Huck's Defeat or Williamson's Plantation occurred [Fig. 5]), on the southwest by Daniel Croft and on all other lines by the land of William

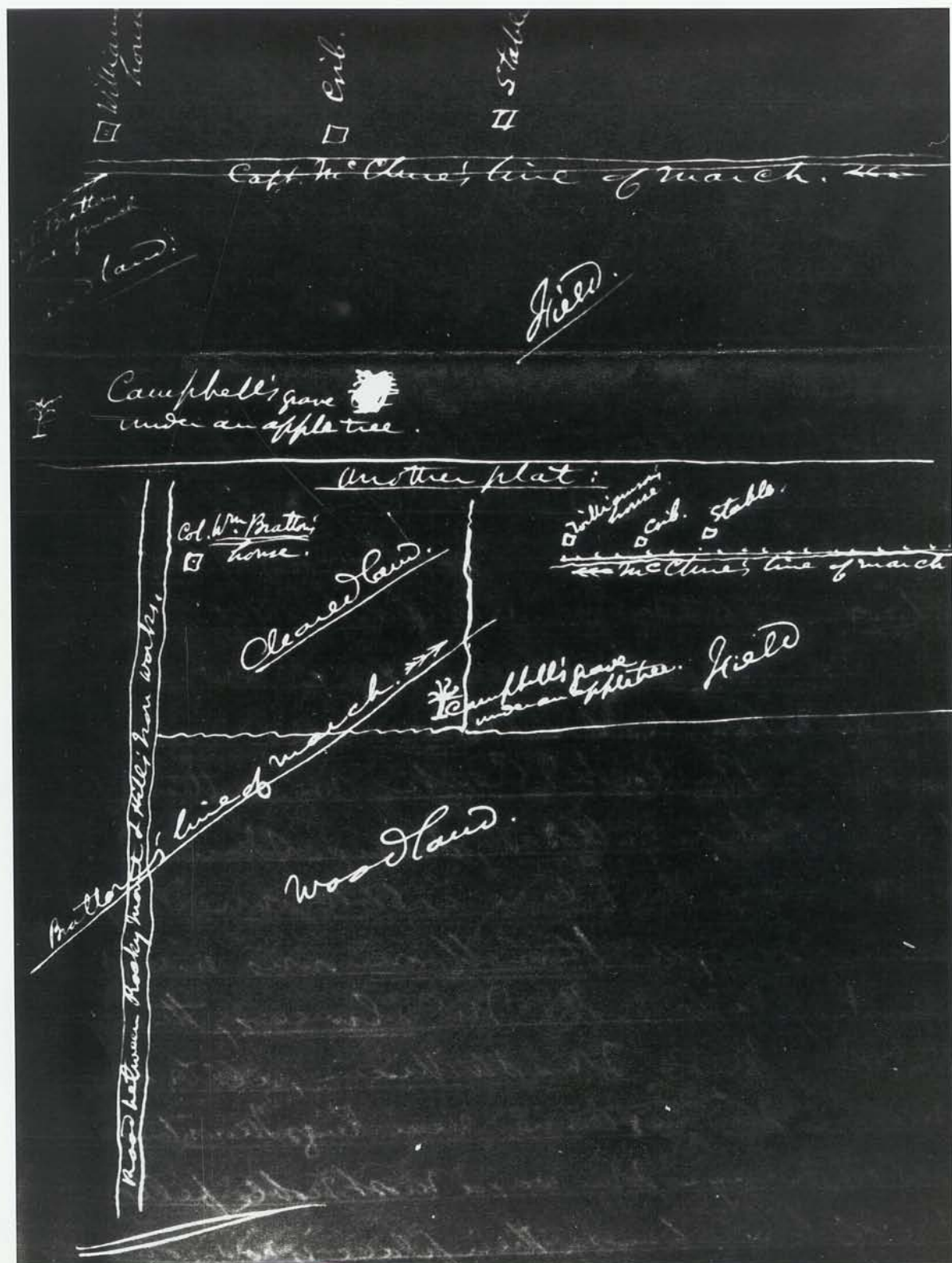


FIGURE 5: Starr Moore Map

Barrow, conveyed to Barrow from an original grant to James Adams (Bratton Plat: 300).

The Bratton log cabin was built sometime between 1774 and 1780. When surveyed in 1774 the plat did not reveal any dwelling on the property, however, in 1780 when the Battle of Huck's Defeat occurred there was a dwelling on the Bratton land. The Rock Hill Evening Herald of October 7, 1948 placed the date of the cabin at 1776 but the article offered no evidence to back up its assertion (Rock Hill Evening Herald 1948).

No actual reference is made in William Bratton's will to the log cabin; but William left to his son, John, the family residence and much of the battlefield of 1780. The will was signed December 27, 1813, and probated February 13, 1818; Colonel William Bratton died in 1815 (William Bratton Will n.d.: 511-513). The will of Martha Bratton, William's wife, who died in June, 1816 was probated May 4, 1827 and also made no mention of any dwellings (Martha Bratton Will 1816: 279).

A celebration of Huck's Defeat was held at Brattonsville July 12, 1839. Mentioned in the proceedings of this event was a reference to a house on the property, apparently the same residence used by Colonel and Mrs. Bratton and owned by their son Dr. John S. Bratton in 1839. There was no evidence to indicate that the original structure had been altered by 1830 (proceedings of the celebration of Huck's Defeat at Brattonsville, York District, South Carolina, July 12, 1839 herein-after cited P.C.H.D.).

In the course of research for his book, King's Mountain, Lyman C. Draper collected numerous references and sketches of the Battle of Huck's Defeat. A large portion of Draper's research was obtained from

Dr. John H. Logan, author of the History of Upper South Carolina written in 1859. Contained in Draper's notes of Logan's research is an interview with Starr Moore whose aunt had married James Williamson. It was on Williamson's Plantation that most of the Battle had occurred. Moore's sketch of the Battlefield, although extremely crude, does provide the location of the Bratton house in relation to the line of march of the patriots (P.C.H.D., Fig. 4).

In March, 1876, D. G. Stinson, who was aiding Draper, sent a sketch to him made from a description of the site of the battle from N. B. Bratton, grandson of Colonel Bratton and from the present appearance of the site (Fig. 4). In August, 1876, Stinson sent Draper another sketch of the battlefield and the Bratton home having this time been aided by John S. Bratton (Fig. 6). Stinson noted that the Bratton house was the same as it had been in 1780 except that a frame ell had been added. The Bratton's no longer lived in the house, Stinson noted, but Mrs. Williams, one of the family, did (Draper Manuscript n.d.: 54).

A monument commemorating Huck's Defeat was erected by the King's Mountain Chapter, Daughters of the American Revolution, October 1, 1903, at the edge of the battlefield 200 yards from the spring near the Bratton house and approximately 100 yards from the house.

From this research one can conclude that the Bratton Log Cabin or house was built sometime between 1774 and 1780, and probably in 1776. The dwelling does not appear to have been substantially altered since then except for a frame ell which was constructed before 1876 (Yorkville Enquirer 1903).



(Adapted from map by D.G. Stinson 1876)

FIGURE 6: Revised Stinson Map, August 1876

PART II

ARCHITECTURAL RESEARCH OF THE COLONEL WILLIAM C. BRATTON HOUSE

by Howell C. Hunter, Jr.
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Clemson University

PREFACE

An architectural examination of the Colonel William Bratton House has resulted in the following report in conjunction with the historical and archeological investigations.

The Colonel William Bratton House is listed simply as a log cabin in the Brattonsville District in the National Register of Historic Places. It has historic value in that it is the site of Huck's Defeat in the Revolutionary War. York County has control of the house, and matching federal, state, and county funds are being used to restore it.

The purpose of this study was to provide documentary architectural research on the house. The study has involved examining and identifying all detached members, numbering them, and preparing an inventory list (Appendix I); making a photographic record of the house as it is; making complete and detailed measurements and preparing measured drawings; and preparing a written summary and analysis of the findings.

INTRODUCTION

Location and Ownership

The Colonel William Bratton House is located in York County on secondary highway S-46-165 just off S.C. 322. It is about three miles east of McConnells and about ten miles southwest of Rock Hill, South Carolina. The house is the Revolutionary War home of Colonel William

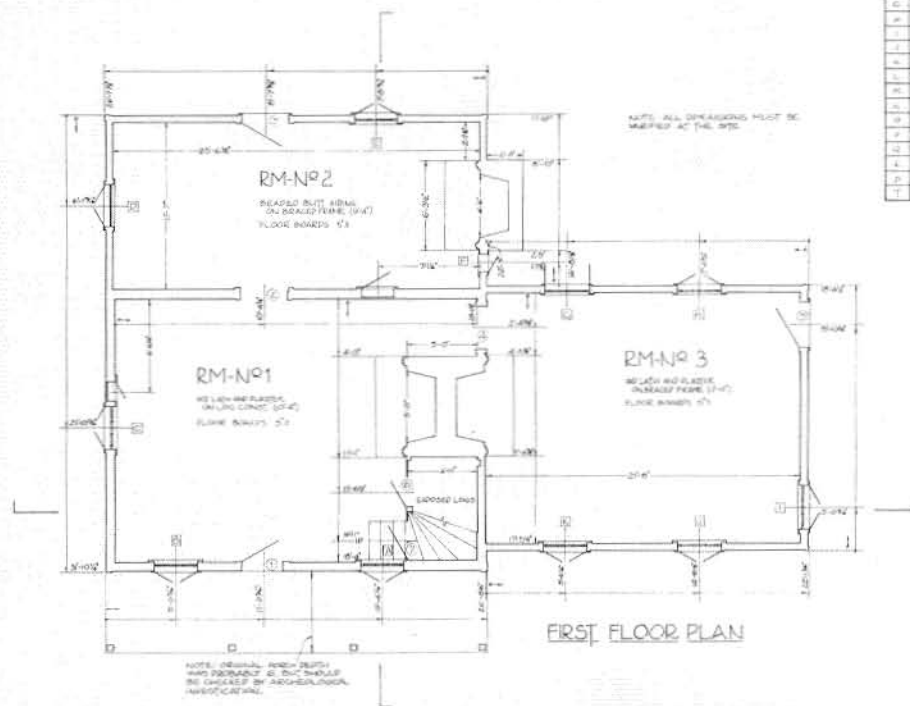
Bratton and his wife Martha Bratton and is the site of Huck's Defeat which occurred July 12, 1780 (Wilkins, Part I).

The house remained in possession of the Bratton family until, in 1962, after the death of Virginia Bratton, the estate was sold to R. F. Draper. The family requested, however, that the house itself be turned over to the county. Matching federal, state, and county funds are financing the restoration of the house.

Present Condition

The house consists of a two-story portion of log construction (original house) with two ells of braced frame construction -- one on the east, or back, side and one on the south side. There are three rooms downstairs and one room upstairs (Fig. 7).

Considering the age of the house, it is in good condition structurally. Some deterioration does occur in a few girders, sills, and joists. Vandalism in recent years has been the cause of damage to the interior. Window sashes have been broken, the plasterwork has been damaged and various members have been taken from the house. Several doors and shutters are not hanging due to broken hinges, and all lock hardware has been removed from the doors and shutters. No major damage has occurred in the house. The existing porch is a fairly recent replacement of the original, but it has already fallen into bad repair. Brick has fallen from the top of both chimneys and all traces of chimney caps are gone. The smaller exterior chimney is leaning away from the house. The original roofing has been replaced with metal roofing.



