RESTORATION OF THE ANDREW JOHNSON HOMESTEAD

GREENEVILLE, TENNESSEE

SECOND SUPPLEMENT TO THE SURVEY REPORT
(ARCHITECTURAL DATA)

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Second and Final Supplement

to the

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(Architectural Data)

R E S T O R A T I O N

of the

A N D R E W J O H N S O N

H O M E S T E A D

Greeneville, Tennessee

April, 1959

by

Henry A. Judd, Architect

United States, Department of the Interior, National Park Service
Eastern Office, Division of Design and Construction

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F O R E W O R D

This report has been prepared to supplement the "Survey Report, Restoration of the Andrew Johnson Homestead," dated August 20, 1956 and the first supplement to the Survey Report, dated August 20, 1956. Both reports were prepared by Dr. Ernest Allen Connally, an EODC Architect, who supervised the measuring team and student program at the Andrew John Home during the summer of 1956.

Research, primarily on the physical structure of the house, continued after the departure of Dr. Connally and the student team. Many points which required further study were followed up and, as is typical to a restoration, new evidence was found as the work progressed which alters some of the tentative conclusions advanced in the previous reports. These matters are covered in the section titled "Later Discoveries".

In this report an attempt will be made to explain the actual restoration of the Home. The two reports prepared by Dr. Connally should be referred to while reading this report. Some duplication will be made for the convenience of the reader; however, this will be kept at a minimum. Where statements conflict with those in Dr. Connally's "Narrative of Construction and Alteration" explanations are given.

A copy of this report maintained at the Andrew Johnson House may help those responsible for its maintenance to understand the reasons for--and the methods of--the various phases of the restoration.

Dr. Connally and his student team started work early in June 1956 by recording the conditions of the house as found. Later in the summer they transferred the 14 sheets in this set of drawings onto HABS sheets.

On August 1, 1956 the writer arrived to assume the supervision of the restoration and of the craftsmen and laborers employed. As we removed recent additions to the house the conditions found were recorded on a set of Drawings No. NM-AJ 3053, 15 sheets, which is as Part A in Appendix I of this report. A set of preliminary restoration Drawings, No. NM-AJ 3054, were prepared by Architects Connally and O'Gorman and the writer for inclusion in Dr. Connally's report. Drawing No. NM-AJ 3054A, 13 sheets, was prepared after further investigations had been made and were used as the restoration drawings for the house. They are included as Part B in Appendix I of this report. As the work progressed 12 sheets of details were prepared. They are included in Appendix I of this report.

A little delay was encountered in the initial phases of the work in the purchase of the special material required. After work was underway we were able to preplan and keep the job progressing at a more or less uniform rate until its completion in December 1957.

Henry A. Judd
Architect

Lynchburg, Va.
April, 1959

A C K N O W L E D G M E N T S

Acknowledgment is due Dr. Ernest Allen Connally and his summer team of students for all their research and the wonderful sets of measured drawings they prepared during the summer of 1956. The writer has referred to these drawings constantly during the restoration. Architect Jim O'Gorman continued on after Dr. Connally and the two students had departed giving much of his own time in helping to prepare the working drawings for the restoration before leaving to serve his hitch with the U. S. Army.

Supervising Architect, Historic Structures Charles E. Peterson and other members of the Eastern Office, Division of Design and Construction aided us in many details of the restoration. Superintendent Benjamin H. Davis and Administrative Aide Mack C. Greene of the Andrew Johnson National Monument handled the many administrative matters and aided in the purchasing of the many diversified materials required in the restoration.

Much credit is due Mrs. Margaret Johnson Patterson Bartlett, a great granddaughter of Andrew Johnson, who gave generously of her time and energy and made available the many papers and accounts of her forebears. Her keen interest

in the home and in our work has made our association with her most rewarding. Mrs. Martha Willingham, also a great granddaughter of Andrew Johnson, helped us clarify many points by her memory of the home when she lived there in the 1890's.

The local contractors and suppliers of the various materials used in the home cooperated to give us outstanding workmenship and to procure the materials required. Even though many materials are no longer on the normal market, most of what we requested was found, so very little substitution was required.

Thanks is due Buildings Restoration Specialists Whittington and Martin and the craftsmen and laborers worked with them to do the physical work of the restoration. Their enthusiasm for this type of work increased as the job went on. It was hard to lose some of these men when their enthusiasm was at a peak because of a limitation of 180 working day appointment within a twelve month period.

Thanks is also due to Mrs. Avis B. Smith of Appomattox Court House National Historical Park, who typed the rough draft of this report and to Elaine T. Adamczyk and James C. Massey of EODC, who type and assembled this report in its final form.

DISCOVERIES SINCE

SUPPLEMENT OF SEPTEMBER 7, 1956

In the early studies of the Home it was believed that the facade received very little change during Johnson's lifetime. As work progressed we found two important changes, one in the grade at the front walk and the other in the front entrance or portal.

FRONT WALK - While excavating along the front of the house to stabilize the foundation we found evidence of a very early sidewalk (Photo. No. 37, Appendix III). At the north corner this walk was very near the existing level but at the south corner it was about three feet below the existing level. This would indicate that the street and sidewalk were raised and the stone retaining wall south of the house was built during Johnson's occupancy of the house. That it was raised to its present level before Johnson's death is clear from the photograph of the home on the day of his funeral (Photo. No. 2, Appendix III).

FRONT ENTRANCE FRAME - We are now reasonably sure that the existing classical front portal was not erected until the work of circa 1869, just before Johnson returned to Greeneville from Washington. When repairs were being made on the head of this frame we were surprised to find buried under it the lintel and head mouldings of an earlier frame, which are of the same

detail as those found on the window frames in the front wing of the house (Photo. No. 12, Appendix III). This frame was probably very similar to that in the old Davis Home on Maple Street, Greeneville (Photo. No. 80, Appendix III).

While it is not clear, the woodcut of "The Residence of President Johnson at Greeneville, East Tenn." published in Frank Leslie's Illustrated Newspaper, September 23, 1865, appears to show the earlier portal while the photograph of August 3, 1875, the day of Andrew Johnson's Funeral, shows the Existing Classical portal. Mouldings used in this existing frame are also found in the upper corners of a mantel in room 6 (dining room). (See Photo. No. 62, Appendix III). Other details of this mantel match those known to be of the 1869 alterations.

PORCH - The writer doubts if the original porch which ran along the north wall of real ell also extended across the rear of that ell as was stated in previous reports. Very clear evidence of the porch outline was found when the paint was removed from the porch area thus exposing the original whitewashed walls (Photo. No. 26, Appendix III). This whitewash was found only on the north wall and not on the rear. A large part of the framing for the original platform was still in place when we arrived, although it was in such a rotted condition we have completely replaced it. The rear wing to the porch and the ell behind the main house were obvious additions to this frame and not a part of the original. The porch has been reconstructed in this same manner.

The porch gave up its secrets piece by piece as the work progressed. There is still some conjecture in its design but basically we feel it is correct. The column spacing which baffled us so long was solved when the demolition of the old and rotted porch was made. Girders from the house to the posts of columns which carried the second deck could only have been installed before the second floor of the rear wing was completed, yet there was no need for this porch until the two second floor rooms were added in 1869; therefore, we feel sure they date from the same period. The nails that fastened these girders were so placed that only a hammer swung from above could have driven them and this would have had to be done before the floor was in place. Marks of a plaster ceiling with painted walls below gave us the original ceiling height for the second story deck, but what shape the roof took above this point remained a problem until we started to frame the new roof. At that time, we found the faint outline on the brick of a former cornice at the approximate same height as the ceiling line. This indicated that the porch roof was hipped rather than shed as we had previously assumed, and that the overhang of the cornice was very small compared to the detail in our working drawings.

KITCHEN - Apparently the need to communicate from the Johnson kitchen in the basement to the dining room (room 6) didn't exist in the house as James Brannon built it. The existing

dining room is the only room in the house with a fireplace prepared for cooking. This fireplace is the largest in the house; it is the only one which has ever had a crane. The hearth extended beyond the fireplace to the south wall of the room, making it about twelve feet long. The three cabinets in this room all date from the 1869 period. If room 6 was the kitchen the room 5 (The Andrew Johnson Jr. Bedroom) was the original dining room. This would explain the two rooms with a connecting door yet accessible from the rest of the house only from the porch. It would also explain a chair rail in Room 5 which is not found in any other bedroom in the house.

WINDOWS - The two south windows in Room 8 were detailed ten inches too high in our working drawings. These windows were 6/6 rather than 9/6 as we had previously thought. This was not discovered until we removed the windows of the 1885 alteration in preparation to install windows to match the original. Tenons of the frame heads which were let into the masonry were found still in place and the outline in the masonry for the corner blocks on the lintel were found. Apparently the lintels for these windows were cut short for about half of the corner blocks overlap the casing below rather than to the side of it, as is found on all other windows in the front section.

ROOM 1 - Room 1 in the basement was believed to have been a servants room. Mrs. Willingham, a great granddaugher of Andrew Johnson, remembers its use as such in the 1890's. It is

very doubtful if it was so used during Johnson's lifetime. We found that the window, the door from this room to the kitchen, and the door leading to the exterior matched in workmanship and tool marks with that of the extensive alterations made by Martha Johnson Patterson in 1885, ten years after her father's death. The floor at the original door sill level apparently was earth, the walls are whitewashed brick. The mortar joints had been left rough and untooled. No evidence of trim before that of the 1885 period could be found. We have restored the room as a storage room, which would have been quite important to Johnson. It was a room handy to the kitchen where he could store foodstuff such as potatoes and smoked meats. It was a place where packing crates could be stored which we know he saved because they are still there. It was also a convenient storage area for heating stoves during the summer months. As rooms 9 and 10 never have had fireplaces, the Johnson family must have had heating stoves.

STRUCTURE - The work of 1885 drastically changed the appearance of the house, and the work of more recent years did serious structural damage. The installation of a hot air heating system was done by workmen with no regard for the structural safety of the building. Large holes were cut in load bearing masonry walls and structural timbers were cut indiscriminately. Two bay windows had been cut at the first floor level on the south elevation without providing adequate support for the masonry

wall above. As a result, this wall had badly cracked and required complete reconstruction. By a door cut in the basement, a bay window on the first floor and a broken masonry wall above, the rear wall of the back ell was completely separated structurally from the south wall. This rear wall four stories high of masonry, with only one opening (the kitchen door), settled two inches more than did the south wall. To rebond these walls in the restoration it was necessary to develop a two-inch curve in the brick courses on the south elevation. As we found the house, the rear wall leaned against the porch; the porch leaned against the wall. In recent years the house had stood by habit more than design.

DETAILS OF RESTORATION

FOOTINGS AND FOUNDATIONS

As brickwork and mortar under grade have a tendency to deteriorate rather rapidly we were somewhat apprehensive as to what we would find. All foundations were carefully exposed on both the exterior and interior to their point of bearing on the earth. In no place was a footing or even a spreading out of the area of the brick in contact with the earth found. The foundations were stepped up as the grade above went up, presumably to save brick. In many places this resulted in a fracture thru the wall which in one case split the masonry wall from the step below grade on up and thru the masonry cornice at the roof line (see photo. No. 14, Appendix III). The earth was checked at all points where the foundations were bearing and in many places was found to be soft. In these places we carefully excavated to firm earth and poured concrete under the walls. Such a footing poured under the rear wall of the ell is thirty inches deep. This wall had already settled two inches.

In general, we found the brick below grade to be in good shape but the mortar had badly deteriorated. The brick was repointed, all the walls were given a 1/2 coating of cement stucco and a coating of coal tar pitch to the grade line. A four-inch field tile footing drain with gravel fill and a

tight asphalt fibre drain for the rain leaders was installed and tied to an existing 18-inch drain running from Main Street to Richland Creek.

The foundation for the north porch, which was at best a very patched up and distorted wall, collapsed when the weight of the porch was removed. Concrete footings and a new wall were built to carry the reconstructed porch. The numerous holes cut for recent hot air heating, electrical runs, and plumbing were patched. Typical conditions are shown in Photo. No. 40, which shows the walls as we found them and with the utilities removed. (Photo. No. 41) shows these walls after their restoration.

BRICKWORK

Because of the many alterations to the home since Johnson's death in 1875, much of the original brickwork was damaged or removed. Martha Johnson Patterson, in her extensive alterations of 1885, in which she modernized the house to the victorian style of the day, had the moulded brick cornice removed. In its place she installed a victorian cornice of wood and tin, the tin being used to mould the curved surfaces of the brackets. She installed a porch on the south elevation with the framing members resting in pockets cut into the brick walls. Many windows were enlarged thus altering many of they masonry openings. The chimneys were recapped and gables were added on the front and on the south elevations. She had the house painted, the brick brown and the woodwork an oxide red.

A few years later a bay window was cut into the south wall of Room 5 to the 1885 south porch. By 1901 this porch had been rebuilt to span the entire south elevation. Another bay window had been cut adjacent to the first and opening into Room 6. New doors and windows had been cut into the kitchen and storage room, now a servants room. The combination of all these weakened the walls so that the masonry on the south second floor wall started to settle and crack. The rear wall, now independent of the south wall because of the many new openings and cracks and because of the more concentrated weight, settled two inches more than the south wall. In rebuilding this area it was necessary to develop a two-inch curve in the brick courses

to re-tie the masonry.

After the death of Martha Johnson Patterson, her son Andrew Johnson Patterson continued to alter the house. Windows were moved and new doors and windows were cut into the brick walls. Sections of the north porch were being enclosed to make more rooms. To finish these rooms the original brick walls were scored with a sharp chisel to provide a bond for plaster. He continued to paint the house now with the brick an oxide red and the woodwork white.

In restoring the brickwork our first job was to remove these new additions and the 1885 wood cornice and window heads. To remove the south porch it was first necessary to remove all the masonry above the two large voids made by the bay windows (see Photo. No. 31). While removing the rooms on the north porch we found the structure to be so badly damaged that the entire porch was removed. This done we were able to get a fairly accurate estimate of the amount of brick that would be required to complete the restoration. We had three types of brick to procure, all of them special. The brick in the original house were a dark brownish red, such as obtained by a hard burn in a green hardwood fired kiln. The original brick were not standard but what might be termed as oversize (3 x 3-3/4 x 9). The brick in the 1869 second floor addition on the rear ell were very much the same except not as hard a burn thus leaving a much lighter color. This is very evident when viewing the south elevation and may have been one of the reasons for the

painting of the brick by Martha Johnson Patterson. The brick used in her work of 1885 were again a different color and a rather soft burn. Those that we were able to salvage were used as a center brick in three brick thick walls. The third type of brick required were the special moulded brick in the ogee cornice. The color and texture being the same as the original hard-burned brick. (See drawing NM-AJ-3059, Appendix I).

As the Locher Brick Company of Glasgow, Virginia, was known to be equipped to reproduce these brick, the writer visited their plant in October 1956. The necessary information to prepare a set of specifications was obtained. Invitations to bid were prepared and forwarded to six brick manufacturers. Only one bid was received, that by the Locher Brick Company. Their bid, F.O.B. plant was $112.50 per thousand for the 5,000 hard burned and 5,000 normal burned rectangular 3 x 3-3/4 x 9 brick, and $0.55 each for the special moulded cornice brick. The contract for these brick was forwarded them with a request for delivery within 90 days. Mr. Locher had previously stated that 60 days would be ample time. Apparently they had delayed getting started on the order feeling that they had ample time only to be further delayed by cold and unusually wet weather. After a great deal of prodding, the brick were delivered in 120 days, delaying the job for a good month. The color and texture of the brick was almost a perfect match to the original, however, they were not so accurate as to size. The width of the original brick were 3-3/4 up to a maximum of 4 inches. The new brick

averaged 4-1/4 inches. This error caused the mason many hours extra work in cutting to maintain the original wall thickness. Only on the north porch foundation, which was 100 percent new, could this problem be avoided. If we were not already so delayed the brick would have been refused.

While waiting for the brick, the mason repaired the foundation and the basement walls with the brick we were able to salvage from the original. The laborers were set at removing the many coats of paint from the brick. The easy way out would have been sandblasting; however, this was avoided as, like cutting the crust from a loaf of bread, it leaves a different color and softer texture exposed.

For reasons of safety the new water wash paint removers were tried. They proved to be slow and very expensive for use on the brick. They were, however, ideal on the woodwork. The old standby lye was finally used. This material is inexpensive and very effective. It is also very effective in removing the users skin. The men doing this work were equipped with a plastic face mask, full length rubber aprons and rubber gloves. They were advised to keep a bucket of clear water handy to wash off any lye that might have splashed on them. Very little trouble was encountered. If a man was careless or showed signs of skin irritations, he was removed from this type of work. Our biggest problem was in keeping the local pedestrians clear. Signs were put up asking them

to use the other side of the street. When work near the front of the house was under way, barriers were put up in addition to the signs. The public ignored the signs and climbed over or walked around the barriers. One lady in her Sunday best pulled her skirts above her knees to crawl over a barrier and proceeded up the walk highly disturbed that her progress had been interrupted. The laborers working on the opposite end didn't notice her and turned on the hose to flush off the walls just as she approached. The lady soaked and dripping climbed over the barrier at the other end and continued on her way. Not one word was spoken. From that point on extra care was taken to see that the public was clear of the work.

All the brick walls were washed with the lye solution at least three times, the stubborn spots more.

Numerous experiments were made to match the new mortar to the original. These experiments being made where they would later be hidden by plaster or paint. The final mortar was mixed by using Trinity White cement, hydrated lime with lumps left in, local sand, and twelve cups per bag of cement (standard measuring cup) of a buff mortar color furnished by the H. G. Hines Company of Knoxville. Other buff mortar colors were too yellow and required the addition of a chocolate color. To give the effect of aging the mortar joints were simply cut with a trowel and when they had just started to set, rubbed with a wad of crumpled up paper. All the new brick were treated with an acid solution made with

with cow manure and water. After aging about two weeks with this solution, it is almost impossible to pick out the new brick from that which had aged naturally for over a hundred years.

The mason work was started by Mr. George Snipes, a local mason, noted for his careful work. Mr. Snipes was a man well along in years and not in the best of health. Reluctantly he had to give up and let a younger man continue on with the work. He was replaced by his son, Mr. Hilton Snipes, who proved to be equally as good a craftsman as his father.

Before the completion of the restoration we were sorry to learn that the elder Mr. Snipes had passed on and was followed within a week by his helper Mr. Gurney Arnold.

NORTH PORCH - EVOLUTION

The original north porch was of a single story and ran only along the north wall of the rear ell and not across the rear of the ell as stated in earlier reports. When the recently enclosed rooms in the porch area and their plaster and paints were removed a clear outline of the original porch was found by original whitewash still on the walls. This whitewash was found across the north wall of the rear ell and on the rear wall of the front wing where the porch had butted to it. No evidence of this whitewash was found at the rear of the ell.

From the outline at the rear of the front wing (see Photo. No. 26) we have a clear picture of the roof and ceiling line of this porch. It was interesting to note that the porch roof crossed the transom area of the rear door. In checking the paint in this area, it was found that the original paint on this frame also stopped at the sloped ceiling line.

Although badly rotted and patched, a large portion of the original deck framing was still in place when worked started on the restoration. (See Photo. No. 25). We were unable to save any of it for re-use, but we did duplicate this framing with the exception that one extra joist was installed in each bay to bring the framing to safe standards for the intended public use of the home.

When, in 1869, two rooms were added to the house

by a second story to the rear ell, a second story was also added to the porch. Apparently it was at this same time that the ells to the porch along the back of the main house and the end of the ell were built. On the first floor the framing to the two ells were butted to the original frame while at the second story the framing was continuous and mitred around the corners. New columns were added at this time which were continuous from the first floor to the roof. Because of their odd section 4-1/2 x 8 inches we had doubted that these columns were used until the alteration by Martha Johnson Patterson in 1885. That these columns were used in the work of 1869 is shown by the fact that the girders carrying the second floor deck were morticed and tenoned and pegged into them and ran back from these columns into the floor joists of the house. The spikes used to fasten the girders to the joists were driven from an angle that could only be done before the flooring of the two second floor rooms was installed. As stated before, these rooms were built in 1869.

Removal of paint on the second floor walls revealed a clear outline of the second story porch ceiling. The original paint on these walls stopped at a very definite line where evidence of original plaster from the ceiling could still be found.

The roof presented the greatest problem in the reconstruction of the porch. We felt that a straight shed roof was the most logical and designed such a roof in our working

drawings. After the restoration was well under way, paint removal on the brick revealed a faint outline of a cornice where it had butted against the rear of the main house. This mark, almost level with the ceiling, indicated that the porch roof was hipped. A cornice of a shed roof as we originally designed would not have butted the wall but would have tied into the main roof.

This mark also indicated that the roof overhang was very small and the curved outer edge of the outline matched that of a typical gutter of the period.

We were never sure of the pitch to the 1869 porch roof. So many alterations were made in later years that no clear evidence of where this roof intersected with the house roof could be found. We do know, however, that no cornice ever existed on the north of the rear ell; therefore, the porch roof tied into the main roof and not against the wall below a cornice. We felt it most logical that the porch rafters tied into the foot of the main rafters and reconstructed the roof in this manner.

The original roof was presumably of tin. We have bills showing that Johnson purchased tin at various times. The slope of the roof is too flat to use wood shingles as were used on the rest of the house.

In 1885, ten years after Johnson's death, his daughter, Martha Johnson Patterson, made extensive alterations to the house. At this time the roof to the porch was changed.

Victorian style caps of wood and tin were added to the columns increasing the cornice height over two feet. A new roof was installed with a reverse slope, that is, it was higher at the cornice than at its point of intersection with the house. A new tin roof was installed on both the house and the porch. This reversed roof apparently gave considerable trouble for a short time later another roof was added to correct this condition (see Drawing No. NM-AJ 3050, sheet 8, Appendix II, Survey Report dated August 20, 1956).

On the second floor a section of the original porch rail was found enclosed within a wall built when sections of the porch were enclosed to make additional rooms. No original rail was found on the first floor but outlines in the paint were found where the rail had butted into the columns. The absence of this outline in two places indicated that the area was open for access to the porch. Steps to the reconstructed porch are located in these two areas.

The porch stairways had been removed when sections of the porch had been enclosed into rooms. The stairwells had been floored in but their outline and the spacing of the balusters were still clearly visible. (See Photo. No. 27). The slope of the stairways were clearly visible by their outline in the paint on the walls.

The stair from the basement level to the first floor is largely conjectural. The rail and newel post is patterned

from a small section of rail and newel found enclosed within a wall built at the head of this stair.

NORTH PORCH - RECONSTRUCTION

As stated earlier, the entire porch, foundations through roof, was so altered and rooted that it was necessary to completely replace it. A decision was made to use the basement area under the porch to house all necessary modern utilities. This area which now houses a lavatory for the attendant's use, a slop sink, the electric distribution panel, a water heater and a storage area will not be seen by the public. The only departure from restoration visible to the public eye is the relocation of the door into this utility area.

The first step in the reconstruction of the porch was the installation of a concrete footing and a footing drain to keep the area dry. Provisions were made in the footing for the various utility lines entering and leaving the building. The original porch had no footing, which was partly responsible for the failure of the original foundation.

A new brick foundation was built and in the utility area its thickness was increased from eight inches to twelve inches. In all exposed areas the eight-inch thickness was retained and reinforced with Durawall. The exterior of the wall was waterproofed to the grade line.

