COLLABORATIVE JUSTIFICATION FOR RECONSTRUCTION OF THE McLEAN HOUSE AT APPOMATTOX

001475

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON

ADDRESS ONLY
THE DIRECTOR, NATIONAL PARK SERVICE

June 22, 1942

MEMORANDUM for Mr. Vint,
Chief of Planning.

Attached is a list of questions of restoration policy raised by Plan App. 2010-17 sheets and the collaborative justification thereof dated March 18, 1942, also attached, providing for the documented reconstruction of the McLean House at Appomattox National Historical Monument.

The documented study or collaborative justification accompanying Plan App. 2010 is certainly the most complete and scholarly work yet undertaken by this Service in connection with a restoration project. The method is sound and strict adherance to this procedure will place the National Park Service in a position of complete security with regard to the McLean House Project.

However, contrary to what might be inferred from an examination of the collaborative justification, the conclusions or architectural summaries regarding each feature of the proposed restoration were reached not collaboratively by archeologist, historian, and architect but, as a rule, by the architect alone. This came about because the architect was stationed in Richmond while the archeologist and historian had headquarters at Appomattox. Under these conditions, it was difficult to effect the close coordination in the compilation of the collaborative justification that would have been desirable. Briefly, the plans and justification reflect the architect's views without expressing the dissenting opinions of the archeologist and historian. This difficulty might have been overcome but for the breakup of our technical staff resulting from the resignations of technicians about to enter the armed services.

From the standpoint of good restoration procedure, one other error was made by the Service. The field staff was allowed to settle for itself, without advising with the Washington Office, a number of fundamental points of restoration policy. The decision to introduce fire-proof flooring, thus increasing the overall height of the building by six inches, is a case in point. Such a radical departure from the Hubbard and Hancock measured drawings should not have been introduced into the plans without the Director's approval.

The attached list of questions of restoration policy we believe can best be settled by an inter-branch conference, which will be guided by the established restoration policy of the National Park Service laid down by the Advisory Board on National Parks Historic Sites Buildings and Monuments, May 19, 1937. In effect, the inter-branch conference will have the duty of applying to the specific case of the McLean House restoration the principles laid down by the Advisory Board.

Acting Supervisor of Historic Sites.

CWP:og

CC- Reg., Dir., Reg. One
- Supt. Appomattox
- Mr. Gerner
- Mr. O. G. Taylor
- Dr. Porter

(With copy of enclosure to each)

Problems Relating to the Proposed
McLean House Restoration
(Plan App. 2010-17 Sheets and Collaborative
Justification thereof dated March 18, 1942)

Card 3 - b Of the Justification — Steps to Floor under the Front Porch

Card 5 - c (Cont.) — Question of reproducing exterior drainage system discovered by archeological excavation.

Card 9 - a — Question of decreasing the known width of the rooms 1 3/4 inches each way in order to put furring strips under the plaster.

Card 10 - c — Fireproof masonry walls with finished plaster appearance in place of wood stud partitions and lath - probably o.k.

Card 10 - c — (Cont.) Modern gypsum plaster in place of lime plaster of the period.

Card 11 - c — Fire proof floor system first and second floors and second floors ceiling, causing

See also "General Construction Features - Summary of Units 5-c, 9-c, 10-c, 11-c, 15-c, 31-c, 96-c, 98-c "Floor Construction."

31-c exterior walls from the ground floor to the cornice level to be increased two brick courses or 6 inches, affecting also the window positions.

45-c Change in dimensions of the fireplace opening to compensate for changes made necessary to provide fireproof flue linings.

Card 15 - c — Re-laying of the hearth discovered by the archeologist. Should it not be retained as it is without relaying?

Card 15 " C — hanging lamp fixtures and inconspicuous electric plugs

Card 29 - c — Brick piers (conjectural) to be introduced as support for rear porch.

Card 88 - c — Modern rather than old type roofframing in attic as shown on Hubbard drawings.

Card 93 - c — Modern exact reproduction of old brick to be used instead of old brick.

Card 96 - c — Painting of woodwork.

COLLABORATIVE JUSTIFICATION

FOR RECONSTRUCTION OF THE MCLEAN HOUSE AT APPOMATTOX

by

Ralph Happel
Junior Historical Technician

Preston Holder
Junior Archeologist

Ray Julian
Junior Architect

I. INTRODUCTION

The proposed reconstruction of the McLean House at Appomattox Court House National Historical Monument is one of the most important reconstructions of historic buildings undertaken by the National Park Service in recent years. Past experience in the reconstruction of historic structures has indicated the necessity of thoroughgoing investigation of every factor concerned.

Plan NHM-APP-2010 in 16 sheets has been completed by the Regional Branch of Plans and Design. The drawings were prepared on the basis of studies by the Branch of Historic Sites (History and Archeology) and the Branch of Plans and Design (Architecture).

II. Purpose of this Collaborative Justification

In order to make possible accurate review of Plan NHM-APP-2010, it was decided that a detailed justification for every important feature of the McLean House should be prepared, not a narrative report, but an assembling of information in convenient review form.

III. Method of Preparation and Use

This justification is presented on regulation paper, in bound form, for the sake of convenience, but is the exact copy of material on 5 X 8 cards in the files of the Appomattox Court House National Historical Monument. Those cards, based on historical, archeological, and architectural data, justify each unit of the McLean Reconstruction, and the unit concept should be remembered by the reviewer.

The sequence of details, or units, as chosen, is from the ground up and from east to west, the order of procedure for each floor being the same. The original numbering of the cards is followed, each unit constituting a number and the data of each technical branch being subheads under that number. The architect's statements of data serve also as the conclusions.

IV. Sources

A. Historical

The historical data is based on the McLean House Study by Junior Historical Technician Ralph Happel, December, 1940. Embodied in this report are

written and published statements from historical sources, statements of people who remember the house, 1865 and later photographs and drawings, and the Hancock-Hubard specifications and drawings. The house was taken down in 1893 for removal to Washington as a museum by Myron E. Dunlap, of Niagara Falls, New York, who employed C. W. Hancock, a local builder, to do both the work of removing and re-erecting the house. The re-erection never took place and the Hancock heirs retained Hancock's written specifications and the floor plans made for him by P. C. Hubard of Lynchburg. Mr. Hubard, who died in 1941, made amplified tracings of his original drawings in 1930. The Hancock-Hubard material was purchased by the National Park Service in 1940.

B. Archeological

The archeological data were uncovered during 1941 at the site. A narrative archeological report will be written later.

C. Architectural

The architect has worked chiefly as an interpreter of data supplied by historical and archeological research. The architect's separate report is Plan NHM-APP-2010.

V. Brief History of the McLean House

The McLean House, built 1848, by Charles A. Raine, was the scene, April 9, 1865, of the meeting between Lee and Grant to arrange for the cessation of hostilities that marked the virtual end of the War Between the States. Wilmer McLean had bought the property in 1863. N. H. Ragland acquired the property after the war and Myron E. Dunlap, of Niagara Falls, New York, purchased it from Ragland's widow in 1891.

In 1893, Dunlap had the house torn down for removal to Washington as a museum. The demolition was completed, but the re-erection never occurred and the material lay on the ground at the site, gradual prey to souvenir hunters and the elements.

Clean-up, preparatory to archeological work, by the National Park Service, began in the autumn of 1940. Archeological research was instituted during February, 1941.

FRONT PORCH STEPS, INCLUDING RAILING

A. Ground Level — Card 1-a
Unit 1

Historical Data

Hancock, the contractor who took the place down, says there were 9 steps; the postwar Stevens photo seems to bear him out. (Hancock Specifications, p.3, at end of Historical Study and Stevens photo at end of same paper). The Stevens photo seems to show 9, the bottom step having the appearance of an extra step. Both of these sources are in relation to the 1893 house. Horace Porter of Grant's staff, speaking of the 1865 house, said there were 7 steps. (Historical Study, p. 21). A study of wartime photo B-6333 (at end of same paper) shows that there are 8 steps, though one could seem to see only 7. According to this photo, there were 15 rails to each step bannister. Note, however, that the bannister overhangs the newel post and thus the newel has no cap, as in the Stevens photo.

The newels are 3½" by 4½" and are 38" high (Hancock). The hand rails are 3" oval. (Hancock ---these figures are for 1893, but the newels were probably the same, though the hand rails may have been changed; their relation to the posts was certainly changed, as seen in the two photos noted above).

This office is in possession of one of the step rails, presented by Mr. C. A. Hancock (a son of the contractor who took the place down, C. W. Hancock, whose Specifications for rebuilding are so often cited in these cards) of Huntington, W. Va. This rail has been used by the architect in his plans.

Archeological Data — Card 1-b

A complex of nine tectonic elements apparently forming the remnants of the base of the front steps was found in the general area indicated by previous historical and archeological research. These elements were:

Feature 5, Details 17 a, c, & i: scattered thin fragments of badly decayed wood whose orientation suggested they formed portions of the "base-box" of the lower-most front step. Respectively these elements represent: the west end of the north face of the base; the east portion of the south face of the base; a small portion of the east face of the base.

F5, D17, b, d, e, f, g, & h: various rocks and brickbats whose orientation suggests they formed a footing for the above-mentioned base of the front steps.

These facts indicate that the base of the front steps was about one and one-half feet wide (i.e. north-south axis), by fifteen feet long (i.e. east-west axis). The south face of the base was about eight feet north of the north face of the front porch pillars and about seventeen feet north of the north foundation trench of the house. The timber understructure of this base was apparently supported only by various field stones and brickbats laid directly on the undisturbed clay at the top of the north terrace.

The mean elevation of these elements was 768.75' above mean sea level. (Archeological notes: Book #4, pp. 76-80; Book #5, pp. 16-20; Negative #268)

FRONT PORCH STEPS, INCLUDING RAILING
Architectural Data

A. Ground Level
Unit 13 Card 1-c

All sizes, width, depth, etc., of these steps are to follow Hubard's 1893 survey.

The profile of the nosing is to be a copy of the Bocock-Isbell stair nosing.

The handrail and balusters shall be sizes as indicated on Hubard's drawing but the rail shall be finished over the starting newel to match the 1865 photograph, instead of Hubard's data.

The steps shall be supported at the grade on a brick wall resting on concrete carried down below frost for public safety reasons.

FRONT PORCH PILLARS (SUPPORTS FROM GROUND)

Historical Data

A. Ground Level
Unit 2 Card 2-a

There were 6 brick columns supporting the porch, each 16" long and 12" deep, in 2 sets of 3 each, 13' 5" between the sets and 6' 8" between each pillar in the sets. (Ground floor plan, Hubard drawings). In his specifications, Hancock (p. 3 of specifications, attached to Historical Study) speaks of the supports as being brick.

Wartime photo B-6333, at end of Historical Study, indicates brick supports, painted white or whitewashed.

Archeological Data Card 2-b

Four Details pertaining to the front porch pillars were found in the general area in which previous historical and archeological research had suggested the bases of the front porch pillars were located. The evidence in three of these Details is scanty but the fourth (F5, D4) had the bottom course of pillar bricks in situ on the supporting field stones. The Details were (from east to west):

Feature 5, Detail 20: a rectangular hole approximately 1.00' (north-south) x 1.30' (east-west) let into the undisturbed basic clay.

F5, D7: two superimposed flat field-stones about 1.00' (east-west) x 0.70' (north-south) x 0.20' (thick) lying directly on the surface of the undisturbed clay.

F5, D4: five whole bricks laid in a horizontal coursing to form a rectangle 1.30' x 1.40'. This rectangle was in contact with and superimposed on two flat field stones comparable to those found in F5, D7 and rested directly on the undisturbed terrace-clay.

F5, D21: a poorly defined rectangular hole about 1.30' x 1.20' let into undisturbed terrace-clay.

These Details are in a nearly true east-west line across the front of the house-site about eight feet north of the north face of the north foundation of the house. They presumably represent the remains of the four eastermost of the six porch pillars noted by Hubard. The distribution of the Details along the east-west axis tends to bolster the Hubard data:

The west face of D20 is 6.50' east of the east face of D7; the west face of D7 is 6.50' east of the east face of D4; but the west face

of D4 is 13.20' east of the east face of D21. This indicates that D20, D7, D4 are the east set, while D21 represents remains of the easternmost pillar of the western set.

No special construction features were noted. At least in some cases the pillars merely rested on stone footings which were laid directly on the surface of the ground; while in others no special arrangement for footings was found.

The average elevation for the Details is 765.30' above mean sea level. (Archeological Notes: Book #4, pp. 74, 86, 106, 110; Book #2, p. 77; Book #5, pp. 24, 26, 28, 54, 56, and 48). (Negatives #274, 275, 276, 277).

FRONT PORCH PIERS
Architectural Data

Card 2-c

Hubard's 1893 survey shows these piers as brick, 12" x 16" in size, which is corroborated by the 1865 photographs. The piers in the reconstructed house are to be identical except that they shall be carried down below the frost line and rest on concrete footings. Four of these piers shall have porch roof water drains concealed in the inside of them, down to a point about one foot below grade.

LATTICE TRELLISES
Architectural Data

Card 2'-c

Wartime photographs show two lattice trellises located on the lawn immediately in front of the end bays of the Front Porch.

These trellises will be reconstructed from the photographic data, with concealed masonry footings for constructural stabilization.

Collaborative Justification for Reconstruction

of the McLean House at Appomattox

Unit 2-b



Hole Left by Razing of Porch Pillar Support, F5 D20
(ACHNHM #275)

Collaborative Justification for Reconstruction

of the McLean House at Appomattox

Unit 2-b



Porch Pillar Support F5 D4

(ACHNHM #274)

STEPS TO FLOOR UNDER THE FRONT PORCH
Historical Data

A. Ground Level
Unit 3 Card 3-a

The area under the porch floor was below the level of the front yard. See discussion in Historical Study, p. 17 and U. S. Signal Corps photo B-6333 at end of Study. Mr. Ragland Featherston, whose grandfather, N. H. Ragland, owned the house after the War, remembers 3 or 4 steps from the yard level to the area under the porch. These steps were to the left of the porch steps, as you faced the house. They were made of wood and may or may not have dated back to 1865. (Historical Study, p. 32).

A post card, "Ruins of Old McLean House, Surrender Grounds, Appomattox, Va." from a photograph by W. E. Burgess, Scottsville, Va., shows the well with a loose set of steps lying on the ground. These steps may well be the steps in question. Mr. Featherston thinks it possible. The post card was found after completion of the McLean Historical Study and is on file at the Appomattox office.

Archeological Data Card 3-b

Several Details were found imbedded in the front terrace in the general area where historical research had indicated the exterior steps to the basement level were located.

These Details were (from south to north):

Feature 5, Detail 15: seven fragments of decayed wood, probably two by four stringers, oriented along an east-west axis from the porch pillar base F5, D4 (see Unit 2-b) to the support stone F5, D15b about five feet to the east. The scattering covers a north-south area of about one foot.

F5, D15a: a flat field stone 0.80' x 0.70' x 0.20', imbedded in the subsoil surface just east of F5 D4 (see above).

F4, D15b: a flat field stone, 0.40' x 0.80' x 0.20', in a similar matrix 5.00' due east of F5 D15a, and just west of the porch pillar base F5 D7 (see Unit 2-b).

F5, D19: a flat field stone 0.60' x 0.90' x 0.25', in a similar matrix 3.50' due north (i.e. "up" the terrace) of F5 D15b.

F5, D14b and 14c: two flat field stones, 0.70' x 0.90' x 0.20' and 0.40' x 0.80' x 0.25', in similar matrix 2.50' due north ("up" the terrace) of F5 D19.

Collaborative Justification for Reconstruction

of the McLean House at Appomattox

Unit 3-b



Eastern Portion of Front Terrace Showing remains of Porch Pillar Supports and Basement Step Supports (Scale in tenths of a foot)

(ACHNHM #285)

F5, D14a: a flat field stone, 0.60' x 1.20' x 0.25' in similar matrix 5.00' due east of F5 D14a and 14b and 5.00' north ("up" the terrace) of F5 D15a.

F5, D14: a fragment of decayed wood, 0.40' (north-south) x 2.50' (east-west), lying along an east-west axis across F5 D14a. This was probably a "two by four" stringer.

This total complex constitutes the remains of the steps to the area under the front porch. The evidence indicates that the steps proper were of wood.

The component F5 D15, 15a, 15b constitutes the remains of the base of the bottom step. The south face of this component is on a vertical line with the north face of the surface drainage ditch, F5 D2, and was apparently directly below the north edge of the front porch as indicated by the relative positions of the two porch pillar bases, F5 D4 and F5 D7.

The field stone, F5 D19, represents an intermediate support stone.

The component, F5 D14, 14a, 14b, constitutes the remains of the base of the top step. The north face of this step was approximately five feet up the terrace (i.e., north) from the face of the front porch.

The evidence indicates that the steps failed, by nearly four feet, to reach the terrace crest. A well-worn path, F2 D3, containing gravel and rough sand leads north from the top of the "steps", past the base of the front steps and the flag-stone complex, F2 D5, and continues along the north side of the front walk, F2 D1.

Elevations above mean sea level follow:

The area under the front porch:	+ 755.30'
The bottom step complex: F5 D15, etc.	+ 765.50'
The top step complex: F5 D14, etc.	+ 767.70'
The top of the terrace: F2 D3	+ 769.00'

NOTE: The Branch of Plans and Design, Region One Office, advises that these steps are considered as exterior to the house and will not be part of the immediate McLean House Reconstruction. Therefore, these Details are not shown on the accompanying drawing, NHM-APP-8051, but will be shown in detail on the drawings accompanying the final report on Excavations at the McLean Site.

BRICK FLOOR UNDER THE FRONT PORCH

A. Ground Level — Historical Data
Unit 4 — Card 4-a

The front porch as Mr. Featherston, whose grandfather owned the place, remembers it had a brick floor under it, level with the basement inside. (Historical Study, p. 32). This was level with the backyard, but below the level of the front yard. The ground level can be verified by the various photographs, wartime and postwar, at the end of the Historical Study.

Archeological Data — Card 4-b

A brick paving (dimensions: 5.00' east and west by 3.54' (north and south) was found adjacent to the north edge of the north foundation-trench of the house. The paving is located about midway along the east-west axis of this foundation-trench, and is composed of brickbats (average dimensions: 0.30' x 0.30') set in the clay sub-soil in ten east-west courses and fifteen north-south courses. The identification is: Feature 5, Detail 3.

The mean elevation of the paving is 765.35' above sea-level. The elevation of the top of the terrace to the north (i.e. the front yard) is 768.50'. (Archeological Notes: Book #3, p. 28 (McL. F5, D3); Negative #273).

GROUND FLOOR FRONT ENTRANCE, INCLUDING PAVING

Architectural Data — Card 4-c

Dimensions of this entrance door are to follow Hubard's 1893 survey. Profiles of all exterior door frames were established from the original wood fragments lent by Mr. Featherston and will follow the same. Slight adjustment in fractions of an inch were made in the overall height to conform with the brick coursing. Concealed flashing and caulking have been added to make the frame weathertight.

The door leaf is to be made to match Hubard's detail of the rear first floor exterior door, in the absence of other precedent, and since the photograph of the rear ground floor door is not sufficiently clear to warrant otherwise.