DOOR 50 FIVE			
NO	CONTRACT	DOOR	DESCRIPTION
1	C-100 x 4" F	C-100 x 4" F	SHALL DOOR, STONE FILLED, BROWNISH OAK, 10' H, 4' W, 1 1/2" THICK, 10' H, 4' W, 1 1/2" THICK
2	C-100 x 4" F	C-100 x 4" F	DOOR, 10' H, 4' W, 1 1/2" THICK, 10' H, 4' W, 1 1/2" THICK
3	C-100 x 4" F	C-100 x 4" F	DOOR, 10' H, 4' W, 1 1/2" THICK, 10' H, 4' W, 1 1/2" THICK
4	C-100 x 4" F	C-100 x 4" F	DOOR, 10' H, 4' W, 1 1/2" THICK, 10' H, 4' W, 1 1/2" THICK
5	C-100 x 4" F	C-100 x 4" F	DOOR, 10' H, 4' W, 1 1/2" THICK, 10' H, 4' W, 1 1/2" THICK
6	C-100 x 4" F	C-100 x 4" F	DOOR, 10' H, 4' W, 1 1/2" THICK, 10' H, 4' W, 1 1/2" THICK
7	C-100 x 4" F	C-100 x 4" F	DOOR, 10' H, 4' W, 1 1/2" THICK, 10' H, 4' W, 1 1/2" THICK
8	C-100 x 4" F	C-100 x 4" F	DOOR, 10' H, 4' W, 1 1/2" THICK, 10' H, 4' W, 1 1/2" THICK

WINDOW SCHEMULE		
NO	NO. OF FLOOR	DESCRIPTION
A	2-05	0.0000 - 0.0000
B	2-05	0.0000 - 0.0000
C	2-05	0.0000 - 0.0000
D	2-05	0.0000 - 0.0000
E	2-05	0.0000 - 0.0000
F	2-05	0.0000 - 0.0000
G	2-05	0.0000 - 0.0000
H	2-05	0.0000 - 0.0000
I	2-05	0.0000 - 0.0000
J	2-05	0.0000 - 0.0000
K	2-05	0.0000 - 0.0000
L	2-05	0.0000 - 0.0000
M	2-05	0.0000 - 0.0000
N	2-05	0.0000 - 0.0000
O	2-05	0.0000 - 0.0000
P	2-05	0.0000 - 0.0000
Q	2-05	0.0000 - 0.0000
R	2-05	0.0000 - 0.0000
S	2-05	0.0000 - 0.0000
T	2-05	0.0000 - 0.0000



STRUCTURE

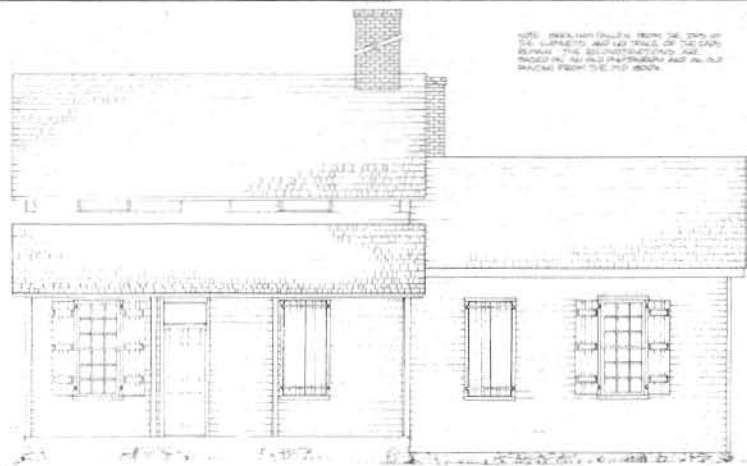
Documentation concerning the physical structure of the Bratton house is scarce. Therefore accurate dating of the evolving stages of the house is impossible at this point. But, from examination of the fabric of the house, it is obvious that it has undergone two major changes in its lifetime. The following is a brief summary of these changes.

Initial (hypothetical)

According to Virginia Bratton, who was born in the house in 1870 and died at the age of 92, the original house was constructed in 1776 (Samuel Mendenhall, personal communication). There exists no documentation to verify the date.

The first house was a two-story structure of log construction, supported at its base by large stones (Figs. 8 & 9). The logs were fabricated by adzing and broad axing. There was one room upstairs and one room downstairs. A porch ran the length of the house on the west side which was the front entrance. There was one other exterior door on the east side. The logs were exposed both on the exterior and the interior. The openings between the logs were chinked with red clay and brick. The original chimney was probably an internal chimney. This seems to be the case because, on the upper level, the logs run behind the existing chimney.

On the front side of the house there were two windows opening from the first level and two long, narrow openings known as "fireworks" opening from the upper level, just above the porch, achieved by leaving



WEST ELEVATION



SOUTH ELEVATION



NORTH ELEVATION

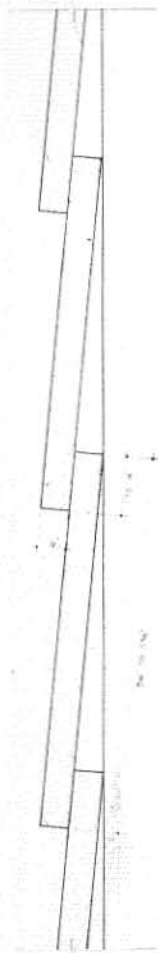


EAST ELEVATION

EXTERIOR ELEVATIONS

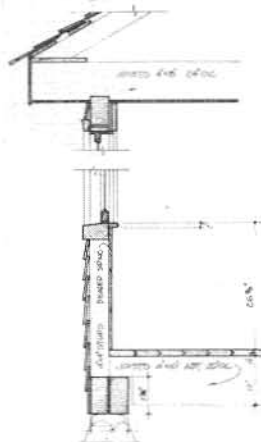
SCALE: 1/4" = 1'-0"



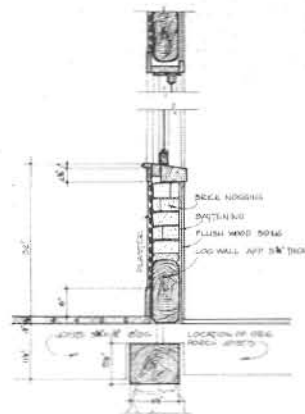


SECTION AT SIDING

SIDING UNDER PORCH

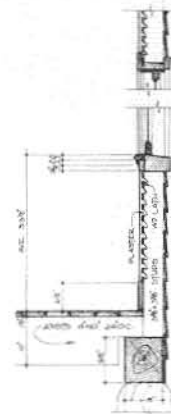


WALL SECTION AT RM N#2



WALL SECTION AT RM N#1

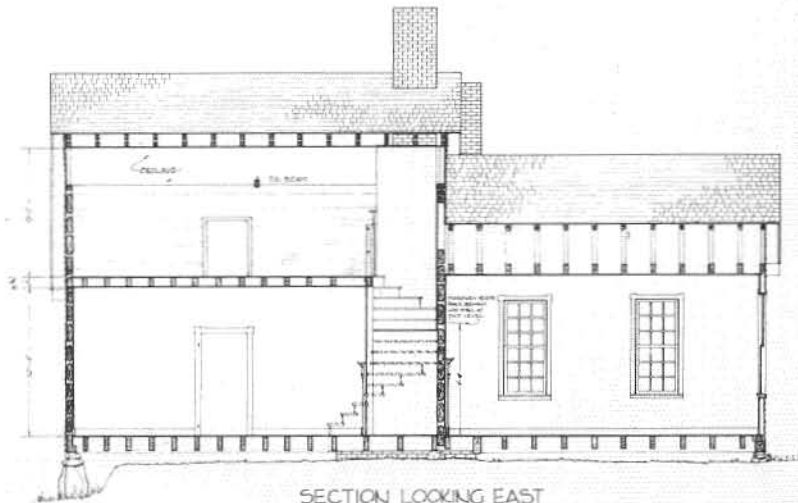
SCALE: 1"=1'-0"



WALL SECTION AT RM N#3



SECTION LOOKING SOUTH



SECTION LOOKING EAST

BUILDING SECTIONS

SCALE: 1/4"=1'-0"



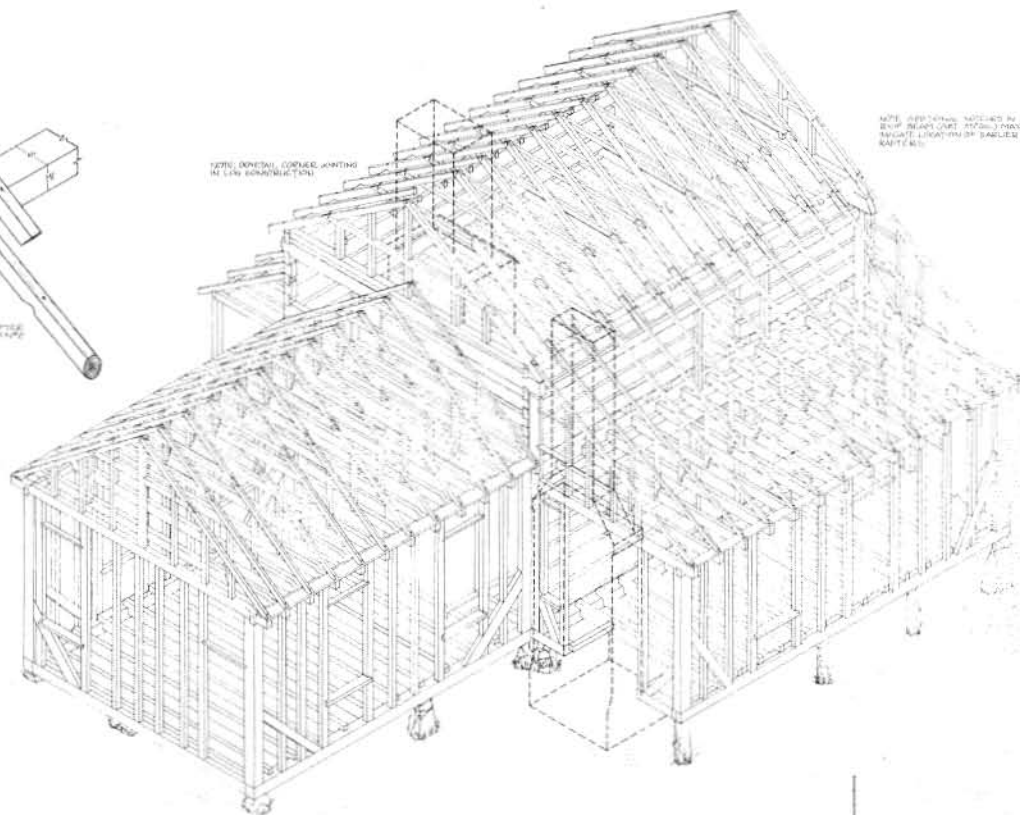
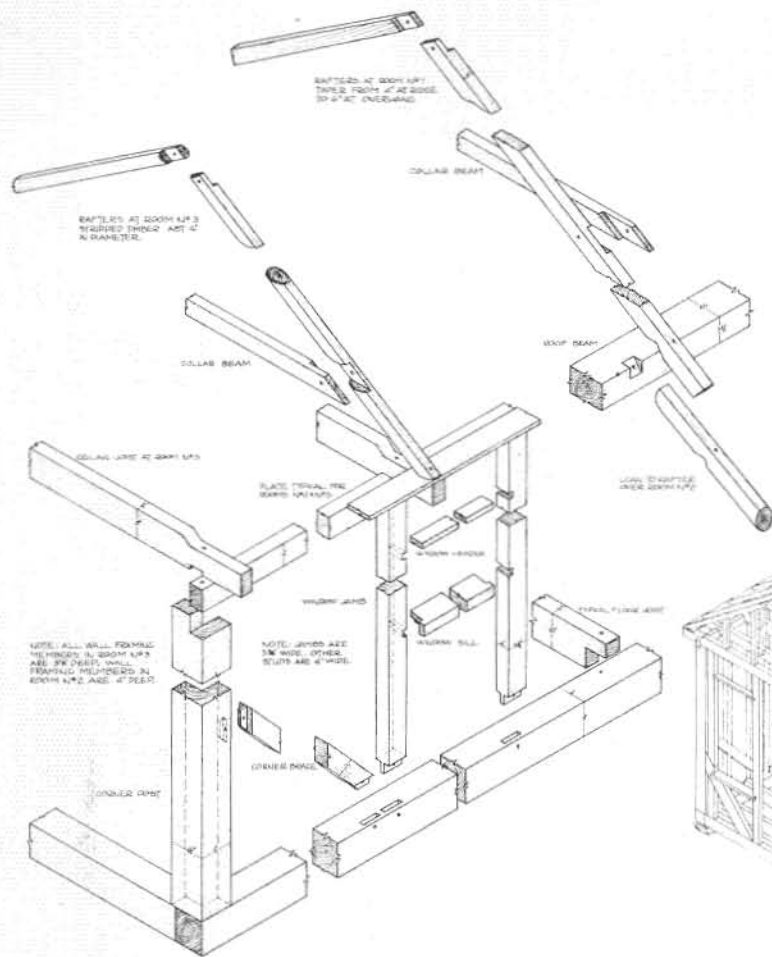
out one log. On the north side one window opened from the first level and one small opening cut into the logs from the second level. Four high windows in the upper level opened at the gables; two on the north and two on the south. On the east side only the door opened off of the lower room, although there could possibly have been an opening where the present cupboard now exists in the eastern addition. On the second level, again a log was left out at the same elevation as the "fireworks" on the west side and may have served the same purpose. One other opening would have been the window on the south wall at the stairwell.