Because a large portion of the underside of the first floor deck framing would be exposed, care was taken to frame this deck in the same manner as the original. The material used,

as in the original, was dense (8 or more rings per inch) yellow pine of the same sizes as the original. The joist spacing was revised to allow for one extra joist in each bay to increase the structural strength. All exposed members of this frame and the under side of the flooring above were sized on a band resaw to duplicate original saw marks. A band resaw with a wide set in its teeth will duplicate the saw markings of an old type vertical mill saw which in some areas is also called a sash saw because of its up and down motion like that of double hung sash. Marks from a circular saw were not found in any work in the house prior to that of c. 1885.

As all the framing above this deck would be completely concealed, modern dimension lumber and framing methods were used.

A search was made for new columns 4 1/2" x 8" by 18' - 0" to replace the original which had rotted at the base and at the mortice where the second deck framing entered. As we were unable to locate any suitable material for this use we had to resort to built-up columns. Four 2 x 4's were coupled to carry the structural load and these were encased by boards with a glued interlocking mitred joint. Only one board of this boxing was fastened to the enclosed 2 x 4's to help eliminate the possible opening of the joints due to shrinkage or movement. Pegs were put where pegs were in the original. The finished result cannot be told from a solid post.

The mouldings used at the second floor line are duplicates of the original, part of which were found in place when the work started. Other mouldings are conjectural and are copied from mouldings of the 1869 period found elsewhere in the house. The cap moulding on the columns is the same as the cornice or cap moulding found along the top of cabinets built in 1869. The porch rails are copied from the original.

The ceiling in the basement area of the porch, as stated before, was the underside of the flooring above. The ceiling in the first floor is conjectural. It is of 1 x 8 matched sheathing with a 3/16 inch bead at the joint. This detail was copied from the original ceiling of the old Reaves-Crislip home on the outskirts of Greeneville. The ceiling of the second floor is plaster as was the original.

The roof of the reconstructed porch was covered with a standing seam tin roof. The distance between seams was determined by the dimensions of tin listed in a bill found among Johnson's papers. As the horizontal joints necessary in 1869 would not be visible to the public, we decided to use 40-lb. tin in a modern roll form to eliminate all possible joints.

EXTERIOR WOODWORK

The house being built of brick very little exterior woodwork was necessary other than the porch and the door and window frame which are covered separately.

The original wood cornice at the gables and along the south of the rear ell had been removed and rebuilt in the victorian style in 1885. Our reconstruction is conjectural but patterned after that shown in the photograph of Johnson's office. (See Illustration 2, Appendix II of Supplement to the Survey Report, September 7, 1956).

INTERIOR RESTORATION

ROOM 1

The writer feels reasonably sure that Room No. 1 was originally intended as a storage room. It has been restored for this use. This would have been the only room within the house available for storage. There was no access of any kind to the Johnson attic so the necessary storage area had to be located in some other place. Room one was handy for food-stuffs such as potatoes. It was a handy spot to store heating stoves during the summer months. Two rooms had no fireplaces so heating stoves were a necessity. Room one could also have been the storage for many packing crates and trunks used by Johnson. We know these were stored and saved as many of them still exist.

Presumably in 1885 the room was converted for use as a servants room. Mrs. Martha Landstreet Willingham, a great granddaughter of Andrew Johnson remembers it being so used when she lived in the house in the 1890's.

A door was cut in the wall between this room and room No. 2, the kitchen. The height of the exterior door protected by a new porch in 1885 was increased in height and a window was cut in just west of this door. All woodwork in these new doors and windows was cut with a circular saw and otherwise matched the craftsmanship of the 1885 alterations. When the house was furnished with a central heating system Room 1 became the furnace room. The floor was excavated to

gain the necessary height for the old type hot air furnace with its ducts radiating in all directions resembling a giant octopus. The ducts headed straight in the shortest route from the furnace to their final destinations. Holes were cut in the masonry walls for their passage with no regard for the structural safety of the building. (See Photo Nos. 40 & 42).

In excavating the floor area for additional height the level was cut lower than the bottom of some of the walls thus weakening their point of bearing. Where necessary, we poured concrete footings under these walls. Earth fill was brought in and tamped with a pneumatic tamper to restore the floor level to its original height. The walls were patched where they were cut for the ducts. The door to the kitchen was removed and the hole re-bricked. The 1885 window was removed and the door to the exterior was restored to the original height, as determined by the pockets in the brick built to receive the head and sill of the frame. The mortar joints were left rough to match the original and the entire area was whitewashed.

An access door to the unexcavated area was retained for maintenance reasons; however, it is doubtful if one existed originally. A batten door was made for this opening and for the exterior door frame. The batten doors were patterned after an old door found in the basement.

ROOM 2

Room No. 2 was used as a kitchen during the later years of Johnson's life; however, the writer feels that the original kitchen as built by James Brannon was Room No. 6, the room directly above Room No. 2. Room No. 2 may well have been originally intended as a servants room. This room has been restored as a kitchen. Mrs. Willingham remembers it so used in the 1890's and recalls the major pieces of furniture and their location at that time.

Originally the room had one door entering from the rear and one window on the south wall. A door connecting this room with Room No. 1 was cut, presumably in 1885. In later years a door was cut beside the south window to a new room formed by the porch of 1901. Although the window remained, it was no longer a source of light so new windows were cut, one on the rear wall to the right of the door and one on the north wall. At this same time the height of the door was increased from 5'-3" to nearly 7'-0". These door and window frames were assembled with wire nails which were not available until the 1890's and found first in the Johnson house in work known to have been done in 1901. The fireplace had been reduced in size once and finally closed in completely. The mantle had been badly damaged by knotching in the shelf and mouldings for a stove pipe. (See Photo. No. 42). After the kitchen was moved upstairs to a new room enclosed in the porch (a board found enclosed in the wall of this new kitchen bears a 1906 date), Room No. 2 became a storeroom. Dampness took

over causing the floor and sleepers to rot out. The plaster on the lower half of the walls rotted and on the upper half the walls were full of holes where heat ducts and other utilities had been installed.

The first step in the restoration of this room was to rebrick the many openings for doors, windows, ducts, etc., which had been cut into the walls. The old rotted floor and sleepers were removed and replaced with new. A thin concrete slab and vapor barrier was put on the ground under the sleepers.

The mantle was repaired. New door and window frames to fit the original openings were installed. The walls were lathed with a 3/8 rib self-furring wire lath and plastered. The ceiling joists were left exposed as they were originally.

The walls and ceiling were painted with a flat paint, in which a stipple compound had been added to leave brush marks like those found in the original whitewash. Whitewash was avoided where the public might come in contact with it, as it would have a tendency to rub off on their clothing. The exterior flat paint with stippling compound added makes a very good imitation. A small amount of raw umber and raw sienna was used to tone the paint to the original whitewash color. The woodwork was again painted a green found on the mantle and other fragments of original woodwork. It was also found on a kitchen table and the remains of the original flour bin. (See Paint Sample e., Appendix IV).

ROOM 3 - Parlor

The Parlor had not been as badly altered and damaged as most rooms in the house. Apparently it had been completely redone in 1869. The door, the mantle and the plaster all date from that period. The door jamb and trim and the window frame and trim are the original.

The plaster was a different color and texture from the original and no writing by the soldier occupants of the house in the Civil War years was found as on original plaster in adjacent areas. Presumably the room was quite damaged during the 1862-1868 period and was refinished just before Johnson's return from Washington.

Since Johnson's time new window sash 2/2 replaced the original 12/12 sash in the front. The window oposite had been removed and replaced by a door to a room(c.1920) enclosed in the porch. A new base had been installed over the original base which was flush with the plaster. The chair rail, the marks of which were very clear in the plaster, had been removed (see Photo. No. 45). A concrete hearth replaced the original brick and the fireplace had been resurfaced with Portland Cement plaster in place of the original cast iron back and jambs.

Our first step again was to remove all additions and changes made after Johnson's death. The floor was patched where a modern hot air register had been. The floor joist showed signs of deterioration and were reinforced and supported by a new center girder at right angles to the joist. A new window frame to match the original still in place in the front

wall was installed in the original opening in the back wall where the recent doorway had been removed. New 12/12 sash were installed in both window frames. The chair rail was replaced and tied in with the window stool and apron. The flush base was repaired or replaced where necessary.

The mantle, while not the original in the room, is of the same design as other work known to be of the 1869 period. There were no marks in the plaster of another mantle so presumably the plaster and mantle are the same period. The writer believes that the altered mantle now in Room No. 5 was the original in the Parlor.

A long search was made locally for cast iron fireplace jambs and back from which to pattern the replacements in Rooms 3 and 4. A part set of a different type in the Reaves-Crislip home were all that were found.

The dimensions and contours of the fireplace openings were sent to the Philadelphia Office where Supervising Architect Peterson made a surprising find of two original sets in excellent condition and with the same dimensions. The purchase of these two sets (six pieces) was arranged for and they were brought to Greeneville. They fitted into position in the Johnson House with very little alteration to the openings. When originally installed, the three cast iron pieces were put in place and the brick work built to them, thus slight variation in a casting would not exactly fit the original opening.

The paint color in the room was matched to the original found on the door first used in 1869. The mantle was grained

to match the original finish which is presumably also of the 1869 period.

The second layer of paint on both door and mantle is also graining which is also found on other woodwork in the room. This graining presumably dates from the 1885 alterations.

Electric heat was installed in the new plaster ceiling with the thermostat concealed in the fireplace throat. The fireplace is capped so it can no longer be used for a fire.

ROOM 4 - Andrew Johnson Bedroom

Room No. 4 was very much altered in the years after Johnson's death. The original mantle was removed and installed in the Tailor Shop, where it still remains. This was probably done in 1885. In its place an elaborate cast iron mantle with a mirror section over was installed. The original 6/6 windows on each side of the mantle were replaced by windows reaching from floor to ceiling. The new window to the left was later changed to a door, presumably in 1901, when the long south porch was built. A doorway was cut in the back wall to Room 5 and the doorway from the central hall was enlarged to contain four french doors; this probably in 1920. At this same time a modern hardwood floor was installed over the original floor and a new base was installed.

The recent wiring and hot air heat ducts were removed. Care was taken in removing the modern hardwood floor to pull each nail with a nail puller before removing the board. Prying

up this floor without first removing all nails would have torn and scarred the original floor under it. The floor was patched in the two places where hot air registers had been cut through. The opening for the door to Room 5 was bricked in and the opening to the hall was reduced to its original size, as indicated by marks found on the original floor.

New window frames and trim were installed in the south wall and the brickwork patched in. New sash were installed in all windows.

A careful check was made to see if the original mantle could be removed from the Tailor Shop and reinstalled in its original location. The masonry and wall behind the mantle were so damaged and the mantle so scarred that it was decided best to reproduce the mantle and to leave the original where it is. Careful measurements were taken and a drawing made from which a new mantle was made by the Chavannes Lumber Company of Knoxville. A set of cast iron fireplace jambs and back which we purchased in Philadelphia were installed to replace the original now missing.

We were able to save a small amount of the original plaster but most of the plaster is new.

Electric heat was installed in the new plaster ceiling. The thermostat is concealed in the fireplace throat. This fireplace, like all others in the house, has been capped and is no longer useable.

ROOM 5 - Andrew Johnson, Jr., Bedroom

The most serious alteration to this room was the removal of the two windows on the south and their replacement by a bay window (c. 1885).

The chair rail had been removed and the doorways to the porch area and to Room 6 were altered. A new doorway to Room 4, mentioned previously, had been installed. A modern floor over the original, a new base and ceiling moulding had been installed in recent years. The fireplace face and hearth had been altered. The mantle, while not the original in the room, is probably the one that was there in 1869. This mantle is of a similar design to the other original mantles. At some time it was cut in two and shortened in length. A block was placed over the resulting joint and a new shelf was installed. The writer believes that this mantle before its alteration was in the Parlor (Room 3). Marks in the plaster indicate that the original mantle in Room 5 was about three inches higher. (See Photo. No. 57).

All recent additions were removed. The floor was patched where hot air ducts had been cut in. The doorway to Room 4 was removed and the other doorways restored to their original size.

Two new 9/6 window frames and sash were installed in the reconstructed south wall. The chair rail was replaced and tied in with the window stool and apron. The pattern for

this was found in paint marks where the rail had butted original door casings.

The new doors were patterned after an original now greatly altered that was found still in place in the adjoining room and a reused door on the second floor of the same design that, before cutting for its present location, would have fitted the opening between Rooms 5 and 6. We found, as the job neared completion, that the new frame we installed in this opening is a little too high. As far as we know, this is the only error in restored door sizes. As the job was so near completion when the error was discovered and the resulting appearance so little different from what it should have been, it was decided to leave it as is.

After removal of the tile fireplace face and hearth, new brick were installed to duplicate a typical fireplace of the 1870 period. The hearth pattern was taken from the original hearths in the Judge Milligan home (c. 1855) in Greeneville.

The plaster in this room was in poor shape, and with the exception of a small section over the mantle, it was replaced.

Electric heat cable was installed in the plaster ceiling and the thermostat concealed in the fireplace throat. The chimney has been capped so this fireplace is no longer functional.

ROOM 6 - Dining Room

This room had received many alterations. Some during Johnson's life and many others since. While most of these changes could be dated, others still remain a mystery. For example, we know that the original hearth continued on from the fireplace to the south wall, a length of about 12 feet. Later it was reduced in length to the width of the mantle. As we do not know if this change was made before or after Johnson's death, we have restored it to its original length. The fireplace in its original form was the largest in the house and was furnished with a crane. In later years, the crane was removed and the opening bricked in; we are not sure when this change was made. We have restored the original opening. We have not replaced the crane; however, this can be installed at any time.

As in Room 5, the most serious alteration was the removal of the two south windows and their replacement by a bay. New frames and sash of the original size have been installed again in this location.

Three cabinets, two corner cabinets on the east wall and one cabinet with double doors in the recess to the left of the fireplace were built in this room presumably in 1869. All had been removed in recent years; however, the outlines of these cabinets on floor, walls and ceiling remained clear. The double cabinet was reused with minor alterations in the Pantry built in 1901. When the pantry was removed care was

to save this cabinet. It is now restored and again in its original location in the Dining Room. The corner cabinets didn't fair as well. While most parts had been saved and reused in the house they had been so altered that we were able to use only one door of the original.

The original base and door trim remained in this room. By careful paint removal on the door trim, we were able to obtain the profile of the chair rail which is now rebuilt.

Electric heat cable was installed in the plaster ceiling. The thermostat is concealed in the throat of the fireplace, which is no longer functional.

ROOM 7 - Mrs. Andrew Johnson's Bedroom

Even though this room was altered by the addition of a bathroom and a closet in 1920 a major portion of the original woodwork remained. The corner closet, built in 1869, had been removed but was found, dismantled but complete, in the basement. It is now back in its original location.

Two windows were cut into the north wall of the room in 1920. These were removed and one new when installed was discarded and the other was returned to its original opening in Room 10. The original mantle, door and casings were still in place.

It was necessary to patch a large area of floor where the bathroom had been located and small patches were put in the board ceiling where lighting fixtures and plumbing had been installed. New sash were required in the two windows.

The fireplace required a new hearth and extensive repairs to the opening. The mantle is original.

As the ceiling in this room was wood rather than plaster, we were unable to install electric heat as was done in all rooms except those in the second floor front. We felt that heat in the ceiling of Room 3 under this room would rise and protect Room 7 except on the coldest of days. Then a portable electric heater could be operated from a 220 V floor outlet located in the corner closet.

Paint colors were matched to those found and believed to have been of the 1869 period.

Original plaster was saved where possible.

ROOM 8 - Bedroom

This room remained very much as it was in the 1870's. The greatest change made since Johnson's death was in the two windows on the south wall flanking the fireplace, which had been enlarged (c. 1885) by increasing their height. These newer windows were removed and replaced with new frames and sash the size of the original. Early in our work we thought that these two windows were ten inches higher than they are now restored. It was not until we were ready to install the new frames that this error was noticed. Much credit is due the mason in noticing the faint evidence in the brick pattern of a patch were the original lintel had set.

In 1913, a 2 1/4" pine floor was put over the original and a modern base was installed. When these were removed we found numerous layers of wallpaper which had been protected by the base. The bottom layer, a vertical stripe of ivory and buff was apparently the original paper used in that room. The room was first papered in 1869. A very similar paper in the original colors is being furnished by Katzenbach & Warren for repapering this room.

The closet of 1869 was still in place and unaltered. The original door from the hall was still on its original hinges, however, the lock had been changed. The door into Room 9 was the original door to this 1869 opening, but it had been re-hung to swing into Room 9 rather than into Room 8, as

first installed. To make this change, the door had been cut an inch in width and an inch was cut off the bottom when the modern floor was placed. Before the door could be re-hung to swing as it originally did, it was necessary to replace the two side stiles and the bottom rail to restore it to its original size.

A modern cement plaster covering was removed from the fireplace and the face and lining was repaired. A modern concrete hearth was removed and replaced with a brick hearth in the old manner.

As in Room 7, we were unable to install electric ceiling heat because of the board ceiling. A 220V floor outlet was put in the corner closet so a portable electric heater could be used.

Room 8 furnished one of our most interesting paint clues. We knew the original colors in this room to be dark blue door and window casings with jambs painted white and the window stool red. The board ceiling was blue of a much lighter shade than that used on the casings. The walls were white. We knew also that the walls remained white until at least January 26, 1868, which is the last date found written by the soldier occupants of the house. The corner closet was built over this writing, therefore, we dated it c. 1869. In looking inside this closet we were surprised to find the ceiling still its original color, a light blue. Apparently the room remained red, white and blue for about eighteen years and the second

coat of paint was not applied until 1869. The ceiling has been restored to the putty color of the second layer found. This color, with minor variations, was found throughout the house. (See Paint Sample c. & d., Appendix IV).

ROOM 9 - Bedroom

Rooms 9 and 10 are the rooms added c. 1869. Room 9 received minor alteration since that time but because of alterations to Room 5 below a great deal of structural damage was encountered. The original south wall had failed because of lack of support after the bay window below was installed. The windows and casings were carefully removed and reinstalled in the reconstructred wall.

A coal grate and hearth had been installed presumably in 1885. These were removed, the opening re-bricked and plastered and the floor was patched where the hearth had been.

A modern pine floor was removed from over the original and the solid wall was rebuilt where a recent door had been cut to Room 10.

The window on the north wall of this room is the only window in the house that remained undisturbed.

The walls and ceiling were re-plastered.

Electric heat cable was installed in the plaster ceiling. The thermostat was placed to be concealed behind a door out of public view.

ROOM 10

This room presumably was built for Andrew Johnson's son, Robert in the 1869 alterations. Unfortunately, Robert lived only a few weeks after the family returned from Washington.

In its original form this room was accessible only from the porch and it had two large closets. The occupant of this room could be quite independent of the rest of the house.

In recent years it had been converted to a Living Room of an apartment. A door was cut through a formerly solid rear wall to a Dining Room and Kitchen formed by enclosing the rear ell of the porch. The original door from the porch was included in a bathroom c. 1920, and a new entrance door was cut in a former window opening. The original window frame from this opening is the one found in Room 7.

One closet had been removed to connect Room 10 to Room 9. In the reconstruction of this closet only the face which would be seen by the public was restored. The space inside now houses an access stairway to the attic which until now was inaccessible. The plumbing stack and electrical conduits rise in the closet area. The other closet is original and was left as found.

As in Room 9, the south wall was rebuilt with the original window frames were retained in their original location. The walls were patched and the walls and ceiling re-plastered.

Electric heat cable was installed in the plaster

ceiling. The thermostat was placed on a wall where it would be behind a door and out of public view.

ELECTRICAL

As the Johnson home was built before the advent of electricity, wiring was installed piecemeal over the years. When the writer first looked over the house the first recommendation was to cut off all existing wiring and install a temporary panel and branches where needed during the restoration. All electrical installations found were removed including the overhead service and the poles which carried the wire.

A complete new electrical system was installed. See drawing NM-AJ 3061, Appendix I; and specifications, Appendix II for the new system.

An underground service was brought in from an existing pole on the northern property boundary to the new utility area under the porch. In this same trench a second conduit was placed which carries the telephone line. Two extra telephone lines were pulled and left dead end at the panel for possible future use for connecting a fire or burglar alarm to the local Fire or Police stations. A third conduit, 1 1/2 ID, was installed from below the panel to the outside of the footing and capped off on either end. This is for any future change of a utility and will eliminate any future need to break up the utility room floor.

LIGHTING

All ten rooms which will be open to the public are lighted by a fluorescent strip light in a trough over the entrance door. The troughs are painted to match the door casing. As the public will view the rooms from the doorways, they will see these lights only if they look straight up.

The porch area at the basement and first floor levels are lighted by electrified lanterns made to duplicate a typical lantern of Johnson's period. Dimensions for these lanterns were obtained from an original owned by Supervising Architect, Historic Structures, Charles E. Peterson. Mr. Clifford Rhea, a Greeneville tinsmith, did an excellent job of fabricating these three lanterns. (See Photo. No. 39). The second floor of the porch is lighted by three modern pin hole arperture lights, flush with the plastered ceiling and located to illuminate the stairwell and the three exterior doors. The first floor hall has an antique hanging fixture which has been electrified. This is the only antique fixture so altered. Other coal oil fixtures remain in their original condition.

The attic, basement and utility areas are lighted by modern vapor proof guarded fixtures.

All light fixtures are controlled from the circuit breaker switches on the main panel, so only an employee with a key to this area may operate them.

Convenience outlets, also controlled from the main panel, are located in inconspicuous places throughout the house

for use with vacuum cleaners, extra lighting, etc.

HEATING

Rooms 3, 4, 5, 6, 9, and 10 and the first floor hall, all of which have plastered ceilings, have electric heat cable embedded in the plaster to furnish radiant heat in these rooms. Each room is individually controlled by a thermostat in the room which controls the contactor switches on the main electric panel.

In rooms 1, 2, 7 and 8, 220V outlets are installed in inconspicuous places for use with portable electric heaters, when necessary. All radiant panels and 200 V outlets are on individual circuits and can be individually controlled from the main panel.

The complete electrical installation was by the Greeneville Electric Company, whose owner, Mr. Ralph Phinney, once lived in the Johnson Home with his uncle, Andrew Johnson Patterson, a grandson of Andrew Johnson.

WATER

The old 1-inch water supply line was cut off at the main on Main Street and a new 2" water line was installed. After passing through a meter, located in a special manhole at the intersection of the sidewalk and the walk into the Johnson yard, the 2-inch is capped at a T- where a 1 1/2 inch branch leads to the Utility Area. In the future, the 2-inch line may be continued for the installation of garden hydrants, street washers, etc., Water is now supplied to the slop sink and the lavatory in the utility area. Hot water is supplied by a 30-gallon electric water heater, located in the utility area.

The water system was installed from the main to meter by the Water Commission of the City of Greeneville. Beyond the meter materials and labor were furnished by the Ricker Plumbing Company of Greeneville.

SEWERAGE

A new sewer line was installed from the Lavatory and Utility Area to the city sewer hose on College Street. (See Drawing No. NM-AJ 3063, Appendix I and Specifications, Appendix II.)

The installation was by Smithson & Paris, a local plumbing contractor who submitted the low of three bids for this work.

They encountered quite a bit of difficulties due to the many springs encountered while digging the trench which made it necessary to run a pump at all times work was in progress.

PLASTERING

Very little of the original plaster could be saved; however, every effort was made to save areas on which the soldier occupants had written during and in the three years following the Civil War. The original plaster was applied directly to the brick walls and to wood lath, both riven and sawn, on ceilings. All wood lath was removed and sawed; however, it was not reused.