The paving in front of this door is revealed almost intact in the archeological investigation. However, it will be necessary to remove almost all of the original brick laid on the grade to excavate and install the foundation walls. Because of this, the original brick will be carefully removed, charted and relaid on substantial masonry base, in order to adequately preserve the same and to resist the public traffic which will pass over it. None of the concrete base will be visible and the surface joints will be made with sand and soil to match the original. Any original brick broken in removal and installation are to be replaced with matching original McLean brick.

Collaborative Justification for Reconstruction

of the McLean House at Appomattox

Unit 4-b



Brick Paving at Basement Front Door
(ACHNHM #273)

NORTH (OR FRONT) WALL (FOUNDATION)

Historical Data

A. Ground Level
Unit 5 Card 5-a

According to the Hancock Specifications, the wall at the base was 17" thick (p. 2 at end of Historical Study) and 50' 1" long (ground floor plan as shown in original Hubard drawings, at end of Historical Study).

Archeological Data Card 5-b

A trench, Feature 3, Detail 2n, left by the previous removal of the bricks composing the base of the front (north) wall of the house was found. The trench varied between 1.35' and 1.43' wide (i.e., north-south axis) at various points along its east-west axis; it was 50.20' long (i.e., east-west axis) along its exterior (northern) face.

The bottom of the trench is 1.30' below the exterior yard-level at its eastern terminus; 0.30' below the exterior yard-level at its western terminus.

The mean elevation of the bottom of the trench is 764.42' above sea level. (Archeo. Notes: Book #3, pp. 12, 13, 32, 33; Negatives 207, 211.).

EXTERIOR BRICK WALLS BELOW GRADE

Architectural Data Card 5-c

Thickness of these walls, and all overall dimensions of the same follow exactly the Hubard 1893 survey. However, the reconstructed foundation walls are being placed 3' 6" deep below the finished grade to insure their immunity to any frost action. Lack of knowledge of the possibility of frost heaving, disregard of it, or whatever prompted the early builders at Appomattox to build shallow foundation walls is one of the fundamental reasons for the structural deterioration of all the remaining buildings there. Hubard called for "foundation walls 2' 0" deep or more to get a good foundation". This was not considered sufficient and the walls are consequently being placed 3' 6" below grade on reinforced concrete footings.

DRAINAGE AND WATERPROOFING

The McLean house, situated as it was with the lower story located in a depression below the natural level and drainage of the ground, must have presented to its several owners the same problem with which we are faced in the remaining structures at Appomattox with similarly located ground floors, that is, the problem of constant dampness and moisture in the rooms below grade. In the summer months the contact of the masonry wall with the cold ground causes condensation on the interior face of the wall. In the McLean

Collaborative Justification for Reconstruction

of the McLean House at Appomattox

Unit 5-b



North Foundation Trench and Floor Stringer Remains
(ACHNHM #211)

House this will be overcome by furring the exterior walls (see Card 9-c). For the remainder of the year, the surface water and subsoil drainage against the walls must be considered. One particular source of danger of water through the walls is the discharge of the roof water at the base of the leaders.

With the above elements to consider, it was strongly felt that every precaution, within the limits of reasonable cost, should be taken to prevent any moisture conditions whatever in the house, as it was certain that there would not be ample funds for the maintenance, repair, or replacement of any of the affected portions of the building after it was erected.

Accordingly, cinders and subsoil drains are to be placed under the ground floor slab, the drains emptying into a sump under the floor, and drained outside the building. Footing drains are to be installed, drained out to lower ground. The entire top of the ground floor slab is to be coated with waterproofing before the wood floor is laid. Metal flashing and membrane waterproofing is to be applied over the exterior of the walls below grade. The interior gable walls in the attic will be waterproofed. Exposed window and door heads will have metal flashing over the heads. All exterior door and window frames will be caulked with waterproof compound where they butt the masonry.

None of the above precautions were incorporated in the original building, and none will be visible in the reproduced building.

Archeological Note: Archeological evidence of a definite drainage system for surface waters was found exterior to the house. These are indicated on the accompanying map - NHM-APP-8051. The Regional Office Branch of Plans and Design advises that this drainage system is considered as exterior to the house and will not be part of the immediate McLean House Reconstruction. Therefore, full discussion of the system will be reserved for the final report on Archeological Excavations at the McLean Site.

EAST WALL (FOUNDATION)
Historical Data

A. Ground Level
Unit 6 Card 6-a

13" thick (Hancock Specifications, p. 2, at end of Historical Study).

22' 0" long (floor plan, original Hubard Drawings, at end of Historical Study).

Archeological Data Card 6-b

The trench mentioned on card 5-b extended unbroken around a right angle turn at its eastern end.

This north-south extension of the wall trench was given the identifying symbol Feature 3, Detail 2e. The trench was between 1.00' x 1.10' wide (i.e. east-west axis) and 22.30' long (i.e. north-south axis). The east face was 22.30' long and was formed by a straight wall of earth rising two feet from the bottom of the trench and forming the terrace along the east of the house. The west face of the trench was 19.40' long and from 0.10' to 0.50' high at various points along its extent; it was interrupted for 9.50' feet near the center of the "house" by the hearth F3, D4 (q.v.).

The average elevation of the bottom of this trench was 764.50' above mean sea level.

This trench undoubtedly is the foundation-trench which was left by the removal of the bricks forming the base of the east wall of the house. There was no apparent disturbance beyond the removal of the bricks. (Archeological Notes: Book #1, pp. 23, 41; Negative #216).

Architectural Data

See Unit 5-c.

SOUTH (OR REAR) WALL (FOUNDATION)
Historical Data

A. Ground Level
Unit 7 Card 7-a

17" thick at base (Hancock Specifications, p. 2 at end of Historical Study).

50' 1" long (ground floor plan, original Hubard Drawings, at end of Historical Study).

Archeological Data Card 7-b

The trench described on Unit 6-b turned a sharp right angle at its southern end.

This east-west portion of the continuous wall-trench was arbitrarily designated Feature 3, Detail 2s. The trench was from 1.40' to 1.60' wide (i.e., north-south axis) along this portion of its extent. The south face was 50.00' long and averaged 0.50' high. The north face was disturbed in certain areas but its height was evidently between 0.10' and 0.25' throughout its total length of 47.70'. The average elevation of the bottom of the trench was 764.20' above mean sea level. (Archeological Notes: Book #1, pp. 45, 46, 74, 78; Book #3, pp. 18, 34; Negative #225).

Architectural Data

See Unit 5-c.

WEST WALL (FOUNDATION)
Historical Data

A. Ground Level
Unit 8 Card 8-a

13" thick (Hancock Specifications, p. 2, at end of Historical Study).

22' 0" long (ground floor plan, original Hubard Drawings, at end of Historical Study).

Archeological Data Card 8-b

The foundation-trench above described (see cards 5-b, 6-b, 7-b) continued unbroken along a north-south line connecting the west end of Feature 3, Detail 2s (see card 7-b) with the west end of F3, D2n (see card 5-b).

This portion of the foundation trench was designated as F3, D2w. Its width (east-west axis) varied from 1.15' to 1.05'. The west face was 22.00' long and varied from 1.50' to 2.00' high. No unbroken east face was found for this trench, but those portions found had a height of 0.40' and the overall length seems to have been 19.10'.

The average elevation of the bottom of the trench was 764.30' above mean sea level. (Archeological Notes: Book #1, pp. 22, 24, 39, 74, 78; Book #3, pp. 89, 90; Negative #214).

Architectural Data

See Unit 5-c.

Collaborative Justification for Reconstruction

of the McLean House at Appomattox

Unit 8-b



West Foundation-Trench and Subterranean Brick Chamber (See Unit 24-b')

(ACHHM # 214)

EAST ROOM DIMENSIONS
Historical Data

A. Ground Level
Unit 9 Card 9-a

19' 1" from front to rear.

16' 7½" the long way of the house. (Ground floor plan, original Hubard drawings, at end of Historical Study)

8' 10" floor beam to floor beam.

This east room, in Mr. Featherston's time, was the kitchen. (Historical Study, p. 33).

Archeological Data Card 9-b

Data on the north-south (front to rear) dimensions are definite. The exact east-west ("long way of house") dimensions must be inferred since the only indication of the position of the west wall of the room was a scattering of thirty eight component elements (stones, brickbats, wood fragments, etc.) forming the remains of the wall footing (Feature 3, D8). This scattering covered an area 1.50' east-west by 19.20' north-south. It seems probable that the general east periphery of F3, D8 is the approximate location of the innter (east) face of the original west wall of the room.

The distance from inner face to inner face of the front and rear walls is: 19.20'.

The distance from inner face to inner face of the east and west walls is: between 15.20' and 16.60' depending on the portion of F3, D8 (west wall footing) used for reference.

Note: Preliminary field examination of specimens recovered from the overlying debris suggests a high percentage of animal bones from this "room" which may indicate its use as a kitchen. (Archeological Notes: Book #1, pp. 46, 56; Book #3, pp. 42, 44, 46, 49, 51, 53; also see references under Cards 5-b, 6-b, 7-b; Negative #231).

Architectural Data Card 9-c

DIMENSIONS OF ROOMS

The exterior walls of the original building had the finished plaster applied directly to the brick. In the reconstruction the brick walls are to have 1-3/4" thick furring strips over which the plaster shall be applied. The resulting air space is to insure the walls against dampness, but since the overall exterior dimensions are adhered to, the various room dimensions are decreased accordingly, that is, 1-3/4" less in length, and twice 1-3/4" less in width. The dimensions given on Hubard's survey and drawings will serve as basic data (see Card 10-c).

EAST ROOM - INTERIOR WALLS

A. Ground Level
Unit 10

Historical Data

Card 10-a

The partition wall was wood (i.e., west wall of this room). Hancock's Specifications, p. 2, at end of Historical Study.

All these walls plastered and whitewashed (Hancock's Specifications, p. 6, at end of Historical Study). (Also Mr. Featherston, in Historical Study, p. 33).

The wood partition was 5" thick (Original Hubard Drawings, floor plan, at end of Historical Study).

Archeological Data

Card 10-b

No remains were found which specifically indicate the nature of the material used in the partition wall, (Feature 3, Detail 8) suggested on Card 9-b. However, the nature of the footing stones suggests that this was not a brick wall, and, further indicates that such footing-stones would have been employed to support a wooden wall. (See Card 9-b, F3, D8, for details).

Architectural Data

Card 10-c

INTERIOR PARTITION WALLS

Although Hubard's 1893 survey and specifications call for wood stud partitions, lathed with hand-rived lath and plastered, this construction was not followed.

Fireproof masonry walls, which present the same overall thickness and finished plaster appearance were substituted in consistency with the justification mentioned on Card 11-c.

All dimensions locating the various partitions and separating the rooms, rigidly follow those shown on Hubard's survey and drawings.

GROUND FLOOR WALLS AND CEILINGS

Hubard's 1893 specifications say "all rooms are plastered and whitewashed". Some of the bricks excavated in the 1941 archeological investigation were found to have the plaster still remaining on one face, which agrees with the specification. Accordingly all rooms in the house will be reconstructed with plaster walls and ceilings. The only plaster in general use at the time of the construction of the original house was lime plaster, made of either calcined limestone or oyster shell and local sand with the addition of cattle hair in the first two coats.

Collaborative Justification for Reconstruction

of the McLean House at Appomattox

Unit 9-b



Footing-stone Complex of West Wall of East Basement Room

(ACHNHM # 231)

However, the superior stability, permanence and identical appearance of modern gypsum plaster has been the reason for its choice for finishing the interior walls of the building, rather than the original lime plaster.

EAST ROOM — FLOOR

A. Ground Level — Historical Data

Unit 11 — Card 11-a

The floor, according to Mr. Featherston, was not brick, as the basement floors of old houses so frequently were, but was an ordinary wooden floor, close to the ground. (Historical Study, p. 33).

Hancock said that the "Basement floors are board resting on scantling laid on the ground". (Specifications, p. 3, at end of Historical Study).

Archeological Data — Card 11-b

No actual remains of the true flooring was recovered. However, the nature of the flooring can be inferred from the following remains:

Feature 3, Details 5,6,7,9,10,11,12,13,14,15,30,31. A series of Details found within the confines of "the east room". These Details consist of streaks of rotted wood fragments running along a north-south axis, each of which was associated with a shallow trench which had been dug into the underlying clay to accommodate it. Frequent flat field stones were found under the wood fragments suggesting their use as support-stones. The wood fragments suggest original timbers of the order of 2" x 4" x 6". The surface of the wood was 764.75' above sea level, while the surface of the surrounding clay was about 0.10' lower.

These Details undoubtedly represent the remains of the "scantling" mentioned by Hancock. The method of construction was apparently as follows:

In all cases a shallow trench (about 0.60 to 0.90' wide and 0.20' deep) was dug to receive the stringers. A long stringer was laid against both the north and south walls running east and west along their inner faces. On these a series of six cross "scantlings" were laid running between the north and south walls. These cross members were placed about every 2.50' along the east-west axis of the room. The hearth (see Card 15-b) was boxed by similar stringers, and four of the cross stringers abutted against its north and south sides.

This type of construction makes it probable that the planking of the floor was laid along the east-west axis, and was not separated from the basic clay by more than 0.20' or 0.30'.

Rotting of the under-supports was probably retarded by the impervious character of the underlying red clay and the plan of drainage of exterior surface water. (Archeological Notes: Book #1, pp. 32 thru 65; Book #3, pp. 42 thru 53, and 93 thru 97; Book #4, pp. 122 thru 126; Negatives #220, and 221).

Collaborative Justification for Reconstruction of

the McLean House at Appomattox

Unit 11-b



Southeast Corner of East Basement Room
(ACHNHM #220a)

See Unit 5-c.

FLOOR CONSTRUCTION

Hubard's 1893 specification and the 1941 archeological investigation establish the ground floor construction as wood beams laid on the ground, over which were nailed a plank floor. No data can be found, or established, as to the frequency with which this floor had to be torn out and replaced, but it is certain that the best wood obtainable today and every modern precaution would not produce a reproduction floor which would last more than 5 to 10 years before rotting out.

Accordingly this method was abandoned at the start and a waterproof concrete slab, with subfloor drainage is to be installed, over which will be laid a wide plank floor to match the old work.

In the case of the first and second floor construction and the second floor ceiling it was felt to be highly desirable to have a fireproof floor system, since the building is isolated, with only the Park fire protection. Subsequent installation of the furniture, furnishing and relics of the original McLean house which are now in the Smithsonian Institution, in other museums, and provately owned, would make any fireproofing (that could possibly be done without being exposed) an essential requirement.

Accordingly, the first and second floors and the second floor ceiling construction will be changed to fireproof construction as indicated on the drawings. Finished floors in all the rooms will be wide plank floors to match the original building, and by looking at the finished ceilings the visitor can see only a plastered surface, the same as the original building.

Since the overall depth of the fireproof construction exceeds that of the original wood beams, slight adjustments have been made in the floor heights to reconcile the same, and still hold the exterior height of the building as shown in Hubard's 1893 survey and specifications. Thus the clear height of the second floor to ceiling is slightly more, and first and ground floor slightly less, than the original. See also Card 31-c.

EAST ROOM --- DOORS
Historical Data

A. Ground Floor Level
Unit 12 Card 12-a

Two doors open on hall - one 6' 6" by 2' 11"; this is the northern-most one, the one near the front of the house.

The other, under the steps, is 2' 6" wide.

(Hancock's Specifications, p. 4, at end of Historical Study)
(Hubard's original drawings, floor plan for ground floor, at end of Historical Study).

Details to be interpretated from Hancock-Hubard data by architect.

Archeological Data

None.

KITCHEN - DOORS
Architectural Data Card 12-c

All interior doors follow the pattern as shown on Hubard's drawing made in 1931 from his site survey made in 1893. Sizes for the kitchen doors are as shown on his site survey and also as indicated in his 1893 specification. Thickness follows the similar doors in the Bocock-Isbell house built within 2 years of the McLean House.

Profile of the panel mould was copied from a door in one of the later added partitions in the Tavern which matches the Hancock detail, and may very possibly be one of the original McLean doors.

EAST ROOM --- WINDOWS
Historical Data

A. Ground Level
Unit 13 Card 13-a

1 window in front.
1 in rear. Both with 16 lights each, 10" by 12" glass.

Windows set 2' 5½" from floor. (Outside blinds)*

(Hancock's Specifications, p. 4, at end of Historical Study).

The interpretation of the Hubard drawings on this matter will be left to the architect.

Note in the Stevens postwar photo (attached to Historical Study) that the front window shows up fairly well.

The back window shows up well in the Plecker postwar photo, attached to end of Historical Study.

* The postwar photographs by Stevens and Plecker (rear view) show blinds. The wartime photographs do not show blinds. The photograph taken because of Grant's death (1885) also shows no blinds. Thus the blinds were added some time a after 1885. (Note here that Mr. Stevens is apparently wrong in saying that he took his picture in the 1870's, because his photo shows blinds and the 1885 photo shows none. All photos in Historical Study.

Archeological Data

None.

KITCHEN - WINDOWS
Architectural Data Card 13-c

Sash sizes, number of panes, overall frame size, and exterior lintel detail are all copied from Hubard's survey.

Overall width and profile of window frames are copied from fragments of original McLean window frames lent by Mr. Ragland Featherston. Digression from this dataonly in one point, i. e., the members were fabricated from three pieces instead of being made from solid material which was done to afford a weathertight frame without changing the external appearance. Wooden pegs were inserted to simulate the original mortise-tenon-pinned construction. Sills were made identical to fragments of original sills lent by Mr. Ragland Featherston. Glass for the sash will be either salvaged old glass of the period or new glass to match the old.

Sash rails and stiles were mortised-tenoned and pinned together, copied from the Bocock-Isbell house built within two years of the McLean House. Profile of the moulding on rail and stile and muntin profile were copied from the Bocock-Isbell sash.

The fact that the upper sash was not operative was determined from the original frame fragments. Wooden buttons for holding the lower sash open were copied from "Rose Cottage," c 1809, located in the town of Buckingham, a country mansion similar to (although earlier than) the Surrender house.

Interior wood jambs are as shown on Hubard's 1893 survey.

All materials are the same as called for in Hubard's 1893 specification, and as found in the original wood fragments.

EAST ROOM --- WOODWORK

A. Ground Level
Unit 14

Historical Data

Card 14-a

The woodwork all over the house was plain (Mr. Featherson, who remembers the house, p. 33 of Historical Study). This is indicated by the photo (postwar) of the surrender room, attached to end of Historical Study.

Archeological Data

None.

Architectural Data

Card 14-c

There is no dataexisting concerning the woodwork in this room beyond what has already been justified. In the absence of such, only a wood baseboard, the size and profile same as the remainder of the house, will be placed around the room.

EAST ROOM --- FIREPLACE AND HEARTH

Historical Data

A. Ground Level
Unit 15 Card15-a

There was a large fire hearth with brick paving (Hancock's Specifications, p. 3, at end of Historical Study).

Dimensions are shown on the ground floor plan of the Hubard drawings, to be described by the architect.

"All fire places are open for burning wood on old fashioned iron dogs." (Hancock's Specifications, p. 6, at end of Historical Study).