During examination of the roof structure, superfluous notches were found in both roof beams at about 35 inches on center. These notches may indicate the position of earlier rafters (Fig. 10). The existing roof structure is pegged timber construction and dates at least as early as 1780, when the first ell is known to have been in existence.

First Enlargement

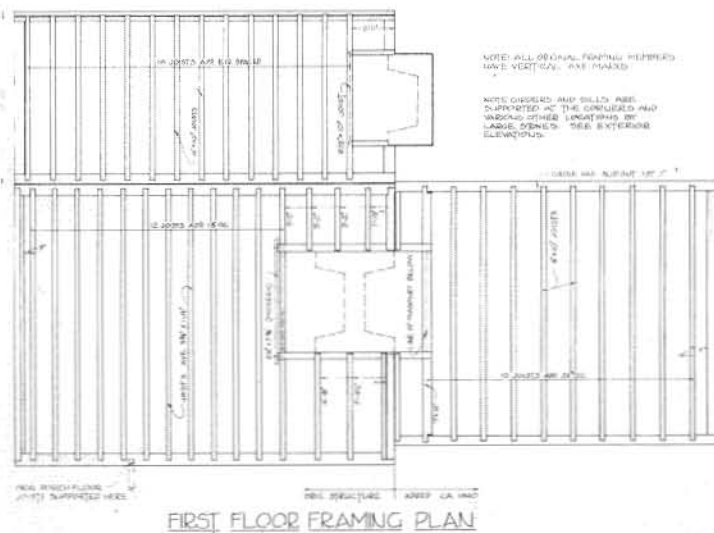
The house was enlarged by the addition of a room at the rear (Figs. 11 & 12). If the date of the original house, as cited by Virginia Bratton, is close to being accurate, then the first enlargement came soon thereafter. It is known to have been in existence at the time of the Battle of Huck's Defeat which occurred in 1780 (Samuel D. Mendenhall, personal communication).

It is evident that this is not part of the original house because logs in the wall separate it from the original. The new ell was of heavy braced frame construction rather than log construction. Many of the joists were apparently salvaged from other structures as indicated by the random order of the various peg holes. An additional chimney



ISOMETRIC FRAMING DIAGRAM
SCALE: 1/4"=1'-0"



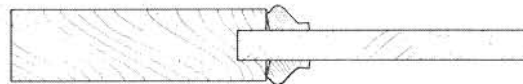


FRAMING PLANS

SCALE $M^* = 10^6$ 



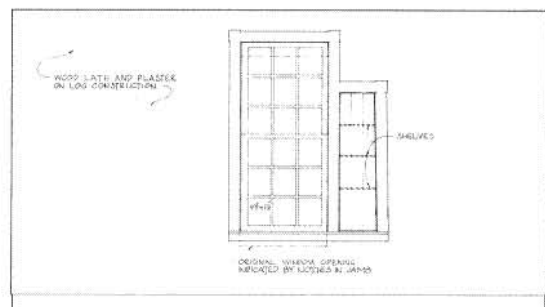
F.S. MUNTIN SECTION



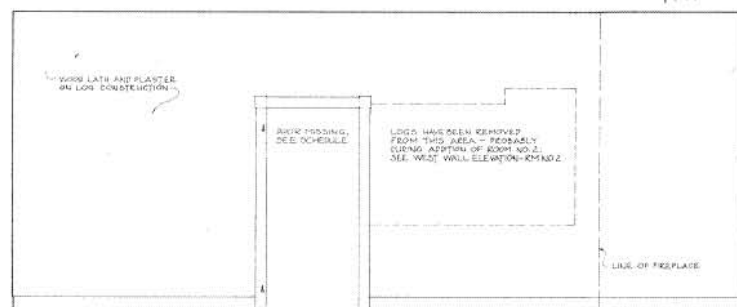
FS. SECTION AT PANEL DOOR



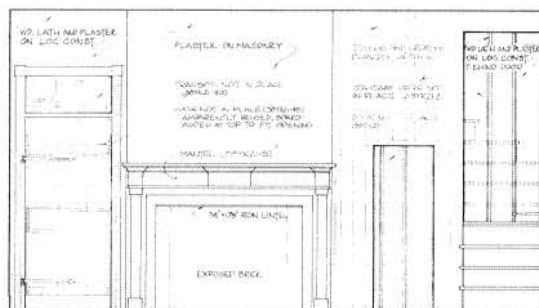
F.S. WINDOW SILL PROFILE



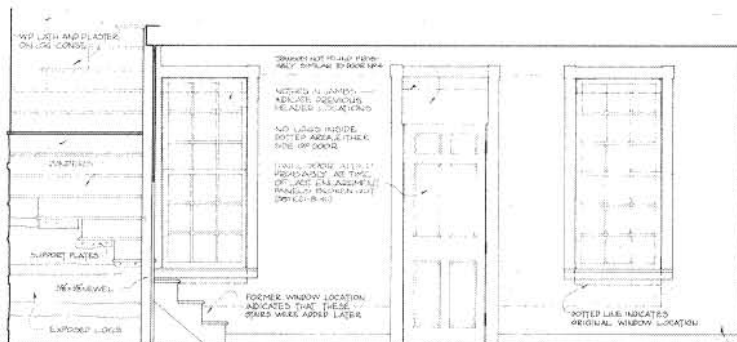
NORTH WALL



EAST WALL



SOUTH WALL

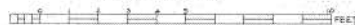


WEST WALL

NOTE: HARMILL SETTLEMENT HAS
OCCURRED IN THIS CORNER DUE TO
DETERIORATION OF ORDER.

ROOM NO. 1 - ELEVATIONS

SCALE $\frac{1}{2}'' = 1' - 0''$



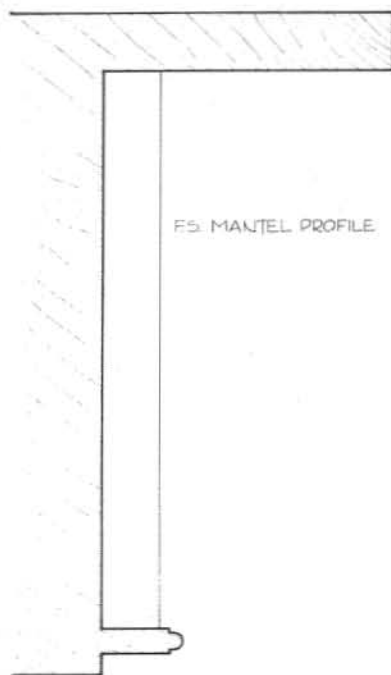
was built at the south end of this room on the exterior. A new roof was added, extending the original upper roof, but at a slightly shallower pitch. The rafters were made from stripped timber about four inches in diameter and flattened on the top side. A small opening was cut into the log wall for access into the attic space which may have been used for storage.

A new rear door was located in line with the other two doors, and one window was located in each of the three frame walls. The south window in the corner by the chimney is very narrow (15 1/4" wide). At one time there was a partition which closed off the northern third of the addition (Fig. 13). This is indicated by notches in the floor, a row of end joints in the ceiling boards, and a change in the size of crown molding. This is the only room where crown molding occurs, and it does not appear to be original.

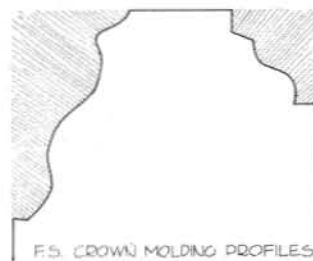
In the west wall, the original exterior wall, an opening was cut into the logs to provide space for a cupboard. It is possible, as stated earlier, that there was already an opening in that location. The interior walls were butt beaded siding on braced frame. The entire room was painted sky blue.

Second Enlargement

A second ell was added on the south end of the house (Fig. 14). This enlargement is the most important in terms of physical remains of the house because, at the time of this enlargement, much of the rest of the house underwent renovation. Although the date of this enlargement is unknown, from examination of its fabric, it was probably constructed somewhere between 1830 and 1850.



F5. MANTEL PROFILE



F5. CROWN MOLDING PROFILES

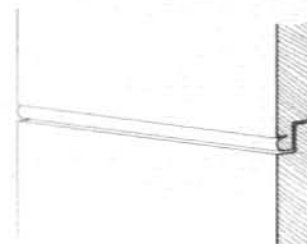
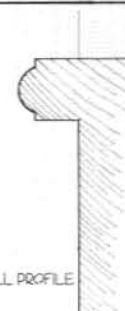
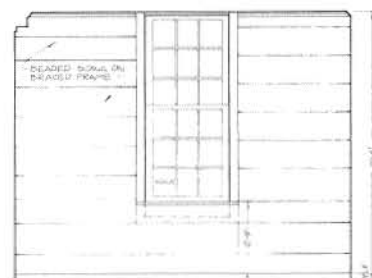


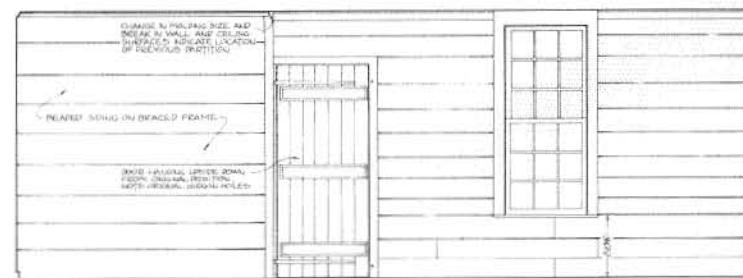
DIAGRAM OF JOINT AT BEADED SIDING



F5 WINDOW SILL PROFILE



NORTH WALL



EAST WALL



SOUTH WALL

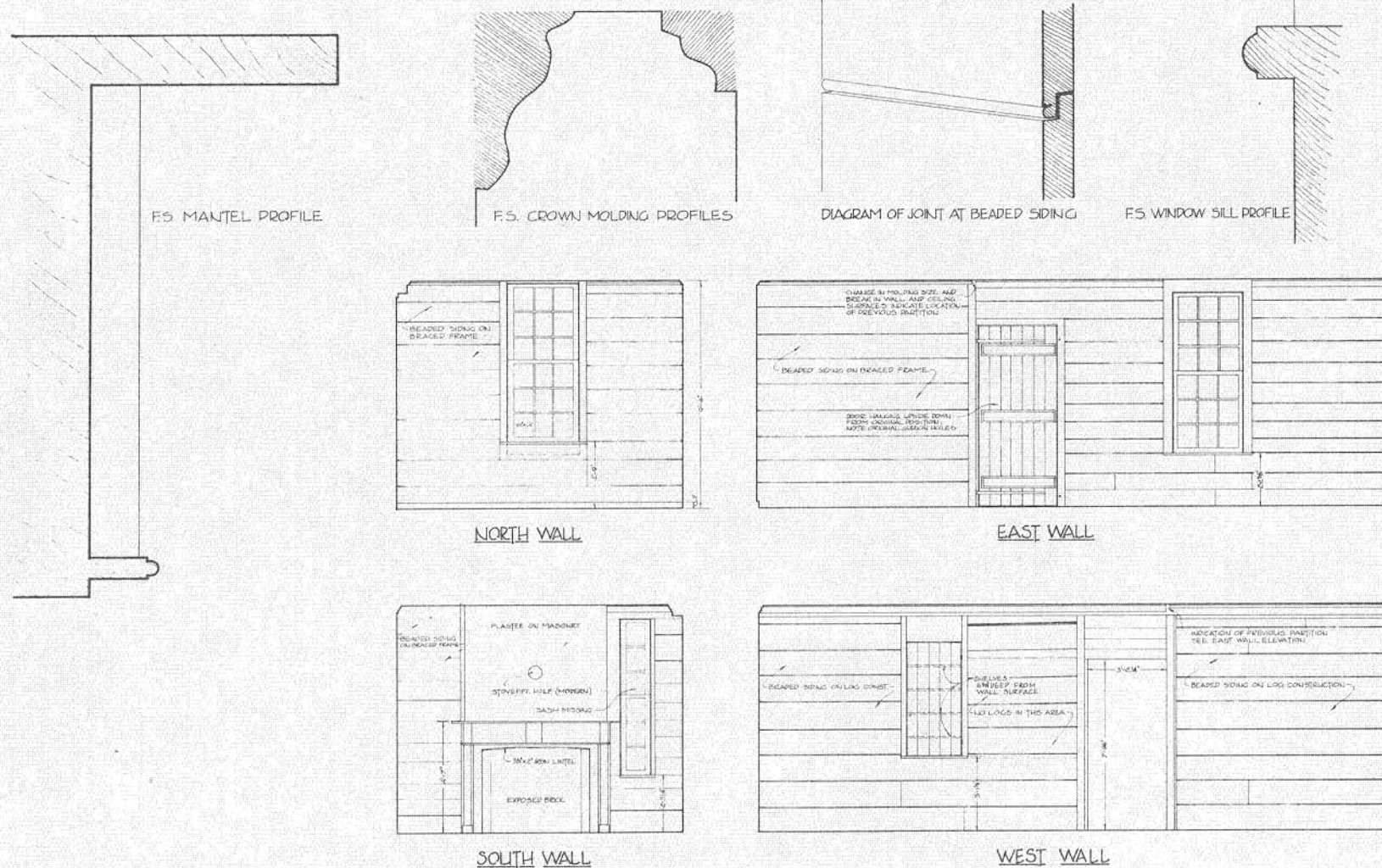


WEST WALL

ROOM NO. 2 - ELEVATIONS

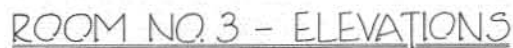
SCALE: 1/8" = 1'-0"