New plaster was applied to 4.0 lb. 3/8" rib wire lath except on ceiling, in which electric heat cable was installed. Here standard gypsum lath was used.

As local sand is of a very poor quality, a vermiculite aggregate was used in the plaster. A special aggregate for radiant heating was used on the ceilings.

The finish coat on ceilings was a standard white lime finish. Sidewalls were finished with a screened gypsum plaster with a special fine vermiculite aggregate. This finish applied the day following the application of the brown coat forms an intregal unit with the brown coat which will not chip when pictures, etc., are hung. The finish is very hard and smooth, giving an ideal surface for either paint or wallpaper with no damaging effects as sometimes encountered from hot lime in a standard lime finish.

Because of the electric heat installed in the ceilings, it was recommended that no finish paint or wallpaper be applied

over them at this time. After a few years aging, it may be necessary to paint them to simulate whitewash. Until wallpaper pastes have been improved to withstand direct contact with the radiant heat, it is recommended that ceiling papers not be used.

Plastering was done by Alonzo Sexton and Rex King. Materials were obtained at the Johnson Hardware in Greeneville.

PAINTING

Exterior

After the tedious job of removing the numerous of red paint from the brick walls, the mortar joints were re-penciled as they were in Johnson's day.

Penciling is a line roughly 1/4 inch wide on all mortar joints or over a brick to idealize the pattern where brick coursing is irregular. Special brushes (see Photo. No. 79) made for this purpose were obtained from the Falk Brody Company. These brushes used along straight edges were used to apply a soft paste white lead cut to a consistency of heavy cream to form the penciling. As the penciling brushes wore down the end was cut off and the remaining short brush was used for the short vertical lines.

The exterior woodwork is painted a light cream color in pure white lead paint to match the original color found where it had been covered by the 1885 victorian alterations. This color was obtained by using equal parts of Raw Sienna and Raw Umber plus a small amount of Prussian Blue mixed in a white base. (See Paint Sample A, Appendix IV).

The brick walls under the porches were originally whitewashed. This whitewash effect was duplicated by using a flat oil base cement paint with a silicone stippling agent added to leave brush marks. Modern paints are all made self-leveling to eliminate the brush marks which were so much in

evidence in older work. (See Paint Sample B, Appendix IV).

Interior

Interior painting is semi-gloss enamel over a white lead first coat and enamel undercoat, second coat. The color matches that found. There is very little variation from room to room. This color was obtained by mixing equal parts raw sienna and raw umber with a small amount of prussian blue in a white base.

The front door was grained to match the hall stair newel in color. The mantels in rooms 3 and 4 were grained to match some original graining found on the room 3 mantle. Graining, which is near to becoming a lost art, was done by Mr. Fred Stroud, a local painter, who had retired due to age and health. We had hoped he could continue with us to help with other painting but his health would not permit it. We feel very grateful to Mr. Stroud for coming out of retirement to do the graining.

All other painting and penciling was done by Mr. Charles Anderson, a local painting contractor, who devoted his own time to the Johnson house while maintaining a crew of painters on other jobs in the Greeneville area.

See Appendix IV

INSULATION AND ATTIC VENTILATION

Five inches of vermiculite insulation was poured over all second floor ceilings. To provide ventilation over this insulation (the original attic had no ventilation) a hole was cut into all three chimneys. Air was pulled through the fireplaces in room 3 on the first floor and room 8 on the second floor to the attic through the chimney flues, which are now capped on the top. The air was exhausted by a squirrel cage fan installed in the center flue of the chimney in the rear ell. The two outside flues are capped.

During the winter months the fan is turned off and the doors over the openings in the two front chimneys are closed.

See Photo. Nos. 74 and 75, Appendix III.

SHEET METAL

All sheet metal work was done by J. S. Rhea & Sons of Greeneville. Mr. Clifford Rhea, the owner of this concern, took a great personal interest in the restoration. Gutters and leaders were made of short sections of tin as in Johnson's time. The dimensions were worked out to use tin sections from a 14" x 20" sheet with no waste. This is the size tin purchased by Johnson as shown in a bill found among his papers. From these sheets we were able to fabricate a 4-7/8" diameter gutter and a 2-5/8" diameter leader. The gutter was hung in a modern manner; however, special straps were made to simulate the original when seen from below. Elbows in the leaders or downspouts were cut and formed rather than crimped, as is common today. (See Photo. No. 5).

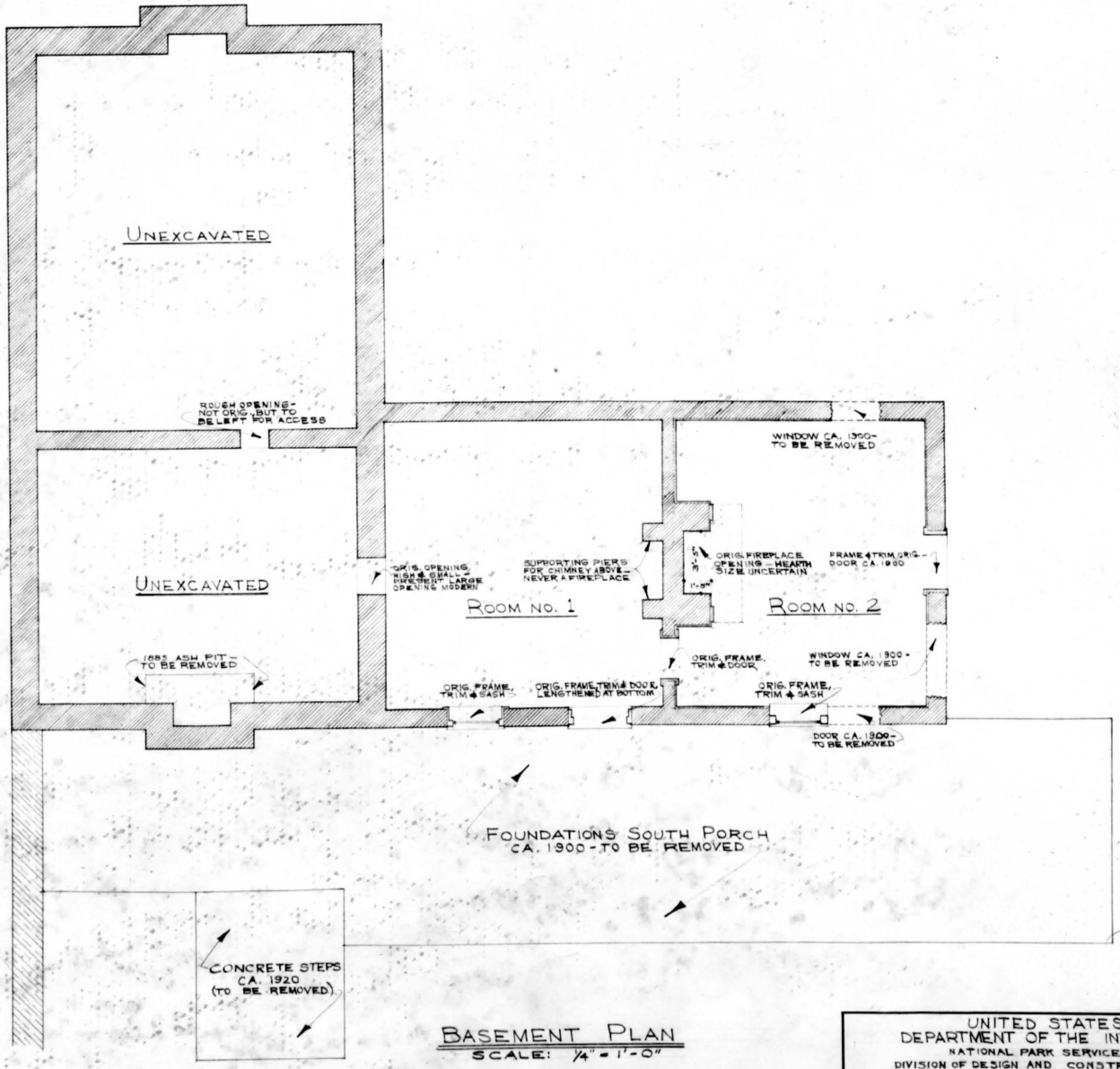
The porch roof was covered with a standing seam roof, as was common in Johnson's time. The distance between seams was kept to match the width of tin purchased by Johnson. We did, however, use roll tin to eliminate the cross joints which would have been necessary in Johnson's time. This is not noticeable from the ground.

All chimney and wall flashings were of lead.

APPENDIX I

WORKING DRAWINGS

a.	NM-AJ 3053	Study of Conditions as Found	15 sheets
b.	NM-AJ 3054A	Restoration Working Drawings	13 sheets
c.	NM-AJ 3059	Brick Details	1 sheet
d.	NM-AJ 3060	Fence and Walk Details	1 sheet
e.	NM-AJ 3061	Electrical Installation	2 sheets
f.	NM-AJ 3062	Exterior Millwork Details	1 sheet
g.	NM-AJ 3063	Sewer Line - Manholes and Location	2 sheets
h.	NM-AJ 3064	Front Entrance Door and Sash	1 sheet
i.	NM-AJ 3065	Mantel for Room 4	1 sheet
j.	NM-AJ 3066	Door Details	1 sheet
k.	NM-AJ 3067	Cast Iron Front Door Lock	1 sheet
l.	NM-AJ 3068	Porch Frame, First Floor Deck	1 sheet



BASEMENT PLAN

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

EUGENE I. LOWRY, D.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

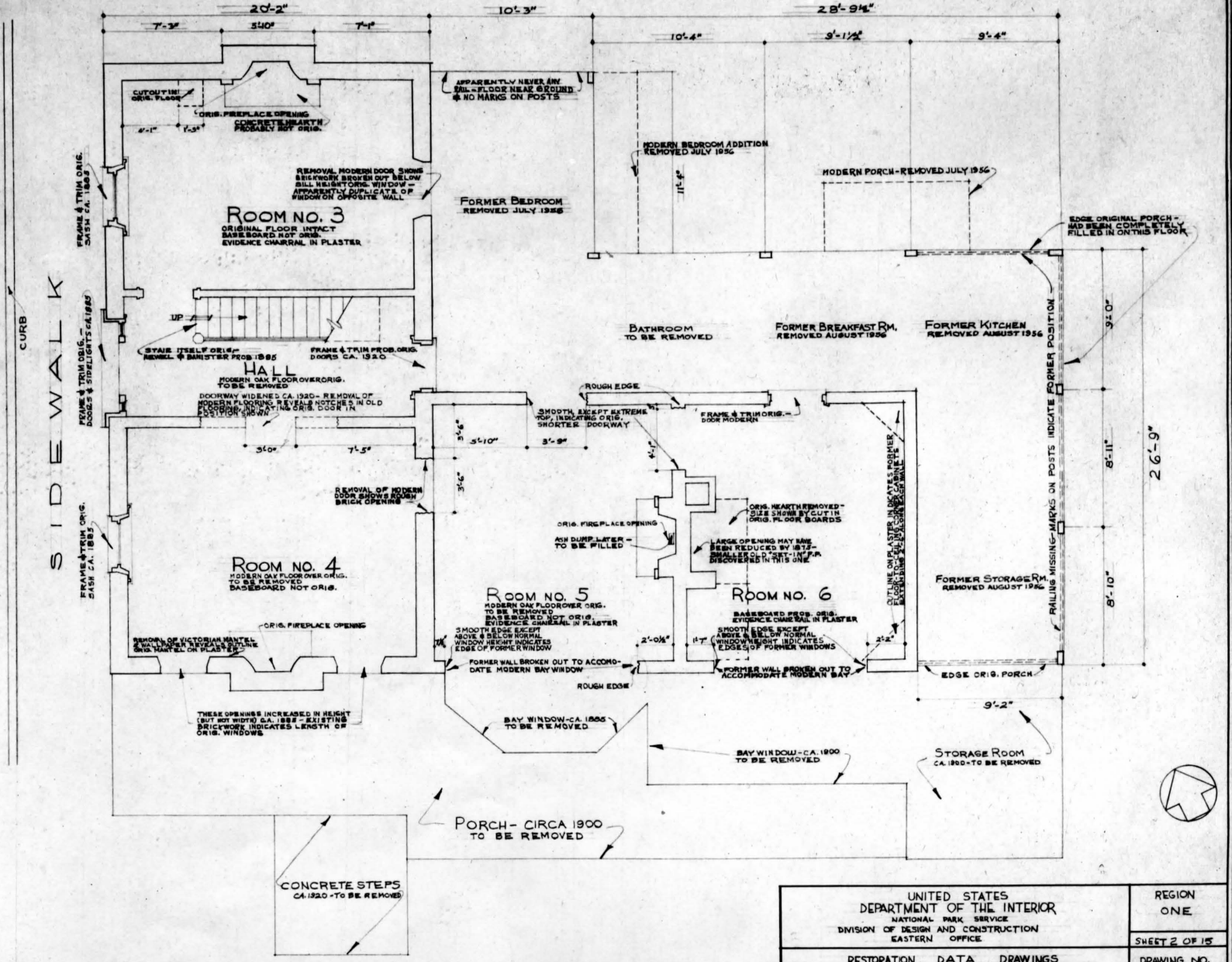
ANDREW JOHNSON RESIDENCE
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

REGION ONE

SHT. 1 OF 15

DRAWING NO. NM-AJ 3053

AUGUST 1956



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

REGION ONE

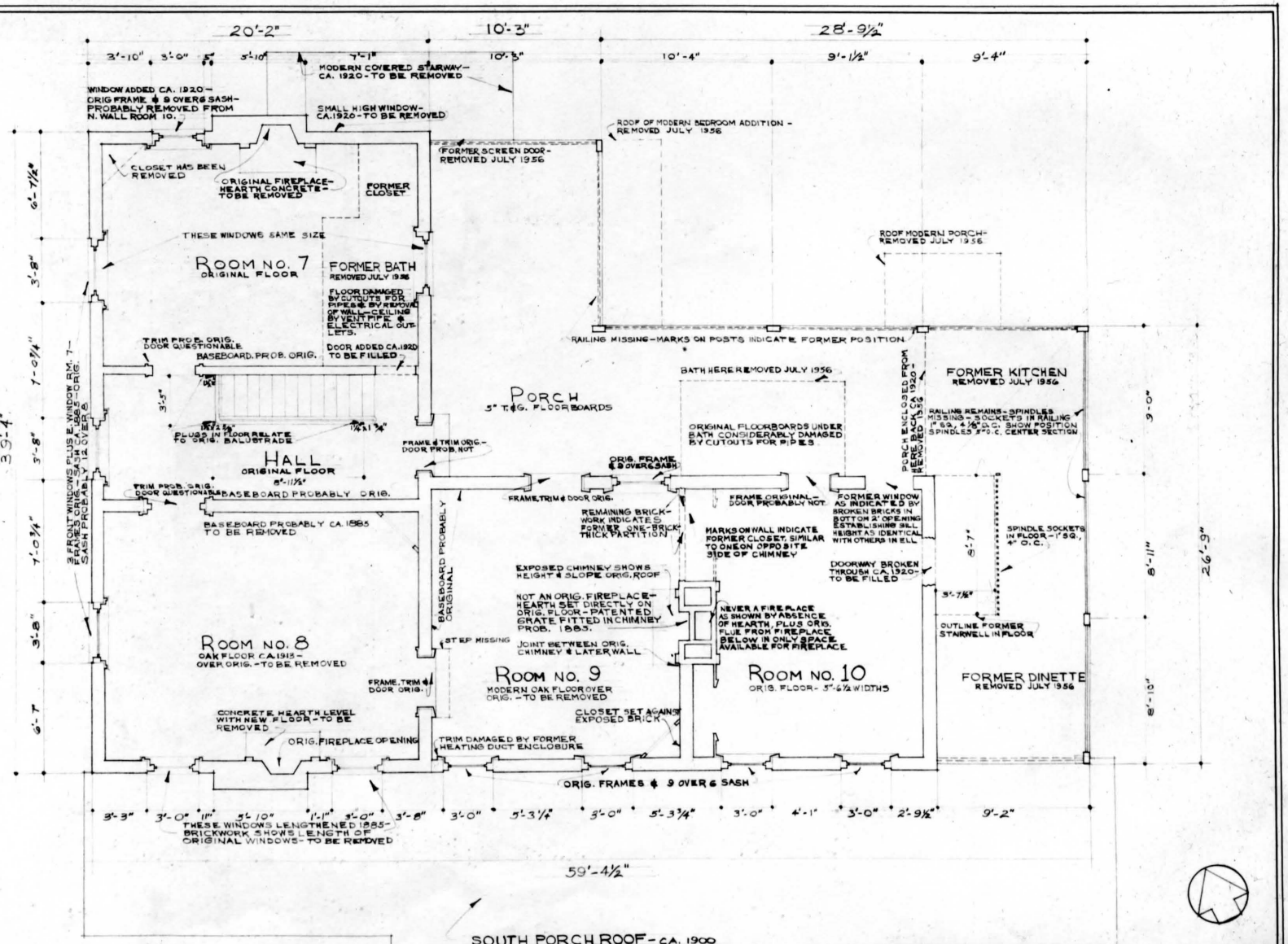
SHEET 2 OF 15

RESTORATION DATA DRAWINGS
ANDREW JOHNSON RESIDENCE
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

DRAWING NO. NM-AJ 3033

JULY 1956

EUGENE I. LOWRY - D.

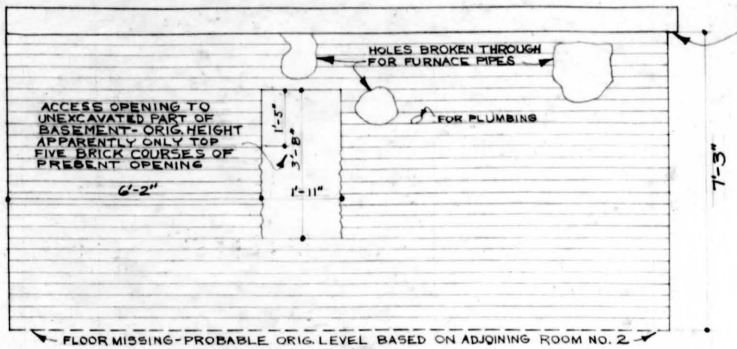


EUGENE I. LOWRY - D.

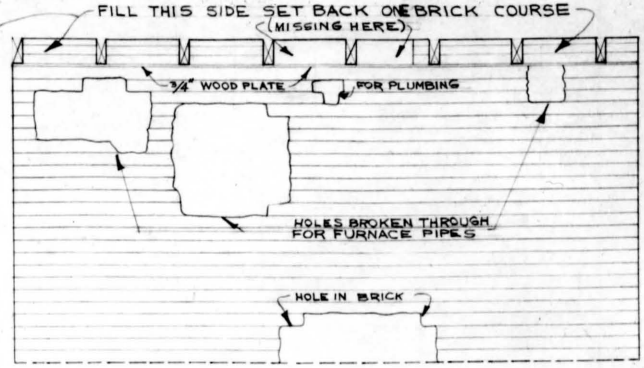
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

RESTORATION DATA DRAWINGS
ANDREW JOHNSON RESIDENCE
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

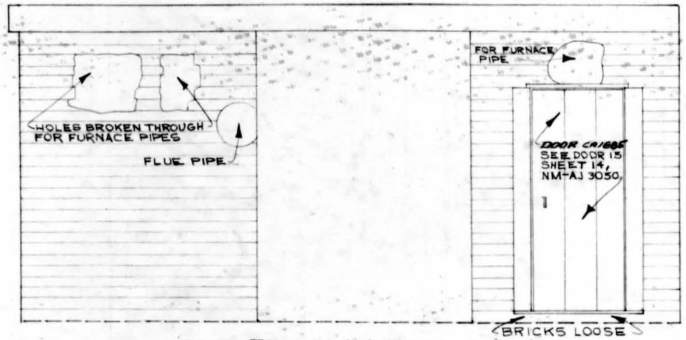
REGION 1
SHEET 3 OF 15
DRAWING NO. NM-AJ 3053
JULY 1956



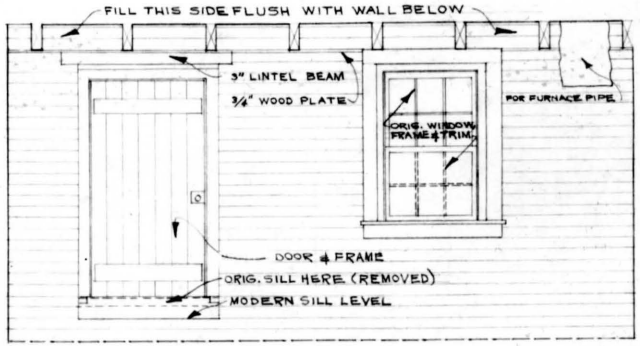
WEST WALL



NORTH WALL



EAST WALL



SOUTH WALL

ROOM NO. 1 — ELEVATIONS

SCALE: 1/2" = 1'-0"

0 1 2 3 4 5 10 FEET

0 1 2 3 METERS

EUGENE I. LOWAY, D.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

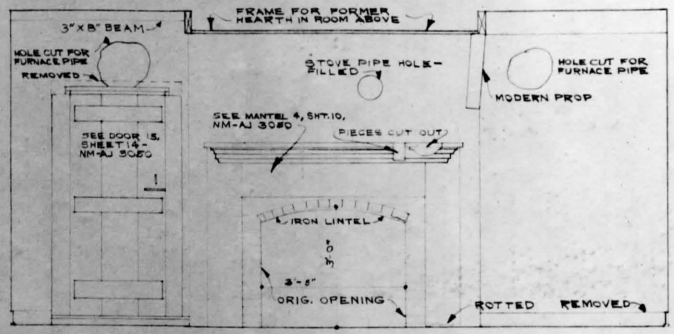
REGION ONE

SHEET 4 OF 15

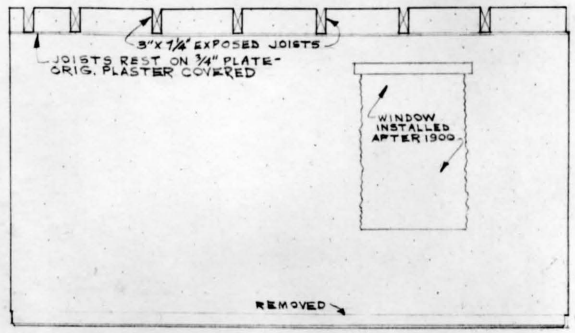
ANDREW JOHNSON RESIDENCE
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

DRAWING NO. NM-AJ 3053

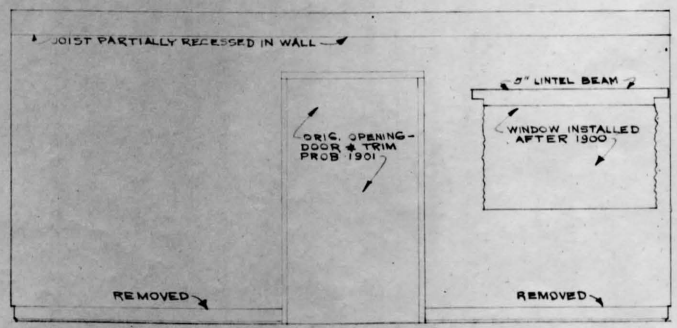
AUGUST 1950



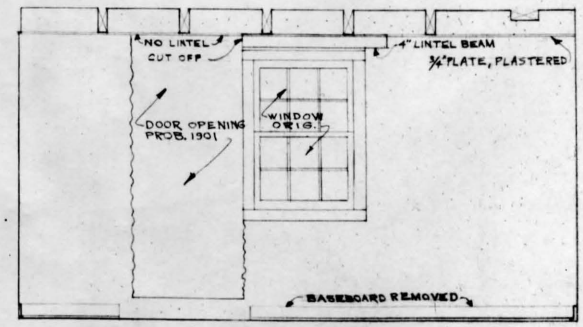
WEST WALL



NORTH WALL



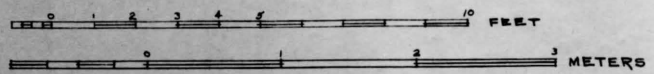
EAST WALL



SOUTH WALL

ROOM NO. 2 - ELEVATIONS

SCALE: ½" = 1'-0"



EUGENE I. LOWRY, D.