Archeological Data Card 15-b

A brick paving with two stone inset sections was found extending into the "east room" from the edge of the east wall-trench. This find was designated as Feature 3, Detail 4, and furnished the following data:

> The overall dimensions of the paving were 8.70' east-west by 9.70' north south. Two sections composed of flat smooth field stones were inset into the brick paving. One of these was directly in front of (i.e. west) the supposed fireplace proper and was 2.90' (north-south) x 4.10' (east-west) ... this inset might be considered as the hearth proper. The other stone inset was near the southwest corner of the paving and occupied an irregularly shaped area 3.50' (north-south) x 2.00 (east-west). It seems probable that both of these insets were features of the original construction of the paving. The patterning of these stone sections as well as the coursing of the bricks in the paving are best demonstrated by reference to the accompanying illustration (ACHNHM #212). It will be noted that the bricks were removed from the section of the hearth within the fireplace proper at the time of razing the house; thus its exact location can only be inferred.

The average elevation of the surface of the paving was 764.90' above mean sea level. (Archeological Notes: Book #1, pp. 25 thru 32, and 53; Book #2, p. 12; Book #4, pp. 32, 106, 112; Negatives #210, 212).

KITCHEN HEARTH

Architectural Data Card 15-c

The archeological investigation in 1941 unearthed the most interesting remaining element of the McLean house, still in its original position, the kitchen hearth (see Archeological Justification).

Collaborative Justification for Reconstruction

of the McLean House at Appomattox

Unit 15-b



Hearth Paving and Fireplace in East Basement Room
(ACHNHM #212)

The architect's problem concerning this hearth was not wholly one of the preservation of the archeological finding. Not discounting the historical and archeological importance of this one portion of the original house remaining intact, the architects have been required to view the final disposition of the hearth from not one, but several angles.

The fact that the hearth is now resting on the soil, that more than half the brick are crumbling and deteriorating rapidly, and that it will be necessary, in any event, to rebuild part of the hearth now missing, and a further portion which will be removed in order to excavate and build the house foundation wall, the following conclusions were reached:

(1) The wood floor of the kitchen could not be built level with the hearth as the hearth is 2½" out of level in some places.

(2) The necessity of building the remainder of the ground story drained and damp-proof, sub-floor around the hearth, would tend to pocket any moisture under the hearth. Repeated inspection of the soil under the McLean house has not convinced the architects that there would be sufficient capillary action of water under the floor to produce saturation. However, it is certain that any materials in direct contact with the soil here will always be damp. Since there is no heating plant in the house, this condition would be at a maximum in all but the summer months of the year, and sufficient, at least, to produce blue-mould over the hearth.

(3) That it would be necessary, in any case, to reconstruct the back hearth of the fireplace which would butt the old hearth, and a portion of the remaining original hearth required to be removed to permit excavation and construction of the house foundation walls.

Since it is required of the architects to rebuild the kitchen (and house) with permanent construction, this room, when completed, must be able to effectively house the museum display, withstand the public traffic, and present a minimum problem of maintenance and replacement for many years.

Accordingly, the hearth will be taken up carefully, the bricks and stones charted, and relaid over a permanent, waterproof concrete slab. No cement joints will show, and crumbling bricks will be replaced with brick selected from the original McLean brick and rubbed to match the original hearth brick.

KITCHEN - FIREPLACE AND MANTEL

Dimensions of the overall chimney breast, follow those on Hancock's survey, except the reconstruction is increased in width 1½" to carry the breast on the floors above (widened to include fireproof flue linings); masonry opening sizes are the same as Hancock's 1893 survey. General design of the wood lintel beam, shelf and brackets follow the fireplace in the west room of the Tavern Annex c 1819; the Jones Law Office basement c 1854; and other kitchen fireplaces of the period found in the surrounding counties.

Brick for the back hearth, fireplace lining and facings is to be selected from the salvaged original McLean brick to match as closely as possible the old brick in the hearth.

Digression from precedent consists of the inclusion of modern cast iron damper and fireproof terra-cotta flue lining - all concealed in the construction.

MECHANICAL INSTALLATION

The original McLean House contained no provision for heating except by the open fireplaces. The only source of water was the well in front of the house. Illumination of the rooms in 1865 was probably by candles, for although crude oil was discovered in Pennsylvania in the 1840's the cost of production and transportation unquestionably made it prohibitive for use as illumination in this area.

In the reconstructed house there is no central heating plant, and fireplaces are still to be the only method of heating. However, it is possible that in the furnishing of the house that Franklin Stones (which were contemporary with the 1865 period) will be installed into the fireplace openings, and equipped for burning oil.

The only water which will be piped into the building will be run concealed to a fire hose cabinet located under the first floor stair landing. This installation will be made as inconspicuous as possible, but it is necessary for obvious reasons. The service will be run underground to the house.

A complete electric wiring system will be built into the house. Service for this system will be run concealed underground to the house. The necessary mechanical features of the system will be concealed from view by

locating them in a closet under the ground floor stairs, added for this purpose (and a digression), as it was not in the original house. The general function of the system is to provide base plugs located in the wood base as inconspicuous as possible, but allowing the use of electrified lamps of the period on the tables, desks, etc., in the house. In some cases hanging fixtures will be provided, some to simulate candle fixtures. In the case of a few of the hanging fixtures designed to represent old oil burning lamps, the same may have to be redesigned if it is established that oil was not in common use in the area in 1865.

Other mechanical features to be included in the reconstruction, but to be concealed, are:

Fireproof fire-clay flue linings for all the fireplace flues.
Cast-iron fireplace dampers, with adjustable valaves which can be closed when the fireplace is not in use.
Fire-clay vents in the chimneys near the roof ridge in the attic to carry off the hot-air from the attic during the summer months.

HALL --- DIMENSIONS

Historical Data

A. Ground Level
Unit 16 Card 16-a

19' 1" from front to rear

9' 8" across

8' 10" from floor beam to floor beam

(Ground floor plan, original Hubard drawings at end of Historical Study).

Archeological Data Card 16-b

The existence of a hall-way on the ground floor can be inferred from the presence of the "footing-stone" complexes forming the west wall of the east froom (Feature 3, Detail 8 - See card 9-b) and the east wall of the west room (F3, D19 - see card 23-b). The assumed location of the front and back doors (see card 20-b) also gives an indication of the location of the hall.

As noted above and below, the constituent elements of the "footing-stone" complexes which evidently supported these interior walls were scattered over a fairly wide area. This makes accurate estimation of the width (east-west axis) of the hall difficult. The length (north-south axis) can be estimated with a fair degree of accuracy.

Length, i.e. the distance from the inner face of the north wall-trench (F3, D2) to the inner face of the south wall-trench (F3-D2s) was: 19.20'.

Width: i.e. distance from the westernmost edge of east footing-complex (F3, D8) to the easternmost edge of the west footing-complex (F3, D19) was: 9.50'. (Archeological Notes: See Cards 9-b and 23-b for east-west axis reference; Book #2, pp. 14, 20, 45, 46, 66, 74, 78; Book #3, pp. 12, 13, 14, 18, 32, 33, 34).

Architectural Data Card 16-c

See Unit 9-c.

HALL --- WALLS

Historical Data

A. Ground Floor Level
Unit 17 Card 17-a

The side walls were wood (partitions), 5" thick, the end walls were the front and back walls of the house and were brick 1' 5" (Hubard original drawings, ground floor plan, at end of Historical Study and Hancock's Specifications, p. 2, at end of Study).

The walls were plastered and whitewashed. (Mr. Featherston, p. 33 of Historical Study and Hancock's Specifications, p. 6, at end of Study).

Archeological Data Card 17-b

These walls are considered as the west wall of the east room (q. v. Card #9-b, Feature 3, Detail 8) and the east wall of the west room (q. v. Card #23-b, F3, D19).

Architectural Data Card 17-c

See Unit 10-c.

HALL --- FLOOR

Historical Data

A. Ground Level
Unit 18 Card 18-a

The floor, according to Mr. Featherston, was not brick, as the basement floors of old houses so frequently were, but an ordinary floor, close to the ground. (Historical Study, p. 33).

Hancock said that the "Basement floors are board resting on scantling laid on the ground". (Specifications, p. 3, at end of Historical Study).

Archeological Data Card 18-b

No actual remains of flooring were found in the area of the "hall"; i.e. between Feature 3, Detail 8 and F3, D19 (see Card 9-b and Card 23-b); but the remains of four "stringers" were discovered.

These are identified as F3, D16, 17, 18, and 29. The remains consisted of wood fragments, trenches in the basic clay, and support stones. These remains and the inferred construction data are similar to that described for the flooring of the "east room" (see Card 11-b). The average surface of the wood was 764.50' above sea level.

The four "scantlings" were apparently 2 x 4" (or 6") x 18' and were placed approximately every 2.00' along the east-west axis of the "hall". In this case also the long axis of the planking was probably along an east-west line. (Archeological Notes: Book #1, p. 59; Book #2, pp. 14, 15, 16; Book #3, pp. 73, 75).

Architectural Data Card 18-c

See Unit 5-c.

See Unit 11-c.

HALL — WOODWORK

Historical Data

A. Ground Level
Unit 19

Card 19-a

The woodwork all over the house was plain (Mr. Featherston, who remembers the house, p. 33 of Historical Study). This is indicated by the photo (postwar) of the surrender room, attached to the Study.

Archeological Data

None.

Architectural Data

Card 19-c

HALL - WOODWORK

There is no data available on woodwork in the Ground Floor Hall, beyond what is justified under Stairway to First Floor unit. In the absence of such data, only a wood base shall be installed in the reconstruction, similar in size and profile to the typical base of the house.

HALL --- DOORS
Historical Data

A. Ground Level
Unit 20 Card 20-a

Front door to basement 6'5½" by 2' 11".

Back door 6'5½" by 3' 3½". (Hancock's Specifications, p. 4, at end of Historical Study).

On Hubard's drawing of the floor plan (see at end of Historical Study), the widths of the respective doors, on the drawing itself correspond to Hancock's figures; on his notes on that page, however, Hubard has the widths of the back and front doors transposed.

The back door can be seen from the outside in the Plecker postwar photo attached to end of Historical Study. In an enlargement (original print) of this picture, owned by Mr. Ragland Featherston, the door shows plainly as a panelled door, but it is difficult to determine the exact number of panels.

Archeological Data Card 20-b

No evidence of doors leading to the exterior from the hallways was found. However, the approximate location of a front and a back door can be inferred from the two Details listed below.

Feature 5, Detail 3: A well preserved brick paving 5.00' east-west by 3.00' north-south was found just exterior to (i.e. north of) the north foundation-trench. The east edge of this pavement is 22.00' west of the apparent north-east corner of the "house"; its west edge is 22.80' east of the apparent north-west corner of the "house"; its south edge is 0.60' north of the north lip of the north foundation-trench. The average elevation of the surface of the paving is 765.36' above sea level. (The ground surface inside the "house" at this point is circa 764.50'). Note: This Detail has been preserved in situ.

Feature 6, Detail 2: A very fragmentary brick paving about 7.00' east-west by 4.00' north-south was found immediately adjacent to the south edge of the south wall trench. The east edge of the pavement was 23.00' west of the apparent south-east corner of the "house"; its west edge was 21.50' east of the apparent south-west "house-corner". The average elevation of the paving-surface was 764.90' above sea level. (The ground surface inside the house at this point is circa 764.50').

The location of the "front" and "back door" pavings in relation to the foundation-walls and the remains of the hall walls indicates that the Hubard-Hancock specifications are correct in placing both the front and back doors to

the west of the center north-south axis of the hallway. The dimensions, etc., of the doorways are not indicated by the archeological data recovered. (Archeological Notes: Book #2, pp. 22, 25, 26; Book #3, p. 28.)

Architectural Data

See Unit 4-c.

STAIRWAY TO FIRST STORY
Historical Data

A. Ground Level
Unit 21 Card 21-a

Width	2' 11"	Hubard Drawing, gound floor, at end of Historical Study. Sketch also shows steps and banister detail, which will be discussed by architect.
Steps (treads)	11"	
Risers	9"	
No. of steps	12	Same data in Hancock's Specifications, p. 5, at end of Historical Study.

Distance of stairway from front wall - 7' 5"

Stairway is alongside east partition.

Archeological Data

None.

Architectural Data Card 21-c

Hubard's 1893 field survey, and his 1931 plan show 11 risers in this flight of stairs but his 1893 specifications call for 12 risers which will be reconstructed. The architectural character, size and profiles of this stair will follow the flight on the first story. See Unit 51-c.

The space under this stair has been enclosed with a plastered partition forming a closet, with a door in the end, door and trim matching the others intthe ground floor hall. The interior of this closet will contain the electrical distribution panel, and the exposed cut-off valve for the fire-hose line and will be made to conform with the fire safety requirements of the U. S. Department of the Interior, National Park Service Building Code.

It was felt that it would be less objectionable to depart from precedent and add this closet rather than to expose the necessary mechanical features mentioned above.

WEST ROOM — DIMENSIONS

Historical Data

A. Ground Level
Unit 22 Card 22-a

19' 1" from front to rear
and
20' 10½" the long way of the house
8' 10" from floor beam to floor beam

(Hubard Drawing, floor plan for basement, at end of Historical Study)

Details in vicinity of fireplace to be discussed by architect.

Archeological Data Card 22-b

The north-south dimensions of this room can be accurately determined, but, as was true for the east room (see Card 9-b), the east-west dimensions can only be approximated. This is due to the character of the remains of the base of the east wall of the room (Feature 3, Detail 19, - see Card 23-b).

The distance from inner face to inner face of the front (north) and rear (south) foundation-trenches is: 19.10'.

The distance between the inner face of the west foundation-trench and the inner face of the east wall is: between 19.50' and 21.20' depending on the component elements of F3, D19 used for reference.

Note: The variation of the east-west dimension is sufficient to allow for the Hubard figure of 20' 10½". However, the line of six bricks at the south end of the Detail would indicate a length of exactly 20.00'. (Archeological Notes: Book #1, pp. 14, 20, 22, 23, 24, 34, 41, 45, 46, 63, 65, 66, 74, 78; Book #3, pp. 12, 13, 14, 18, 32, 33, 34, 55, to 61, 89, and 90).

Architectural Data Card 22-c

See Unit 9-c.

WEST ROOM — WALLS
Historical Data

A. Ground Level
Unit 23 Card 23-a

East wall is wood partition 5" thick. (Hubard Drawings, ground floor plan, at end of Historical Study).

Other walls are house walls, brick.

All walls plastered and whitewashed. (Mr. Featherston, p. 33 of Historical Study and Hancock's Specifications, p. 6, at end of Study).

Archeological Data Card 23-b

All of the four walls of the west room have been described (see Cards 5-b, 6-b, 7-b, and 8-b) except the inner or east wall.

The remains of this wall consisted of a series of thirty component elements (Feature 3, Detail 19-a thru m) which apparently constituted the footing for a curtain-wall dividing the hallway from the west room. These elements include flat-field stones, brickbats, and sections of wood. They are scattered over an area 17.70' north-south by 2.30' east-west running along a north-south axis between the "hall" and the "west room".

The remains indicate that this was not a brick wall, and give at least a negative evidence verification of the Hubard-Hancock specifications of a wooden wall. The thickness of this wall cannot be verified from the archeological evidence, aside from a maximum of 2.30'. (Archeological Notes: Book #1, p. 63, 65; Book #3, pp. 55 thru 61).

Architectural Data Card 23-c

See Unit 10-c.

WEST ROOM -- FLOOR
Historical Data

A. Ground Level
Unit 24 Card 24-a

The floor, according to Mr. Featherston, was not brick, as the basement floors of old houses so frequently were, but an ordinary wood floor, close to the ground. (Historical Study, p. 33).

Hancock said that the "Basement floors are board resting on scantling laid on the ground". (Specifications, p. 3, at end of Historical Study).

Note subterranean brick chamber found by archeologist and discussed on archeological card.

Neither Mr. Featherston (Aug. 15, 1941) nor his elder sister, Miss Emily Featherston (Aug. 14, 1941) remember this hole. They both think it was floored over in their time, after the war. It was not used by their grandparents for keeping food; the ice house was used for that purpose.

Archeological Data Card 24-b

No remains of flooring were found within the "west room", nor were any wood-fragments found which could be interpreted as the remains of floor-stringers. However, a series of six shallow trenches and associated support-stones were found which were comparable to those occurring in association with stringer-remains in other parts of the "house". These were:

Feature 3, Details 22 thru 27. These trenches were typically from 0.60' to 0.80' wide and had been excavated into the subsoil from 0.20' to 0.30'. They ran parallel to each other along a roughly north-south axis, apparently from wall to wall, and were spaced roughly every 3.00' (center to center) along the east-west axis. This series began 2.00' west of the east wall and ended about 3.00' east of the west wall of the room. Along the north and south walls there was some evidence of a similar trench paralleling each wall and immediately adjacent to it.

The evidence suggests that the type of floor construction was similar to that in the "east room" (q.v. Card 11-b) with the exception of such minor variations as the spacing of the stringers.

Subterranean Brick Chamber Card 24-b'

In the extreme south-west corner of the west room a subterranean brick chamber was found, of which no suggestion is given in any of the historical data. Its characteristics are:

Feature 3, Detail 1: A brick chamber, 2.00' square by 3.00' deep (interior measurements), with unbroken walls and floor. The bricks had been carefully set but have suffered some displacement. The chamber was let into the basic red clay in such fashion that the uppermost course of bricks apparently would be approximately on a level with the flooring of the west room. The exterior west face is 0.40' east of the "inner" face of the west foundation trench and 1.70' north of the south foundation trench; its east face is 0.50' west of the westermost stringer-trench found in the "west room".

The average elevation of the surface of the upper course of bricks is: 765.00' above mean sea level.

The elevation of the bricked floor is: 762.00' above sea level.

The exact use of this Detail is somewhat obscure. A search, exterior to the house, for a buried drain leading from the chamber gave no positive evidence, and it seems probable that the chamber was not a sump-hole. Its most probable use was a "cooler" for food. The careful coursing of the bricks, plus the fact that they bore traces of white paint (that is, on the inner faces) indicates consideration for appearances. The fact that the west-room was apparently the dining room would give sufficient reason for this specific location of such a "cooler". The impervious nature of the surrounding clay matrix would assure relatively moderate temperatures, and at least reasonable dryness. It seems improbable that ice was placed in the chamber, because of the difficulty of removing the resultant water.

In view of the Featherston data quoted on Card 24a, it is interesting to consider whether the use of the chamber as a storage place might not antedate the construction of the ice-house. That is, that the chamber functioned as a crude sort of "Spring-house" perhaps even utilizing small pieces of ice in some type of container, until such time as the ice-house came into use. Data on the time of the construction of the ice-house would be illuminating. It seems peculiar, however, that the chamber should have been sealed away and forgotten if it once had such a use.