ROOM NO. 2 - ELEVATIONS
SCALE 1/2" = 1'-0"
0 1 2 3 4 5 6 7 8 9 10 FEET

FIGURE 13



SCALE: $\frac{1}{2}'' = 1'-0''$



The original chimney was rebuilt and a fireplace added on the south side to heat the new ell. This involved cutting out a section of the original log wall to accommodate the new fireplace. The section was cut wide enough to allow for a doorway and transom on the east side of the fireplace. This ell, like the first, was of heavy braced frame construction, and the same type of heavy timber floor joists and assembly was employed as in the rest of the house (Fig. 8). All framing members were adzed and broad axed.

The construction of the second ell resulted in the following architectural changes throughout the rest of the structure. The three windows in the original lower room were raised six inches and the north window in the first addition was raised six inches. The original entrance door was replaced with a panel door and the transom was made taller by six inches. New trim was placed around the windows and doors of the original lower room but not in the east ell. New mantels were installed in the lower and upper rooms of the original house after the same pattern as that in the new ell. New sashes were probably placed in the windows at this time. The cupboard in the north wall of the original lower room may have been added at this time. The ceiling boards were replaced in the lower room of the original house and ceiling boards were introduced for the first time in the upper room. New floor boards were installed in the lower portion of the house and the original stairway was replaced with a new one. The area under the stairway was closed in to make a closet or storage room.

This last enlargement introduced plaster to the house (Fig. 11). The interior walls of the new ell were split wood lath and plaster on

braced frame. The exposed log walls in the adjoining room were battened and covered with wood lath and plaster. The exposed logs upstairs were given a thin coat of plaster. The narrow openings in the west wall upstairs were framed in half way and covered with wood lath and plaster. Sliding doors were provided to cover the openings (Fig. 15).

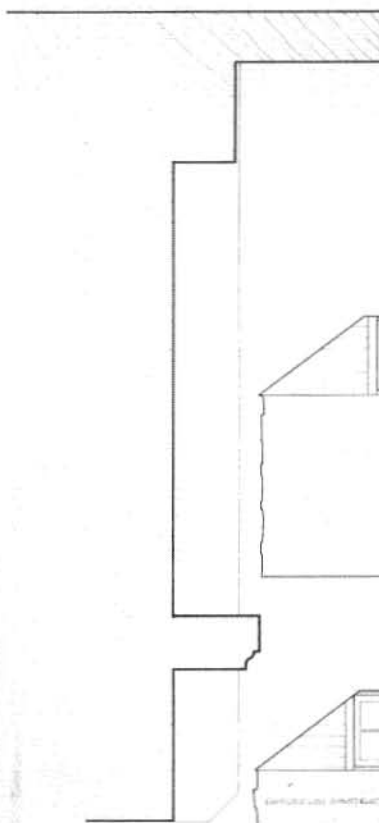
The new ell itself was illuminated with five windows; two each on the east and west side and one on the south side. An additional exterior door was also placed on the south side. The trimwork was the most ornate of the house with fluted door and window facings, additional molding at the window sill, and molded window stops. The plaster was white with the trimwork and ceiling painted blue.

The exterior portion of the house also underwent changes in that lapped siding was applied to the entire house. New shutters were installed for all the windows. The roof of the last enlargement carried the same slope as the original roof and was covered with wooden shingles (Fig. 10), with the wooden shingles on the rest of the house possibly having been replaced at that time.

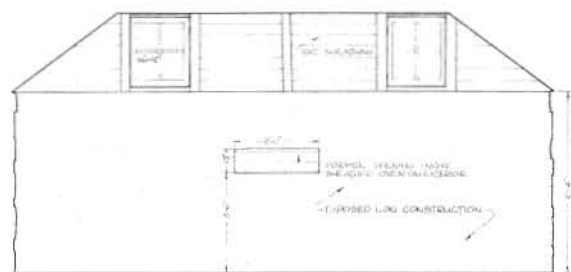
CONCLUSIONS

Although exact dates are lacking, it is obvious that the house has undergone the three stages of development previously discussed. More investigation should be made into the history of the house to obtain concrete evidence based on documentation. Drawings of each stage of development should be made for documentation and for display.

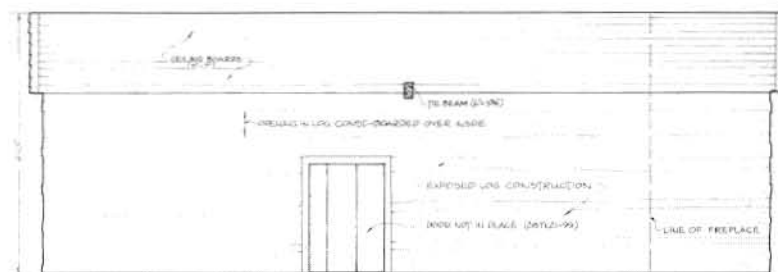
The resulting house is of handsome proportions, and composed of few, but spacious, rooms. The orientation of the house in respect to



F5 MANTEL PROFILE



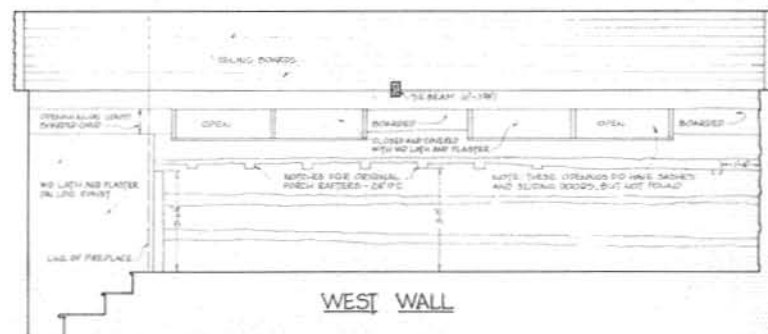
NORTH WALL



EAST WALL



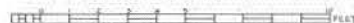
SOUTH WALL



WEST WALL

ROOM NO. 4 - ELEVATIONS

SCALE: $\frac{1}{8}'' = 1'-0''$



the sun along with the high ceilings serve to keep the house cool in the summer. In the winter, maximum efficiency is derived from the main chimney due to its location in the center of the house. The large windows opened to let in fresh air and light, and the shutters, when closed can hold in the heat or keep it out.

The exterior of the house is simple and straightforward in its form and detail. It is not elaborate or ornate in any way. There is a functional reason and use for every member in the house. Aside from its historical value, this honesty of expression makes the house worthy of special architectural consideration.

Much would be lost in the character of the house if the terminal date for restoration was set at the time of Colonel Bratton. However, if the house is to be known as the home of Colonel Bratton the changes to the house since his time should be emphasized. The public should not be confused into thinking that this is the way the house looked when Colonel Bratton lived there.

A step by step program of restoration should be drawn up. I am suggesting a terminal date for restoration at the time of the completion of the last enlargement 1830-1850.

RECOMMENDATIONS

1. Immediate action should be taken to check the settling of the northwest corner of the house due to deterioration of the front sill girder. Other girders and sills should also be checked along with their supports for stability before any other work on the house begins. The girders should be jacked up and supports replaced where necessary. However, care

should be taken to avoid excessive elimination of the sags and settlements of age. The signs of age are lost if made completely plumb and level.

Before as well as during the restoration, the house should be checked and treated for wood borers.

2. The existing porch should be entirely and carefully removed.

3. The exterior sheathing should be removed, a section at a time so that the logs and framing may be exposed for examination for rot and termites. It should be photographed as is for documentation. As each section is uncovered, the necessary treatment should be given the framing, and the sections replaced as needed. Any major replacement of the structural members should be marked by paint and with the date of replacement, so that future examiners will know it is a replacement. The section that has been removed should be covered at this time with heavy gauge transparent plastic stapled to the frame, and not resheathed until the entire house has been uncovered, examined, and recorded. The sheathing should be examined to determine the species of the wood, and more pieces fabricated according to specifications to replace damaged pieces.

4. The porch should be rebuilt according to the drawings. The roof pitch should be the same as the major portion of the house, with the rafters springing from the notches provided for the original porch rafters.

5. The metal roof should be removed and the rafters and nailing strips examined. The roof should be replaced with wooden shingles according to specifications.

Inspection and restoration of the two chimneys can begin while the frame is stripped and the roof under examination to be sure that all structural elements interlock.

6. When the frame of the house is repaired and the roof replaced, the exterior siding can be replaced. By this time the chimneys should be completed and the porch rebuilt. The necessary replacement elements (window sashes, sills, shutters, doors, etc.) should be determined and reconstructed elements begun. This includes the necessary hardware, i.e. hinges and locks. Old elements which are to be reused should be cleaned, stripped, and repaired where necessary. Reconstructed elements should be treated, primed, and ready for installation.

7. After the exterior is completely finished, the interior work can begin. Care should be taken so that the original paint can be determined before any major replacement or cleaning is done. Floors that have been added must be removed and existing floors repaired where necessary. The joists and beams should be examined and repaired. The partitions which contain the original log wall should be examined and deteriorated logs replaced.

8. Finally, when the interior structural work is completed, the plaster work can be repaired or replaced and the painting can be done.

PART III

ARCHEOLOGICAL RESEARCH OF THE COLONEL WILLIAM C. BRATTON HOUSE (38YK27)

by Richard F. Carrillo
Institute of Archeology
and Anthropology

INTRODUCTION

The archeological excavations at the Bratton log house, situated in an area approximately 85 feet east of present Highway #165, and 35 feet from the remnant of the original road (Fig. 3), were conducted during the week of July 22-26, 1974. As previously stated, the basic purpose was to look for evidence of stone foundations or other indications of an earlier and larger front porch. Plans were to use this information to augment historical and architectural research. In addition, a total of thirty 2' x 5' units comprising five linear cuts were excavated in the area south of the log structure (Fig. 3). The purpose of this excavation was also architectural in that subsurface remains of a corn crib shown on the August 1876 Stinson sketch (Fig. 6) were being sought. There is an apparent conflict between the two maps drawn by D. G. Stinson (Figs. 4 & 6). The initial map (Fig. 4) drawn in March 1876 with the aid of a Bratton relative shows a corn crib located in the area where the excavations were made. The revised map was used as the basis for the excavations. The excavations did not reveal evidence of a corn crib in this area.

Although the primary objective was architectural information, all excavations were undertaken in anticipation of using the artifact data to detect possible patterning in their distribution. For this purpose, a five-foot square grid system was used. All features e.g. postmolds,

stone, etc., were recorded by means of transit and tape in order to provide a site plan into which all the features could be incorporated (Fig. 16).

ARCHEOLOGICAL STUDY

The total excavation in the area adjacent to the porch consisted of 13 fully excavated five-foot squares and ten partially excavated units incorporated into the grid system.