UNITED STATES
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NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

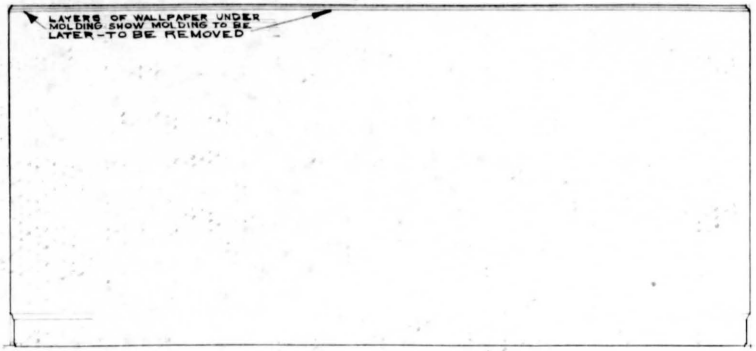
REGION ONE

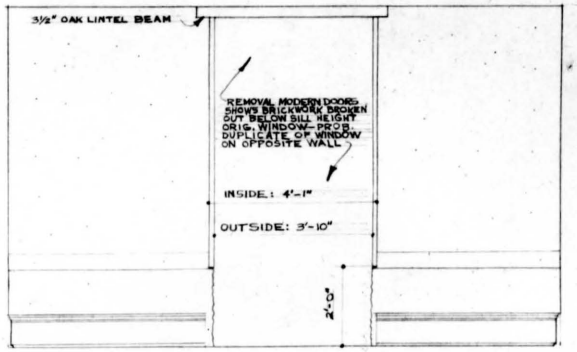
SHEET 5 OF 15

ANDREW JOHNSON RESIDENCE
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

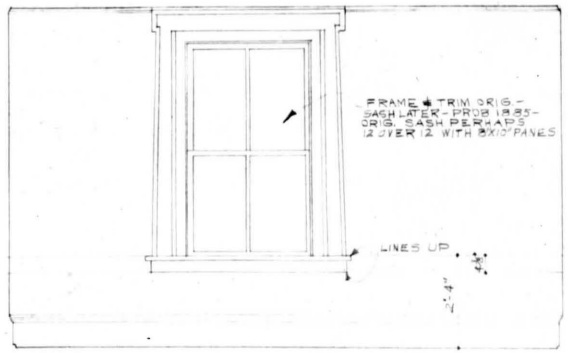
DRAWING NO. NM-AJ 3053

AUGUST 1936









ROOM NO. 3 — ELEVATIONS

SCALE: ½" = 1'-0"

0 1 2 3 4 5 10 FEET

0 1 2 3 METERS

EUGENE I. LOWRY, D.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

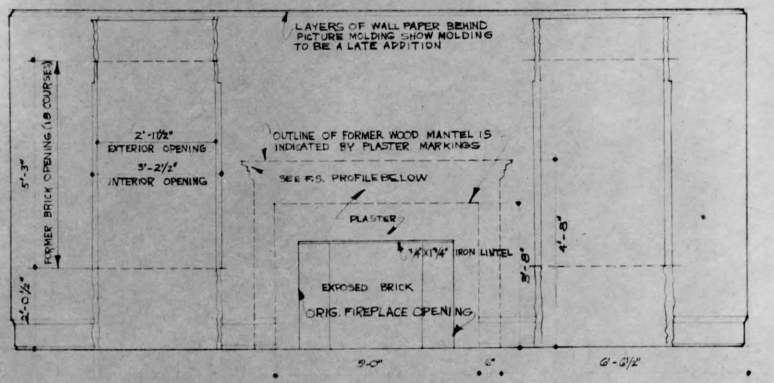
REGION ONE

SHEET 5 OF 15

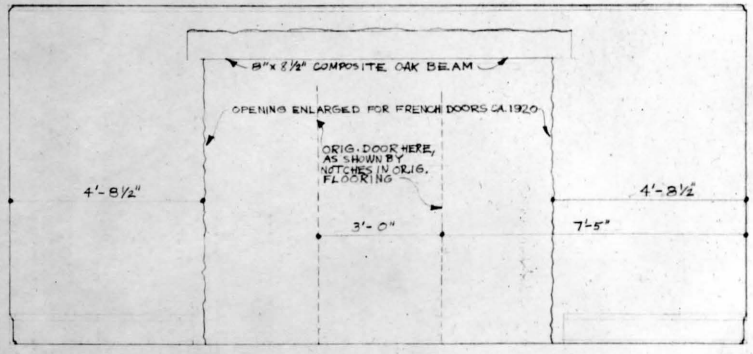
ANDREW JOHNSON RESIDENCE
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

DRAWING NO. NM-AJ 3053

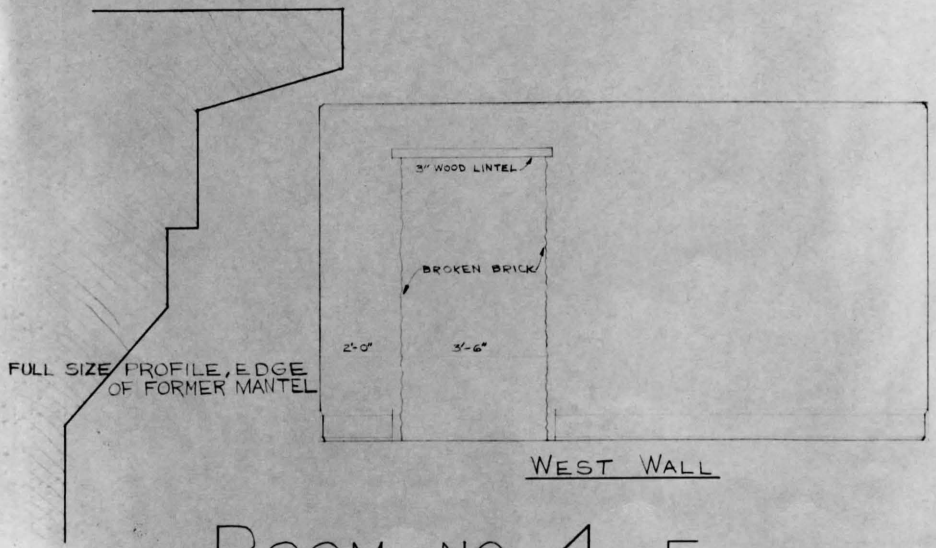
AUGUST 1953



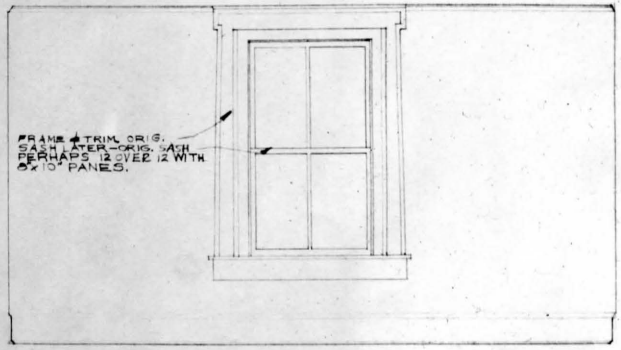
SOUTH WALL



NORTH WALL



WEST WALL



EAST WALL

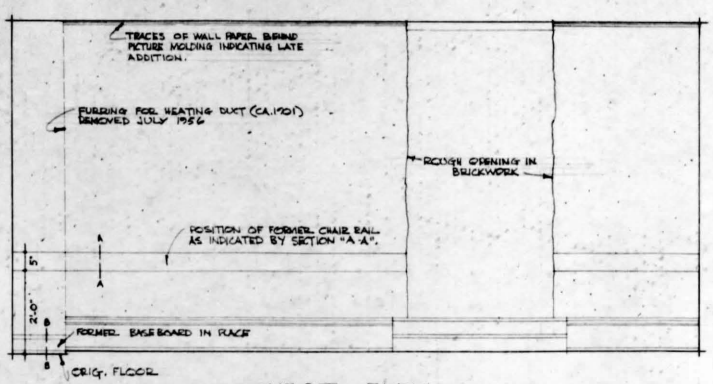
ROOM NO. 4 – ELEVATIONS

SCALE: ½" = 1'-0"

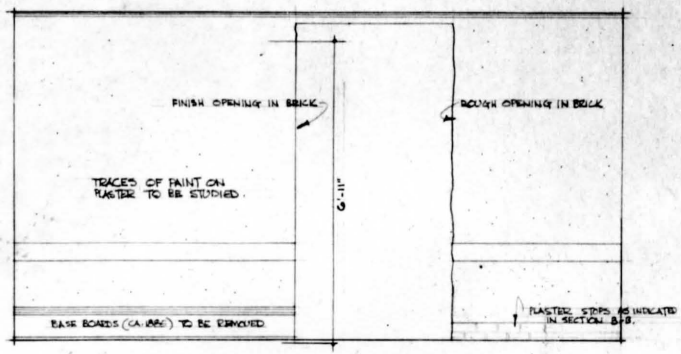
0 1 2 3 4 5 10 FEET

EUGENE I. LOWRY-D.

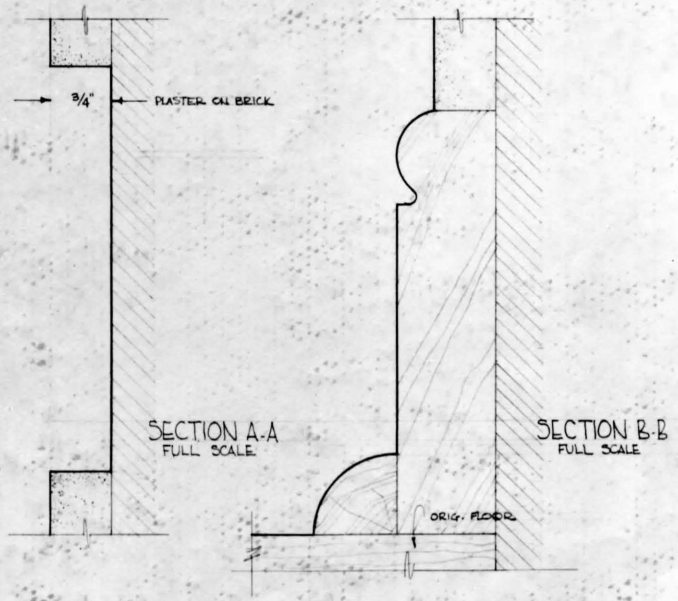
UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DIVISION OF DESIGN AND CONSTRUCTION EASTERN OFFICE	REGION ONE SHEET 7 OF 15
RESTORATION DATA DRAWINGS ANDREW JOHNSON RESIDENCE GREENEVILLE, TENNESSEE ANDREW JOHNSON NATIONAL MONUMENT	DRAWING NO. NM-AJ 3053 AUGUST 1956

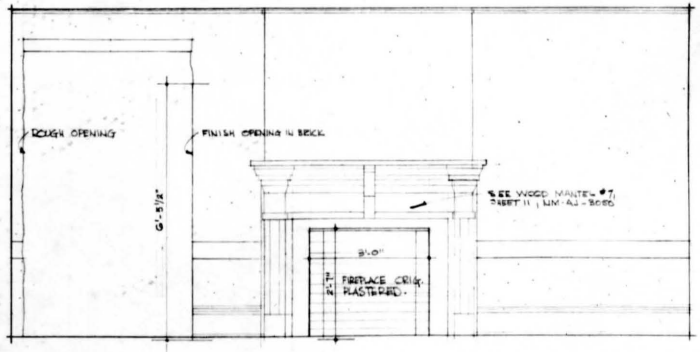


WEST ELEV.



NORTH ELEV.
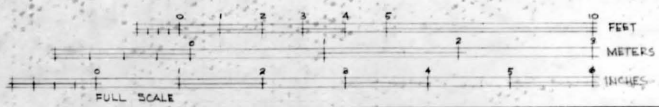




EAST ELEV.

INTERIOR ELEVATIONS, ROOM 5

SCALE 1/2"-1'-0"



J.F.O'GORMAN - DEL.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

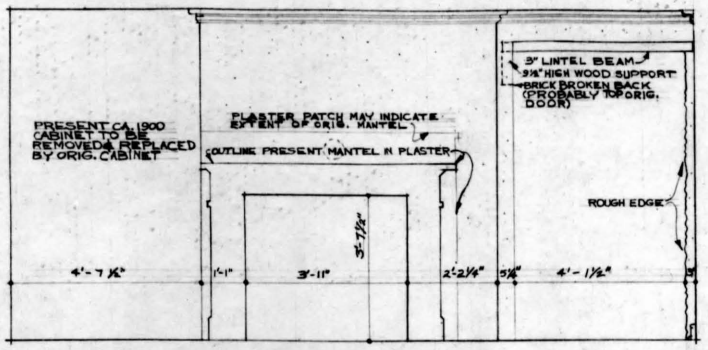
REGION ONE

SHT. 8 OF 15

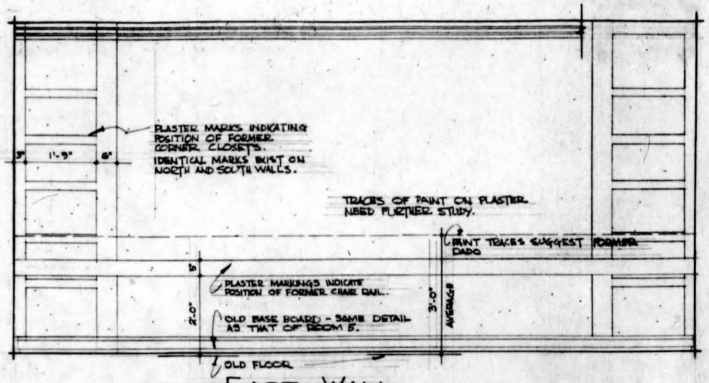
RESTORATION DATA DRAWINGS
ANDREW JOHNSON RESIDENCE
ANDREW JOHNSON NATIONAL MONUMENT

DRAWING NO. NM-A-1 3057

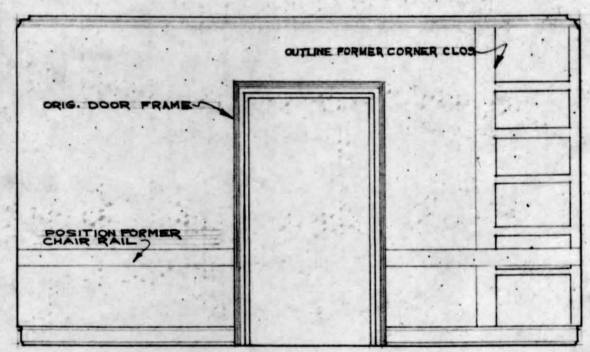
AUGUST 1956



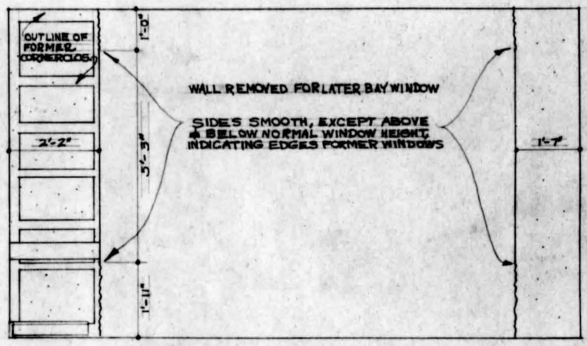
WEST WALL



EAST WALL



NORTH WALL



SOUTH WALL

ROOM NO. 6 (ELEVATIONS)

SCALE: ½" = 1'-0"

0 1 2 3 4 5 10 FEET

EUGENE I. LOWRY-D.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

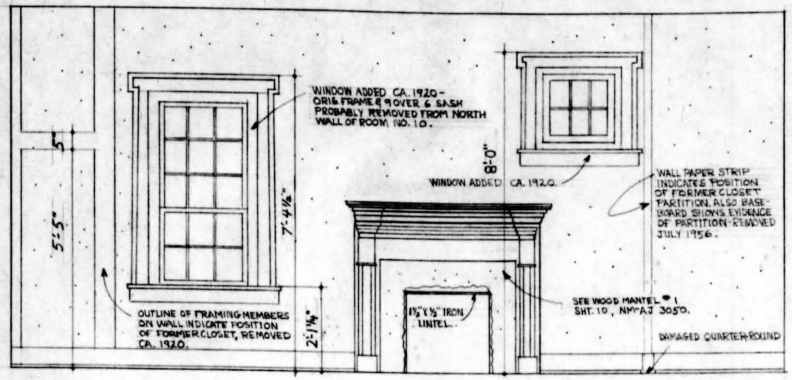
REGION ONE

SHEET 8 OF 16

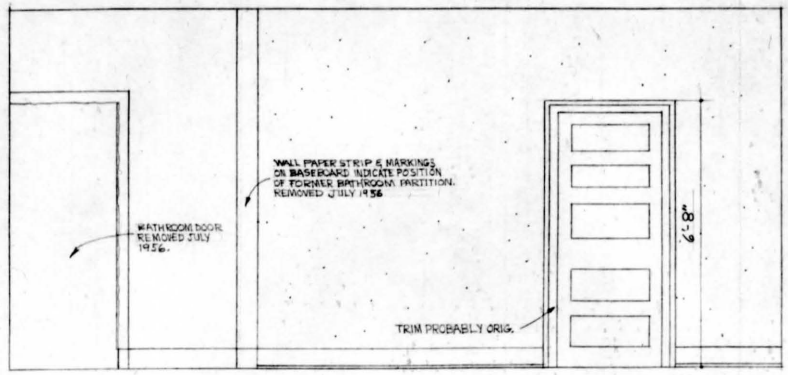
RESTORATION DATA DRAWINGS
ANDREW JOHNSON RESIDENCE
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

DRAWING NO. NM-AJ 3053

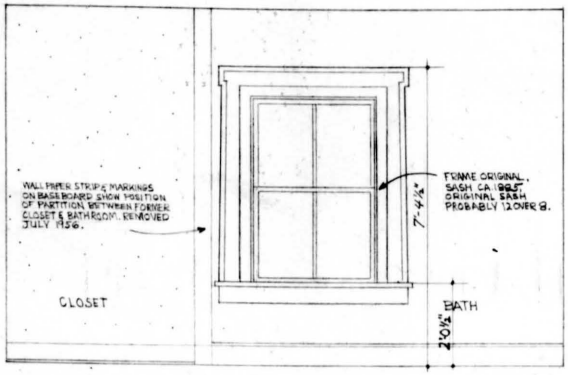
AUGUST 1956



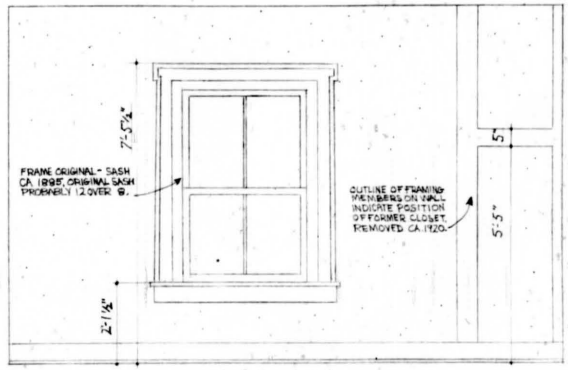
NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION

ROOM NO. 7 ELEVATIONS

SCALE - ½" = 1'-0"

0 1 2 3 4 5 6 7 8 9 10 FEET

0 1 2 3 METERS

EUGENE F. DUNBAR - DEL.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

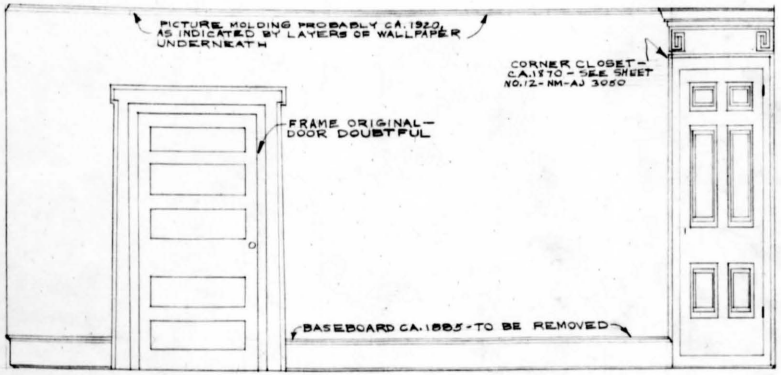
REGION ONE

SHEET 10 OF 15

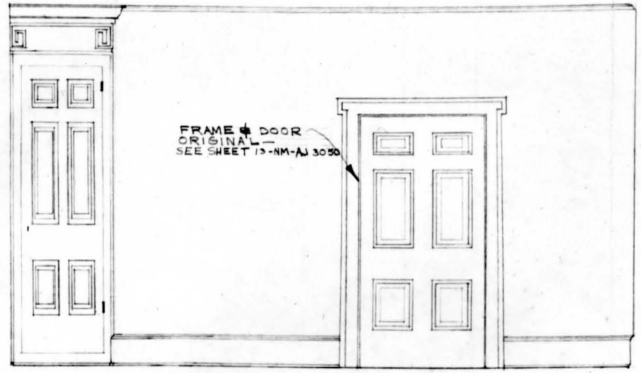
RESTORATION DATA DRAWINGS
ANDREW JOHNSON RESIDENCE
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

DRAWING NO. NM-AJ 3053

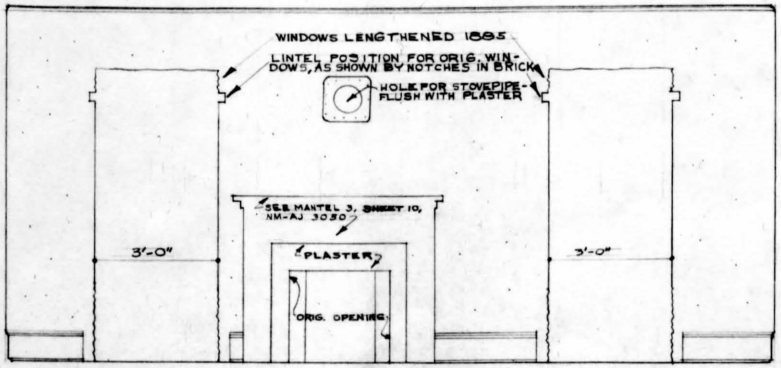
AUGUST 1956.