Architectural Data Card 24-c

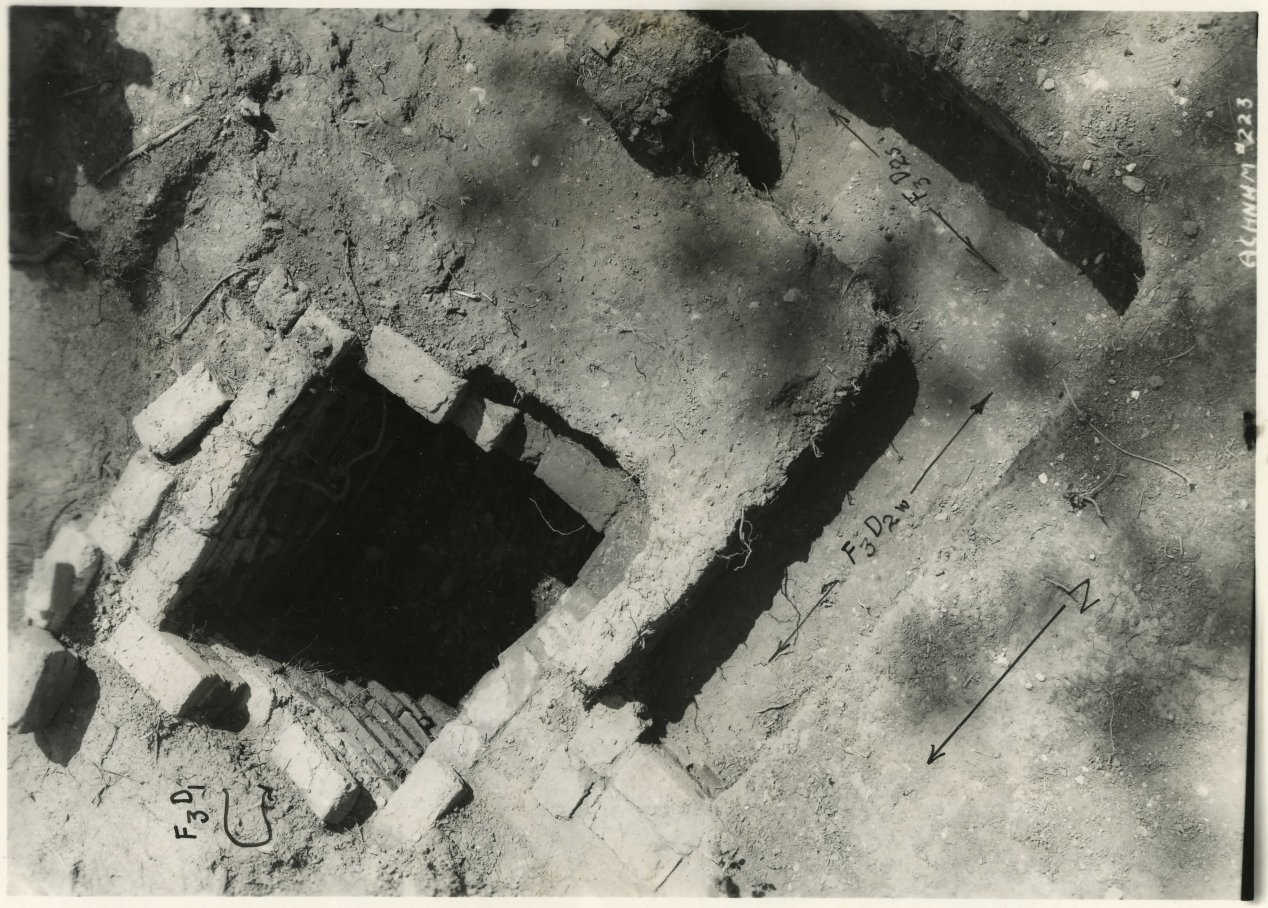
See Unit 5-c.

See Unit 11-c.

Collaborative Justification for Reconstruction

Of the McLean House at Appomattox

Unit 24-5



Southwest Corner of West Basement Room,
and Subterranean Brick Chamber
(ACHNHM #223)

WEST ROOM --- DOOR
Historical Data

A. Ground Level
Unit 25 Card 25-a

This door from the hall was 3' 8" from the front wall of the house.

6' 6" by 2' 11". (Hancock's Specifications, p. 4, at end of Historical Study).

Archeological Data Card 25-b

No actual remains indicating the position or size of this door were found. However, the absence of "footing" elements for a five foot space along the north portion of Feature 3, Detail 19 coincides approximately with the data from the Hancock Specifications.

Architectural Data Card 25-c

See Unit 12-c.

WEST ROOM --- WINDOWS

Historical Data

A. Ground Level
Unit 26

Card 26-a

One in front wall of house

(Hancock's Specifications, p. 4, at end of Historical Study).

One in back wall of house

16 lights each, 10" by 12".

Outside blinds *

Size and details shown by Hubard, to be discussed by architect.

The front window can be discerned in the Stevens postwar photo, and the back window shows plainly in the Plecker postwar photo. (Both attached to Historical Study).

* The postwar photographs by Stevens and Plecker (rear view) show blinds. The wartime photographs do not show blinds. The photograph taken because of Grant's death (1885) also shows no blinds. Thus the blinds were added some time after 1885. (Note here that Mr. Stevens is apparently wrong in saying that he took his picture in the 1870's, because his photo shows blinds and the 1885 photo shows none). All photos at end of Historical Study.

Archeological Data

None.

Architectural Data

Card 26-c

See Unit 13-c.

WEST ROOM --- WOODWORK

Historical Data

A. Ground Level
Unit 27 Card 27-a

The woodwork all over the house was plain. (Mr. Featherston, Historical Study, p. 33). This is indicated by the photo (postwar) of the surrender room, attached to Study.

Archeological Data

None.

Architectural Data Card 27-c

See Unit 14-c.

A. Ground Level
Unit 28

WEST ROOM - FIREPLACE AND HEARTH

Historical Data

Card 28-a

Basement had large fire hearths with brick flooring. (Hancock's Specifications, p. 3, at end of Historical Study).

The details of this fireplace and hearth are shown by Hubard, and will be discussed by the architect.

"All fire places are open for burning wood on old fashioned iron dogs". (Hancock's Specifications, p. 6, at end of Historical Study).

Archeological Data

Card 28-b

No hearth comparable to that occurring in the east "room" was found in the west "room". The occurrence of an area of fire-discolored clay and three isolated bricks indicate that the orientation of the fireplace was approximately the same as that in the east room. The archeological data were:

Feature 3, Detail 20: An area of fire-discolored basic clay roughly ovate, 2.00' (east-west) by 4.00' (north-south). This probably indicates the position of the actual fireplace. The extent of the hearth is suggested by the location of the three bricks, F3, D20a, 20b, 20c, to have been at least 3.00' east-west by 5.00' north-south. It is impossible to give an accurate approximation of the north-south span of the hearth, but it should be noted that the "stringer trench", F3, D27, makes it doubtful that the hearth extended more than about 3.50' east of the inner face of the west wall.

Note that location of the fired area indicates that the actual fireplace may have been slightly off-center along the west wall, as is suggested in the Hubard plans. (Archeological Notes: Book #2, pp. 14, 15, 36; Negative #227).

Architectural Data

Card 28-c

See Unit 15''-c.

DINING ROOM FIREPLACE AND MANTEL

See Unit 15-c regarding dimensions, modern damper, etc., and materials of the fireplace. There being no data available for the design of the mantel, the mantel which is shown on Hancock's 1893 plan in the East second floor Chamber will be copied for this room.

REAR PORCH PILLARS (i.e. SUPPORTS FROM GROUND)

Historical Data

A. Ground Floor
Unit 29 Card 29-a

"The back porch rests on wooden posts, whose bottom ends rest on flat stones". (Hancock's Specifications, p. 3, at end of Historical Study).

The postwar photo of the rear of the house (attached to Historical Study) indicates that these posts are plain round posts, apparently not dressed.

Hubard shows this porch on his lot plan and his floor plan for the first story. The architect will interpret the figures.

Archeological Data Card 29-b

Two large flat field stones were found in such position as to indicate that they are the support stones mentioned by Hancock. These are:

Feature 6, Detail 1a: A flat roughly ovate field stone 1.70' (east-west) by 0.90 (north-south) by 0.20' thick, laid horizontally on the surface of the basic clay. The surface of the stone is 764.76' above sea level. F6, D3a: a flat rectangular field-stone about 1.50' (north-south) by 2.20' (east-west) by 0.30' thick laid horizontally on the surface of the basic clay. The surface of the stone is 765.09' above sea level.

These two stones are 13.00' apart (center to center) along an east-west axis and are 7.00' south of the outer face of the south wall trench. The west support-stone (F3, D1a) is 18.50' east of the southwest corner of the "house". The east support stone is 18.30' west of the southeast corner of the "house".

No evidence of the actual supports was found.

Note: These Details were left in situ. (Archeological Notes: Book #2, pp. 24, 25 and 28; Negative #236).

REAR PORCH PIERS
Architectural Data

There is much contention regarding the material of these piers as they existed in 1865. There is a complete absence of data and no 1865 photographs. Hubard's 1893 survey and field notes omit the whole porch on his ground floor plan.

The 1893 photographs show the porch resting on rough log posts which bear on flat stones at the grade line. That this construction was recently installed prior to the 1893 photograph is conclusively deducted, since the bark remains on the logs and shows plainly in the photograph. Hubard's 1931 drawings call for 12 x 16" brick piers, but this is contradicted by his 1893 specifications which verify the 1893 photograph.

In the absence of any 1865 precedent, the architects reach the following conclusions:

(1) All of the construction of the original house (disregarding architectural style) is of a consistently high standard, and is done according to the best custom and practice known to the builders at that time. It is unreasonable to assume that the original builders, after placing substantial brick piers under the front porch, would employ such makeshift methods as rough logs for the rear porch piers, which would rot at the base and require periodic replacement; not to mention their poor appearance.

(2) The 1893 photographs show the brick wall on the rear of the house (at the grade line) in the furthest state of disintegration of any masonry on the building. This was due mainly to the effect of the porch roof water and surface drainage against the wall at the grade line. The brick porch piers, only seven feet from the wall, and lacking the tremendous weight of the main wall to assist in their stabilization, would have deteriorated rapidly. However, it is assumed they would have been in place at the time of the surrender, only 17 years after building, as inferior masonry would have outlasted that span of years.

Accordingly brick piers are to be installed, similar to the front porch. It is felt that maintenance and replacement of any other material, and the factor of public safety, is sufficient justification alone, in the absence of accurate precedent.

NOTE: The flat base stones which are visible under the log posts in the 1893 photograph were excavated by the archeological investigation in 1941. Although they are to be built under the brick piers in the reconstruction, the author of this justification does not concur in their use, as it is plainly obvious they are a part of the 1893 scene, not the 1865.

REAR PORCH STEPS (INCLUDING RAILING)

Historical Data

A. Ground Floor
Unit 30 Card 30-a

"The Back Porch is reached by a flight of 13 steps. plain 1 1/8" treads no risers hand rail 2"X 4" top rounded foot rail 1 x 6 plain, newell 3' 8" high" (Hancock's Specifications, p. 4, at end of Historical Study).

The steps are shown on the Hubard drawings and in the postwar photo of rear of the house, attached to Historical Study. Risers can be seen in the photo. The architect will discuss details.

In the written report on the McLean House, it was stated that, according to Mr. Featherston, the railing around the back porch was put up by his uncle when Mrs. Ragland, Mr. Featherston's grandmother, fell off the porch; since that writing it has been determined that Mr. Featherston meant not the railing around the porch, but the railing on the porch steps. Thus this step railing would not be wartime. The railing on the porch, however, would be original.

Archeological Data Card 30-b

No remains of the steps proper were found. Nor were any indications of intermediate supports discovered. However, a buried sill and two associated stones were found which probably represent the base of the steps. These were:

Feature 6, Detail 13: A shallow (0.20' to 0.30' below the surface of basic clay) straight sided trench 0.40' to 0.50' wide (north-south) and at least 5.20' long (east-west). The trench contained wood fragments in its eastern portions and was overlaid by two flat field-stones, F6, D10 and F6, D11. The western end of the trench was obscured by the roots of a large wild cherry tree. The trench is 19.50' south of the exterior face of the south foundation trench, and 12.50' south of the assumed edge of the back-porch. The east and west ends of the trench as uncovered are not equidistant from the stone porch-pillar supports (F6, D1a, D3a), but it should be noted that F6, D11 is 5.00' east of F6, D1a (center to center) and that F6, D10 is 5.00' west of F6, D3a (center to center). This suggests that the two field-stones, F6, D10 and D11, supported the bottom corners of the steps, indicating a width of at least 3.50' for the steps. The trench was apparently dug to contain some sort of horizontal wooden support for the base of the steps. (Archeological Notes: Book #2, pp. 139, 141; Book #3, pp. 18, 20, 40, 63; Negative #259).

REAR PORCH STEPS AND RAIL
Architectural Data

Data on these items is contradictory. Hubard's 1893 survey shows 8 risers with no dimensions. His 1931 drawings show 13 risers, not dimensioned. The Plecker 1893 photograph of the rear of the house also shows 13 risers but does not agree in design with Hancock's drawing. The flight shown in the 1893 photograph is unquestionably not the original stairs, but in the absence of further data it will be used as a basis for reconstruction. It will be joined by mortise-tenon-pinned construction to approximate the early work. Masonry footings will be placed under all the bearing members to insure construction stability and public safety.

EXTERIOR NORTH (FRONT) WALL, FROM GROUND TO FIRST STORY

Historical Data

A. Ground Floor
Unit 31 Card 31-a

17" thick, every sixth course headers. (Hancock's Specifications, p. 2, at end of Historical Study).

This section of the wall does not show up to any extent in the various photographs. It shows a little in one, the Stevens postwar photo, attached to Historical Study. The basement windows can be seen also in that photo, especially the east window.

(See Hubard Drawings, ground floor plan, at end of Historical Study).

Archeological Data

None.

Architectural Data Card 31-c

EXTERIOR BRICK WALLS ABOVE GRADE

All exterior brick walls above grade are the same thickness as the original walls, as indicated on Hubard's 1893 Survey. Overall lateral dimensions same. Brick for the exterior wall, on the front of the house from the porch floor to the porch ceiling, will be selected brick from the remaining original brick now stored on the site. Brick for the facing of the remaining brick walls, piers, chimneys, etc., are to be handmade reproduction brick to match the originals. All the back-up brick in the exterior walls, which cannot be seen, is to be ordinary common brick. Bonds for the brickwork in the exterior face of the walls shall be as shown on Hubard's drawings, and in photographs of the house taken in 1865. Face brick joints shall be small, tight joints as required by Hubard's 1893 specifications. Color of joint will be made to match those in the Bocock-Isbell house. Height of the exterior walls from the ground floor level to the cornice line will be increased two brick courses of 5" over Hubard's 1893 specifications. This digression is made because of the fact that the fireproof floor system of the reconstruction is 6" greater in overall depth than the original wood beans, and it is felt imperative to have the same distance showing from the Surrender room ceiling to the window head casing as can be seen from Plecker's photograph of the Surrender room. See also Units 11-c and 9-c.

It is the architect's belief that counting the brick courses in the photographs (which will eventually be on display in the reconstructed house) will not be as easy a task as reading the distance from the window casing to the ceiling; hence the latter alternative was selected.

EXTERIOR EAST WALL, FROM GROUND TO FIRST STORY

Historical Data

A. Ground Level
Unit 32 Card 32-a

This end wall was 13" thick. Every sixth course headers. (Hancock's Specifications, p. 2, attached to Historical Study).

There were no openings in this wall and the chimney was an inside one. This wall shows in the postwar rear view of the house by Plecker and in the Dresher postwar engraving, both attached to the Historical Study.

(See Hubard Drawings, ground floor plan, at end of Historical Study).

Archeological Data

None.

Architectural Data Card 32-c

See Unit 31-c.

EXTERIOR SOUTH (REAR) WALL, FROM GROUND TO FIRST STORY

Historical Data

A. Ground Level
Unit 33 Card 33-a

17" thick, every sixth course headers. (Hancock's Specifications, p. 2, at end of Historical Study).

There was a door in the center, flanked by a window on either side, as seen in the Plecker postwar photo attached to end of Historical study. The windows show up plainly.

(See Hubard Drawings, ground floor plan, at end of Historical Study).

Archeological Data

None.

Architectural Data Card 33-c

See Unit 31-c.

EXTERIOR WEST WALL FROM GROUND TO FIRST STORY

Historical Data

A. Ground Level
Unit 34 Card 34-a

13" thick, every sixth course headers. (Hancock's Specifications, p. 2, at end of Historical Study).

There were no openings in this wall and the chimney was inside. This end shows in wartime photo 223 and the sections from the Webber drawing, attached to Historicay Study.

(See Hubard Drawing, ground floor plan, attached to Historical Study).

Archeological Data

None.

Architectural Data Card 34-c

See Unit 31-c.

EXTERIOR NORTH (FRONT) WALL FROM FIRST STORY TO SECOND STORY

Historical Data

B. First Story Level

Unit 35 Card 35-a

Hancock, in his Specifications, p. 2, at end of Historicay Study, says,

"Front and back basement walls Seventeen inches thick, every sixth course headers. Front and Back walls to first story 13" thick. Front wall flemish bond from front porch floor to Cornice. Very close joints not over ¼" thick".

The first story front wall openings were a hall (front) door with a window on either side, as shown in the Hubard Drawings, first story floor plan, at end of Historical Study.

The front wall shows up well in a number of photographs, notably: wartime B-6333, 223, and 221 and the Stevens postwar photo, all included with the Historical Study.

Archeological Data

None.

Architectural Data Card 35-c

See Unit 31-c.

EXTERIOR EAST WALL FROM FIRST STORY TO SECOND STORY

Historical Data

B. First Story Level
Unit 36 Card 36-a

End wall. 13" thick. Every sixth course headers. (Hancock's Specifications, p. 2, at end of Historical Study).

There were no openings in this wall and the chimney was an inside one. This wall shows in the postwar rear view of the house by Plecker and in the Dresher post-war engraving, both attached to Historical Study.

See also Hubard Drawing, attached to Historical Study.

Archeological Data

None.

Architectural Data Card 36-c

See Unit 31-c.

EXTERIOR SOUTH (REAR) WALL FROM FIRST STORY TO SECOND STORY

Historical Data

B. First Story Level
Unit 37 Card 37-a

Hancock in his specifications says, p. 2, at end of Historical Study,

"Front and back basement walls Seventeen inches thick. - - - very close joints not over ½" thick. Back wall every sixth course headers".

The first story openings were a hall door with a window on either side, as shown in the Hubard Drawings, at end of Historical Study.

The back wall shows up well in the Plecker rear view photograph. (See Historical Study).

Archeological Data

None.

Architectural Data Card 37-c

See Unit 31-c.

EXTERIOR WEST WALL FROM FIRST STORY TO SECOND STORY

Historical Data

B. First Story Level
Unit 38

Card 38-a

End wall, 13" thick. Every sixth course headers. (Hancock's Specifications, p. 2, at end of Historical Study).

There were no openings in this wall and the chimney was inside, as seen in wartime photo 223 and the sections from the Webber drawing, attached to Historical Study.

See also Hubard Drawings, attached to Study.

Archeological Data

None.

Architectural Data

Card 38-c

See Unit 31-c.

EAST (SURRENDER) ROOM - DIMENSIONS

Historical Data

B. First Story Level
Unit 39 Card 39-a

The New York Times for Friday, April 14, 1865 (p.1.) states that the surrender room was "a comfortable parlor, about eighteen by twenty feet". (Historical Study, p. 20).