Although no features relative to an earlier porch were uncovered, data was found in the form of a partial cobblestone pavement located approximately six inches below the present surface. In addition, a portion of a brick walkway was found in direct alignment with the entranceway. Three features (32-34) were revealed. Feature 32 (Figs. 16 & 17) consisted of an irregular disturbance (approximately 4' x 5'; depth 2.0'); the remains of a tree trunk and roots. A painting made by Marth Bratton in 1840 (Samuel D. Mendenhall, personal communication) indicates a tree was located in this area. This feature provided a considerable quantity of artifacts consisting primarily of window glass and cut nails. Feature 33 was an almost square posthole with dimensions of 1.8' x 1.8' having a depth of 1.55'. Artifacts present were ceramics, bottle glass, flat glass, and nails. A blue-edged pearlware rim sherd (1790-1830; South 1972a) was among the artifacts recovered. The third feature (34) consisted of a shallow circular pit (diameter - 2.0'; depth - .5') and contained no artifacts.

The tentative interpretations which can be drawn from the architectural data recovered appear to confirm that: (1) The porch did not

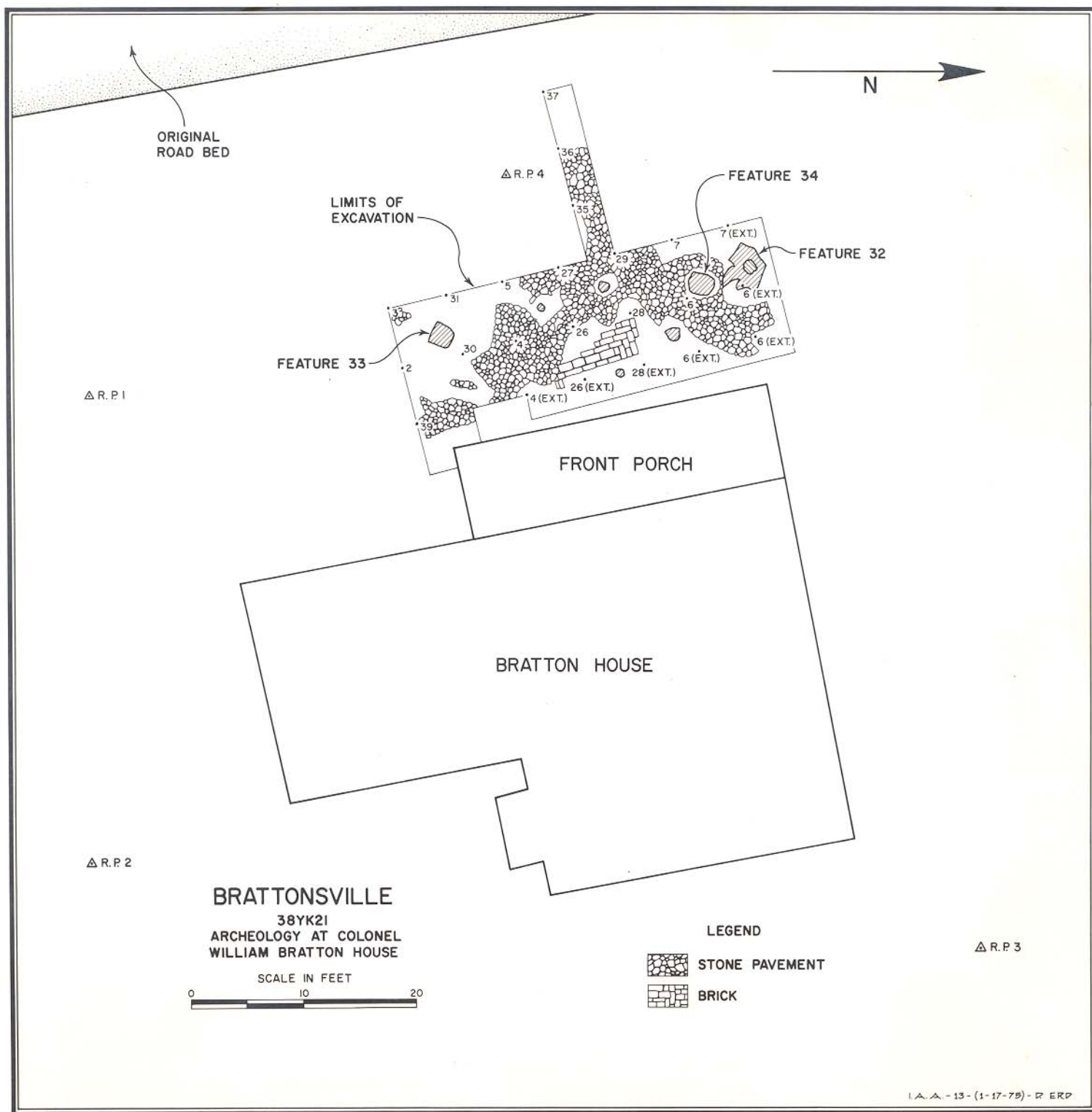


FIGURE 16: Bratton House Excavations



FIGURE 17: Completed archeological excavations. View to the south.

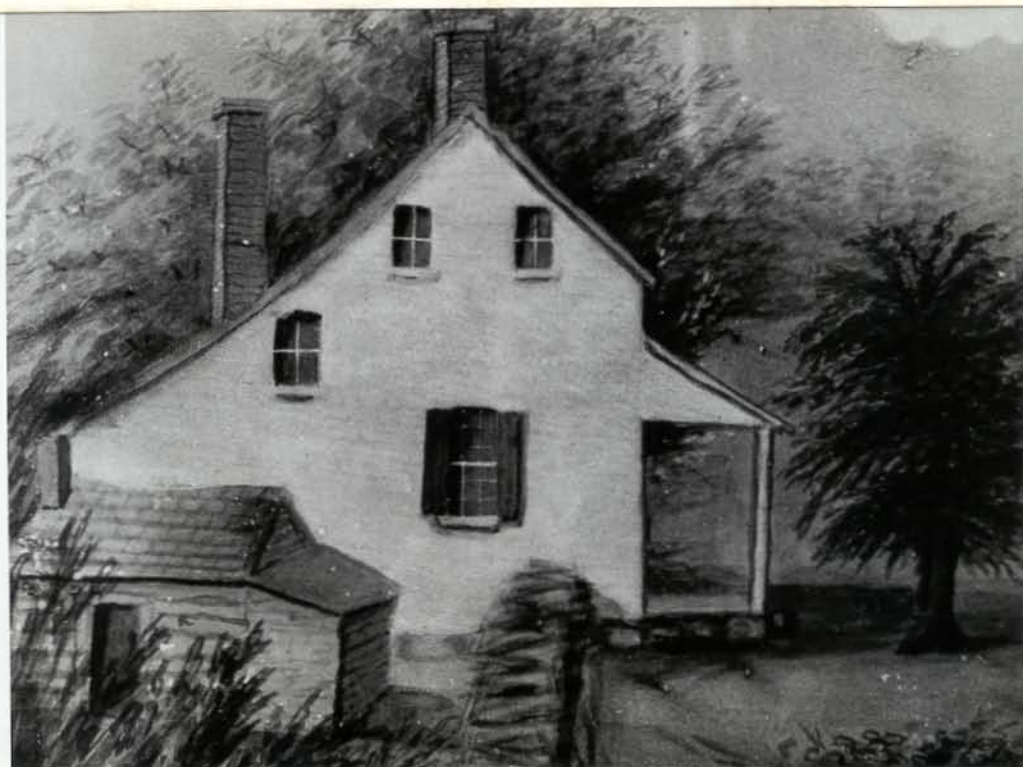


FIGURE 18: Painting of Bratton House by Martha Bratton, c. 1870. View to the south.

extend beyond its present limits. Based upon consultations with the architectural specialist in addition to the information derived from the photograph which appeared in the Yorkville Enquirer (1906) it was concluded that the initial porch was in approximately the same location as the present one (Howell C. Hunter, personal communication; Part II, this volume. (2) A cobblestone patio or driveway existed in front to the porch. (3) A partial brick stair stoop was present. Three features detected by soil disturbance, consisted of (1) Feature 32, the remains of a tree trunk; (2) Feature 33, a posthole, among the artifacts retrieved from this feature was a blue-edged pearlware sherd fragment with manufacture dates between 1780 and 1830 (South 1972a) indicating that the posthole was dug sometime during the early occupation period of the house; and (3) Feature 34 which consisted of a shallow circular depression with no diagnostic artifacts.

RESEARCH DESIGN

The secondary goal of this study is to use artifact distributional data to help develop a better understanding of the behavior which created the archeological record. The approach is to examine the archeological data as a part of a larger study comparing the Scotch-Irish Bratton house with a house built and occupied by a German immigrant Henry Howser (Bearss and Adlerstein 1974). The Howser House located in King's Mountain National Military Park was also excavated in the summer of 1974 (Carrillo 1974b). Extensive excavations at the Howser House yielded only a small amount of cultural debris, while limited excavations at the Bratton house produced a considerable quantity

of similar debris (Carrillo 1975). Thus, significant archeological differences appeared to exist between two diverse sociocultural expressions. Archeological data collected at the sites of Bethabara (South 1972b) and Brunswick (South 1975), in North Carolina, eighteenth century German and English towns respectively, also support this observation. In addition, further supporting evidence exemplifying the differences has been noted in architecture:

These [house] types by no means exhaust the American folk architectural repertoire, for other basic concepts composed of squares were used to generate other Anglo-American typological families, and German-American architectural design commences with differently composed base concepts with inevitably distinct results... (Glassie 1973: 329).

The archeological data retrieved from the Bratton house was thus examined under the assumption that the archeological patterning reveals differing sociocultural contexts. This is a relatively new approach that assumes that ethnic group patterning as well as individualistic traits can be isolated through historical archeology (Carrillo 1975; South 1975). Using this assumption the data obtained at Brattonsville are examined in a manner which might reveal information concerning the processes which formed the archeological record on a Scotch-Irish homestead.

Recent archeologists (Schiffer 1972; Schiffer and Rathje 1973; Reid, Rathje and Schiffer 1974) have begun to examine the correlates between the archeological record and the behavior responsible for producing that record. The archeological record does not, in itself, constitute the living sociocultural system but rather represents an ambiguous by-product of that system's operations in addition to other intervening cultural and non-cultural processes (Reid, Schiffer and Neff n.d.). In keeping with this approach, the archeological data from the Bratton house will be

viewed within a framework which (1) examines the observations noted during the excavations structured within the archeological context, (2) examines the artifacts within the archeological context and their relationships, and (3) based on the observations, propositions will be made regarding the sociocultural processes involved in creating the archeological record.

Four functional categories of artifacts are used: ceramics, bottle glass, window glass and nails, while personal and other non-personal items were only present in small quantities, these samples represent large enough samples to be examined statistically. The four categories, in addition, will be viewed in accordance to their functional purposes in that these classes of artifacts performed different functions, i.e. ceramics and bottle glass served as subsistence items within the social context. On the other hand, window glass and nails function as architecturally related artifacts.

ARTIFACT ANALYSIS

During the course of the excavation a considerable quantity of artifacts was recovered. The plan was to analyze the spatial distribution and relationships of artifacts throughout the excavated area. Due to the use of rigorous statistical methodology, only the artifacts from completely excavated units were used.

The primary aim and strategy of the analyzed artifact content is as follows:

(1) Test to discern if significant variability exists in the archeological record between the surface and subsurface among the various

categories of artifacts in order to determine if the total artifact content should be treated as a homogeneous entity for purposes of discussion. This will be accomplished using a Chi-Square (X^2) test which determines significant associations between two or more variables.

(2) Once the above has been established, tests will be made to determine variability among the various artifact categories using Spearman's Rank Correlation Coefficient (Seigel 1956: 259-60). This correlation coefficient indicates the degree to which two variables are related to one another. This test should statistically establish relationships which may exist between the categories of subsistence and architecturally related artifacts.

(3) Test to determine artifact variability between specific use units (features) and generally distributed artifacts. The test will be used to make functional determinations between the subsurface artifacts and those found in a feature.

(4) Tentative explanations in the form of testable propositions based on the results will be made. Hopefully, these propositions will stimulate future research towards defining consistent systemic and archeological patterning in similar sociocultural archeological contexts.