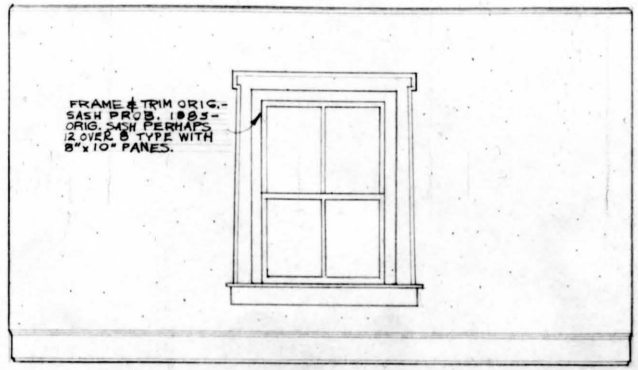
NORTH WALL



EAST WALL



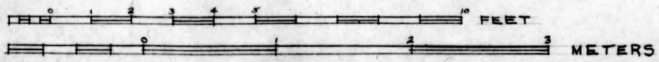
SOUTH WALL



WEST WALL

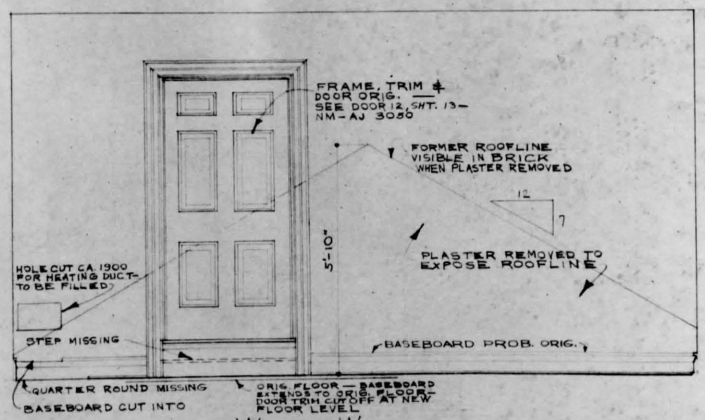
ROOM NO. 8 - ELEVATIONS

SCALE: 1/2" = 1'-0"

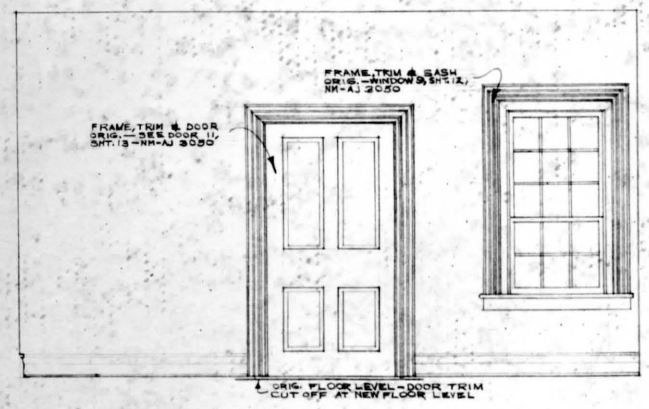


EUGENE I. LOWRY - D.

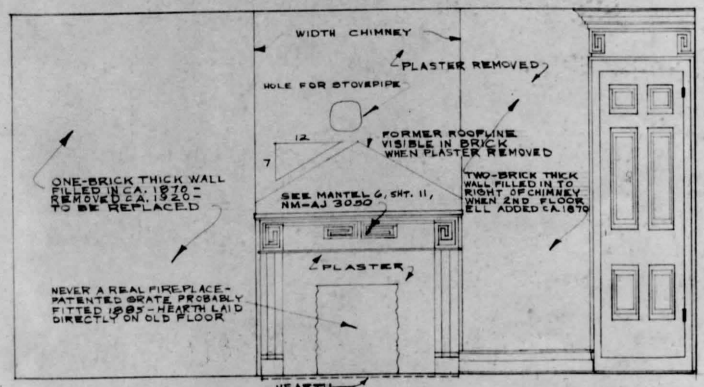
UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DIVISION OF DESIGN AND CONSTRUCTION EASTERN OFFICE	REGION ONE SHEET 11 OF 15
RESTORATION DATA DRAWINGS ANDREW JOHNSON RESIDENCE GREENEVILLE, TENNESSEE ANDREW JOHNSON NATIONAL MONUMENT	DRAWING NO. NM-AJ 3058 AUGUST 1936



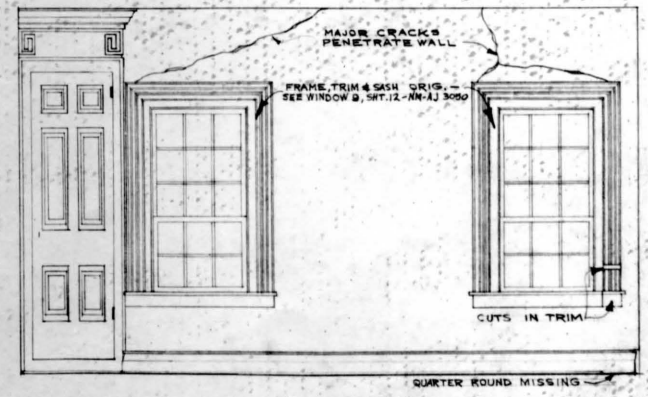
WEST WALL



NORTH WALL



EAST WALL



SOUTH WALL

ROOM NO. 9 — ELEVATIONS

SCALE: 1/2" = 1'-0"

0 1 2 3 4 5 10 FEET

0 1 2 3 METERS

EUGENE I. LOWEY, D.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

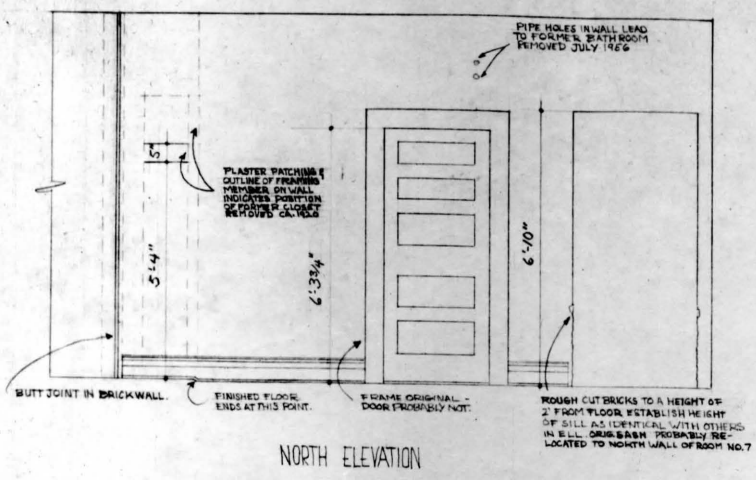
REGION ONE

SHEET 12 OF 15

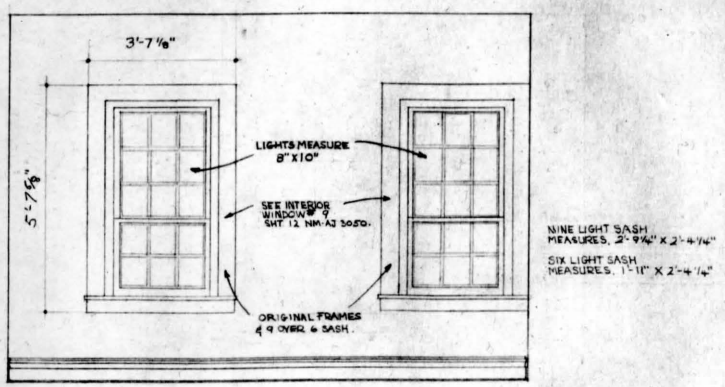
ANDREW JOHNSON RESIDENCE
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

DRAWING NO. NM-AJ 3053

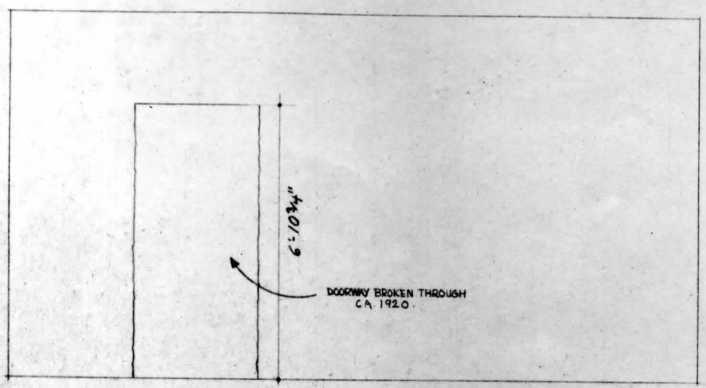
AUGUST 1956



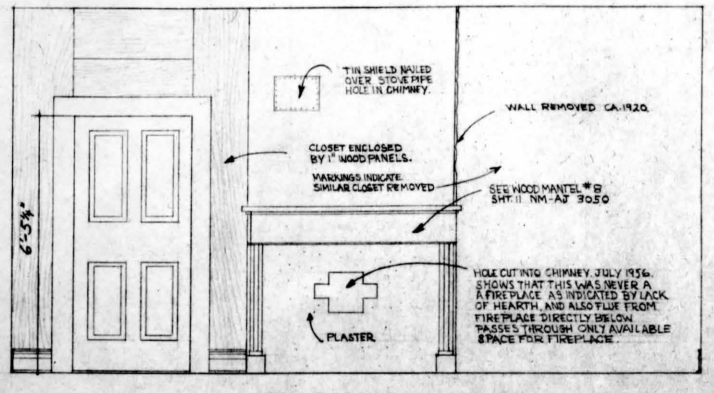
NORTH ELEVATION



SOUTH ELEVATION



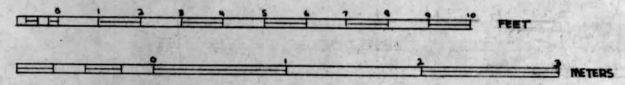
EAST ELEVATION



WEST ELEVATION

ROOM NO. 10 ELEVATIONS

SCALE ½" = 1'-0"



EUGENE K. DUNBAR - DEL.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

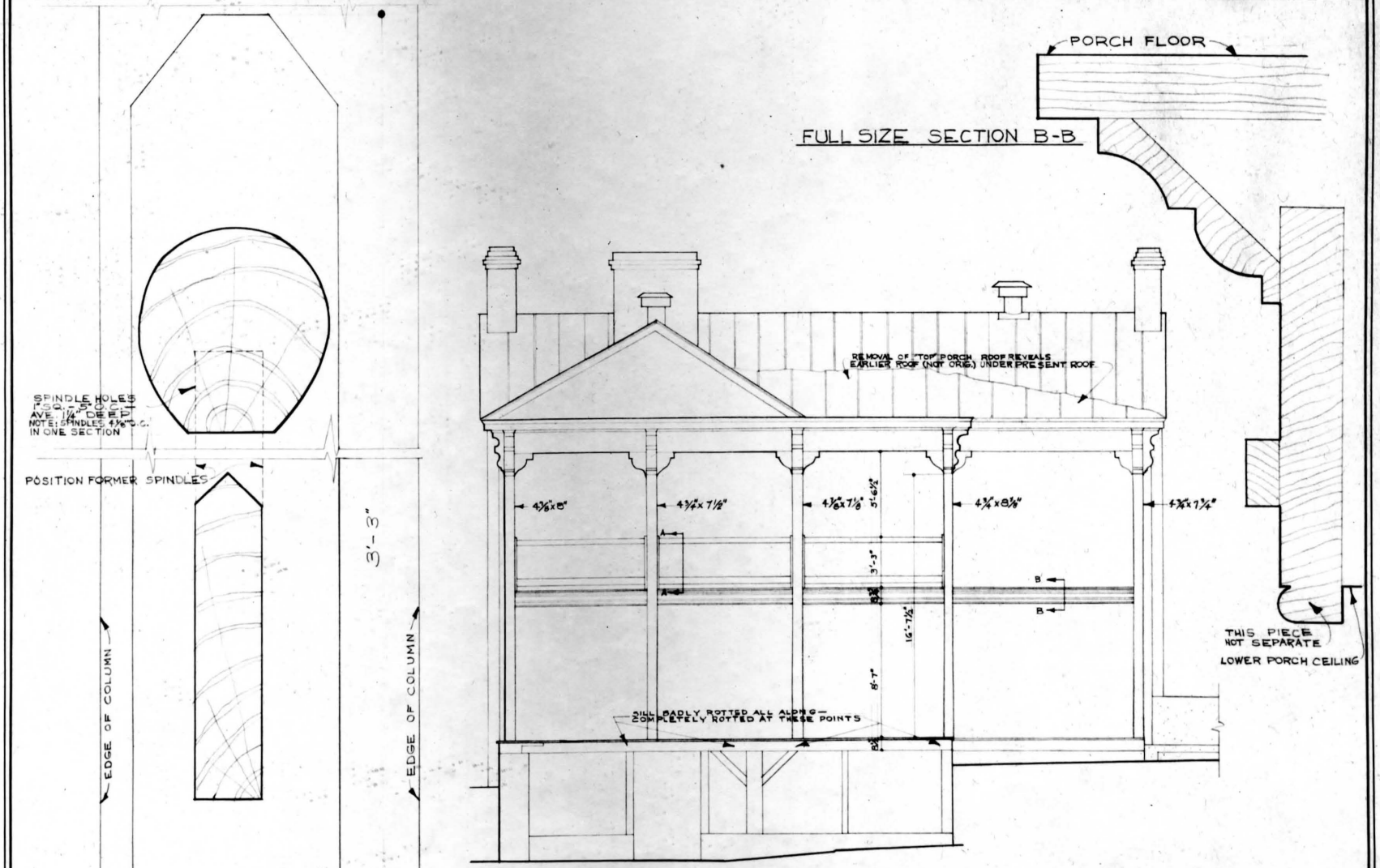
RESTORATION DATA DRAWINGS
ANDREW JOHNSON RESIDENCE
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

REGION ONE

SHEET 13 OF 15

DRAWINGS NO. NM-AJ 3053

AUG. 1956



PORCH DETAILS

EAST ELEVATION
SCALE: ¼"=1'-0"

EUGENE I. LOWRY-D.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

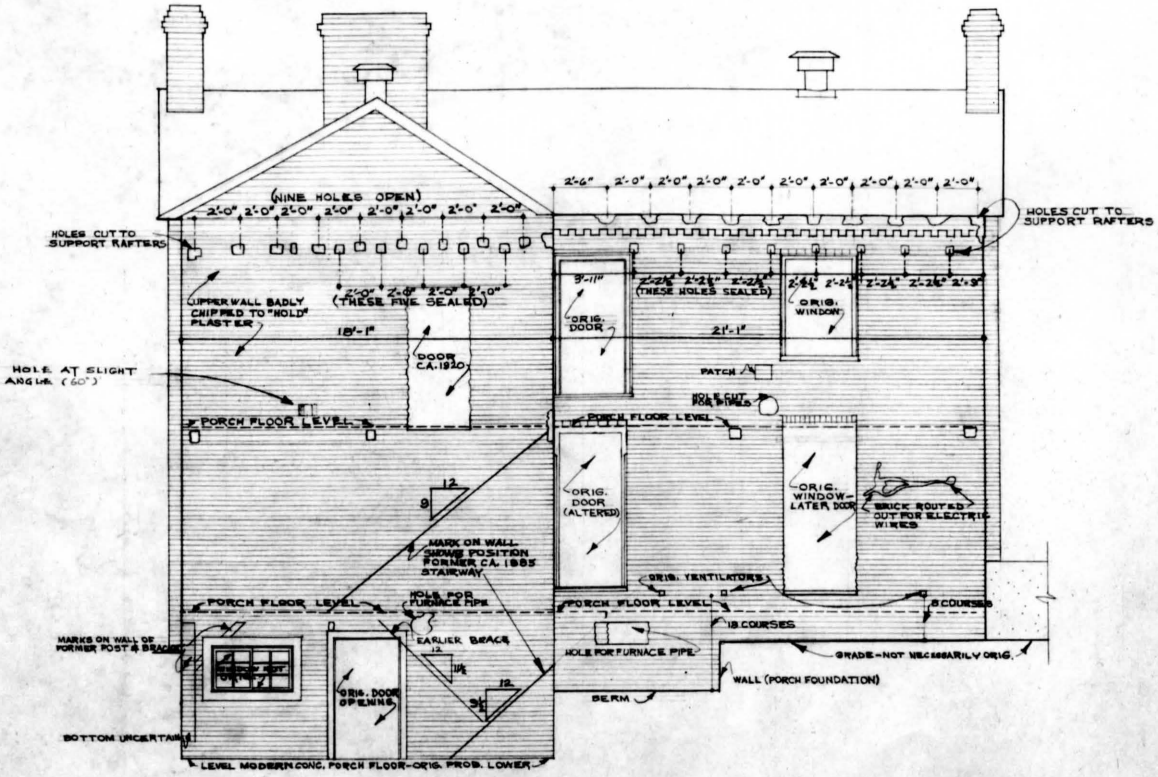
REGION ONE

SHEET 11 OF 15

ANDREW JOHNSON RESIDENCE
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

DRAWING NO.
NM-AJ
305

AUGUST 1956



EAST ELEVATION
(WITH PORCH REMOVED)

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

FEET

METERS

EUGENE I. LOWRY, D.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

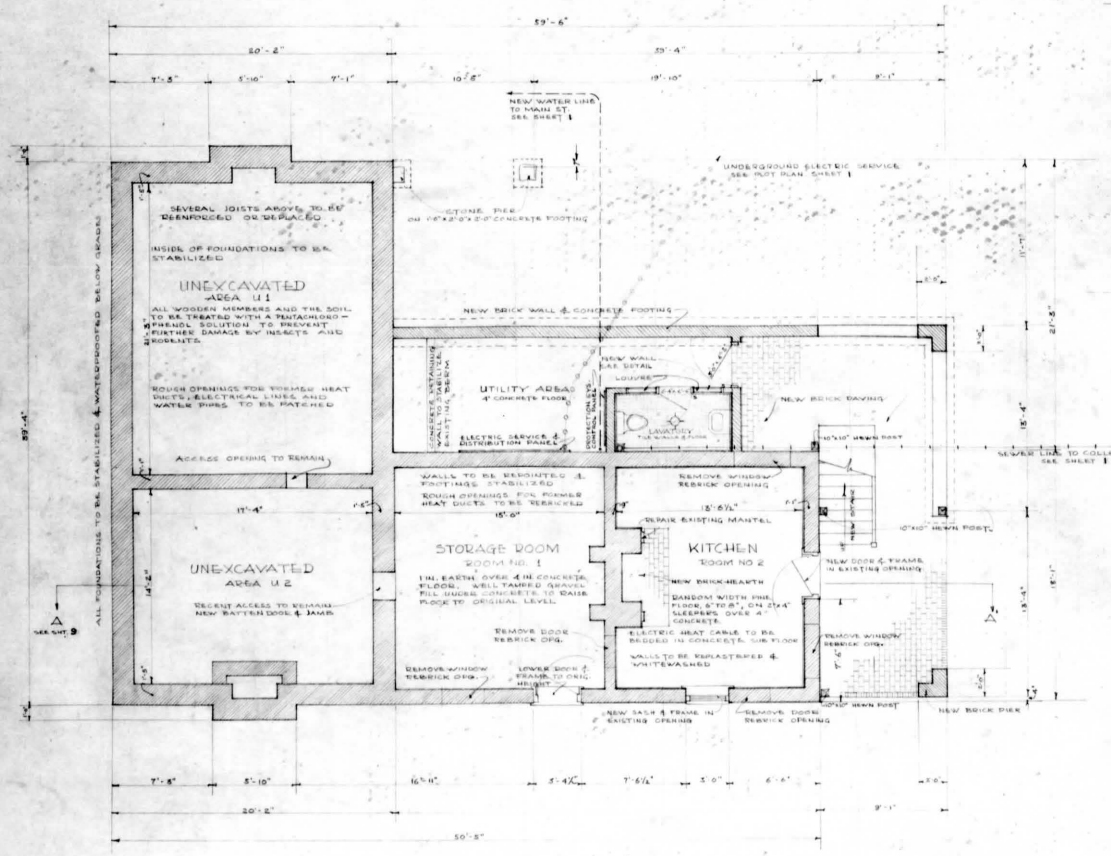
REGION ONE

SHEET 15 OF 15

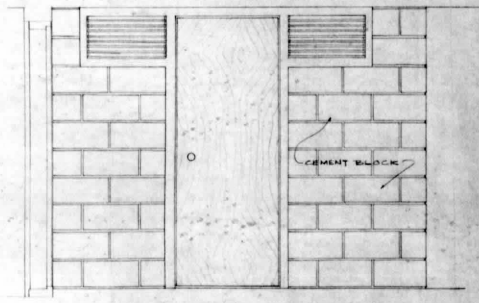
ANDREW JOHNSON RESIDENCE
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

DRAWING NO. NM-AJ 3053

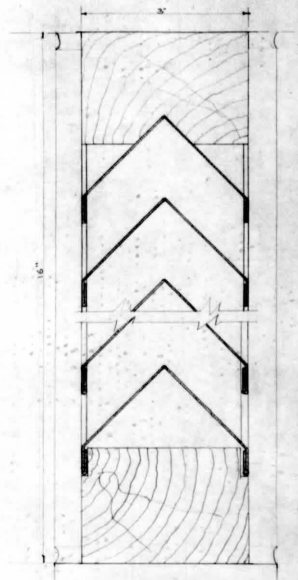
AUGUST 1956



BASEMENT PLAN
SCALE 1/4"=1'-0"



LAVATORY WALL FROM UTILITY AREA
SCALE 3/4"=1'-0"



LOUVRE SECTION
SCALE FULL SIZE.