The first story floor plan of the Hubard Drawings show the room to be 20' from front to rear and 16' 5" the long way of the house (stud 16' 6"). See end of Historical Study.

Ceiling - 9' 9⅛" (Hubard Drawings, first story plan, at end of Historical Study. Note that the figures here have been changed from 8' 2").

The 9' 9½" seems to be floor to floor.

Archeological Data

None.

Architectural Data Card 39-c

See Unit 9-c.

EAST (SURRENDER) ROOM -- WALLS

Historical Data

B. First Story Level
Unit 40

Card 40-a

All walls plastered and whitewashed. (Mr. Featherston, p. 33 of Historical Study, and Hancock's Specifications, p. 6, at end of Study).

This face can be seen in the case of the surrender room in the interior photo by Plecker, included with other photographs at end of Historical Study.

The north (or front) wall, the east wall, and the south wall of the room are the house wall and thus are brick -- 13" thick. The west wall of the room is a wood partition 5" thick. (Hubard Drawings, first story plan, at end of Historical Study). (Also statement from Hancock's Specifications, p. 2, at end of Historical Study, for statement - "All outside walls are brick. Partitions wood".)

Archeological Data

None.

Architectural Data

Card 40-c

See Unit 10-c.

EAST (SURRENDER) ROOM - - FLOOR

Historical Data

B. First Story Level
Unit 41 Card 41-a

"1st Floor is nailed to 3 x 10 Joists, 24" ¢ and two 10 x 10 Oak sills running crosswise of the house- - -" (Hancock's Specifications, p. 3, at end of Historical Study).

The floor shows up in the Plecker interior photograph of the room. (Attached to Historical Study).

Archeological Data

None.

Architectural Data Card 41-c

See Unit 11-c.

EAST (SURRENDER) ROOM - - DOOR

Historical Data

B. First Story Level
Unit 42 Card 42-a

Horace Porter, of Grant's staff, said that "each room had two doors opening into the hall". (See Historical Study, p. 22).

Another Federal officer, Forsyth, echoes Porter on this matter. (Study, p. 23).

The Hubard Drawings (1st story plan -- see at end of Historical Study) show only one door, and Mr. Featherston, who was in the house many times, it being the home of his grandfather after the war, states that there was only one door and no evidence of change. If there were change, it could be seen easily in a plain unpapered plaster wall.

See discussion in Historical Study, p. 21 - p. 24.

Door detail can be seein in Hubard Drawing --- Hancock's Specifications state "- - - panelled side hall doors 6' 5¼" x 3' 1½" 5 panells door frames finished off inside same style as window frames - - -" (Specifications, p. 5, at end of Historical Study).

Archeological Data

None.

Architectural Data Card 42-c

See Unit 49-c.

EAST (SURRENDER) ROOM -- WINDOWS

B. First Story Level
Unit 43

Historical Data

Card 43-a

Porter, of Grant's staff, says, "A hall ran through the middle from front to back, and on each side was a room having two windows, one in front and one in rear". (Historical Study, p. 21).

Forsyth, another Federal officer, says, "The door opened into a hall that ran the entire length of the house, and on either side of it was a single room with a window in each end of it". (Historical Study, p. 23).

See Hubard Drawings, first story plan, at end of Historical Study. The dimensions are there shown, and will be discussed by the architect. Hancock's Specifications, p. 5, at end of Historical study, call for 24 lights each, 10" by 12" glass.

One of the windows (rear) in the surrender room shows up well in the Plecker interior photograph, attached to Historical Study.

The front window can be seen from the outside in wartime Photo B-6333, attached to Historical Study.

Hancock calls for outside blinds (see his Specifications, p. 5 and p. 6 at end of Historical Study) and the postwar photographs by Stevens and Plecker (rear view) shows blinds. The wartime photographs do not show blinds. The photograph taken because of Grant's death (1885) also shows no blinds. Thus the blinds were added some time after 1885. (Note here that Mr. Stevens is apparently wrong in saying he took his picture in the 1870's, because his photo shows blinds and the 1885 photo shows none). All photos at end of Historical Study...

Archeological Data

None.

EAST (SURRENDER ROOM) WINDOWS

Architectural Data

Card 43-c

See Unit 13-c.

These windows differ from the ones below them on the ground floor only in the number of panes, overall size of the windows, and in the fact that they have splayed jambs instead of the usual right-angle jambs. Plecker's photograph of the Surrender room shows the detail plainly.

EAST (SURRENDER) ROOM -- WOODWORK
Historical Data

B. First Story Level
Unit 44 Card 44-a

Mr. J. Rolfe Horseley, a former Clerk of Appomattox County, remembers the McLean House well, though he does not claim any special knowledge. He stated that the woodwork was plain and not at all fancy. (See Historical Study, p. 26).

Mr. Featherston, whose grandfather owned the house after the war, says the same thing. (Historical Study, p. 33).

See Hubard Drawings, 1st floor plan, at end of Historical Study.

Hancock, in his Specifications, p. 5, at end of Historical Study, states -- " - - - the two windows in right hand room are more elaborately moulded than those in surrender room and also have a panell under them reaching to the floor 6½" Square rose blocks in Corners. Outside blinds Windows in Surrender room have no rose blocks inside - - - wash board in Surrender room 5½" x 1½" Hat strip in this room 1 3/4" x 1 1/4" level with top of door. This hat strip may have been only along north wall. - see Hubard drawing. The woodwork shows up plainly in the Plecker interior photo of the Surrender Room at end of Historical Study. This shows east and south walls, with no hat rail.

Archeological Data

None.

Architectural Data Card 44-c

Plecker's photograph, taken after the surrender, shows the east(or mantel) side and north side including the window. The base-board and window casings are as described in Hubard's specifications. However, there does not appear in the photograph the "hat-strip" or picture mould which is called for in Hancock's survey. Evidently this wood strip occurred only on the south and west walls of the room where it was level with the top of the door trim.

A base-board, window and door casings and the picture mould will be installed in this room and the plaster shall then be applied. This was the procedure in early construction, in contrast to the present day method of applying the woodwork after the room has been plastered.

EAST (SURRENDER) ROOM --- FIREPLACE AND HEARTH (MANTEL)

Historical Data

B. First Story Level
Unit 45 Card 45-a

The details of the mantel in the surrender room are shown in the Hubard Drawings, to be discussed by the architect. (See Hubard Drawings, first floor plan, at end of Historical Study).

The Plecker Photograph of the interior of the surrender room (attached to end of Historical Study) shows the fireplace well --- simple wood mantel, small square fireplace, brick hearth.

"All fire places are open for burning wood on old fashioned iron dogs". (Hancock's Specifications, p. 6, at end of Historical Study)...

Archeological Data

None.

Architectural Data Card 45-c

See Unit 15''-c.

EAST (SURRENDER ROOM) - FIREPLACE AND MANTEL

Plecker's photograph of the Surrender room fireplace furnishes excellent material for rebuilding the same. Hubard provides the overall measurements, and the full-sized profiles of the mouldings can be found on the fireplace in the east room (first floor) of the Bocock-Isbell house. These mantels resemble each other closely in size, character and materials and very possibly were made by the same joiner.

As discussed on Card 15-c the masonry chimney breast for this room was widened very slightly ($2\frac{1}{2}$") to accommodate modern fireproof blue linings from the fireplace on the floor below. In order to preserve the proportion between the masonry breast and the wood mantel, the fireplace opening has been made slightly wider and higher.

Lining of the fireplace and the back and front hearth shall be made of selected brick salvaged from the McLean site. The front hearth brick shall be laid without face joints, and the whole surface rubbed, oiled and waxed after the manner of the period and as shown in the Plecker photo. For painting see Unit 96-c.

HALL --- DIMENSIONS

Historical Data

B. First Story Level
Unit 46

Card 46-a

Three Federal officers (Horace Porter, George A. Forsyth, and Ely S. Parker) describe the hall as running through the house from front to back. They do not indicate its length. Another Federal officer, Badeau, calls it a "narrow hall". (Historical Study, p. 21, p. 23, and p. 25).

According to the Hubard Drawings (1st floor plan, at end of Historical Study), the hall was 20' long (i.e., from front to rear of house) and 10' wide.

Ceiling (floor to floor) --- 9' 9½" (Hubard Drawings, 1st story, see at end of Historical Study)....

Archeological Data

None.

Architectural Data

Card 46-c

See Unit 9-c.

HALL ---- WALLS

Historical Data

B. First Story Level
Unit 47 Card 47-a

The front and back walls were the brick front and back walls of the house and were 13" thick. The side walls were wood partition and were 5" thick. (Hubard Drawings, 1st floor plan, at end of Historical Study). (Also statement from Hancock's Specifications, p. 2, at end of Historical Study, "All outside walls are brick, Partitions wood".)

All walls plastered and whitewashed. (Mr. Featherston, p. 33 of Historical Study, and Hancock's Specifications, p. 6, at end of Study).

Plaster shows up in only interior photo we have -- that of surrender room, attached to Historical Study.

Archeological Data

None.

Architectural Data Card 47-c

See Unit 10-c.

HALL --- FLOOR

Historical Data

B. First Story Level
Unit 48 Card 48-a

"1st Floor is nailed to 3 x 10 joists, 24" ¢ and two 10 x 10 Oak sills running crosswise of the house, the hall floor rests on joists running lengthwise of the house & morticed into the 10 x 10 Oak sills". (Hancock's Specifications, p. 3, at end of Historical Study)...

The type of flooring can be seen in the Flecker photo of the interior of the surrender room, attached to Historical Study.

Archeological Data

None.

Architectural Data Card 48-c

See Unit 11-c.

HALL --- DOORS

Historical Data

B. First Story Level
Unit 49 Card 49-a

There were a front door, a back door, and one interior door into each of the two rooms, and an interior door to the stairway. (See also card on surrender room door, unit 42).

"The Front door has double doors with transom as shown on detail Back door single 6' 5½" x 3' 9½" panelled side hall doors 6' 5½" x 3' 1½" 5 panells door frames inside finished off same style as window frames." (Hancock's Specifications, p. 5, end of Historical Study).1.

See Hubard Drawings, first story plan, end of Historical Study, for details.

The rear door can be seen, though not clearly, in the Plecker rear view photo, attached to Historical Study.

The front door can be seen in the various wartime photographs attached to the Historical Study. In the Stevens postwar photo, attached to the Study, it can be seen in detail.

Wood fragments which may have been outside door or window framing were found at the site by the archeologist.

Archeological Data

None.

FRONT ENTRANCE DOORWAY

Architectural Data Card 49-c

Hubard's survey made on the job, and his subsequent drawings generally agree with the 1865 photographs extant of the front entrance. His height dimensions also check against clearance of the first floor ceiling and the front porch ceiling.

Profiles and mouldings of the frame follow the mouldings on the fragments located by Mr. Featherston. The muntins in the transom were copied from the transom muntins over the front door of the Bocock-Isbell house, the design of which is very similar.

The door panel arrangement and the panels, rails and stiles conform to the Hubard data. Full size profiles of the panel mould are copied from an interior door in the Patteson-Hix Tavern (installed in a partition of late date) which is believed to be an original McLean interior door. See also Unit 49'-c.

FIRST STORY HALL DOORS

Architectural Data — Card 49'-c

Doors for the hall are to be made in accordance with the description and dimensions furnished in Hubard's survey and drawings. Materials are to be heart yellow pine. The number of panels and panel arrangement of these doors conform to Hubard's data.

The profile of the panel moulding is to be copied from a door now installed in the Patteson-Hix Tavern. This door matches in size, number of panels, size of panel rails and thickness to Hubard's data. It is made from heart yellow pine, mortised and tenoned and pinned. It is now installed in a partition wall in the Tavern, which has been definitely established as a late addition, and the door has the appearance of being exposed to the weather for a long time. It is the opinion of the author of this justification that this door is an original McLean interior door which was stored on the site after the house was demolished, and subsequently used in the alteration of the room in the Tavern. Accordingly, it has been used as a model together with the Hubard data, for interior doors.

HALL -- WOODWORK

Historical Data

B. First Story Level
Unit 50 Card 50-a

"door frames finished off inside same style as window frames" Hancock's Specifications, p. 5, at end of Historical Study)...

See Hubard Drawings, 1st floor plan, attached to Historical Study.

"Hat strips in front hall level with top of door 1" x 2"---" (Hancock's Specifications, p. 5, end of Historical Study).

Mr. Featherston, whose grandfather owned the house after the war, states that the woodwork all over the house was simple. (See Historical Study, p. 33)...

Archeological Data

None.

Architectural Data Card 50-c

See Unit 19-c.

INTERIOR STAIRWAY FROM FIRST STORY TO SECOND STORY

Historical Data

B. First Story Level
Unit 51 Card 51-a

"Stair from first to second story has a landing as shown on plan. these Stairs have hand rail & newells these stairs are Ceiled* on underside & are panelled on side that shows in hall. Stop strips for 5 panelled door leading to basement". (Hancock's Specifications, p. 5, at end of Historical Study).

See Hubard Drawings, 1st floor plan, at end of Historical Study.

* looks like "Ciiled" in original handwritten ms.

Archeological Data

None.

INTERIOR STAIRWAY FROM FIRST TO SECOND STORY

Architectural Data Card 51-c

Hubard's data on the main staircase in the house is probably as meager and devoid of specific information as if he had never surveyed the stairs. It is quite possible that he did not make but a superficial measurement of the stairs as it was undoubtedly the intention to remove the stairs intact and re-erect them without disturbing their fabrication. One photo exists of the McLean well, some years after the house was torn down, showing a complete flight of steps laying over the well opening as a cover for the same.

Hubard's specifications for the balusters, handrail, newels and newel caps resemble very closely the existing stair in the Plunkett-Meeks house which was installed in the early 1870's and which might have used the McLean stairs as a model. Accordingly, the general features of this stair have been incorporated into the drawings for the rebuilding. Hubard's specifications also called for the jib between the stair and floor to be panelled in wood. Since the Bocock-Isbell staircase is panelled similarly, and built within two years of the McLean house, this work has been copied from that source, together with the general features of the stair fabrication, moulding profiles, etc. Concealed steel framing has been substituted for the original concealed wood beams in consistency with the policy outlined in Unit 11-c.

WEST ROOM --- DIMENSIONS

B. First Story Level
Unit 52

Historical Data

Card 52-a

This room was almost square -- 19' 11" from front to rear of the house and 20' 0" the long way of the house. (Hubard Drawings, 1st floor plan, at end of Historical Study).

The ceiling was 9' 9½" from floor to floor (Hubard Drawings, 1st floor plan).

Ely S. Parker, Grant's Military Secretary, stated after the war that "on the left as you entered was the parlor, and on the fight what seemed to be the family living rooms" (Historical Study, p. 24). Parker by the use of the word seemed indicates that he went in only the parlor or surrender room, the larger size of the west room is indicated by the fact that Parker thought of it as rooms.

Archeological Data

None.

Architectural Data

Card 52-c

See Unit 9-c.

WEST ROOM — DIMENSIONS

Historical Data

B. First Story Level
Unit 53

Card 53-a

All walls plastered and whitewashed. (Mr. Featherston, p. 33 of Historical Study, and Hancock's Specifications, p. 6, at end of Study)...

An example is seen in the interior photo of the surrender room. (Attached to Historical Study).

The north (front), west, and south walls were the brick walls of the house and were 13" thick. The east wall of this room was a wood partition 5" thick. (Hubard Drawings, First floor plan, at end of Historical Study, and Hancock's Specifications, p. 2, at end of Historical Study)...

Archeological Data

None.

Architectural Data

See Unit 9-c.

WEST ROOM --- FLOOR

Historical Data

B. First Story Level
Unit 54 Card 54-a

"1st Floor is nailed to 3 x 10 joists, 24" ¢ and two 10 x 10 Oak sills running crosswise of the house, the hall floor rests on joists running lengthwise of the house & morticed into the 10 x 10 Oak sills". (Hancock's Specifications, p. 3, at end of Historical Study)...

The type of flooring can be seen in the interior photograph of the surrender room, attached to Historical Study ...

Archeological Data

None.

Architectural Data Card 54-c

See Unit 11-c.

WEST ROOM -- DOOR

Historical Data

B. First Story Level
Unit 55

Card 55-a
See Card 42-a for
Surrender Room Door

Horace Porter, of Grant's staff, said that "each room had two doors opening into the hall" (See Historical Study, p. 22).

Another Federal officer, Forsyth, echoes him on this matter. (Study, p. 23).

The Hubard Drawings (1st story plan -- see at end of Historical Study) shows only <u>one</u> door, and Mr. Featherston, who was in the house many times, it being the home of his grandfather after the war, states that there was only one door and no evidence of change. If there were change, it could be seen easily in a plain unpapered plaster wall.

See discussion in Historical Study, p. 21 - p. 24.

Door detail can be seen in Hubard Drawing --- Hancock's Specifications state - "panelled side hall doors 6' 5¼" x 3' 1½" 5 panells door frames finished off inside same style as window frames ---" (Specifications, p. 5, at end of Historical Study).

Archeological Data

None.

Architectural Data

Card 55-c

See Unit 42-c.

WEST ROOM --- WINDOWS

Historical Data

B. First Story Level
Unit 56

Card 56-a

Porter, of Grant's staff, says, "A hall ran through the middle from front to back, and on each side was a room having two windows, one in front and one in rear". (Historical Study, p. 21).

Forsyth, another Federal officer, says, "The door opened into a hall that ran the entire length of the house, and on either side of it was a single room with a window in each end of it". (Historical Study, p. 23).

See Hubard Drawings, 1st story plan, at end of Historical Study. The dimensions are there shown, and will be discussed by the architect. Hancock's Specifications, p. 5, at end of Historical Study, call for 24 lights each, 10 x 12 glass.

Hancock calls for outside blinds (Specifications, p. 5 and p. 6, at end of Historical Study) and the postwar photographs by Stevens and Plecker (rear view) show blinds. The wartime photographs do not show blinds. The photograph taken because of Grant's death (1885) also shows no blinds. Thus the blinds were added some time after 1885. (Note here that Mr. Stevens is apparently wrong in saying he took his picture in the 1870's, because his photo shows blinds and the 1885 photo shows none). All photos at end of Historical Study.

Archeological Data

None.

Architectural Data

Card 56-c

See Unit 43-c.

WEST ROOM — WOODWORK

Historical Data

B. First Story Level
Unit 57 Card 57-a

Mr. Featherston and Mr. Horseley, Appomattox men who remember the house, state that the woodwork was simple. (Mr. Featherston's grandfather owned the house after the war). (See Historical Study, p. 26 and p. 33).

See Hubard Drawings, 1st floor plan, at end of Historical Study.

Hancock's Specifications, p. 5, at end of Historical Study ---"
". . . the two windows in right hand room are more elaborately moulded than those in surrender room and also have a panell under them reaching to the floor 6½" Square rose blocks in Corners - - -"

The type of woodwork can be seen in the interior photo of the surrender room, attached to end of Historical Study.

Archeological Data

None.

Architectural Data Card 57-c

The woodwork in this room is slightly more elaborate, although later in period than the trim in any other portion of the house. Generally the trim and character of the mouldings on the inside of the house are earlier, in style, than the house. The woodwork follows very closely the design and custom of houses built in Virginia between 1795 and 1810. However, the woodwork in the West Room (which is the larger on this floor) is typical of the date in which the house was built--1848. Casings at the windows extended down to the floor, ending on plinths as do the doors. Wood panels are placed under the windows. The casings do not mitre over the window and door heads, but are butted against a turned corner block. The trim in the lower floor of the Bocock-Isbell house is identical, although slightly coarser in overall detail, and it is from this source that the full-size profiles were adopted.