Surface and Subsurface Comparison

The X^2 test was conducted (Appendix III) to determine the variability, if any, existing between the cultural material recovered in the surface zone and that of the subsurface. The surface zone consisted of between two and three inches of clearly defined humus. The subsurface zone consisted of a light tan clay overlying a light orange clay. The frequency

of artifacts recovered from the surface of the units under study (2, 3, 5, 6, 7, 26, 27, 28, 29, 30, 31, 39) was:

<u>Type</u>	<u>Quantity</u>	<u>Percent</u>
Bottle Glass	137	43.6
Ceramics	1	00.3
Flat Glass	160	51.0
Nails	<u>16</u>	<u>05.1</u>
Total	314	100.0

The subsurface distribution excluding Feature 32, consisted of the following:

<u>Type</u>	<u>Quantity</u>	<u>Percent</u>
Bottle Glass	21	12.1
Ceramics	42	24.1
Flat Glass	56	32.2
Nails	<u>55</u>	<u>31.6</u>
Total	174	100.0

The X^2 test indicated a significant difference between the two strata ($X^2 = 132.93$, $df = 3$, $p < .001$). Figures 19 through 23 show the artifact distribution within the surface and subsurface units (surface ceramic figure excluded).

Once the significant dichotomy between the surface and subsurface units was demonstrated, only the subsurface material was further examined. Nevertheless, the differences between the two zones needs more examination.

Ceramics

The mean ceramic date of the subsurface ceramics, consisting primarily of pearlware and whiteware was 1825.6 (South 1972a). The single sherd occurring on the surface consists of a whiteware sherd dated 1830+ (South 1972a). The historical record indicates that a structure was built in

FIGURE 19

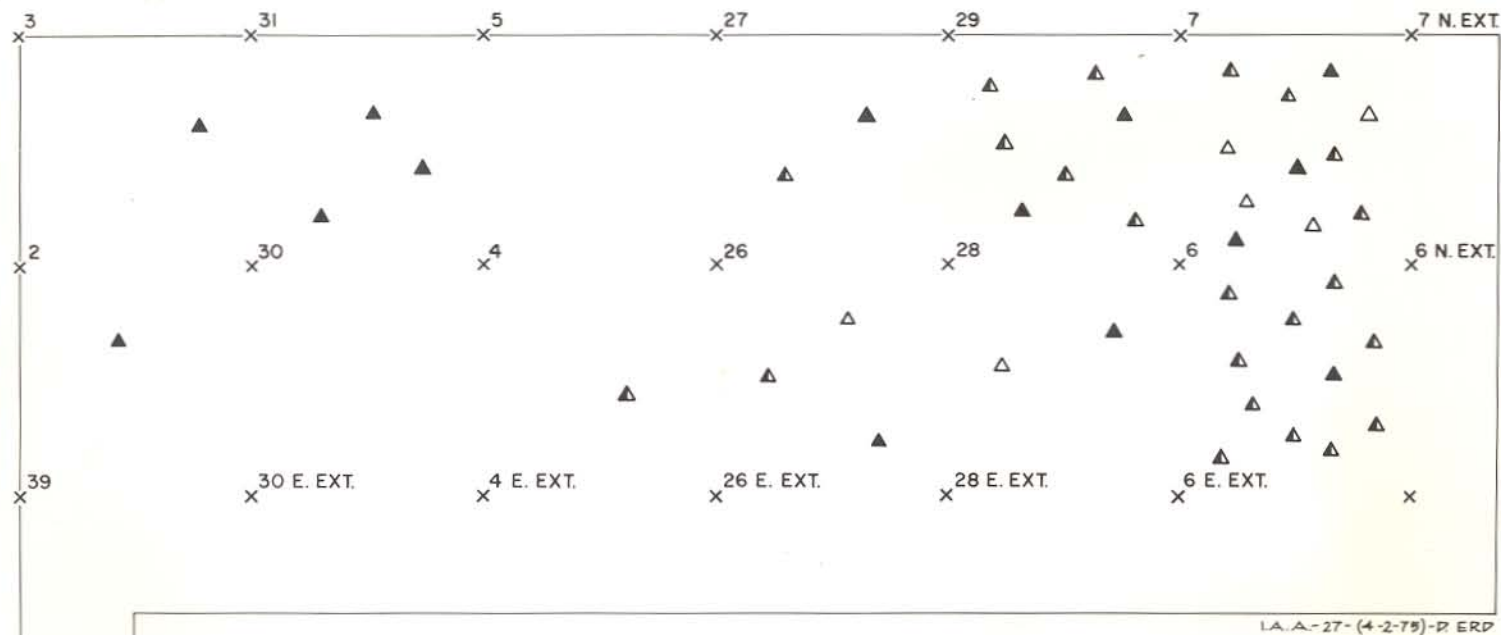
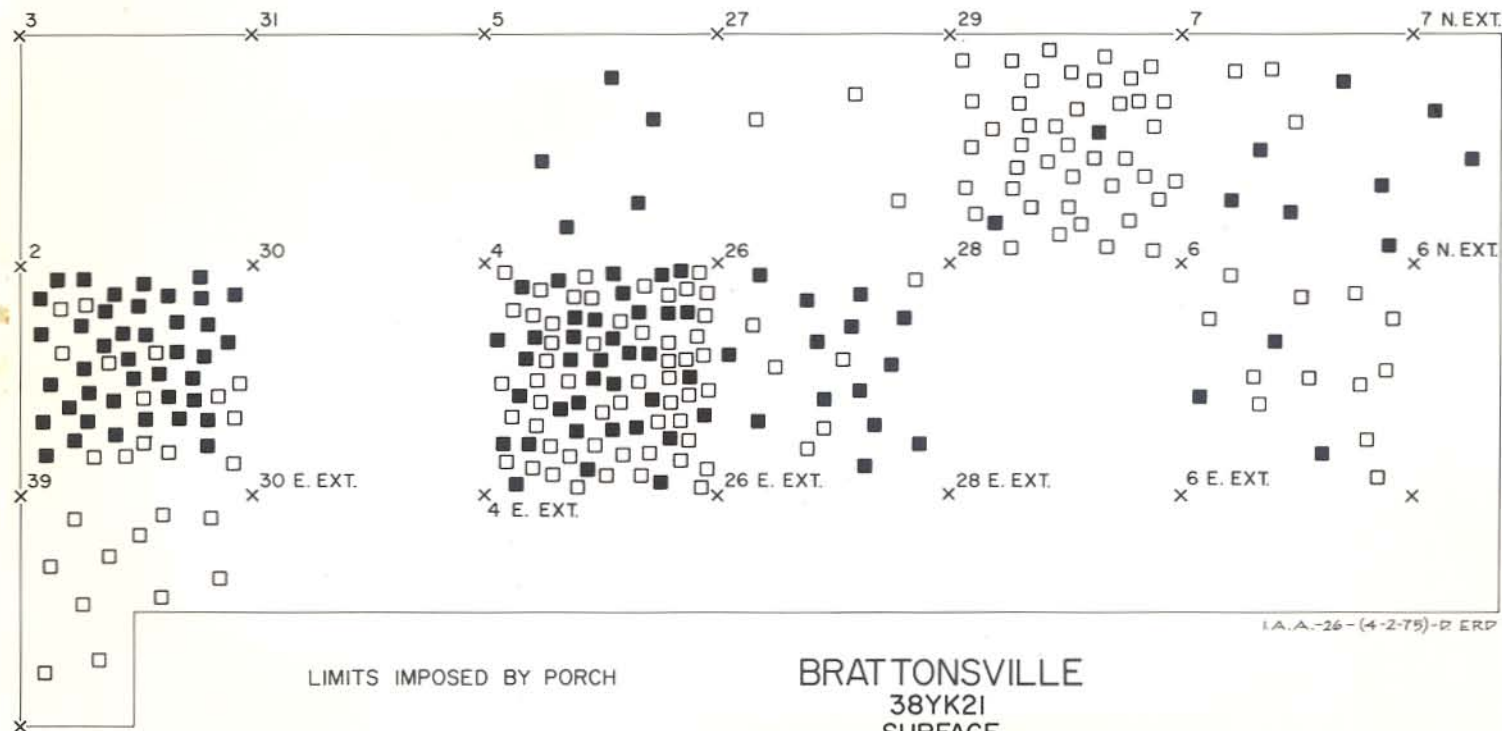


FIGURE 20



I.A.A.-26-(4-2-75)-D ERP

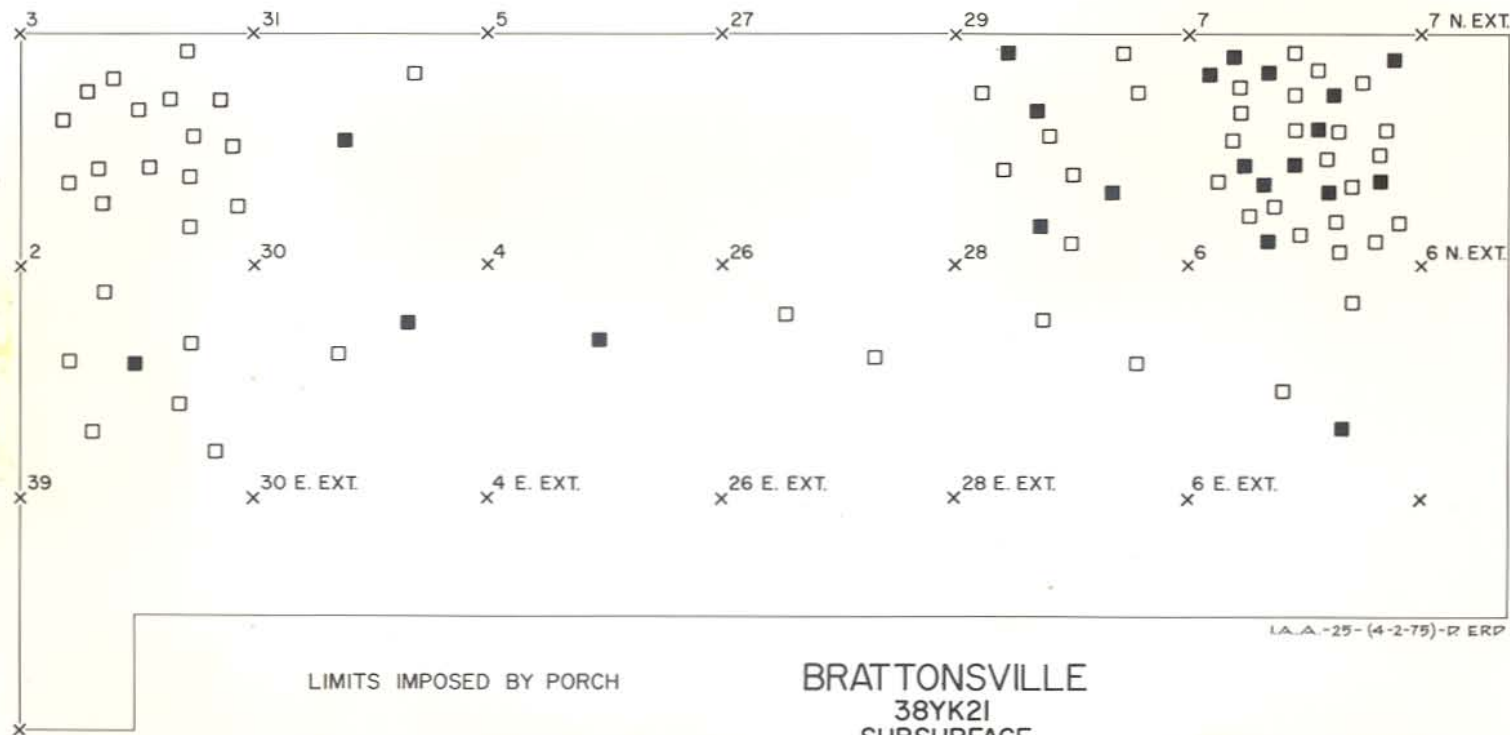
BRATTONSVILLE
38YK21
SURFACE
BOTTLE AND WINDOW
GLASS DISTRIBUTION

LEGEND

- BOTTLE
- FLAT (WINDOW)

EACH SYMBOL = 1 ARTIFACT

FIGURE 21



I.A.A.-25-(4-2-75)-R ERP

BRATTONSVILLE
38YK2I
SUBSURFACE
BOTTLE AND WINDOW
GLASS DISTRIBUTION

LEGEND

- BOTTLE
- FLAT (WINDOW)