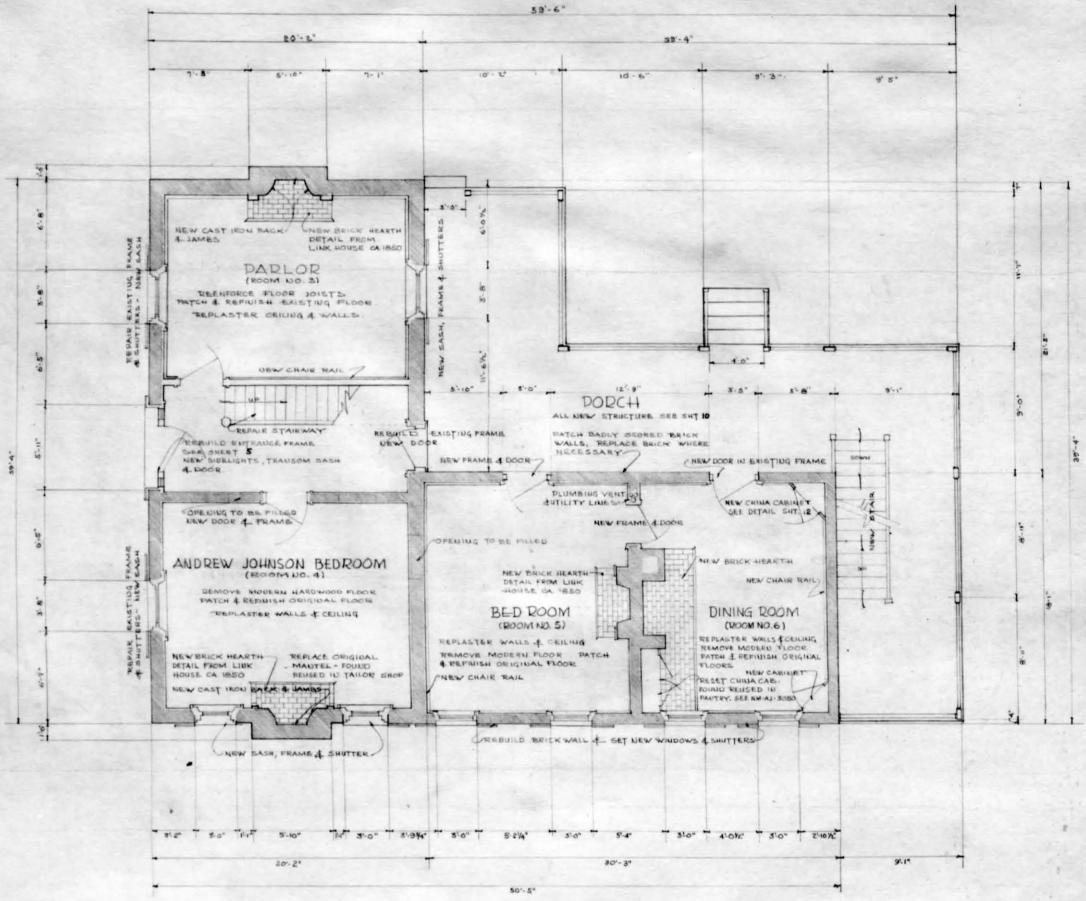
SCALE AS NOTED

BASIC DATA

RECOMMENDED
Edward A. Hummel, ECDC 11/9/56
Benjamin H. Davis, Superintendent 11/5/56
THOS C. VINT, CHIEF, DIV D.E.C. (MEMO) 11/9/56
APPROVED C.L. WIRTH (MEMO) 11/9/56
DIRECTOR

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN & CONSTRUCTION
PREPARED BY
FIELD REPRESENTATIVE, EASTERN
OFFICE
ANDREW JOHNSON HOME RESTORATION
TITLE OF DRAWING
GREENEVILLE, TENNESSEE
LOCATION WITHIN AREA
ANDREW JOHNSON NATIONAL MONUMENT
NAME OF AREA

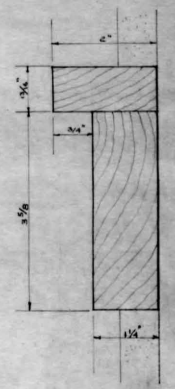
ORIENTATION
REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV. REGION
WASHINGTON
DES. & CONST.
E.A. STERN
A.
E.
L.A.
WASHINGTON
A.
E.
L.A.
OTHER
PREPARED
H.A. JUDD
DESIGNED
H.A. JUDD
DRAWN
CHECKED
REVISED
DATE | INITIAL
REGION ONE
FCP
SHEET 1 OF 13
DRAWING NO. NM-AJ 3054 A
DATE 10-12-56



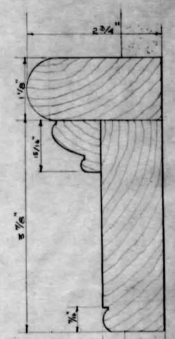
FIRST FLOOR PLAN
SCALE 1/4" = 1'-0"



DETAIL OF BASE
FULL SIZE.
DETAIL FROM SMALL SECTION OF ORIGINAL BASE.



DETAIL - CHAIR RAIL
ROOM 3
FULL SIZE.
DETAIL FROM FRONT MARKS ON DOOR CASING.



DETAIL - CHAIR RAIL
ROOMS 5 & 6
SCALE FULL SIZE

SCALE AS NOTED

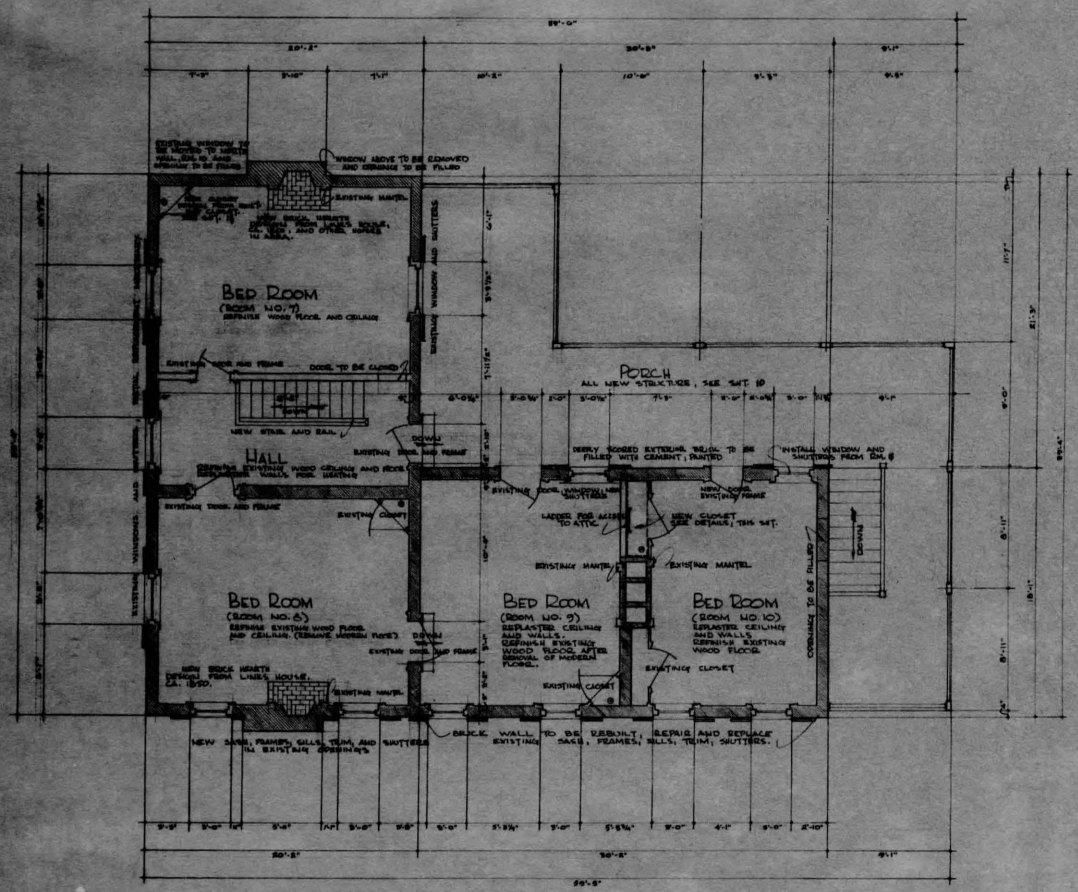
BASIC DATA - EXISTING STRUCTURE

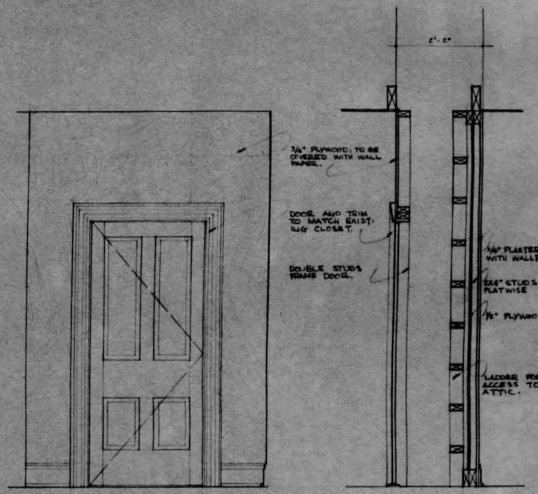
ORIENTATION REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV. REGION
WASHINGTON
DES. & CONST. A. E. L.A. WASHINGTON A. E. L.A.
OTHER
PREPARED H.A. JUDD
DRAWN H.A. JUDD
CHECKED
REVISED DATE | INITIAL

RECOMMENDED
APPROVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
FIELD REPRESENTATIVE - EASTERN OFFICE
ANDREW JOHNSON HOME RESTORATION
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT

DIVISION ONSC
FOR
SHEET 6 OF 12
DRAWING NO. NMPAJ 3084 A





CLOSET, ROOM NO. 10.

INTERIOR NOT FOR EXHIBITION. TO BE USED FOR UTILITY AND ATTIC ACCESS. DESIGN TAKEN FROM FLOOR AND WALL MARKS AND EXISTING CLOSET.

SCALE 3/4" = 1'-0"

ORIENTATION REVIEWED

OPERATIONS REGION

WASHINGTON

INTERP. REGION

WASHINGTON

COOP. ACTV. REGION

WASHINGTON

DES. & CONST.
E.A. STERN
A.
E.
L.A.
WASHINGTON
A.
E.
L.A.

OTHER

PREPARED JUDD-CONNALLY
DESIGNED
CHECKMAN
DRAWN
CHECKED
REVISED
DATE | INITIAL

SCALE

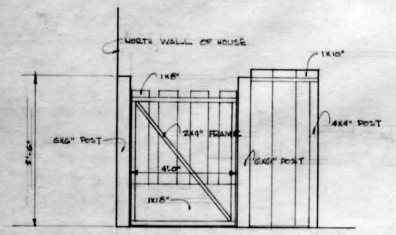
RECOMMENDED DATE

APPROVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
PREPARED BY
FIELD REPRESENTATIVE - EASTERN
OFFICE
ANDREW JOHNSON HOME RESTORATION
TITLE OF DRAWING
GREENEVILLE, TENNESSEE
LOCATION WITHIN AREA
ANDREW JOHNSON NATIONAL MONUMENT
NAME OF AREA

REGION ONE
PCP
SHEET 3 OF 15
DRAWING NO. NHPAJ 2054-A
DATE

BASIC DATA



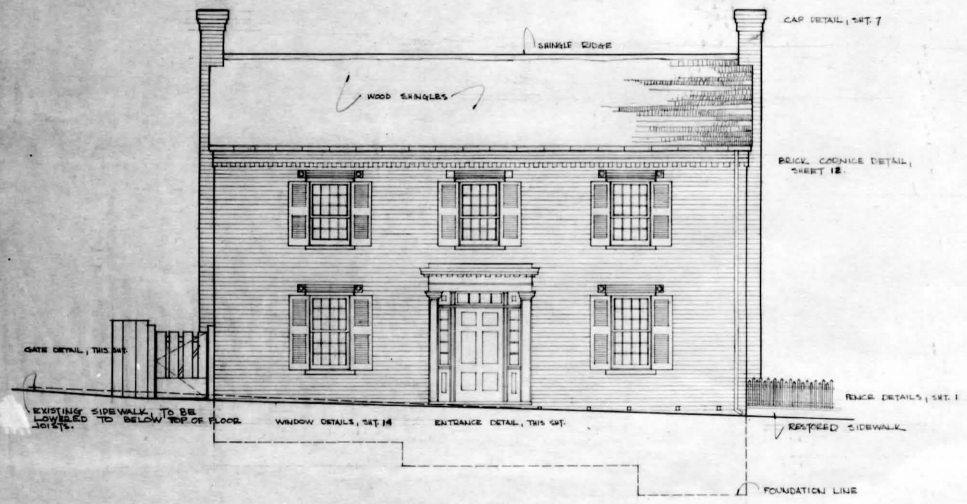
REAR ELEVATION, WOOD GATE
1/2" = 1'-0"



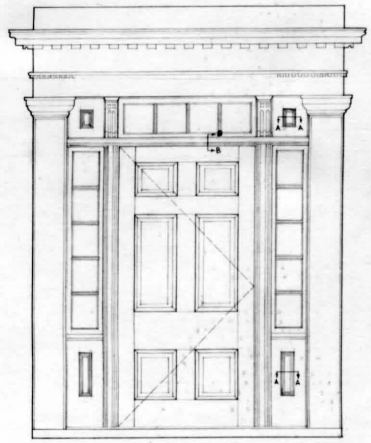
PROFILE A-A
FULL SCALE



SECTION "B-B"
FULL SCALE



WEST (FRONT) ELEVATION
1/4" = 1'-0"



ENTRANCE FRAME
3/4" = 1'-0"

SCALE AS NOTED

RECOMMENDED — DATE

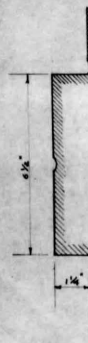
APPROVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
PREPARED BY
FIELD REPRESENTATIVE - EASTERN OFFICE
ANDREW JOHNSON HOME RESTORATION
TITLE OF DRAWING
GREENEVILLE TENNESSEE
LOCATION WITHIN AREA
ANDREW JOHNSON NATIONAL MONUMENT.
NAME OF AREA

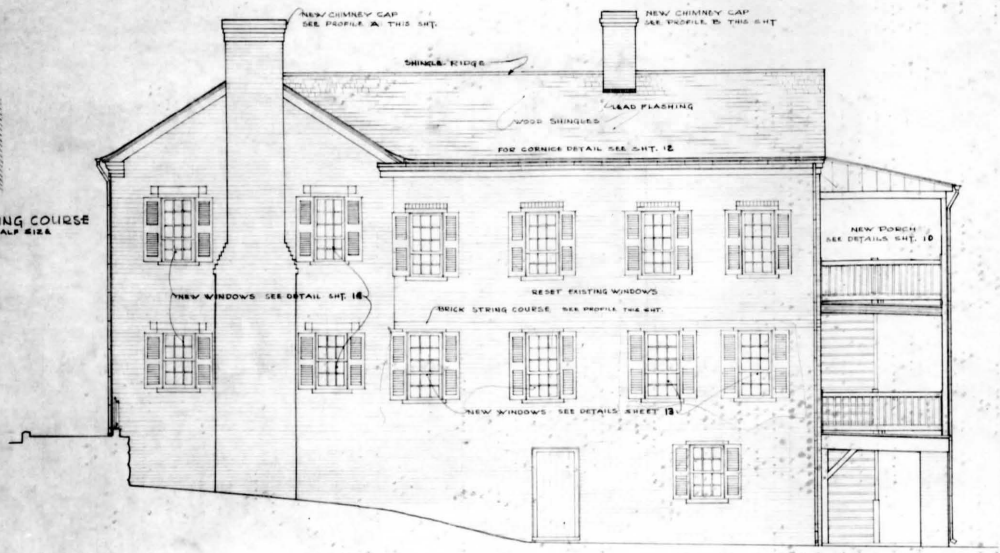
ORIENTATION
REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV. REGION
WASHINGTON
DES. & CONST. EA. STERN
A.
E.
L.A.
WASHINGTON
A.
E.
L.A.
OTHER
PREPARED H.A. JUDD
DESIGNED CHECKMAN
DRAWN
CHECKED
REVISED DATE / INITIAL

REGION CSE
PCP
SHEET 4 OF 12
DRAWING NO. NM-AJ 80 54-A
DATE

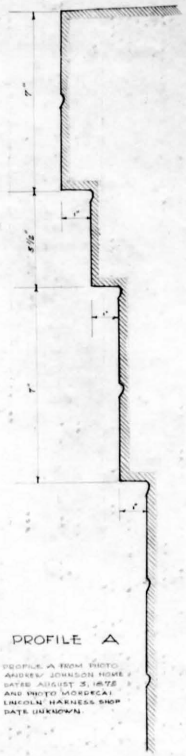
BASIC DATA — PHOTOGRAPH : 1874 EXISTING STRUCTURE



BRICK STRING COURSE
SCALE HALF SIZE

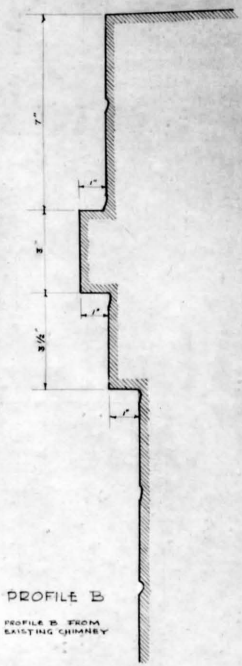


SOUTH ELEVATION
SCALE 1/4"-1'-0"



PROFILE A

PROFILE A FROM PHOTO ANDREW JOHNSON HOME DATED AUGUST 3, 1878 AND PHOTO MORDECAI LINCOLN HARNESS SHOP DATE UNKNOWN.



PROFILE B

PROFILE B FROM EXISTING CHIMNEY

CHIMNEY CAPS
SCALE HALF SIZE.

BASIC DATA

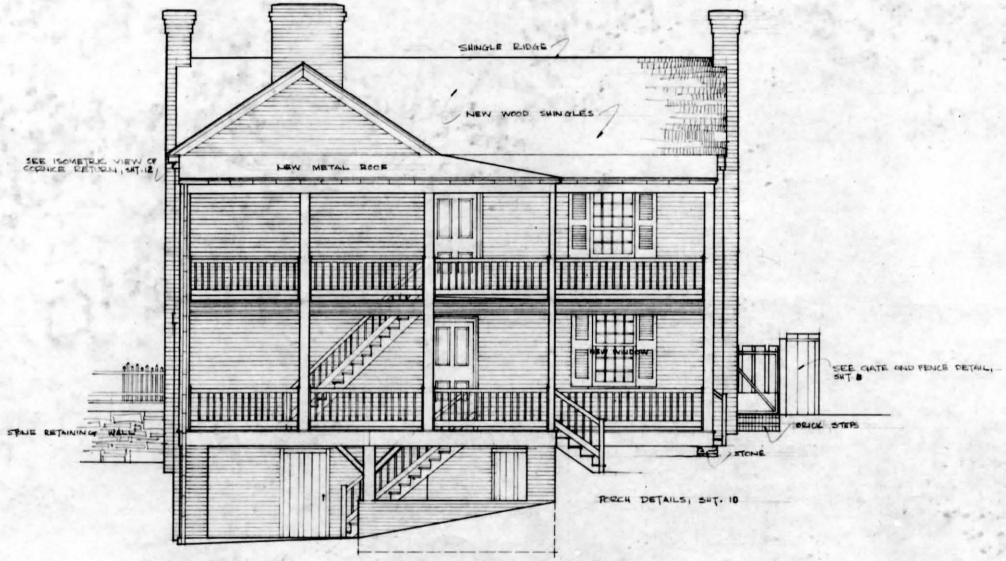
SCALE AS NOTED

RECOMMENDED
APPROVED
DATE

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN & CONSTRUCTION
PREPARED BY
FIELD REPRESENTATIVE - EASTERN OFFICE
OFFICE
ANDREW JOHNSON HOME RESTORATION
TITLE OF DRAWING
GREENEVILLE, TENNESSEE.
LOCATION WITHIN AREA
ANDREW JOHNSON NATIONAL MONUMENT
NAME OF AREA

ORIENTATION REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV. REGION
WASHINGTON
DES. & CONST. EASTERN
A.
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L.A.
WASHINGTON
A.
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L.A.
OTHER
PREPARED
DESIGNED H.A. JUDD
DRAWN
CHECKED
REVISED
DATE | INITIAL

REGION ONE
PCP
SHEET 5 OF 5
DRAWING NO. NHP-AJ 8054-A
DATE 10-7-56



EAST ELEVATION

1/4"=1'-0"

SCALE AS NOTED

BASIC DATA

RECOMMENDED _____ DATE

APPROVED _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
PREPARED BY
FIELD REPRESENTATIVE, EASTERN
OFFICE

ANDREW JOHNSON HOME RESTORATION
TITLE OF DRAWING
GREENEVILLE TENNESSEE
LOCATION WITHIN AREA
ANDREW JOHNSON NATIONAL MONUMENT
NAME OF AREA

REGION CARE
PCP
SHEET 6 OF 12
DRAWING NO. NHAJ 3094-A
DATE

ORIENTATION REVIEWED

OPERATIONS REGION
WASHINGTON

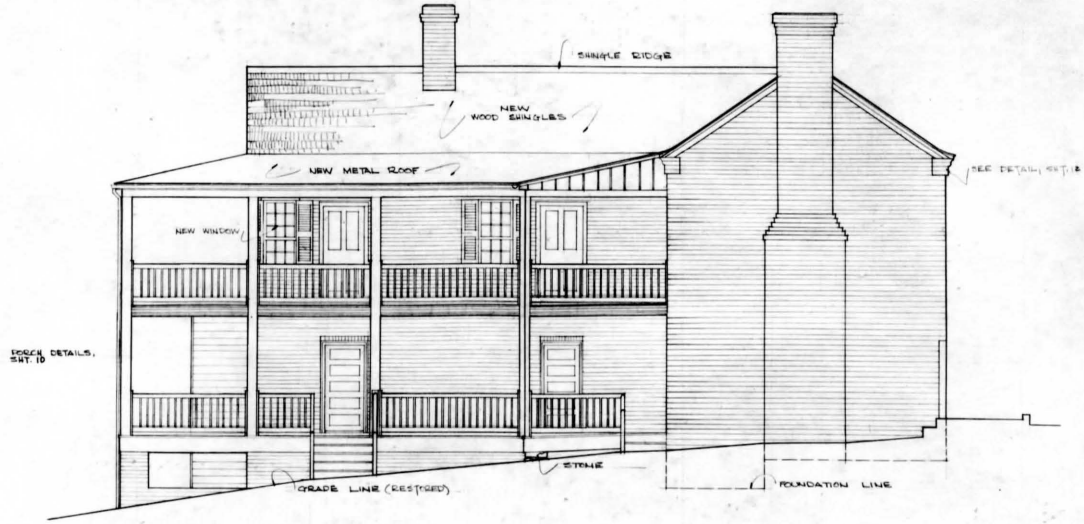
INTERP. REGION
WASHINGTON

COOP. ACTV. REGION
WASHINGTON

DES. & CONST.
EA STERN
A.
E.
L.A.
WASHINGTON
A.
E.
L.A.

OTHER

PREPARED
E.A. ARC
E.A. CONNALLY
DESIGNED
ORIGINALLY DRAWN
CHECKED
REVISED DATE INITIAL



NORTH ELEVATION

1/4"=1'-0"

SCALE 1/4"=1'-0"

BASIC DATA EXISTING STRUCTURE

RECOMMENDED DATE

APPROVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
PREPARED BY
FIELD REPRESENTATIVE - EASTERN
OFFICE
ANDREW JOHNSON HOME RESTORATION
TITLE OF DRAWING
GREENEVILLE - TENNESSEE
LOCATION WITHIN AREA
ANDREW JOHNSON NATIONAL MONUMENT
NAME OF AREA

ORIENTATION REVIEWED

OPERATIONS REGION
WASHINGTON

INTERP. REGION
WASHINGTON

COOP. ACTV. REGION
WASHINGTON

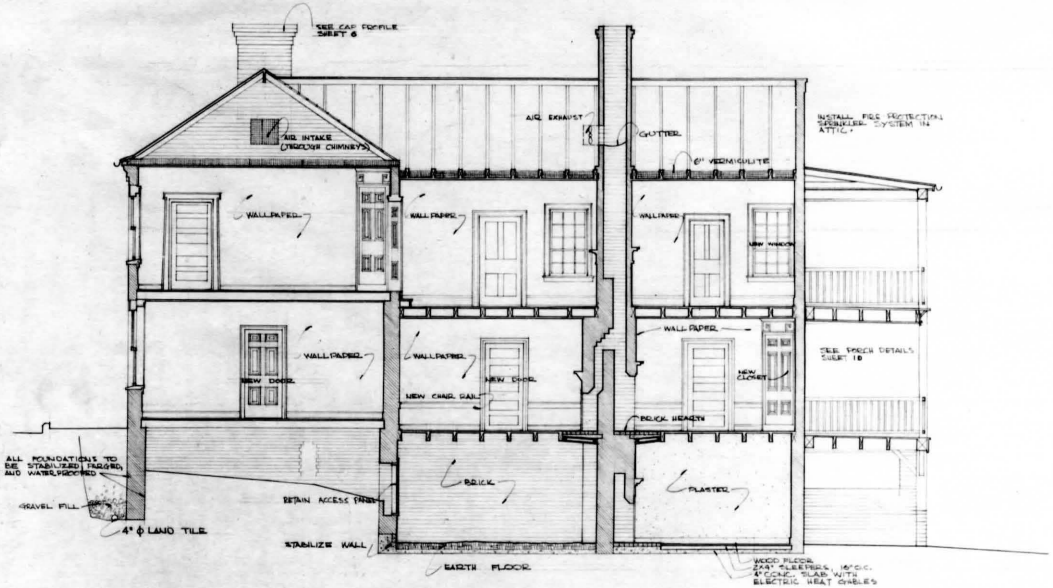
DES. & CONST.
EA. STERN
A. CAP
E.
L.A.
WASHINGTON
A.
E.
L.A.