WEST ROOM --- FIREPLACE AND HEARTH (MANTEL)

Historical Data

B. First Story Level
Unit 58 Card 58-a

The details of the mantel are shown in the Hubard Drawings, to be discussed by the architect. (See Hubard Drawings, first story plan, at end of Historical Study)...

The Plecker photograph of the interior of the surrender room shows the type of fireplace --- simple wood mantel, small square fireplace, brick hearth.

"All fire places are open for burning wood on old fashioned iron dogs". (Hancock's Specifications, p. 6, at end of Historical Study)...

Archeological Data

None.

Architectural Data Card 58-c

See Unit 15''-c.

WEST ROOM - FIREPLACE AND MANTEL

The mantel in this room differs from the one described on Unit 45-c in that Hubard's survey calls for more simple mantel without pilasters on the sides for the mantel directly above in the West Chamber. Since there was no available data for a mantel in West Room, first floor, and since the masonry opening is the same as the one on the floor above it was decided to use the same detail.

CEILINGS

Historical Data

B. First Story Level
Unit 59

Card 59-a

Ceiling joists are 10" by 13" running across the house. (Hancock's Specifications, p. 3, at end of Historical Study).

Archeological Data

None.

FRONT PORCH (EXCEPT STEPS)
(Steps treated on Card 1-a)

Historical Data

B. First Story Level
Unit 60 Card 60-a

"The House consists of a basement first and second stories, with a decked front porch extending the length of house". (Hancock's Specifications, p. 2, at end of Historical Study).

"Six brick pillars are to be built to support front of front porch as shown on ground plan and elevation" (Hancock's Specifications, p. 3, at end of Historical Study).

"Front Porch Framing morticed together, one end of sills resting in walls of house, the other on brick pillars as shown on end elevation of house. - - - The porch has a railing extending all around with hand rail 3½" wide top edge bevelled this porch has Six 12 x 12 Square wooden columns supporting deck. The flooring of this deck has a slight drainage in the front about 1½". This porch has a hand railing around the top as follows. Eight post 3" x 8" x 30". hand rail 3 x 3 foot rail 3 x 3 lattices 1½ x 2. run diagonally to form diamonds as shown on drawings. Top rail chamfered 1/3. 1" chamfer. Front of posts panelled with 3/4" half round moulding. Rail run over top of posts mitered at corners," (Hancock's Specifications, p. 4, at end of Historical Study).

See Hubard Drawings.

The wartime photographs show a lattice railing around the porch roof and indicate a floor not covered (or perhaps not covered) with any roofing material (especially U. S. Signal Corps photo B-6333). The postwar photographs show absence of this top railing and a more sloping roof, covered with wood shingles. (All photos at end of Historical Study)...

It is a truism in the McLean Study that the wartime photographs are to be accepted (where differences occur) rather than later photos or Hancock's and Hubard's evidence (1893), because it is the 1865 house that is to be restored. In the matter of the frontporch, however, Hancock seems to be describing the wartime porch. The top railing had disappeared at least by 1885 (See the Plecker photo of the house draped in black for Grant's funeral).

Archeological Data

None.

FRONT PORCH AND RAIL
Architectural Data

Stevens' photograph of the front of the house taken in the 1870's shows this rail completely removed and considerable other alteration to the porch roof. This must have been the state in which Hubard found the house when he measured it. However, he describes this railing and the various members of it in detail and makes a drawing of it. It is possible that some of the newels and pieces of the rail were on the property and he had access to them. His newel measurements check well and resemble the originals shown in Brady's several excellent wartime photographs. However, Hubard's reconstruction of the design of the railing is badly out of detail with the Brady photographs. Accordingly, the sizes and sections of the rail elements will be rebuilt but the diamond pattern of the rail balusters will be made like the 1865 photographs.

In the case of the cornice of the porch, Hubard seems to have made an accurate survey and drawing. These compare very well with the 1865 photographs and will be rebuilt in toto.

No gutters or leaders appear in the photographs on the porch cornice. However, it was felt that the roof water from the porch should not be allowed to simply drip off and drain into the area under the front porch, in consistency with the justification found in Unit 5-c. Accordingly, a concealed, metal lined gutter will be built into the cornice on three sides of the porch; and shall be drained by leaders concealed on the inside of the wood porch columns and the brick piers. These leaders will connect with the drainage system as described on Unit 5-c. Hancock makes no mention of the material of the porch ceiling, and due to this absence of data the porch ceiling of the Bocock-Isbell House will be used as a precedent. See Unit 61-c. (It is the opinion of the author of this justification that the wide beaded edge boards in one of the rooms of a late addition to the John Rosser house, about one-half mile away, show evidence of re-use, and might be the original McLean porch ceiling boards).

In his 1893 survey Hubard made no record of the elevations of the house. In making his drawings in 1931 he either referred to survey notes, of which we have no copy, or he relied on photographs to make his elevation drawings.

In his 1893 specifications he describes the framing of the front porch floor as mortised and tenoned construction. From 1865 photographs it is possible to determine the direction in which the porch plan was laid and from this information the porch plan will be framed as indicated on the working drawings and specifications.

The square porch wood columns, caps, bases, the porch cornice and first floor rail will follow Hubard's 1931 drawing which seems to agree with the 1865 photographs. In the absence of datafor the porch ceiling, wide beaded edge boards were used, laid in transverse direction to the ceiling beams, to match the porch ceiling on the Bocock-Isbell house.

BACK PORCH (Except Steps)
(Steps treated on Card 30-a)

Historical Data

B. First Story Level
Unit 61 Card 61-a

"Back porch fourteen feet long by eight feet 1½" wide with a comb roof". (Hancock's Specifications, p. 2, at end of Historical Study).

"The back porch rests on wooden posts, whose bottom ends rest on flat stones, as shown on end elevations and ground plan" (Hancock's Specifications, p. 3, at end of Historical Study).

"The Back Porch - - - railing same as front porch the roof of this porch is a comb roof covered with shingles Columns of this porch 10½" x 11". (Hancock's Specifications, p. 4, at end of Historical Study)...

See Hubard Drawings.

There is no wartime photograph of this back porch. We can assume that it existed in 1865 because a wartime news account mentions it - "The McLean House - - - is likewise built of brick - - - with the inevitable portico in front and rear" (New York Herald, April 14, 1865, p. 5, col. 6 - see Historical Study, p. 21).

The postwar photograph of the rear of the house (by Plecker) shows the back porch well. (See at end of Historical Study)...

It is to be noted that (according to the Historical Study) Mr. Featherston believes that no railing existed in 1865; if it did, it was torn down --- because, he says, his uncle Trent Ragland put the railing (seen in photo) there after Trent's mother (Mr. Featherston's grandmother) fell off the porch emptying ashes. (Historical Study, p. 17). Further interviews with Mr. Featherston, however, have established the fact that he meants the back porch steps railing, not the porch railing itself, which seems to have been original.

Archeological Data Card 61-b

No remains of the back porch proper were found. However, inferential data on the general dimensions can be gained from:

Feature 6, Detail 1b and 1c: two shallow oval depressions filled with debris. The character of the depressions indicate they are the result of water action and were not dug purposely. These two holes are on an approximate north-south axis with the southwest back porch pillar support, F6, D1a, and are respectively 2.00' and 5.00' (center to center) north of it.

Feature 6, Detail 3: a debris filled trench of considerable depth (approx. 1.00') running north and south just east of the southeast back porch pillar-support (F6, D3a) and abutting on to the south foundation-trench at its north end. The trench was apparently artificial originally but shows much evidence of water-action continuing over a considerable period.

The water action mentioned with regard to these two Details must have come from the rain run-off from the comb-roof of the back porch falling directly to the ground in the absence of eave-troughs. The distance of about 13.50' to 14.50' between the centers of these two "drip-trenches indicates corroboration of Hancock's data.

The same is true for the "width" of eight feet given by Hancock; this figure corresponds closely to the distances south of the exterior of the house at which the field-stone pillar-supports occur. (See Card 29-b).

REAR PORCH, INCLUDING ROOF

Architectural Data

The framing for the rear porch floor follows generally the method used on the front porch, that is, mortise and tenoned and pinned construction. Hancock's data appears to agree with an excellent photograph by Plecker taken in the 1890's. Wood columns, caps, bases and the mouldings on the gable follow this data. The roof is covered with asbestos cement shingles, especially designed to imitate hand-rived cypress shingles. See Unit 59-c. From the deterioration of the mortar-joints in the brick at the base of the porch due to the spilling of the roof water against it, and since the photograph does not show any gutters or leaders on the porch, none were rebuilt. The ridge of the roof has been given a "comb" as shown in the photograph, a technique favored by early Virginia roofers.

EXTERIOR NORTH (FRONT) WALL FROM SECOND STORY TO ROOF

Historical Data

C. Second Story Level
Unit 62 Card 62-a

13" thick --- front wall flemish bond from front porch floor to cornice ---- very close joints not over ¼" thick (Hancock's Specifications, p. 2, and p. 3, at end of Historical Study).

The openings were a hall door (opening on porch roof) with a window on either side. (See Hubard Drawings, 2nd story plan, at end of Historical Study).

The front wall shows up well in a number of photographs, notably wartime B-6333, 223, and 221, and the Stevens postwar photo, all included at end of Historical Study.

Archeological Data

None.

Architectural Data Card 62-c

See Unit 31-c.

EXTERIOR EAST WALL FROM SECOND STORY TO ROOF

Historical Data

C. Second Story Level
Unit 63 Card 63-a

13" thick -- laid every sixth course headers --- very close joints, not over ½" thick. (Hancock's Specifications, p. 2 and p. 3, at end of Historical Study)...

There were no openings in this wall and the chimney was an inside one. this wall shows in the postwar rear view of the house by Plecker and in the Dresher postwar engraving, both attached to Historical Study.

See also Hubard Drawings, attached to Historical Study...

Archeological Data

None.

Architectural Data Card 63-c

See Unit 31-c.

EXTERIOR SOUTH (REAR) WALL FROM SECOND STORY TO ROOF

Historical Data

C. Second Story Level
Unit 64 Card 64-a

13" thick, every sixth course headers -- very close joints, not over ½" thick. (Hancock's Specifications, p. 2 and p. 3, at end of Historical Study).

The openings were three windows. "The Second story has 5 windows 16 lights 2 windows in each room & one in end of hall over back porch" (Hancock's Specifications, p. 5, at end of Historical Study)..

This hall window shows plainly in the Plecker postwar photo of the rear of the house (attached to Historical Study)...

It does not appear in Hubard Drawings, attached to Historical Study, and Mr. Featherston pointed out its absence when viewing the drawings and stated that there was such a window. (See Historical Study, p. 33)..

Archeological Data

None.

Architectural Data Card 64-c

See Unit 31-c.

EXTERIOR WEST WALL FROM SECOND STORY TO ROOF

Historical Data

C. Second Story Level
Unit 65 Card 65-a

End wall. 13" thick. Every sixth course headers. (Hancock's Specifications, p. 3 and p. 2, at end of Historical Study).

There were no openings in this wall and the chimneys were inside, as seen in wartime photograph #223 and the sections from the Webber drawing, attached to Historical Study.

See also Hubard Drawings, attached to Study.

Archeological Data

None.

Architectural Data Card 65-c

See Unit 31-c.

EAST BED ROOM — DIMENSIONS

Historical Data

C. Second Story Level
Unit 66 Card 66-a

20' from front wall to back wall of house.

16' 6" the long way of the house.

8' 3" - height of ceiling.

Hubard Drawings, second story plan, at end of Historical Study...

Archeological Data

None.

Architectural Data Card 66-c

See Unit 9-c.

EAST BED ROOM — WALLS

Historical Data

C. Second Story Level
Unit 67 Card 67-a

All walls plastered and whitewashed. (Mr. Featherston, p. 33 of Historical Study, and Hancock's Specifications, p. 6, at end of Study).

An example is seen in the interior photograph of the surrender room, attached to Historical Study.

The north, east, and south walls were the brick walls of the house and were 13" thick, according to Hancock (Hancock's Specifications, p. 3, at end of Historical Study) — 12" thick, according to Hubard's Drawings, 2nd story plan, at end of Historical Study.

The wood partition which was the west wall was 5" thick (Hubard Drawings, 2nd story plan, at end of Historical Study)...

Archeological Data

None.

Architectural Data Card 67-c

See Unit 10-c.

EAST BED ROOM --- FLOOR

Historical Data

C. Second Story Level
Unit 68 Card 68-a

"1st Floor is nailed to 3 x 10 joists, 24" ¢ and two 10 x 10 Oak sills running crosswise of the house, the hall floor rests on joists running lengthwise of the house and morticed into the 10 x 10 oak sills.

"2nd Floor same as first except it hasn't the 10 x 10 sills" (Hancock's Specifications, p. 3, at end of Historical Study).

Archeological Data

None.

Architectural Data Card 68-c

See Unit 11-c.

EAST BED ROOM --- DOOR

Historical Data

C. Second Story Level
Unit 69 Card 69-a

There was one door --- see Hubard Drawings, 2nd story plan, attached to Historical Study for dimensions.

Discussed by architect.

Hancock notes that "panelled doors leading from hall to each room located as shown". (Hancock's Specifications, p. 6, at end of Historical Study).

Archeological Data

None.

Architectural Data Card 69-c

See Unit 49'-c.

EAST BED ROOM — WINDOWS

Historical Data

C. Second Story Level
Unit 70 Card 70-a

"The Second story has 5 windows 16 lights 2 windows in each room & one in end of hall over back porch" (Hancock's Specifications, p. 5, at end of Historical Study)...

"Height from floors of rooms to windows 2' 3" (Hancock's Specifications, p. 6, at end of Historical Study).

For dimensions, see Hubard Drawings, 2nd story plan, at end of Historical Study....

Hancock calls for outside blinds (Specifications, p. 6, at end of Historical Study) and the postwar photographs by Stevens and Plecker (rear view) show blinds. The wartime photographs do not show blinds. The photograph taken because of Grant's death (1885) also shows no blinds. Thus the blinds were added some time after 1885. (Note here that Mr. Stevens is apparently wrong in saying he took his picture in the 1870's, because his photograph shows blinds and the 1885 photo shows none).. All photographs at end of Historical Study....

Archeological Data

None.

Architectural Data Card 70-c

See Unit 84-c.

EAST BED ROOM --- WOODWORK

Historical Data

C. Second Story Level

Unit 71 Card 71-a

"Mop and chair boards in both rooms" (Hancock's Specifications, p. 6, at end of Historical Study)...

(See also Hubard Drawings, 2nd story plan)...

The woodwork all over the house was plain. (Deposition of Mr. Featherston, whose grandfather owned the place after the war, see Historical Study, p. 26 and p. 33).

Only interior photograph available is of surrender room (attached to Historical Study), which is, however, indicative of woodwork in other rooms.

Archeological Data

None.

Architectural Data Card 71-c

See Unit 85-c.

EAST BED ROOM — FIREPLACE AND HEARTH (MANTEL)

Historical Data

C. Second Story Level
Unit 72 Card 72-a

"Mantels in these rooms as shown on detail sheet --- --- --- All fire places are open for burning wood on old fashioned iron dogs". (Hancock's Specifications, p. 6, at end of Historical Study).

See Hubard Drawings, 2nd story plan, at end of Historical Study.

The architect will discuss.

Example of type of fire place in house is to be seen in the interior photo of the surrender room, attached to Historical Study.

Archeological Data

None.

Architectural Data Card 72-c

See Unit 15''-c.

EAST CHAMBER - FIREPLACE AND HEARTH (MANTEL)

The fireplace, chimney breast, etc., follow the same justification as indicated on Unit 45-c, but Hancock's 1893 survey describes a wood mantel which was used for this room.

HALL --- DIMENSIONS

Historical Data

C. Second Story Level
Unit 73 Card 73-a

10' wide (i.e., the long way of the house).

20' long (i.e., from front wall to rear wall of house).

Height of ceiling 8' 3".

Hubard Drawings, 2nd story plan, at end of Historical Study.

Archeological Data

None.

Architectural Data Card 73-c

See Unit 9-c.

HALL --- WALLS

Historical Data

C. Second Story Level
Unit 74 Card 74-a

All walls plastered and whitewashed. (Mr. Featherston, p. 33 of Historical Study, and Hancock's Specifications, p. 6, at end of Historical Study).

The plaster shows up in the only interior photograph we have - that of the surrender room, attached to Historical Study.

The end walls of the hall (i.e., the front and rear walls of the house) are brick and the side walls wood. Brick walls here, according to Hancock, 13" thick, according to Hubard, 12" thick. Thickness of wood partitions 5". (Hancock's Specifications, p. 3, at end of Historical Study, and Hubard Drawings, 2nd story plan, at end of Historical Study)..

Archeological Data

None.

Architectural Data Card 74-c

See Unit 10-c.

HALL --- FLOOR

Historical Data

C. Second Story Level
Unit 75 Card 75-a

"1st Floor is nailed to 3 x 10 Joists, 24" ¢ and two 10 x 10 Oak sills running crosswise of the house, the hall floor rests on joists running lengthwise of the house & morticed into the 10 x 10 Oak sills - - - 2nd Floor same as first except it hasn't the 10 x 10 sills. Ceiling joists are 10" x 3" running across the house" (Hancock's Specifications, p. 3, at end of Historical Study)...

Archeological Data

None.

Architectural Data Card 75-c

See Unit 11-c.

HALL -- DOOR

C. Second Story Level
Unit 76

Historical Data

Card 76-a

A door opened onto the roof of the front porch. "This door is 4' 1" wide and 6' 10" high" - (Hancock's Specifications, p. 6, at end of Historical Study)..

See also Hubard Drawings, 2nd floor plan, at end of Historical Study...

This door shows up (from the outside) in various photographs, notably, - the wartime photo B-6333 and the Stevens postwar photo, both attached to Historical Study.

Archeological Data

None.

SECOND STORY HALL - EXTERIOR DOOR

Architectural Data

Card 76-c

Hubard's data on this door is particularly confusing and ambiguous. His 1893 survey plan shows a door, but shows a single operative leaf. However, he also indicates a later added wood partition clothes closet which is built over one-half of the door. This would lead us to believe that the door was a double leaf door and one leaf was left operative when the clothes closet was added. On his 1931 drawings he shows the opening as a window matching the two flanking second floor windows.

The best source for authentic data again comes from Brady's 1865 photograph of the front of the house. This photo shows the opening to be a door matching the first floor entrance door except without a transom. Since the height of the door aligns with the windows and the floor height was known it was possible to determine the overall height of this door. Allowance was made at the sill to keep the same above the porch roof sufficiently high to avoid a water condition. For the same reason this door has had metal weatherstrips and threshold added as it is exposed high on the facade of the building and faces directly to the north.

The panelled jambs and head of the reveal were copies from those on the first floor. The vertical rails of the door leaves can be seen to line with those on the first floor front entrance doors, and the horizontal location of the door stiles was obtained by scaling them against the adjacent brick courses.