EACH SYMBOL = 1 ARTIFACT

FIGURE 22

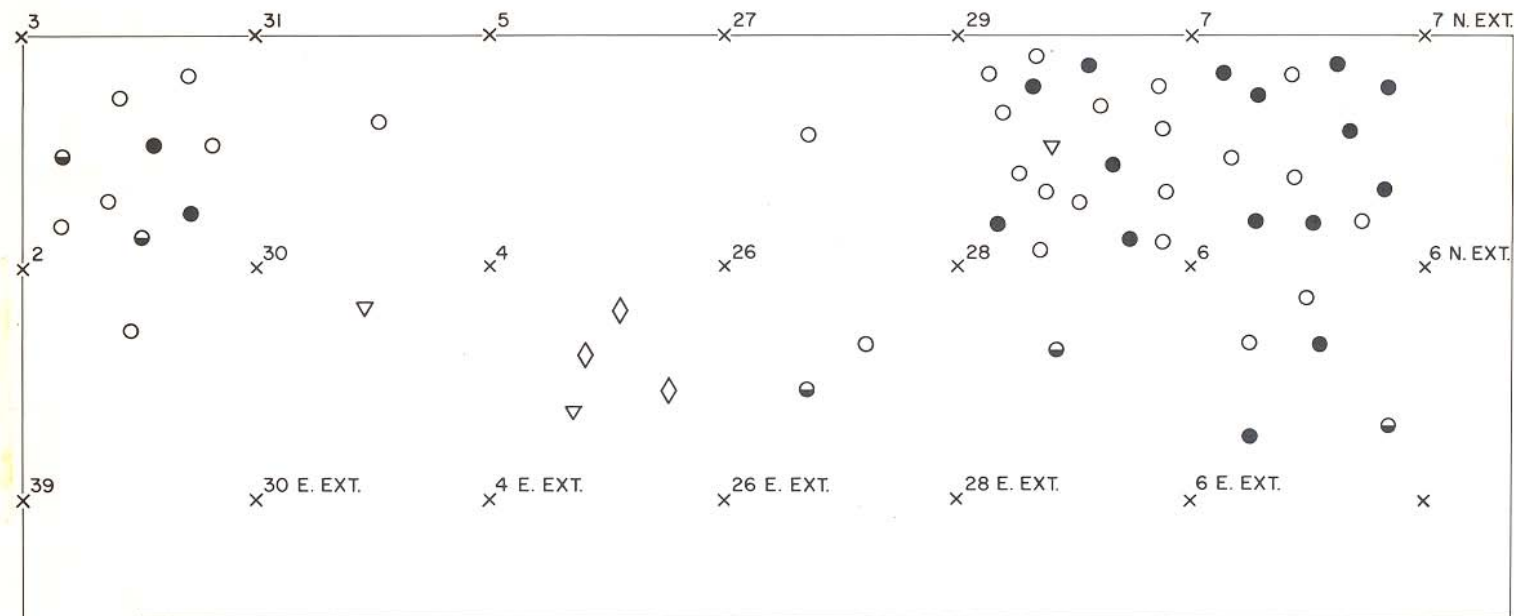


WHOLE
HEADS
SHANKS

WROUGHT CUT ROUND

EACH SYMBOL = 1 ARTIFACT

FIGURE 23



I.A.A.-23-(4-1-75)-D ERP

LIMITS IMPOSED BY PORCH

BRATTONSVILLE 38YK21 SUBSURFACE NAIL DISTRIBUTION

LEGEND

WROUGHT CUT ROUND

WHOLE	◇	○	▽
HEADS	◆	●	▼
SHANKS	◊	◐	▽

EACH SYMBOL = 1 ARTIFACT

this location between 1774 and 1780 (Wilkins, Part I), and the entire occupation span encompasses a period of approximately 180 years to 1955 (Samuel Mendenhall, personal communication). The mean ceramic date usually produces the median occupation date of the site, which in this case is 1865. This actual median date is significantly different from the calculated date and, the artifacts were examined in an attempt to explain this difference.

Two further observations which were noted, but were not pursued due to an inadequate sample were: (1) The total ceramics recovered appear to represent a varied assortment comprising sixteen different styles of dinnerware, usually represented by only a few sherds of each style. A similar pattern occurred with bottle glass. This pattern of artifact types illustrates another important possibility for further examination regarding the processes involved in creating the archeological record. (2) Of the total ceramic inventory only one tea service sherd was represented. Eighteenth century British-American archeological sites usually produce a considerable quantity of "teaware" (Ferguson 1975; South 1975a; Stone, Little & Israel 1973). In addition, a nineteenth century tenant farmer occupation, excavated in Maryland, produced a considerable quantity of "teaware" (Miller 1972: 197-210). Although it is not known when tea consumption began to lose its important ceremonial function (Roth 1961), the relative absence of "teaware" at Brattonsville may be attributable to sociocultural factors.

Bottle Glass

Bottle glass recovered in the surface and at the marginal zone delineating the surface and subsurface zones was comprised primarily of

twentieth century whiskey bottle fragments. The distributional differences between the surface glass and that recovered in the subsurface was quite apparent. The surface glass formed clusters created by the breaking of individual bottles (Fig. 20).

The subsurface glass displayed a pattern similar to that of subsurface ceramics in that several different types of bottle glass were represented by only a few fragments of each type (Fig. 21).

Window Glass

The window glass category had a higher percentage occurring in the surface (74%) while the subsurface contained 26%. This may result from the house being occupied until c. 1955 (Samuel D. Mendenhall, personal communication).

Nails

Between the surface and subsurface units nails occur in an inverse proportion to window glass. Sixteen percent of the nails occurred in the upper zone while 84% were recovered from the lower zone (Figs. 22 & 23). The high quantity of nails and window glass in the subsurface (both comprising 63% of the total artifact sample) appears to indicate building activity which probably resulted from a construction phase occurring between 1820 and 1876 (Wilkins and Hunter, Parts I and II).

Based on the information derived from the above discussion, the following section is an attempt to provide explanations for the activities which resulted in the archeological record revealed at the Bratton house.

Inter-Artifact Comparisons

After arriving at trial explanations regarding the observed variation between the surface and subsurface zones, the next step involved establishing relationships between the artifact categories themselves. These relationships were recovered using a Spearman's Rank Correlation Coefficient (Siegel 1956: 259-60; Appendix IV). Several trials were undertaken in an effort to examine the nature of the variability between the general categories (e.g. nails vs. ceramics). Upon examination of the variables, propositions were set forth.

Ceramics and Nails

The highest correlation coefficient was between ceramics and nails ($r_s = .75$, $p < .01$). The association of two such diverse functional artifact sets is, at this time, unexplainable. Nevertheless, the association of ceramics dating between 1820 and 1830 with nails supports the historically determined bracket of 1820-1876 for the second renovation (Wilkins and Hunter, Parts I and II). More specifically these data suggest the renovation to have taken place in the decade between 1820 and 1830.

Pearlware and whiteware were the two most common types of ceramics recovered (Appendix II). Pearlware was introduced in 1780 (South 1972a) and the types found at Brattonsville continued to be manufactured until 1830. Whiteware was introduced c. 1820 (Noel Hume 1970: 130-131; South 1972a).

As mentioned earlier, the mean ceramic date obtained from the archaeological sample at the Bratton house was 1825.6. This date obviously does not represent the median occupation date of the house, but rather

represents the median date of the refuse deposition. The fact that types of ceramics, such as Ironstone which did not appear until c. 1830 (Stanley South, personal communication), were not present serves to support a pre-1830 date for this deposit. Thus the mean ceramic formula and the terminus post quem indicators support the 1820-1830 time bracket for the deposit.

Nails and Flat Glass

A significant correlation was obtained ($r_s = .82$, $p < .01$) between these two categories of artifacts. This high correlation between these two categories of architecturally related artifacts is believed to be a result of construction activity.

Bottle Glass and Nails

The analysis conducted between these two categories resulted in a correlation ($r_s = .57$, $p < .05$) indicating that these artifacts tend to be spatially mutually exclusive suggesting a behaviorally related negative correlation.

Bottle Glass and Flat Glass

The obtained correlation was mildly negative ($r_s = .38$, $p > .05$). This relationship is similar to that between bottle glass and nails, and this negative correlation may also be the result of dissimilar roles for these two diverse artifact categories.

Bottle Glass and Ceramics

Bottle glass and ceramics produced a highly significant correlation ($r_s = .88$, $p < .01$) that suggests a mutual cultural association between these two artifact categories. Generally, both serve a subsistence function and it seems probable that these two categories were used simultaneously within the systemic context and therefore were being expended accordingly.

Ceramics and Window Glass

The high correlations between nails and ceramics ($r_s = .75$, $p < .01$) and between nails and window glass ($r_s = .82$, $p < .01$) suggests there should be a corresponding correlation between ceramics and window glass. Such is not the case. Ceramics and window glass have a low correlation coefficient ($r_s = .52$, $p > .05$). In the following section this apparent paradox is further pursued.

Feature 32 and Subsurface

A further association was attempted using the artifacts recovered from a tree root mold (Feature 32, Figs. 16 & 18). The contents of this feature which is in the area adjacent to Unit 7 were not included in the preceding analysis. The artifacts obtained from this feature are contrasted with those obtained throughout the subsurface units.

χ^2 tests were made between the artifacts in the subsurface units and Feature 32 in an attempt to statistically determine the variability between these two distinct units. These tests were employed to help segregate the factors producing differences. The results obtained by

the tests between the categories are presented as follows:

Ceramics and Window Glass ($X^2 = 21.85$, $df = 1$, $p < .001$)
 Nails and Window Glass ($X^2 = 7.22$, $df = 1$, $p < .01 > .001$)
 Nails and Ceramics ($X^2 = 6.96$, $df = 1$, $p < .01 > .001$)
 Window Glass and Bottle Glass ($X^2 = 4.27$, $df = 1$, $p < .05$)
 Ceramics and Bottle Glass ($X^2 = 3.70$, $df = 1$, $p > .05$)
 Nails and Bottle Glass ($X^2 = .02$, $df = 1$, $p < .90$)

The above results can be stated in another way. The comparison between the artifacts found in Feature 32 and those of the subsurface produced the following:

<u>Homogeniety</u>	<u>Hetrogeniety</u>
Bottle Glass and Nails	Nails and Ceramics
Bottle Glass and Ceramics	Nails and Window Glass
Window Glass and Bottle Glass	Ceramics and Window Glass

As is apparent in the above table, bottle glass occurs with all the other classes of artifacts in somewhat similar distributions. On the other hand relationships between the surface and features for nails and ceramics, nails and window glass, and ceramics and window glass are different. This indicates that Feature 32 represents a different type of functional use than the rest of the excavated sample.

Based on the above results, propositions regarding the behavioral processes responsible for the differences in the archeological contexts can be made. In other words, the behavioral activity responsible for the feature does not specifically correspond with the activity which resulted in the deposition of the general subsurface.

The following percentage relationships were established between the two distinct samples:

<u>Feature 32</u>	<u>Subsurface</u>
Nails (26) 23%	Nails (55) 31%
Window Glass (68) 60%	Window Glass (56) 32%
Ceramics (8) .07%	Ceramics (42) 24%
Bottle Glass (11) .09%	Bottle Glass (21) 12%

As is evidenced by the above samples, Feature 32 has a higher frequency of architecturally related artifacts (nails and flat glass) than subsistence artifacts. The entire subsurface sample also has a higher percentage of architecturally related artifacts, but subsistence artifacts also occur at a higher frequency than in the feature.

DISCUSSION

The archeological data revealed some factors which appear to have general applicability and which now will be discussed:

(1) The artifact content as recovered from the area in front of the Bratton house, built c. 1774 (Wilkins, Part I) and occupied until 1955 (Samuel D. Mendenhall, personal communication), revealed cultural material reflecting a specialized artifact pattern. The artifacts tend to indicate primarily architectural activities. This pattern is particularly strong within Feature 32 with technomic artifacts comprising 83% of the total sample and the sociotechnic artifacts only 16%. A similar pattern occurred throughout the entire subsurface collection as well, although not to the extent in Feature 32. Overall, architecturally related artifacts comprise 63% of the sample with subsistence artifacts comprising 36%.

(2) In terms of associations between the various classes of artifacts one particular detail warrants further discussion. The ceramic inventory was viewed in terms of general functional categories primarily comprising two distinct sub-functions, i.e. eating and drinking, with emphasis placed upon one aspect of drinking, specifically tea, as evidenced in the accoutrements assumed to be associated with the consumption

of tea (Roth 1961). Only one sherd was recovered which could be placed in this category. The remainder of the inventory consisted of sherds attributable to various assortments of dinner and utility ware.