OTHER

PREPARED
MDD - GOMALLY
DESIGNED
O'GORMAN
DRAWN
CHECKED

REVISED
DATE | INITIAL

REGION ONE
PCP
SHEET 7 OF 18
DRAWING NO. NMJA1 20013-A
DATE



EAST-WEST SECTION "A-A"

1/4" = 1'-0"

ORIENTATION

REVIEWED

OPERATIONS REGION

WASHINGTON

INTERP. REGION

WASHINGTON

COOP. ACTV. REGION

WASHINGTON

DES. & CONST. EASTERN A. J.A.J. E. L.A.

WASHINGTON A. E. L.A.

OTHER

PREPARED U.A. JUPD. DESIGNED CHICKMAN DRAWN CHECKED

REVISED DATE / INITIAL

SCALE 1/4"=1'-0"

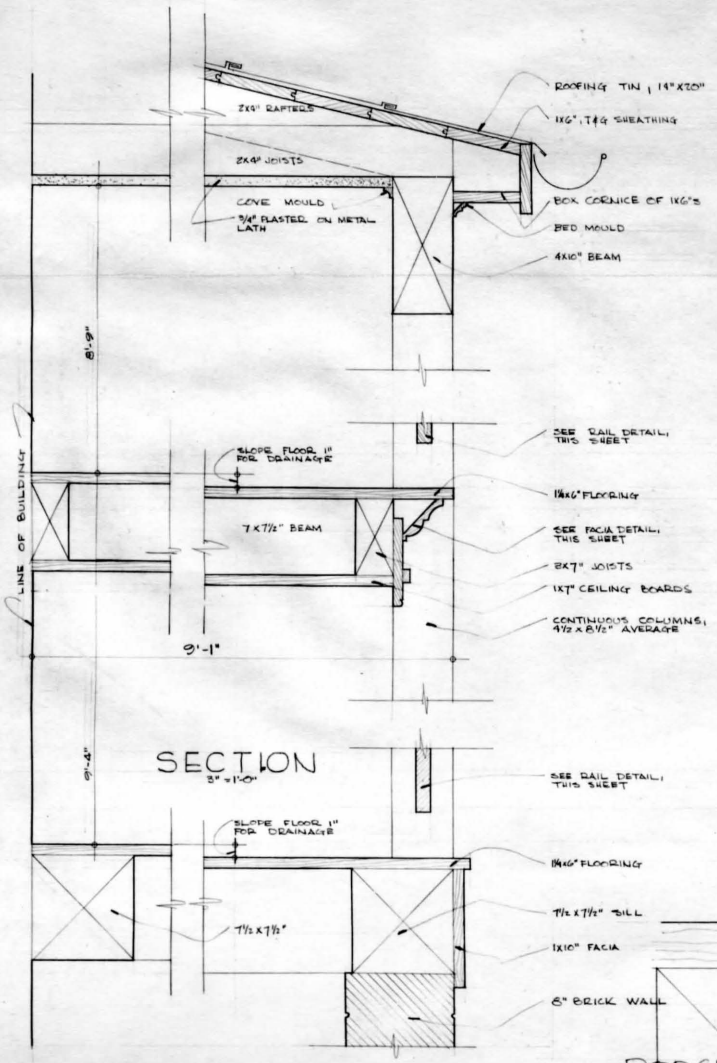
RECOMMENDED DATE

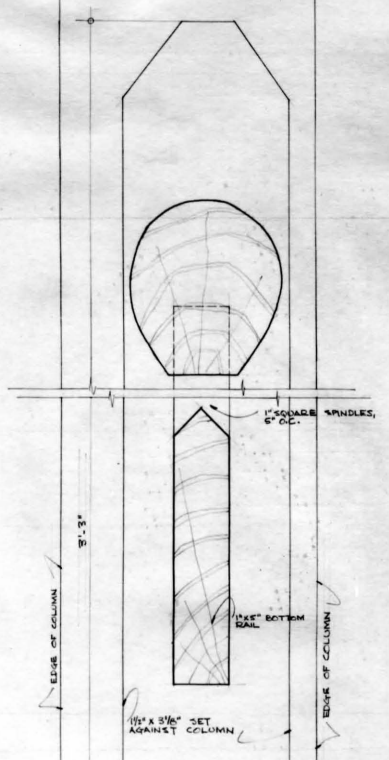
APPROVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
PREPARED BY
FIELD REPRESENTATIVE - EASTERN
OFFICE
ANDREW JOHNSON HOME RESTORATION
TITLE OF DRAWING
GREENEVILLE, TENNESSEE
LOCATION WITHIN AREA
ANDREW JOHNSON NATIONAL MONUMENT
NAME OF AREA

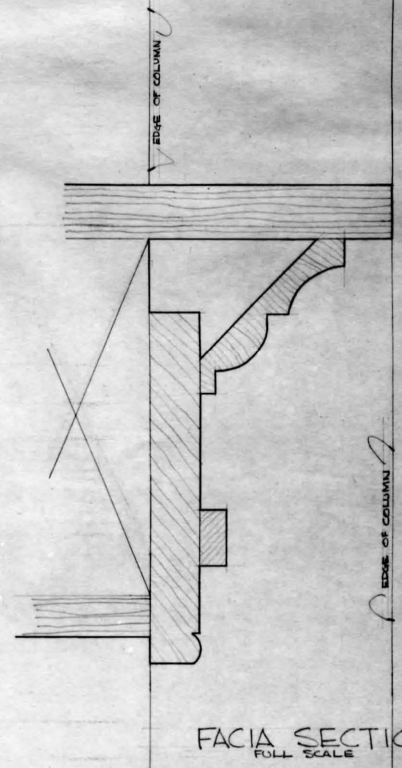
REGION CME
PCP
SHEET 8 OF 13
DRAWING NO. NM-AJ 3050-B
DATE

BASIC DATA NM-AJ: 3050, SHEET 8 EXISTING STRUCTURE JULY, 1966





RAIL SECTION
FULL SCALE



FACIA SECTION
FULL SCALE

PORCH DETAILS

BASIC DATA EXISTING STRUCTURE

SCALE AS NOTED

RECOMMENDED DATE

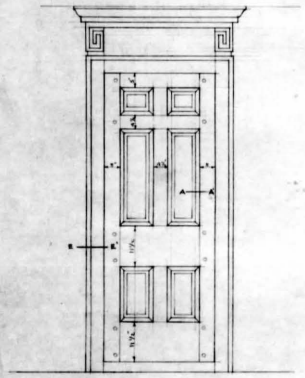
APPROVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
DRAWN BY
FIELD REPRESENTATIVE - EASTERN
OFFICE

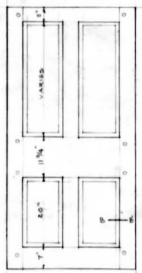
ANDREW JOHNSON HOME RESTORATION
TITLE OF DRAWING
GREENEVILLE TENNESSEE
LOCATION WITHIN AREA
ANDREW JOHNSON NATIONAL MONUMENT
NAME OF AREA

ORIENTATION REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV. REGION
WASHINGTON
DES. & CONST. E.A. REGION
A. CAL
E.
L.A.
WASHINGTON
A.
E.
L.A.
OTHER
PREPARED
AUTO. DRAFTSMAN
CHECKED
REVISED DATE | INITIAL

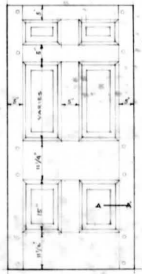
REGION ONE
FILE
SHEET 5 OF 5
DRAWING NO. NM-41 506A
DATE



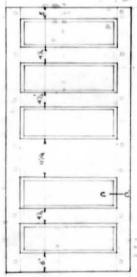
CORNER CABINET
SCALE 1/2" = 1'-0"



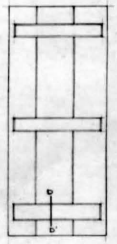
4 PANEL DOOR
SCALE 1/2" = 1'-0"



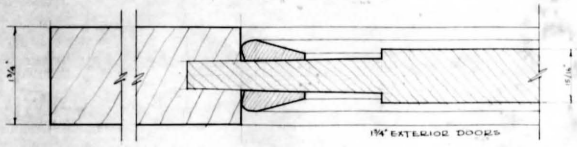
6 PANEL DOOR
SCALE 1/2" = 1'-0"



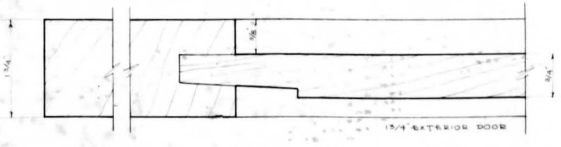
5 PANEL DOOR
SCALE 1/2" = 1'-0"



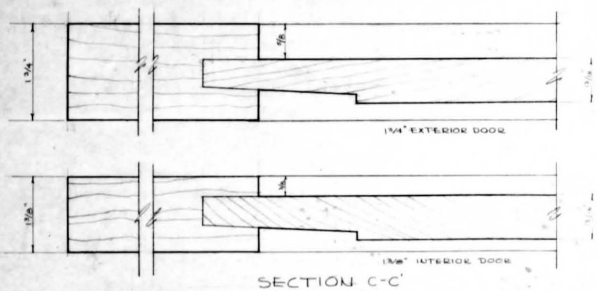
BATTEN DOOR
SCALE 1/2" = 1'-0"



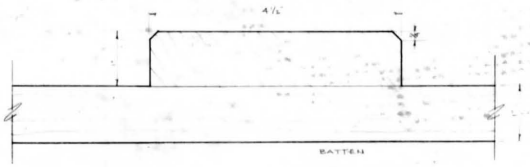
SECTION A-A'



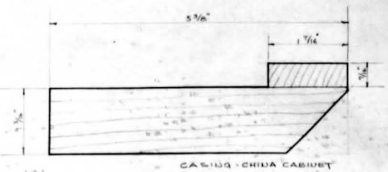
SECTION B-B



SECTION C-C'



SECTION D-D'



SECTION E-E'

NOTES:
ALL SECTIONS FULL SIZE.
PANEL SIZES VARY WITH SIZE OF DOOR.

BASIC DATA EXISTING DOORS.

DOOR DETAILS

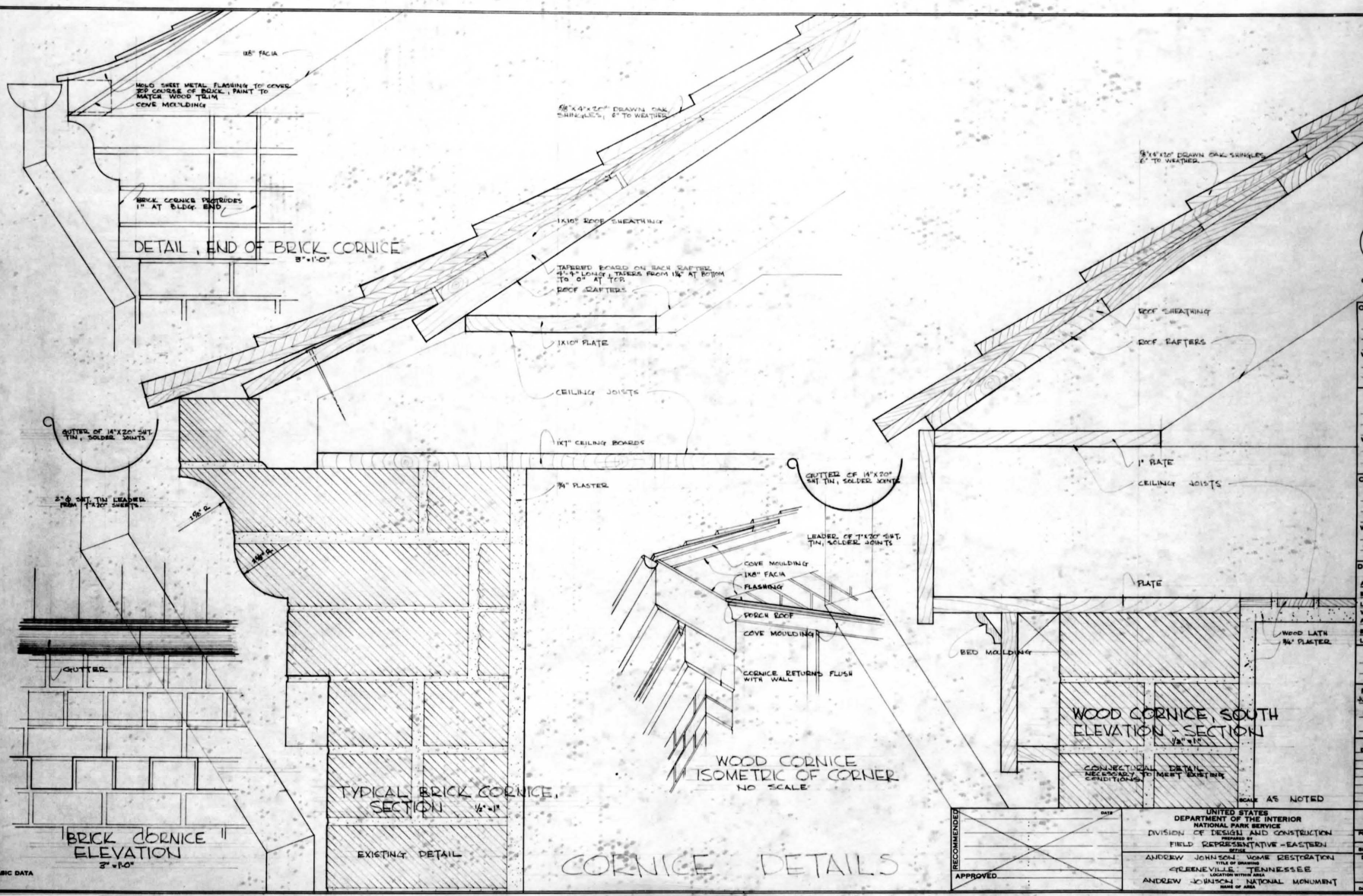
SCALE AS NOTED

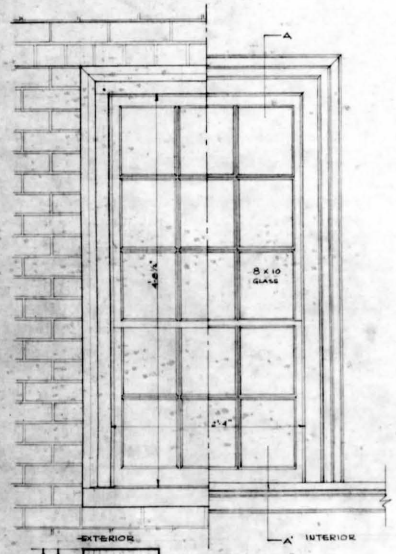
RECOMMENDED — DATE
APPROVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN & CONSTRUCTION
PREPARED BY
FIELD REPRESENTATIVE - EASTERN OFFICE
TITLE OF DRAWING
ANDREW JOHNSON HOME RESTORATION
LOCATION WITHIN AREA
GREENEVILLE, TENNESSEE
NAME OF AREA
ANDREW JOHNSON NATIONAL MONUMENT

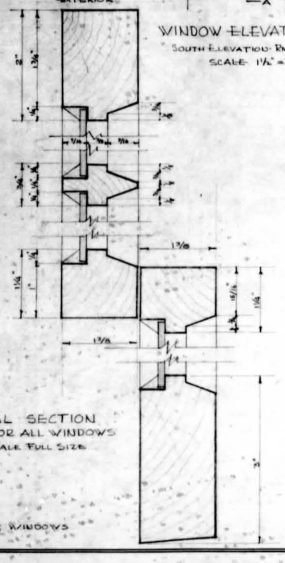
REGION ONE
PCP
SHEET 10 OF 18
DRAWING NO. NM-AJ 5053 A
DATE 10-28-55

ORIENTATION REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV. REGION
WASHINGTON
DES. & CONST. EASTERN A. E. L.A.
WASHINGTON A. E. L.A.
OTHER
PREPARED H. A. JUDD, A.F.O. GORMAN
DESIGNED H. A. JUDD, A.F.O. GORMAN
DRAWN
CHECKED
REVISED DATE | INITIAL

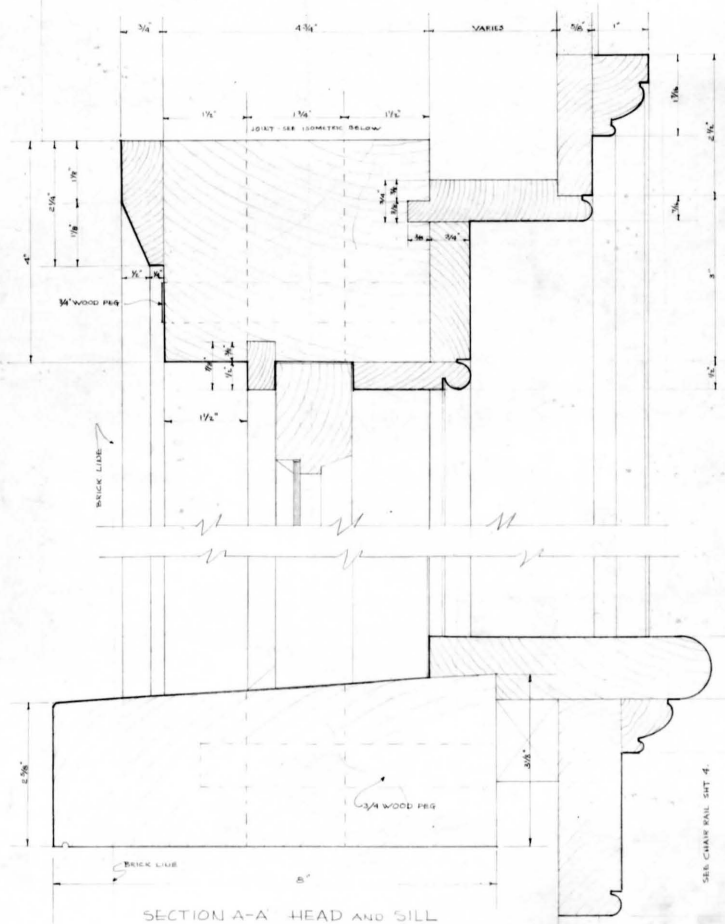

1x8" FACIA
HOLD SHEET METAL FLASHING TO COVER TOP COURSE OF BRICK, PAINT TO MATCH WOOD TRIM
COVE MOULDING
BRICK CORNICE PROTRUDES 1" AT BLDG. END
DETAIL, END OF BRICK CORNICE
3"=1'-0"
5/8"x4"x24" DRAWN OAK SHINGLES, 6" TO WEATHER
1x10" ROOF SHEATHING
TAPERED BOARD ON BACK RAFTER, 9'-9" LONG, TAPERS FROM 1¼" AT BOTTOM TO 0" AT TOP
ROOF RAFTERS
1x10" PLATE
CEILING JOISTS
1x1" CEILING BOARDS
¾" PLASTER
GUTTER OF 14"X20" SHT. TIN, SOLDER JOINTS
3"ø SHT. TIN LEADER FROM 14"X20" SHEETS
GUTTER
BRICK CORNICE ELEVATION
3"=1'-0"
TYPICAL BRICK CORNICE, SECTION
½"=1"
EXISTING DETAIL
LEADER OF 7"X20" SHT. TIN, SOLDER JOINTS
COVE MOULDING
1x8" FACIA
FLASHING
PORCH ROOF
COVE MOULDING
CORNICE RETURNS FLUSH WITH WALL
WOOD CORNICE ISOMETRIC OF CORNER
NO SCALE
5/8"x4"x20" DRAWN OAK SHINGLES 6" TO WEATHER
ROOF SHEATHING
ROOF RAFTERS
1" PLATE
CEILING JOISTS
PLATE
BED MOULDING
WOOD LATH ¾" PLASTER
WOOD CORNICE, SOUTH ELEVATION - SECTION
½"=1"
CONJECTURAL DETAIL NECESSARY TO MEET EXISTING CONDITIONS
SCALE AS NOTED
CORNICE DETAILS
BASIC DATA
RECOMMENDED
APPROVED
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
FIELD REPRESENTATIVE - EASTERN
ANDREW JOHNSON HOME RESTORATION
GREENEVILLE, TENNESSEE
ANDREW JOHNSON NATIONAL MONUMENT
ORIENTATION REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV. REGION
WASHINGTON
DES. & CONST.
E.A. STERN
A.
E.
L.A. WASHINGTON
A.
E.
L.A.
OTHER
PREPARED
JUDD O'GORMAN
DRAWN
CHECKED
REVISED
DATE | REVISIONS
REGION ONE
SHEET 11 OF 15
DRAWING NO. NM-NJ 3051-A
DATE



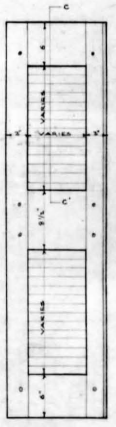
WINDOW ELEVATION
South Elevation: Rms 546
SCALE: 1½" = 1'-0"



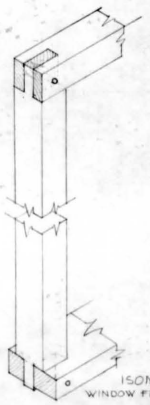
TYPICAL SECTION
SASH FOR ALL WINDOWS
SCALE FULL SIZE



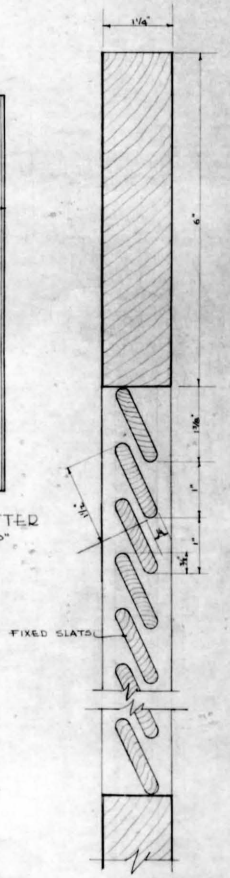
SECTION A-A' HEAD AND SILL
JAMB DETAIL SIMILAR TO HEAD DETAIL
SCALE: FULL SIZE



TYPICAL SHUTTER
SCALE 1½" = 1'-0"