HALL -- WINDOW

Historical Data

C. Second Story Level
Unit 77 Card 77-a

"The Second story has 5 windows 16 lights 2 windows in each room & one in end of hall over back porch" - (Hancock's Specifications, p. 5, at end of Historical Study)...

Hubard forgot to show this window in his drawings (2nd story plan, at end of Historical Study) and Mr. Featherston noticed the omission at once when he examined the plans. Mr. Featherston's grandfather owned the house after the war. Such a window was important in the lighting of the stairs... (See Historical Study, p. 33).

Note that the window shows up plainly in the postwar photo of the rear of the house by Plecker -- attached to end of Historical Study.

Archeological Data

None.

Architectural Data Card 77-c

See Unit 43-c.

HALL --- WOODWORK

Historical Data

C. Second Story Level
Unit 78 Card 78-a

No specific data. It is to be noted that the woodwork all over the house was simple. (Historical Study, p. 33).

Archeological Data

None.

Architectural Data Card 78-c

See Unit 50-c.

HALL — CLOSET

Historical Data

C. Second Story Level
Unit 79

Card 79-a

Note that Hubard (see 2nd story plan, at end of Historical Study) shows a clothes closet in the northeast corner of the hall. (This is as of 1893).

This closet was not in the hall in 1865 apparently. Mr. Featherston, whose grandfather owned the place after the war, says that his (Mr. Featherston's) uncle Trent Ragland moved the closet into the hall from the southeast corner of the west bed room about 1885. (See Historical Study, p. 34).

Archeological Data

None.

Architectural Data

Exact 1865 data not available and this closet therefore, omitted.

WEST BED ROOM -- DIMENSIONS

Historical Data

C. Second Story Level
Unit 80 Card 80-a

20' from front wall of house to rear wall of house.

20' 9" the long way of the house.

8' 3" height of ceiling.

Hubard Drawings, 2nd story plan, at end of Historical Study.

Archeological Data

None.

Architectural Data Card 80-c

See Unit 9-c.

WEST BED ROOM --- WALLS

Historical Data

C. Second Story Level
Unit 81 Card 81-a

All walls plastered and whitewashed. (Mr. Featherston, p. 33 of Historical Study, and Hancock's Specifications, p. 6, at end of Historical Study).

The plaster shows up in the only interior photo we have, that of the surrender room, attached to Historical Study.

The north (front), west, and south walls of this room were the brick walls of the house and were 13" thick, according to Hancock (Hancock's Specifications, p. 3, at end of Historical Study), 12" thick, according to Hubard (Hubard's Drawings, 2nd story plan, at end of Historical Study).

The east wall was a wood partition, 5" thick. (Hubard Drawings, 2nd story plan, at end of Historical Study)....

Archeological Data

None.

Architectural Data Card 81-c

See Unit 10-c.

WEST BED ROOM --- FLOOR

Historical Data

C. Second Story Level
Unit 82 Card 82-a

"1st Floor is nailed to 3 x 10 Joists, 24" ¢ and two 10 x 10 Oak sills running crosswise of the house, the hall floor rests on joists running lengthwise of the house & Morticed into the 10 x 10 Oak sills".

"2nd Floor same as first except it hasn't the 10 x 10 sills"

"Ceiling joists are 10" x 3" running across the house".

Hancock's Specifications, p. 3, at end of Historical Study).

Archeological Data

None.

Architectural Data Card 82-c

See Unit 11-c.

WEST BED ROOM — DOOR

Historical Data

C. Second Story Level
Unit 83 Card 83-a

"Panelled door leading from hall to each room located as shown" (Hancock's Specifications, p. 6, at end of Historical Study).

There was one door to each of the two upstairs rooms — shown on Hubard's Drawings, 2nd story plan, at end of Historical Study...

Discussed by architect.

Archeological Data

None.

Architectural Data Card 83-c

See Unit 49'-c.

WEST BED ROOM — WINDOWS

Historical Data

C. Second Story Level
Unit 84 Card 84-a

"The Second story has 5 windows 16 lights 2 windows in each room & one in end of hall over back porch" (Hancock's Specifications, p. 5, at end of Historical Study).

"Height from floors of rooms to windows — 2' 3" " — Hancock's Specifications, p. 6, at end of Historical Study).

See Hubard Drawings, at end of Historical Study, for dimensions.

Hancock calls for outside blinds (Specifications, p. 6, at end of Historical Study) and the postwar photographs by Stevens and Plecker (rear) show blinds. The wartime photographs, however, do not show blinds. Thus the blinds were added some time after 1885. (Note here that Mr. Stevens is apparently wrong in believing that he took his picture in the 1870's, because his photograph shows blinds and the 1885 photo shows none). All photographs at end of Historical Study...

Archeological Data

None.

Architectural Data Card 84-c

See Unit 43-c.

WEST BED ROOM --- WOODWORK

Historical Data

C. Second Story Level
Unit 85 Card 85-a

"Mop and chair boards in both rooms" (Hancock's Specifications, p. 6, at end of Historical Study).

See also Hubard Drawings, 2nd story plan, at end of Historical Study.

The woodwork all over the house was plain. (Deposition of Mr. Featherston, whose grandfather owned the place after the war, see Historical Study, p. 26 and p. 33).

Only interior photo available is of surrender room (attached to end of Historical Study), which is, however, indicative of woodwork in other rooms.

Archeological Data

None.

Architectural Data Card 85-c

See Unit 44-c.

Woodwork in this room, from all available data, is identical to the lower floors, except that a chair rail is called for on four sides of the room in Hubard's 1893 survey.

WEST BED ROOM --- FIREPLACE AND HEARTH (MANTEL)

Historical Data

C. Second Story Level
Unit 86 Card 86-a

"Mantels in these rooms as shown on detail sheet - - - All fire places are open for burning wood on old fashioned iron dogs" (Hancock's Specifications, p. 6, at end of Historical Study).

See Hubard Drawings, 2nd story plan, at end of Historical Study, for sketches.

Architect will discuss.

Example of type of fireplaces is to be seen in the interior photo of the surrender room, attached to Historical Study.

Archeological Data

None.

Architectural Data Card 86-c

See Unit 15''-c.

WEST BED ROOM -- CLOTHES CLOSET

Historical Data

C. Second Story Level
Unit 87 Card 87-a

Presumably at the time of the surrender (1865), there was a clothes closet in the southeast corner of this room. Hubard (see Hubard Drawings, 2nd story plan, at end of Historical Study) shows this closet (1893) in the northeast corner of the hall. Mr. Featherston, whose grandfather owned the house after the war, states that his (Mr. Featherston's) uncle Trent Ragland moved this closet from the west room into the hall some time about 1885. (Historical Study, p. 34).

Archeological Data

None.

Architectural Data

Exact 1865 situation not known - closet therefore omitted.

RAFTERS

Historical Data

D. Roof Level
Unit 88 Card 88-a

"Rafters 3" x 4" Sheeting 1" covered with tin". (Hancock' s Specifications, p. 3, at end of Historical Study).

Archeological Data

None.

RAFTERS, ATTIC, ETC.

Architectural Data Card 88-c

While the heights, pitch of the roof and cornice profile are the same as shown on Hubard's survey and drawings there was no attempt to frame the roof in the old manner. (See General Statement). In the first place the roofing materials in the reconstructed building (see Unit 89-c) is approximately four times heavier in weight per square foot and the framing called for in Hubard's data would not sustain the load. Accordingly, modern dressed lumber, framed by the use of spike nails, and sheathed tight by modern tongue and grooved roofing boards and made weather and windtight by the use of asphalt paper has been substituted. It will be noted that none of this work is visible.

In addition to this, the brick gable ends of the attic will be coated on the inside with waterproofing compound in consistence with the policy outlined in Unit 5-c. In order to have access to the attic in case of emergency or file, there has been detailed on the working drawings a metal access door, located in the second floor hall ceiling. This door has been made to match the adjacent plaster ceiling as nearly as possible and is flush with the ceiling. Access to the attic will be made by step ladder from the second floor hall. A wood plank wall will be installed over the attic beams for the full length of the building. Insulation has been supplied between the rafters for the entire roof. This is in accordance with the outline in the General Statement and is done to reduce the effect of heat in the summer, and to conserve the heat in the building in the winter months. Vents from the attic, hidden in the chimneys are discussed in Unit 92-c.

ROOFING MATERIAL

Historical Data

D. Roof Level
Unit 89

Card 89-a

"Rafters 3" x 4" Sheeting 1" covered with tin" (Hancock's Specifications, p. 3, at end of Historical Study).

At the time Hancock made his specifications, 1893, the roof was tin. The tin shows up plainly in the Stevens postwar photograph, attached to Historical Study.

In 1865, however, the roof was a wooden shingle roof, as plainly seen in the wartime photographs, particularly the excellent Signal Corps B-6333.

Another indication of the fact that the roof was made of wooden shingles is found in a local news item about a model --- the statement was that Mr. George T. Peers had "a beautiful miniature model of the house made out of shingle from the original roof". (Appomattox and Buckingham Times, Thursday, Nov. 12, 1896, p. 3, quoted in Historical Study, p. 13).....

Archeological Data

None.

Architectural Data

Card 89-c

All of Hubard's data and the photographs available from the early 1870's until the demolition of the house show a tin roof in the usual widths laid at right angles to the eaves.

However, all of the Brady wartime photographs clearly show the roof to be of wood shingles, laid with a short exposure to the weather, and the usual Virginia style "comb" ridge facing the front of the house. This was the precedent that was followed except in the case of the material. Instead of using wood shingles, asbestos cement shingles have been specified, and these shingles will have the same size, shape, texture, and color as a weather-softened cypress hand-made shingle. The justification advanced for this change is the fire hazard due to the comparative isolation of the building from fire-fighting equipment, together with the intended use of the fireplaces.

ROOF -- GUTTER AND DOWNSPOUTS

Historical Data

D. Roof Level
Unit 90 Card 90-a

"Tin Gutters hung under main roof with down spouts at each corner of old pattern with gutter heads" —— (Hancock's Specifications, p. 6, at end of Historical Study).

The gutters and downspouts can be seen in photographs, especially the rear view by Plecker and the Stevens photo, as well as wartime photo B-6333. (All Photographs attached to Historical Study). (The date mentioned below can not be distinguished, though that is not proof of date's non-existence). Note that this gutter, as seen in the photos, seems to be made up of short sections.

The date 1848 (the building date) was made in the guttering, according to Mr. Ragland Featherston, whose grandfather owned the place after the war. Mr. Featherston says he was told this fact. He played around the house all through his boyhood and remembers many details, but he does not remember seeing this date himself. (See Historical Study, p. 2). The exact spot of the date in the gutter system was probably the gutter head, the usual place for dates in old houses. The date 1859 (repair date rather than building date) is so placed on the main house at New Store, an historic house group in Buckingham County.

Archeological Data Card 90-b

Inferential data as to the guttering is supplied by the fact that nowhere along the front or rear "walls" was there any evidence of drip-trenches such as occurred along the sides of the back porch. This indicates that functional gutters must have been present from the time of house-construction. The drainage system indicates some data with regard to the downspouts. At the northeast corner of the house a small flat field stone, Feature 5, Detail 10, served either as a drip-stone or as a splash stone for a downspout outlet. The water was drained westward along the surface in the drainage ditch, F5, D2. The situation at the northwest corner of the house is confused by the presence of post-holes. However, a flat stone and a "washed" area occurred here, indicating that another downspout discharged water into the ditch at this point. The water was then carried on south past the house. At the southwest corner of the house a well defined splash-basin, F7, D6a, about 0.50' deep was found with a surface drain F7, D6b, leading southwest to the main ditch. This undoubtedly was the location of another donwspout outlet.

No splash-basin occurred at the southeast corner of the house but the east drain-ditch, F6, D4a, is only 2.00' from the house-corner and an elbow on the downspout would give adequate discharge into this ditch.

See Unit 5-c.

GUTTERS, LEADERS, LEADER HEADS

Hubard's drawings show very little, and his specifications make only a slight mention of gutters, leaders, and leader heads.

However, Brady's excellent wartime photographs of the front and Plecker's rear photo of the house furnish ample and authentic data for the rebuilding of these items.

Placing Brady's picture under maghifying glass it was possible to obtain an approximate size of the leader heads by scaling them against the adjacent brick - since the exact brick size was known. Comparison also was made to the existing leader head now on the Patteson-Hix Tavern, which is almost identical with the one shown on the McLean House in the 1865 photographs.

By these photographs it was also possible to obtain the size of the goosenecks, sections of the gutters and leaders and to make a reconstruction of the gutter hooks.

See Card 60-c for front porch gutters.

CORNICE

Historical Data

D. Roof Level
Unit 91 Card91-a

The cornice shows up well in the various photographs (attached to end of Historical Study). The architect will discuss.

Archeological Data

None.

CORNICE, RAKE, ETC.

Architectural Data Card 91-c

There is no data on Hubard's survey relative to the cornice, but his drawings contain a larger scale section that seems to agree in size, scale and detail with all the available photographs. It is possible that he measured the various members of the cornice after they were removed from the building since his indication of the fabrication is not in accordance with the practice of the period. The cornice has been reproduced as shown on his drawings, the returns, etc., being determined from the photographs. He made no record of the rake mouldings and these have been determined by careful study of the photographs under a magnifying glass, using the known size of the brick as a scale.

CHIMNEYS

Historical Data

E. General and Materials
Unit 92 Card 92-a

There were 123 courses of brick in the end walls. (Hancock's Specifications, p. 3, at end of Historical Study).

"Both end walls thirteen inches thick, laid every sixth course headers"--- (Hancock's Specifications, p. 2, at end of Historical Study).

The chimneys were inside chimneys. See photographs attached to Historical Study.

Archeological Data

None.

Architectural Data Card 92-c

Unit 15-c covers the justification of the use of modern cast-iron operative valve dampers in the fireplaces and the use of a separate fireproof fire-clay flue from each fireplace up to the top of the chimneys. These elements, considered essential to make the building fire-safe are the cause of slightly increasing the overall width of the chimneys above the roof by 8 inches and the overall depth by $4\frac{1}{2}$". The brick coursing, height above the ridge, and the corbelled chimney caps are identical to the 1865 photographs.

In each chimney, near the roof ridge on the interior of the attic a flue lining vent will be installed to take off the hot air in the summer time.

No metal flashings were exposed at the intersection of the roof and chimney in the 1865 photographs, and for this reason all flashing will be built in concealed.

BRICK (TYPE, SIZE, TEXTURE, COLOR, VARIATION, WHERE MADE, HARDNESS, ETC.)

Historical Data

E. General and Materials
Unit 93 Card 93-a

The brick for the McLean House was probably made locally. There is one written statement to this effect. Branch Walker, born in 1834, wrote in 1901, that "soon after the county was formed, Mr. Raine, from Cumberland, came to the village. I remember when the bricks were made for 'Raines' Tavern', which became known as the McLean House". (Lynchburg News, March 6, 1901). (Historical Study, p. 2).

The brick work shows up well in various photographs, notably U. S. Signal Corps B-6333. (Attached to Historical Study).

Many of the original bricks (at the site) are extant and will be discussed by the architect and archeologist.

Archeological Data Card 93-b

The archeological data for Units 93 through 98 will not be available until laboratory analysis of specimens on hand is complete. Full data will accompany the final report on Excavations At The McLean Site.

Architectural Data Card 93-c

It has been decided that modern brick, exact reproductions of the old brick at the site, will be more permanent and satisfactory for the reconstruction than any old brick available.

See Unit 31-c.

MORTAR - (COMPOSITION)

Historical Data

E. General and Materials
Unit 94 Card 94-a

Hancock specified the type of mortar for the reconstruction intended in 1893; whether this was exactly like (or anything like) the original this technician is not in a position to tell.

There are ample specimens of plaster and mortar uncovered by the archeologist, however, and they should give some clue.

Hancock's words on the subject are as follows, "Bricks to be laid in mortar composed of one Part James River or Rosendale Cement, two parts clean sharp sand to the surface of the ground, then in lime mortar of good quality one part lime two parts sharp sand". (Hancock's Specifications, p. 2, at end of Historical Study).

Archeological Data Card 94-b

See Unit 93-b.

Architectural Data

See Unit 31-c.

PLASTER (COMPOSITION)

Historical Data

E. General and Materials
Unit 95 Card 95-a

None.

Note: Samples were dup at the site by the archeologist.

Archeological Data Card 95-b

See Unit 93-b.

Architectural Data

See Units 10-c and 11-c.

PAINT (COLOR AND COMPOSITION)

Historical Data

E. General and Materials
Unit 96 Card 96-a

The photograph of the surrender room indicates that the paint on the woodwork was black or dark brown in color. The window seems to be natural wood or a light color. This photograph is postwar, but our only photographic evidence for the interior.

The wartime photographs (the best of which is U. S. Signal Corps B-6333) show that the outside trim was white, with the exception of the porch hand rail and all the porch steps and porch step railing -- which were apparently a natural wood finish.

The doors outside were also apparently a natural finish. (Photographs attached to Historical Study).

Miss Emily Featherston, elder sister of Mr. Featherston, says she does not remember the paint clearly (August 14, 1941).

Both she and Mr. Featherston agree that the doors might have been black and also the baseboards.

The interior photo indicates that the mantel and baseboards were black (Victorian ebony) and such were the mantels and baseboards of the Bocock-Isbell House, still standing. The window trim of that house is off white, and such may have been the trim of the McLean House. The interior photo shows that the window was light colored.

Archeological Data

See Unit 93-b.

PAINTING AND DECORATION

Architectural Data Card 96-c

Paint for the trim on the exterior of the house will follow the 1865 photographs, in which the outside trim, with the exception of the doors, appears to be painted white, with the brick porch piers whitewashed. Exterior faces of the doors will be painted to match the exterior doors on the Tavern, Bocock-Isbell House, and other doors in the village which are painted and grained to represent stained wood. It is possible that this treatment of the exterior doors in the above buildings may have been done after 1865. However, there is ample evidence of this treatment in many other houses in Virginia of this period, and lacking other precedent this method will be followed.

The Plecker photograph of the Surrender Room interior shows the mantel and baseboard to be painted a very dark color, either black or to represent a dark wood stain finish. The window casing and sash, however, appear almost as light a color as the whitewash on the walls.

Since thare is much precedent of dark woodwork in Virginia houses of this period, some to represent grained wood, some marbelized, this method of painting will be followed on the interior trim, and varied slightly in the different rooms to avoid monotony. It seems reasonable that this prudence would have been exercised by the 1865 owners of the house.

The interior doors on the second floor of the Bocock-Isbell House, built two years later than the McLean house, are grained to imitate walnut and other cabinet woods. This work has been very skillfully done, and is a pleasing and dignified treatment, harmonious in a residence of this character. The work bears a close resemblance to the painted doors in the Tavern, grained to represent mahogany, and might easily be the work of the same craftsman. It is conceivable that the finish on the doors in both houses antedates 1865 or was performed sometime near that date.

For this reason the McLean doors shall be finished similarly, in the belief that this finish will be the nearest representation to the original doors. Hancock's specification and the Plecker interior photograph show the interior walls and ceilings whitewashed, which treatment shall be repeated on all the walls and ceilings of the reconstructed house.