Utilizing all of the information at hand regarding the archeological data and the patterning, the next step consisted of attempting to arrive at explanations to account for the patterns. It seems quite apparent that the archeologically revealed patterning is, to some degree, consistent with the systems which produced it, i.e. the persons and processes, cultural and non-cultural which were responsible for it (Schiffer 1972: 156-165). If the artifacts present within the archeological record are viewed as representing a part of a past living system, then explicit probabilistic and testable behavioral propositions can be made. Results can be used to reflect upon various aspects of the systemic context which the investigator wishes to pursue. In this manner, the results can lead to a well-based understanding of human behavior. As an example, the archeological results of the Bratton excavation can be incorporated with the architectural style and a model of relationships for a Scotch-Irish dwelling developed to be tested against other complexes of the same or differing ethnic groups. The possibilities for this type of study have already been demonstrated (Glassie 1968; 1973).

With regard to the results derived from the archeological data, the following interpretations are presented:

1. The front area of the Bratton house received a considerable quantity of cultural material c. 1820-1830 believed to correspond with the historical record of renovation (Wilkins and Hunter, Parts I and II). The activity of discarding refuse within a close proximity of domiciles has been archeologically documented in other excavations of eighteenth

century English households (South 1975). This pattern is believed to represent a sociocultural datum unique to Scotch-Irish and English groups of the eighteenth century. Excavations conducted at domiciles occupied by people of German origin have revealed a different refuse disposal pattern (Carrillo 1975; South 1972b).

In addition, the front area of the Bratton house was not an area in which extensive activity took place after the house was renovated. This is supported by the following archeological correlates:

The collection comprised a high frequency of architecturally related artifacts. These artifacts were correlated with ceramics which allowed the use of the mean ceramic formula (South 1972a) indicating a deposition date of c. 1825. Based on these associations it is possible to state that the area excavated did not receive extensive functional use after the renovation took place.

2. It is proposed that other areas adjacent to the structure would produce high frequencies of functional classes of artifacts reflective of daily activities.

SUMMARY

The information presented has utilized archeological data in a way which will allow testable assumptions regarding sociocultural aspects of human behavior to be examined. In this manner, the information recovered not only reveals data regarding the individuals who resided at the Bratton house, but also allows an insight into collective sociocultural behavior.

CONCLUSIONS

This three part study was initially conceived as an attempt to derive information of an historical, architectural, and archeological nature for the purposes of aiding in the restoration of the Bratton log house. As a result of the study, considerable information was obtained which served the goals of the project, but in addition this study can contribute on a broader scale towards the understanding of the things that man does and reasons for doing them.

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APPENDIX I

COLONEL WILLIAM BRATTON HOUSE INVENTORY

Room No. 1

- 38YK21 - 2 Stairway door (door no. 7 on schedule)
- 3 Closet door (door no. 6 on schedule)
- 4 Window sash (whole)
- 5 Mantel no. 1
- 6 Weathered board (modern)
- 7 Top of mantel no. 4
- 8-14 Pieces of panel from door no. 1
- 15 Muntin from door no. 1 (middle)
- 16 Muntin from door no. 1 (bottom)
- 17 East door jamb from closet
- 18 Stile from window sash
- 19 Section of metal roofing
- 20 Sheet metal (modern)
- 21 Sheet metal (modern)
- 22 Sheet metal (modern)
- 23 Window sash (some muntin missing)
- 24 Window sash (some muntin missing)
- 24b Bottom rail to window sash
- 25-32 Detached muntin from window sash
- 33-35 Window stop from north jamb, window B
- 36a Wood stop from south jamb, transom no. 1
- 36b Wood stop from north jamb, transom no. 1
- 37 Rough sawn board (modern)
- 38 Floor board from front of hearth no. 1, modern replacement
- 39 Rough sawn board, circular sawn
- 40 Possible closet shelf
- 41 Top step staircase viser
- 42 Unidentified board
- 43 Possible shelf, circular sawn
- 44 Rail post from second level
- 45a&b Railing from second level
- 46 Wooden turn lock
- 47 Board with tongue
- 48 Door no. 4

Room No. 2

- 38YK21--49 Wall board (damaged) from W. wall
- 50 Ceiling board
- 51 Window shutter
- 52-55 Ceiling boards
- 56-57 Wall boards from west wall
- 58 Exterior siding board (damaged)
- 59 4"x72 1/2"x1/2" board notched @corner (wooden)
- 60 Wall board (from just below cupboard) west wall.
- 61a&b 2 3/4" trim about 8'-3" long (prob. from exterior)
- 62 Exterior siding board (9 feet)
- 63 Section of metal roofing
- 64 1 1/8" wood dowel (22"long) probably from a piece of furniture.

APPENDIX I (Continued)

INVENTORY (con't)

Room No. 3

- 38YK21 - 65 Mantel no. 3 (partial)
- 66 Molding from mantel no. 3
- 67 Top plate from mantel no. 3
- 68 Edge board (lock side) from door no. 2
- 69 Two boards (2"x4 $\frac{1}{4}$ ") nailed together with staggered ends
- 70 Window sash with some muntin missing
- 71-78 Detached muntin
- 79 Bottom window sash (missing muntin)
- 80 Window sash, bottom
- 81 Rough sawn board beveled (circular sawn)
- 82 Batten from west shutter @ window
- 83 Board with smaller boards attached, probably crude ladder (boards and nails modern)
- 84 Piece to 83

Room No. 4

- 38YK21 85-87 Pieces from mantel no. 4
- 88 Ceiling board (39 $\frac{1}{2}$ ")
- 89 Board from opening @ east wall (modern)
- 90 Transom frame from door no. 4
- 91 Ceiling board (36")
- 92-93 Ceiling boards
- 94 Detached floorboard from S.E. corner
- 95a&b Detached floor board from N.W. corner (64")
- 96 Muntin from window shash
- 97 Notched ceiling board (partial) from N.W. corner
- 98 Unidentified wooden fragment
- 99 Door to opening in east wall
- 100 Board (unidentified)

Miscellaneous

- 38YK21 -101 Molding pieces from door no. 1 (10)
- 102 Pieces of wood lath room no. 1
- 103 Wood roof shakes
- 104 Wooden strip (unidentifiable)
- 105 Wood fragments
- 106 Wooden strip, (unidentifiable)
- 107 Fragment of wooden flooring from east wall room no. 3
- 108 Unidentified wooden fragments
- 109 Fragments of molding from window jambs in room no. 3
- 110 Fragments of wooden lath room no. 2
- 111 Window shutter probably from window no. 2
- 112 Window shutter probably from window no. 2
- 113 Wooden plate from West wall, room no. 4, which received rails
- 114 Window shutter - of different construction than others on house; apparently from some other structure

APPENDIX I (Continued)

INVENTORY (con't)

- 115a&b Wooden fillers from between fireplace and jamb @ door #4
- 116 Modern floorboards removed from front of hearth no. 1
for inspection (5)
- 117 Shutter from window boards have circular saw marks;
not original

APPENDIX II

APPLICATION OF THE MEAN CERAMIC DATE FORMULA TO SAMPLES FROM BRATTONSVILLE (38YK23)

<u>Ceramic Type</u>	<u>Type Median</u>	<u>Sherd Count</u>	<u>Product</u>	<u>Reference</u>
Annular Pearlware (26)*	1805	1	1805	(Noel Hume 1970: 131)
Blue- & Green-edged Pearlware (19)	1805	5	9025	(Noel Hume 1970: 131)
Blue Hand Painted Pearlware	1800	1	1800	(Noel Hume 1970: 128-29)
Polychrome Pearlware	1830	2	3660	(Noel Hume 1970: 129)
Mocha	1843	1	1843	(Noel Hume 1970: 131)
Undecorated Pearlware	1805	6	10,830	(South 1971: Analysis Chart)
Creamware	1791	1	1771	(Noel Hume 1970: 126-128)
Creamware	1798	4	7192	(Noel Hume 1970: 126-128)
Nottingham Stoneware	1755	1	1755	(Noel Hume 1970: 114)
Whiteware	1860	<u>14</u>	<u>26,040</u>	(Noel Hume 1970: 130-131)
		36	65,721 ÷ 36 = 1825.6	

Mean Ceramic Date = 1825.6

APPENDIX III

CHI-SQUARE DISTRIBUTIONS

Examples of Procedure:

Surface and Subsurface

	<u>Ceramics</u>	<u>Glass</u>	<u>Window Glass</u>	<u>Nails</u>	<u>Totals</u>
Surface (All units)	1 (20-70) [.04]	137 (124.28) [129.77]	160 (109.04) [234.78]	16 (48.97) [5.22]	314 [279.81]
	42 (21.29) [82.86]	129 (131.72) [126.34]	56 (106.95) [129.32]	81 (48.03) [136.60]	308 [375.12]
Totals	43	266	216	97	622 [754.93]

$$X^2 = 132.93, df = 3, p < .001$$

CHI-SQUARE DISTRIBUTIONS OF ARTIFACTS BETWEEN SUBSURFACE AND FEATURE 32

Nails and Ceramics $X^2 = 6.96, df = 1, p > .01 < .001$
 Nails and Window Glass $X^2 = 7.22, df = 1, p > .01 < .001$
 Nails and Bottle Glass $X^2 = .02, df = 1, p < .90$
 Ceramics and Window Glass $X^2 = 21.85, df = 1, p < .001$
 Ceramics and Bottle Glass $X^2 = 3.70, df = 1, p > .05$
 Window Glass and Bottle Glass $X^2 = 4.27, df = 1, p < .05$

APPENDIX IV

PEARSON'S RANK CORRELATION

Example: Rank for Ceramics and Bottle Glass

Unit	Bottle Glass		Ceramics		d_i	d_i^2
7	12	r12	11	r11.5	.5	.25
29	4	r11	11	r11.5	-.5	.25
4	1	r8	8	r10	-2.0	4.00
2	1	r8	3	r9	-1.0	1.00
6	1	r8	2	r7.5	.5	.25
31	1	r8	2	r7.5	.5	.25
30	1	r8	1	r4	4.0	16.00
3	0	r3	1	r4	-1.0	1.00
28	0	r3	1	r4	-1.0	1.00
5	0	r3	1	r4	-1.0	1.00
27	0	r3	1	r4	-1.0	1.00
26	0	r3	0	r1	2.0	4.00

$$d_i^2 = 30.00$$

$$r_s = 1 - \frac{N \sum d_i^2}{N^3 - N}$$

$$= 1 - \frac{6(30)}{12(143)}$$

$$= \frac{180}{1716}$$

$$= .90$$

$$r_s = .90$$

APPENDIX IV (Continued)

Correction for tied scores:

$$\begin{aligned}\Sigma y^2 &= \frac{N^3 - N}{12} - \Sigma Ty \\ &= \frac{12^3 - 12}{12} - \left[\frac{2^3 - 2}{12} + \frac{2^3 - 2}{12} + \frac{5^3 - 5}{12} \right] \\ &= 143 - 11 \\ \Sigma y^2 &= 132\end{aligned}$$

$$\begin{aligned}\Sigma x^2 &= \frac{N^3 - N}{12} - \Sigma Tx \\ &= \frac{12^3 - 12}{12} - \left[\frac{5^3 - 5}{12} + \frac{5^3 - 5}{12} \right] \\ &= 143 - 20 \\ \Sigma x^2 &= 123\end{aligned}$$

$$\begin{aligned}r_s &= \frac{\Sigma x^2 + \Sigma y^2 - d^2}{2 \sqrt{\Sigma x^2 \Sigma y^2}} \\ &= \frac{123 + 132 - 30}{2 \sqrt{(123)(132)}} \\ &= \frac{225}{254}\end{aligned}$$

$$r_s = .88$$

$$r_s = .88, p < .001$$

APPENDIX IV (Continued)

SUBSEQUENT RESULTS OF SPEARMAN'S RANK CORRELATIONS

Bottle Glass and Nails	$r_s = .57, p < .05$
Bottle Glass and Window Glass	$r_s = .38, p > .05$
Ceramics and Nails	$r_s = .75, p < .01$
Ceramics and Nail Heads	$r_s = .63, p < .05 > .01$
Nails and Window Glass	$r_s = .82, p < .01$
Nail Heads and Window Glass	$r_s = .79, p < .01$
Bottle Glass and Nails	$r_s = .57, p < .05$
Bottle Glass and Flat Glass	$r_s = .38, p > .05$
Ceramics and Flat Glass	$r_s = .52, p < .05 > .01$