Wood floors, stair treads, etc., shall be stained dark, waxed and polished to represent the floor finish and depth shown on the Plecker photograph of the Surrender Room.

NAILS

Historical Data

E. General and Materials
Unit 97

Card 97-a

None.

Archeological Data

See Unit 93-b.

Architectural Data

None.

HARDWARE

Historical Data

E. General and Materials
Unit 98 Card 98-a

The lock from the surrender room door is in the possession of the Featherston family (Mr. Ragland Featherston and two sisters) of Appomattox, grandchildren of N. H. Ragland, postwar owner of the McLean House. Mr. Ragland took the lock off the door, because it was not working well, about 1885. (Miss Emily Featherston, interview with Junior Historical Technician Happel, August 14, 1941).

This lock has been photographed and is available (at the Featherston home) for examination at any time. The small trade mark round seal on the face of the lock has an eagle on it and the wording -- No. 60 - Improved Lock. The dimensions of the lock are 4½" by 5-7/8" by 3/4" thick. There is only one knob, obviously brass, though the whole is gilded at the present time. (Lock part iron).

There are two similar locks in the Plunkett-Meeks House, one of which is the same with the seal gone (and has both brass knobs). The other is smaller (4" by 5") and has a picture of a beehive on the seal and the wording - No. 60 - Improved Lock. This also has two brass knobs.

In the Bocock-Isbell House there are two similar locks also, both the same size as the McLean lock, one having the same seal. The other has a seal with the same wording plus - E. Wootton, and the picture is a sailing ship. Neither of these locks has knobs.

The lock with the seal gone in the Plunkett-Meeks House is on the door from the west room to the hall, and the lock with the beehive is on the door from the west room to the east room. (Upstairs).

The Bocock-Isbell lock which is exactly like the McLean lock is on the door from the west room to the hall, upstairs, and the lock with the ship is on the door from the upstairs hall to the roof of the front porch.

Still another old lock is on the downstairs, east room hall door of the Bocock House 4½" x 6". The seal has an eagle and the words -- J. Walker - Improved Lock. This lock has a modern china knob.

Archeological Data

See Unit 93-b.

HARDWARE Card 98-c

Architectural Data

The fact that the original rim-lock which was used on the Surrender Room door has been made available to the reconstruction, will simplify the choice and selection of the door locks for the house. Hancock's data on the thickness of the doors has established them as being too thin for mortise locks, and during the period of 1848 when the house was built, mortise locks were in use mainly as cabinet hardware.

Locks remaining on the doors in the Bocock-Isbell House (which was erected in 1848, two years after the McLean House) are rim-locks, about the same size as the original Surrender Room lock. These are hand-made locks made in England, of wrought iron, with brass furniture and with large brass bit-key, and a latch action which lifts out of the strike, instead of the earlier period sliding latch.

These locks were made principally by three English locksmiths; J. Walker, E. Wooton, and T. Carpenter, and are found in abundance in Maryland, Virginia, and the Southern Seaboard, and bear a trademark of the maker in the form of a small brass seal, resembling a coin, on the lock face.

The Surrender Room lock is a J. Walker lock, and similar old locks will be purchased and reconditioned for the remainder of the doors in the house.

Butt hinges in the Bocock-Isbell House are fast-pin cast iron hinges, typical of the period, and reproductions of these hinges will be furnished on the McLean House.

Wooden buttons for holding open the lower window sashes are to be copied from those in "Rose Cottage" c 1809, Buckingham County, a similar country mansion, in the absence of similar precedent within the Village area.

BLINDS

Historical Data

E. General and Materials
Unit 99 Card 99-a

This subject is mentioned on other cards also.

Hancock's Specifications call for outside blinds on all windows. (Hancock's Specifications, p. 6, at end of Historical Study).

The Stevens postwar photograph shows outside blinds. (Attached to Historical Study). So does the postwar rear view by Plecker. (Also attached to Study). The postwar photograph taken because of Grant's death (1885), however, shows no shutters. (Attached to Study). And the wartime photographs show no shutters (see attached to Study), which indicates that there were no blinds in 1865 and that blinds were added some time after 1885.

From the above it is obvious that Mr. Stevens' photograph was taken after 1885 and he is thus incorrect in believing that he took the picture in the 1870's.

Archeological Data

None.

Architectural Data

Evidence points to no blinds in 1865.

MCLEAN HOUSE

General Construction Features

Architectural Data

(Summary of Architectural Data Contained in Units 5-c, 9-c, 10-c, 11-c, 15''-c, 31-c, 96-c, 98-c)

EXTERIOR BRICKS WALLS BELOW GRADE

Thickness of these walls, and all overall dimensions of the same follow exactly the Hubard 1893 Survey. However, the reconstructed foundation walls are being placed 3' 6" deep below the finished grade to insure their immunity to any frost action. Lack of knowledge of the possibility of frost heaving, disregard of it, or whatever prompted the early builders at Appomattox to build shallow foundation walls is one of the fundamental reasons for the structural deterioration of all the remaining buildings there. Hubard called for "foundation walls 2' 0" deep or more to get a good foundation". This was not considered sufficient and the walls are consequently being placed 3' 6" below grade on reinforced concrete footings.

EXTERIOR BRICK WALLS ABOVE GRADE

All exterior brick walls above grade are the same thickness as the original walls, as indicated on Hubard's 1893 Survey. Overall lateral dimensions same. Brick for the exterior wall, on the front of the house from the porch floor to the porch ceiling, will be selected brick from the remaining original brick now stored on the site. Brick for the facing of the remaining brick walls, piers, chimneys, etc., are to be hand-made reproduction brick to match the originals. All the back-up brick in the exterior walls, which cannot be seen, is to be ordinary common brick. Bonds for the brickwork in the exterior face of the walls shall be as shown on Hubard's drawings, and in photographs of the house taken in 1865. Face brick joints shall be small, tight joints as required by Hubard's 1893 specifications. Color of joint will be made to match those in the Bocock-Isbell house. Height of the exterior walls from the ground floor level to the cornice line will be increased 2 brick courses or 5" over Hubard's 1893 specifications. This digression is made because of the fact that the fireproof floor system of the reconstruction is 6" greater in overall depth than the original wood beams, and it is felt imperative to have the same distance showing from the Surrender room ceiling to the window head casing as can be seen from Plecker's photograph of the Surrender Room. See also cards 11-c and 9-c.

It is the architect's belief that counting the brick courses in the photographs (which will eventually be on display in the reconstructed house) will not be as easy a task as reading the distance from the window casing to the ceiling; hence the latter alternative was selected.

FLOOR CONSTRUCTION

Hubard's 1893 specification and the 1941 archeological investigation establish the ground floor construction as wood beams laid on the ground, over which were nailed a plank floor. No data can be found, or established, as to the frequency with which this floor had to be torn out and replaced, but it is certain that the best wood obtainable today and every modern precaution would not produce a reproduction floor which would last more than 5 to 10 years before rotting out.

Accordingly, this method was abandoned at the start and a waterproof concrete slab, with sub-floor drainage is to be installed, over which will be laid a wide plank floor to match the old work.

In the case of the first and second floor construction and the second floor ceiling it was felt to be highly desirable to have a fireproof floor system, since the building is isolated, with only the Park fire protection. Subsequent installation of the furniture, furnishing and relics of the original McLean House which are not in the Smithsonian Institution, in other museums, and privately owned, would make any fireproofing (that could possibly be done without being exposed) an essential requirement.

Accordingly, the first and second floors and the second floor ceiling construction will be changed to fireproof construction as indicated on the drawings. Finished floors in all the rooms will be wide plank floors to match the original building,and by looking at the finished ceilings the visitor can see only a plastered surface, the same as the original building.

Since the overall depth of the fireproof construction exceeds that of the original wood beams, slight adjustments have been made in the floor heights to reconcile the same, and still hold the exterior height of the building as shown in Hubard's 1893 survey and specifications. Thus the clear height of the second floor to ceiling is slightly more, and first and ground floor slightly less, than the original. See also Unit 31-c.

INTERIOR PARTITION WALLS

Although Hubard's 1893 survey and specifications call for wood stud partitions, lathed with hand-rived lath and plastered, this construction was not followed.

Fireproof masonry walls, which present the same overall thickness and finished plaster appearance were substituted in consistency with the justification mentioned in Unit 11-c.

All dimensions locating the various partitions and separating the rooms, rigidly follow those shown on Hubard's survey and drawings.

DRAINAGE AND WATERPROOFING

The McLean House, situated as it was with the lower story located in a depression below the natural level and drainage of the ground, must have presented to its several owners the same problem with which we are faced in the remaining structures at Appomattox with similarly located ground floors, that is, the problem of constant dampness and moisture in the rooms below grade. In the summer months the contact of the masonry wall with the cold ground causes condensation on the interior face of the wall. In the McLean House this will be overcome by furring the exterior walls (see Unit 9-c). For the remainder of the year, the surface water and subsoil drainage against the walls must be considered. One particular source of danger of water through the walls is the discharge of the roof water at the base of the leaders.

With the above elements to consider, it was strongly felt that every precaution, within the limits of reasonable cost, should be taken to prevent any moisture conditions whatever in the house, as it was certain that there would not be ample funds for the maintenance, repair, or replacement of any of the affected portions of the building after it was erected.

Accordingly, cinders and subsoil drains are to be placed under the ground floor slab, the drains emptying into a sump under the floor, and drained outside the building. Footing drains are to be installed, drained out to lower ground. The entire top of the ground floor slab is to be coated with waterproofing before the wood floor is laid. Metal flashing and membrane waterproofing is to be applied over the exterior of the walls below grade. The interior gable walls in the attic will be waterproofed. Exposed window and door heads will have metal flashing over the heads. All exterior door and window frames will be caulked with waterproof compound where they butt the masonry.

None of the above precautions were incorporated in the original building, and none will be visible in the reproduced building.

MECHANICAL INSTALLATION

The original McLean House contained no provision for heating except by the open fireplaces. The only source of water was the well in front of the house. Illumination of the rooms in 1865 was probably by candles, for although crude oil was discovered in Pennsylvania in the 1840's the cost of production and transportation unquestionably made it prohibitive for use as illumination in this area.

In the reconstructed house there is no central heating plant, and fireplaces are still to be the only method of heating. However, it is possible

that in the furnishing of the house that Franklin Stoves (which were contemporary with the 1865 period) will be installed into the fireplace openings, and equipped for burning oil.

The only water which will be piped into the building will be run concealed to a fire hose cabinet located under the first floor stair landing. This installation will be made as inconspicuous as possible, but it is necessary for obvious reasons. The service will be run underground to the house.

A complete electric wiring system will be built into the house. Service for this system will be run concealed underground to the house. The necessary mechanical features of the system will be concealed from view by locating them in a closet under the ground floor stairs, added for this purpose (and a digression), as it was not in the original house. The general function of the system is to provide base plugs located in the wood base as inconspicuous as possible, but allowing the use of electrified lamps of the period on the tables, desks, etc., in the house. In some cases hanging fixtures will be provided, some to simulate candle fixtures. In the case of a few of the hanging fixtures designed to represent old oil burning lamps, the same may have to be redesigned if it is established that oil was not in common use in the area in 1865.

Other mechanical features to be included in the reconstruction, but to be concealed, are:

Fireproof fire-clay flue linings for all the fireplace flues.
Cast-iron fireplace dampers, with adjustable valves which can be closed when the fireplace is not in use.
Fire-clay vents in the chimneys near the roof ridge in the attic to carry off the hot-air from the attic during the summer months.

DIMENSIONS OF ROOMS

The exterior walls of the original building had the finished plaster applied directly to the brick. In the reconstruction the brick walls are to have 1-3/4" thick furring strips over which the plaster shall be applied. The resulting air space is to insure the walls against dampness, but since the overall exterior dimensions are adhered to, the various room dimensions are decreased accordingly, that is, 1-3/4" less in length, and twice 1-3/4" less in width.

HARDWARE

The fact that the original rim-lock which was used on the Surrender Room door has been made available to the reconstruction, will simplify the choice

and selection of the door locks for the house. Hancock's data on the thickness of the doors has establishedthem as being too think for mortise locks, and during the period of 1848, when the house was built, mortise locks were in use mainly as cabinet hardware.

Locks remaining on the doors in the Bocock-Isbell house (which was erected in 1848, two years after the McLean House) are rim-locks, about the same size as the original Surrender Room lock. These are hand-made locks made in England, of wrought iron, with brass furniture and with large brass bit-key, and a latch action which lifts out of the strike, instead of the earlier sliding latch.

These locks were made principally by three English locksmiths; J. Walker, E. Wooton, and T. Carpenter, and are found in abundance in Maryland, Virginia, and the Southern Seaboard, and bear a trademark of the maker in the form of a small brass seal, resembling a coin, on the lock face.

The Surrender Room lock is a J. Walker lock, and similar old locks will be purchased and reconditioned for the remainder of the doors in the house.

Butt hinges in the Bocock-Isbell house are fast-pin cast iron hinges, typical of the period, and reproductions of these hinges will be furnished on the McLean House.

Wooden buttons for holding open the lower window sashes are to be copied from those in "Rose Cottage" c 1809, Buckingham County, a similar country mansion, in the absence of similar precedent within the Village area.

PAINTING AND DECORATION

Paint for the trim on the exterior of the house will follow the 1865 photographs, in which the outside trim, with the exception of the doors, appears to be painted white, with the brick porch piers whitewashed. Exterior faces of the doors will be painted to match the exterior doors on the Tavern, Bocock-Isbell House, and other doors in the Village which are painted and grained to represent stained wood. It is possible that this treatment of the exterior doors in the above buildings may have been done after 1865. However, there is ample evidence of this treatment in many other houses in Virginia of this period, and lacking other precedent this method will be followed.

The Plecker photograph of the Surrender Room interior shows the mantel and baseboard to be painted a very dark color, either black or to represent a dark wood stain finish. The window casing and sash, however, appear almost as light a color as the whitewash on the walls.

Since there is much precedent of dark woodwork in Virginia houses of this period, some to represent grained wood, some marbelized, this method of painting will be followed on the interior trim, and varied slightly in the different rooms to avoid monotony. It seems reasonable that this prudence would have been exercised by the 1865 owners of the house.

The interior doors on the second floor of the Bocock-Isbell house, built two years later than the McLean House, are grained to imitate walnut and other cabinet woods. This work has been very skillfully done, and is a pleasing and dignified treatment, harmonious in a residence of this character. The work bears a close resemblance to the painted doors in the Tavern, grained to represent mahogany, and might easily be the work of the same craftsman. It is conceivable that the finish on the doors in both houses antedates 1865 or was performed sometime near that date.

For this reason, the McLean doors shall be finished similarly, in the belief that this finish will be the nearest representation to the original doors. Hancock's specification and the Plecker interior photograph show the interior walls and ceilings whitewashed, which treatment shall be repeated on all the walls and ceilings of the reconstructed house.

Wood floors, stair treads, etc., shall be stained dark, waxed and polished to represent the floor finish and depth shown on the Plecker photograph of the Surrender room.

The End

~ APPOMATTOX COURT HOUSE NATIONAL HISTORICAL MONUMENT ~

Archeological Remains of the McLean House

(plan and sections)

to accompany : Collaborative Justification McLean House Reconstruction

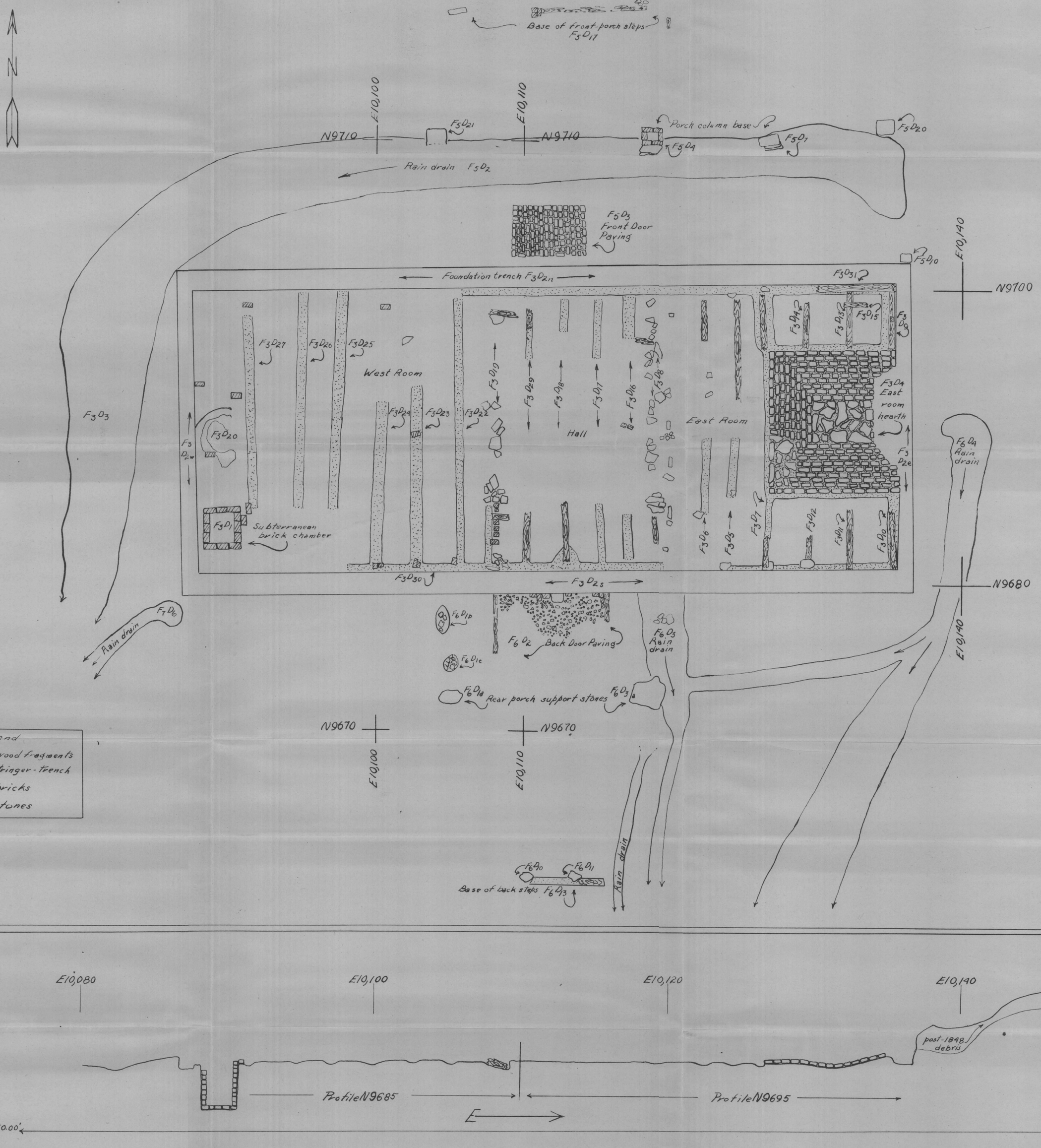
Junior Archeologist, PRESTON HOLDER

JANUARY 15, 1942

Drawing No.	NHM:APP 8051
Sheet 1 of 1	

Scale : 1" = 4'

0 4 8 12 16



Typical Profiles through McLean House Remains, taken at the level of undisturbed subsoil.