ISOMETRIC
WINDOW FRAME ASSEMBLY



SECTION C-C'
SCALE FULL SIZE

WINDOW & SHUTTER DETAILS

BASIC DATA EXISTING WINDOWS

SCALE AS NOTED

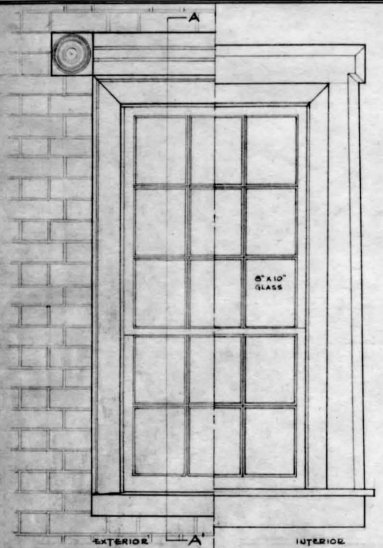
RECOMMENDED ____ DATE

APPROVED

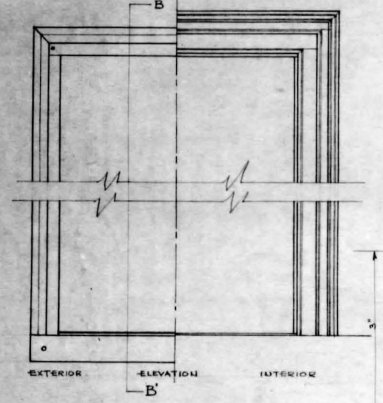
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN & CONSTRUCTION
PREPARED BY
FIELD REPRESENTATIVE - EASTERN OFFICES
OFFICE
ANDREW JOHNSON HOME RESTORATION
TITLE OF DRAWING
GREENEVILLE, TENNESSEE
LOCATION WITHIN AREA
ANDREW JOHNSON NATIONAL MONUMENT
NAME OF AREA

ORIENTATION REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV. REGION
WASHINGTON
DES. & CONST. SOUTHEASTERN
A.
E.
L.A.
WASHINGTON
A.
E.
L.A.
OTHER
PREPARED in A. JUDD
DESIGNED H. A. JUDD
DRAWN
CHECKED
REVISED DATE | INITIAL

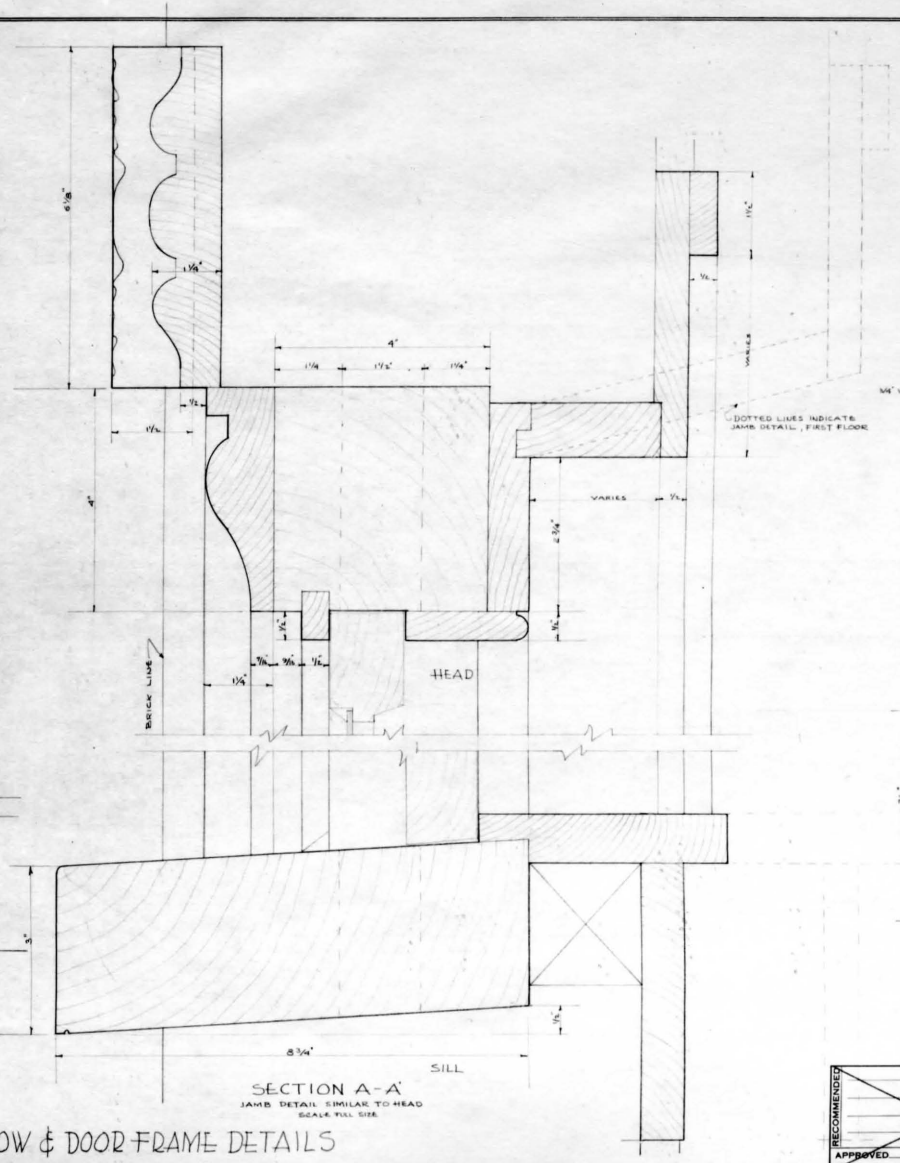
REGION ONE
FCP
SHEET 12 OF 15
DRAWING NO. NJMAJ 3058 A
DATE 11-1-86



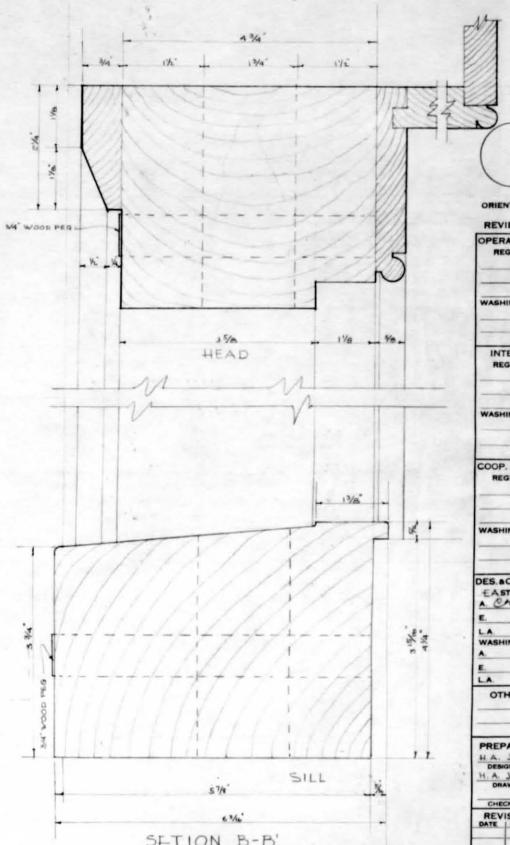
TYPICAL WINDOW ELEVATION
ROOMS 3, 4, 7 & 8 SCALE 1½" = 1'-0"
SIZES VARY TO ACCOMODATE 6/6, 9/6 & 12/12 SASH
GLASS SIZE OF ALL SASH 8"x10"



TYPICAL DOOR FRAME
SCALE 1½" = 1'-0"



SECTION A-A'
JAMB DETAIL SIMILAR TO HEAD
SCALE FULL SIZE



SETION B-B'
JAMB DETAIL SAME AS HEAD
SCALE FULL SIZE

BASIC DATA EXISTING FRAMES

WINDOW & DOOR FRAME DETAILS

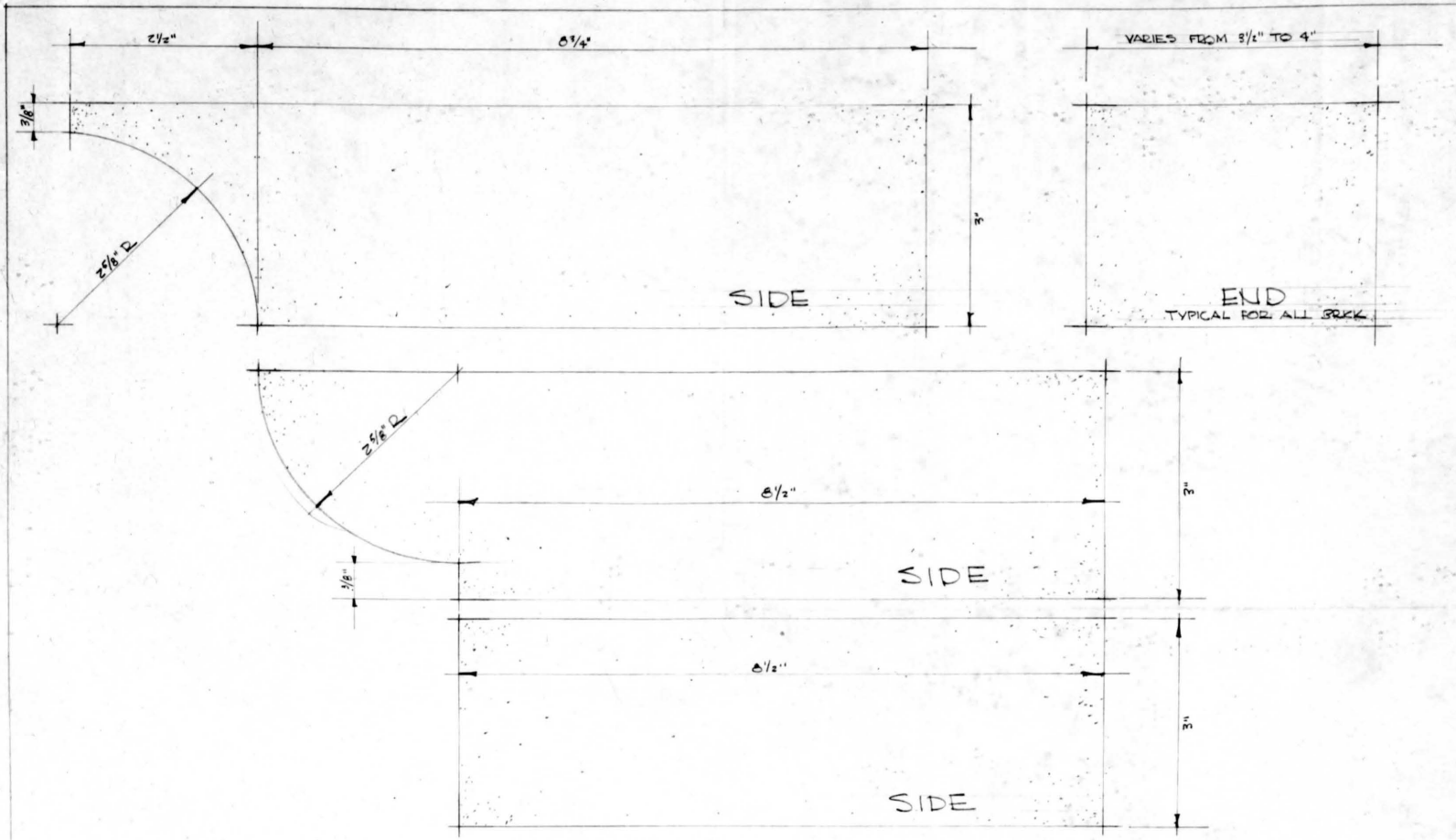
SCALE AS NOTED

RECOMMENDED DATE
APPROVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN & CONSTRUCTION
PREPARED BY
FIELD REPRESENTATIVE EASTERN OFFICE
OFFICE
ANDREW JOHNSON HOME RESTORATION
TITLE OF DRAWING
GREENEVILLE, TENNESSEE
LOCATION WITHIN AREA
ANDREW JOHNSON NATIONAL MONUMENT
NAME OF AREA

ORIENTATION REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV REGION
WASHINGTON
DES. & CONST.
EASTERN
A. & E.
L.A.
WASHINGTON
A.
E.
L.A.
OTHER
PREPARED H.A. JUDD
DESIGNED H.A. JUDD
DRAWN
CHECKED
REVISED DATE | INITIAL

REGION ONE
PCP
SHEET 15 OF 15
DRAWING NO. NMA-J 3054-A
DATE 11-1-56



MOULDED BRICK, EXTERIOR CORNICE

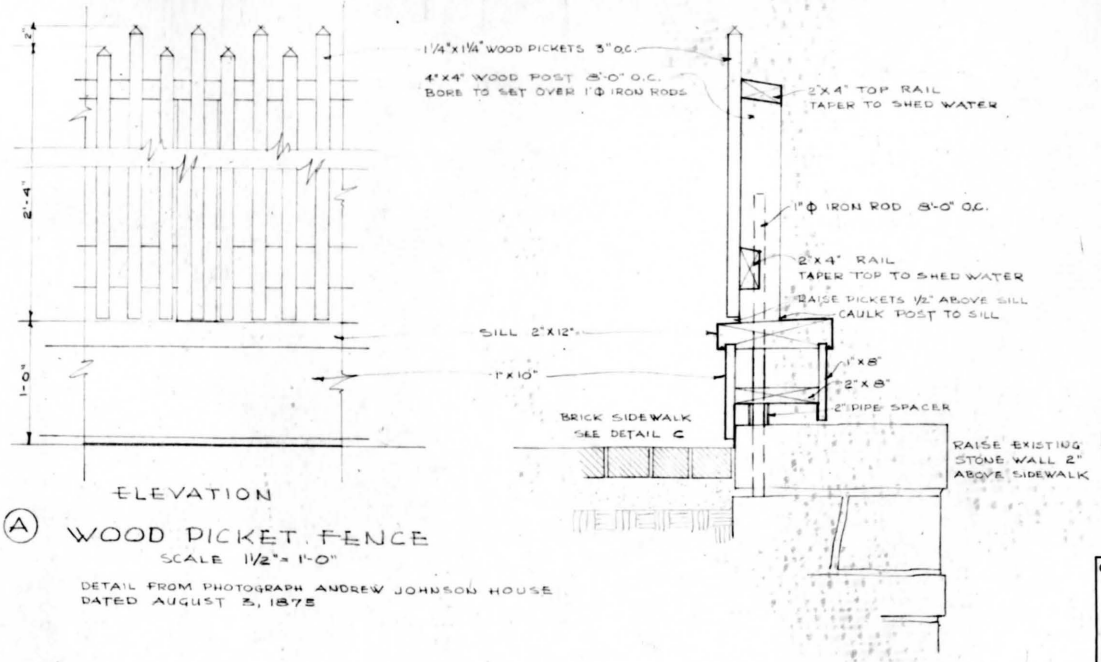
SHOWN IN APPROXIMATE CORNICE POSITION

FULL SCALE

NOTE:
ALL DIMENSIONS VARIABLE UP TO 1/8"

UNITED STATES DEPARTMENT OF INTERIOR NATIONAL PARK SERVICE DIVISION OF DESIGN & CONST.	REGION ONE
MOULDED BRICK DETAILS ANDREW JOHNSON HOME GREENEVILLE TENNESSEE	NM-AJ 3050 REDRAFT

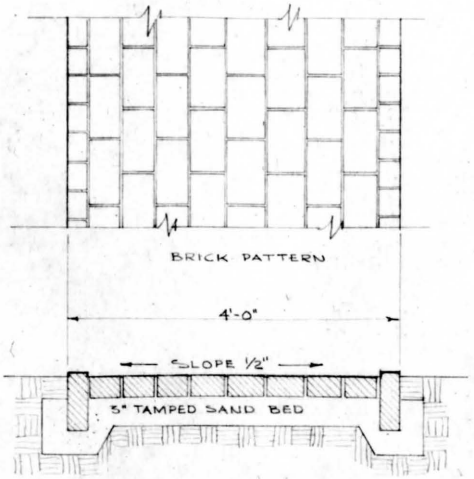
O'GORMAN - DEL 9/17/56



(A) WOOD PICKET FENCE

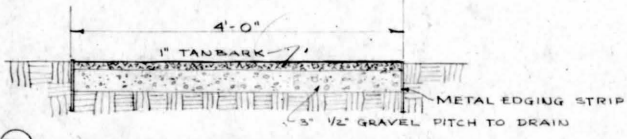
SCALE 1½"= 1'-0"

DETAIL FROM PHOTOGRAPH ANDREW JOHNSON HOUSE
DATED AUGUST 3, 1875



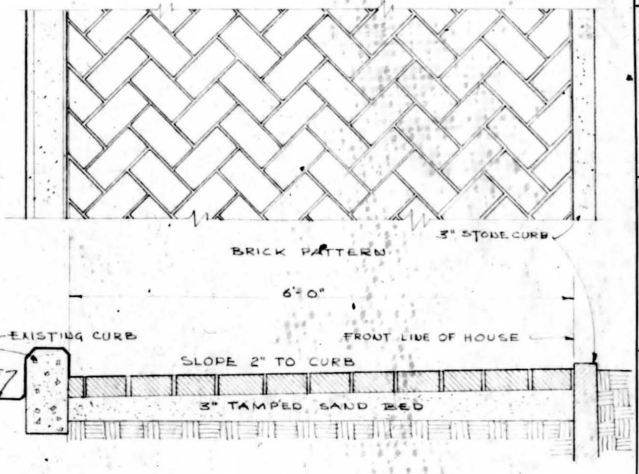
(B) BRICK WALK

SCALE 1½"= 1'-0"
DETAIL FROM EXISTING FRAGMENTS



(D) TANBARK WALK

SCALE 1½"=1'-0"
DETAIL FROM WALKS MILLIGAN
HOUSE CA 1855



(C) BRICK SIDEWALK - MAIN STREET

SCALE 1½" = 1'-0"

DETAIL FROM PHOTOGRAPHS - JOHNSON HOUSE

SCALE AS NOTED

ORIENTATION REVIEWED

OPERATIONS
REGION
WASHINGTON

INTERP.
REGION
WASHINGTON

COOP. ACTV.
REGION
WASHINGTON

DES. & CONST.
EASTERN
A.
E.
L.A.
WASHINGTON
A.
E.
L.A.

OTHER

PREPARED
H.A. JUDD
J.F. OGDENMAN
DESIGNED
H.A. JUDD
DRAWN
CHECKED

REVISED

DATE	INITIAL
3/4/57	

RECOMMENDED

ACTG CHIEF, EODC (Benjamin H. Davis (Memo)) DATE 2/25/57
SUPERINTENDENT
REGIONAL DIRECTOR
CHIEF, DIVISION OF DESIGN & CONSTRUCTION

APPROVED
DIRECTOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN & CONSTRUCTION
PREPARED BY
FIELD REPRESENTATIVE - EASTERN OFFICE
OFFICE

FENCE AND WALK DETAILS
TITLE OF DRAWING
ANDREW JOHNSON HOME RESTORATION
LOCATION WITHIN AREA
ANDREW JOHNSON NATIONAL MONUMENT
NAME OF AREA

REGION ONE
FCP
SHEET 1 OF 1
DRAWING NO. NHS-AJ 3060
DATE 12-7-56

MULTI BREAKER PANEL FOR 4 WIRE 120-208 V. 3 Φ SERVICE

MAIN DISTRIBUTION PANEL SCHEDULE

PHASE CON.	POLES	VOLTS	BREAKER	CIRCUIT	LOCATION
AB	2	208	20A	1	HEAT CABLE RM. #5
BC	"	"	"	2	" 1ST FLR. HALL
CA	"	"	"	3	" RM. #6
AB	"	"	"	4	" RM. #5
BC	"	"	"	5	" RM. #4
CA	"	"	"	6	" RM. #3
AB	"	"	"	7	" RM. #2
BC	"	"	"	8	" RM. #1
CA	"	"	"	9	UNIT HEATER RM. #5
AB	"	"	"	10	" RM. #7
BC	"	"	"	11	WALL HEATER LAV.
CA	"	"	"	12	UNIT HEATER KIT.
AB	1	120	"	13	ATTIC LIGHTS (5)
BC	1	"	"	14	RECP. (ONE PER) (3)
CA	1	"	"	15	DOOR LIGHTS & MISC.
AB	1	"	"	16	FOR 1ST LTS. STAIR (4)
BC	1	"	"	17	BSMT. LTS, UTILITY (3)
CA	1	"	"	18	BSMT. LTS. RM. (9)
AB	1	"	"	19	BSMT. RECP. (5)
BC	1	"	"	20	ROOM #1, 2, 3, 4 & HALL
CA	1	"	"	21	RECP. RM. #5, 6, 7
AB	1	"	"	22	ATTIC FAN
BC	2	208	"	23	UNIT HEATER RM. #1
CA	2	208	"	24	SPARE
AB	1	120	"	25	RECP. ATTIC, CLOSET RM. #5
BC	1	"	"	26	SPARE
CA	1	"	"	27	
AB	1	"	"	28	

NOTE: ALL BRANCH CIRCUITS #12 AWG. TYPE TW IN CONDUIT.

METER POLE — APPROX. 100' — SERVICE TO MAIN SER. HEAD 3/0 AWG IN 2½" C. (CU) CONNECT TO NEW POLE

½" CONDUIT IN PARTWAY FOR PROTECTOR EYE TRANSMITTER, WATER, ELECTRIC

Room No. 2 KITCHEN

1800 W WALL HEATER

LAVATORY

FIRE & BURGLAR ALARM PANEL

Room No. 1 STORAGE RM.

UTILITY AREA

UNEXCAVATED U-1

UNEXCAVATED U-2

BASEMENT PLAN

Room No. 6

Room No. 5

PORCH

Room No. 3

HALL

Room No. 4

ANGLE STAIR

FIRST FLOOR PLAN

Notes:

- SINGLE CONVENIENCE OUTLET OVER DOOR FOR 36" FLOURESCENT STRIP LIGHT IN TROUGH
- DUPLEX FLOOR OUTLET (DUPLEX)

PORCH LIGHTS TO BE ELECTRIFIED, COAL OIL WALL BRACKET LAMPS.

HALL LAMP TO BE ELECTRIFIED COAL OIL WALL CHANDELIER.

CHANDELIERS USED IN ROOM 3 (PARLOR) & ROOM 4 (DINING) NOT TO BE ELECTRIFIED.

HEATING DESIGNED 4/5/57 by A. SKOUFOS, E.O.S.D.C.

THERMOSTATS TO BE LOCATED AT DIRECTION OF SUPERVISING ARCHT.

HEATING TO CONFORM TO MANUFACTURERS SPECIFICATIONS AND THE REQUIREMENTS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS

WORKING DRAWING

THESE DRAWINGS WERE PREPARED IN CENTRAL OFFICE WITH PRELIMINARY DRAWINGS NO. AN-AJ 20024 AS REVISED BY EUGT. DENG. K. DAVIS, HISTORIC ARCH. DIRECTOR WITH AS MEMO. MINUTE

ACTING CHIEF, E.D.C.D.C.

RECOMMENDED — DATE

APPROVED — DATE

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN & CONSTRUCTION
PREPARED BY
FIELD REPRESENTATIVE - EASTERN OFFICE
DETAILED

ELECTRICAL INSTALLATION
TITLE OF DRAWING
ANDREW JOHNSON HOME RESTORATION
LOCATION WITHIN AREA
ANDREW JOHNSON N.M. GREENEVILLE, TENN.
NAME OF AREA

SCALE 1/4 IN. = 1 FT.

ORIENTATION REVIEWED

OPERATIONS REGION — WASHINGTON

INTERP. REGION — WASHINGTON

COOP. ACTV. REGION — WASHINGTON

DES. & CONST. & STEMS — WASHINGTON — A. — E. — L.A.

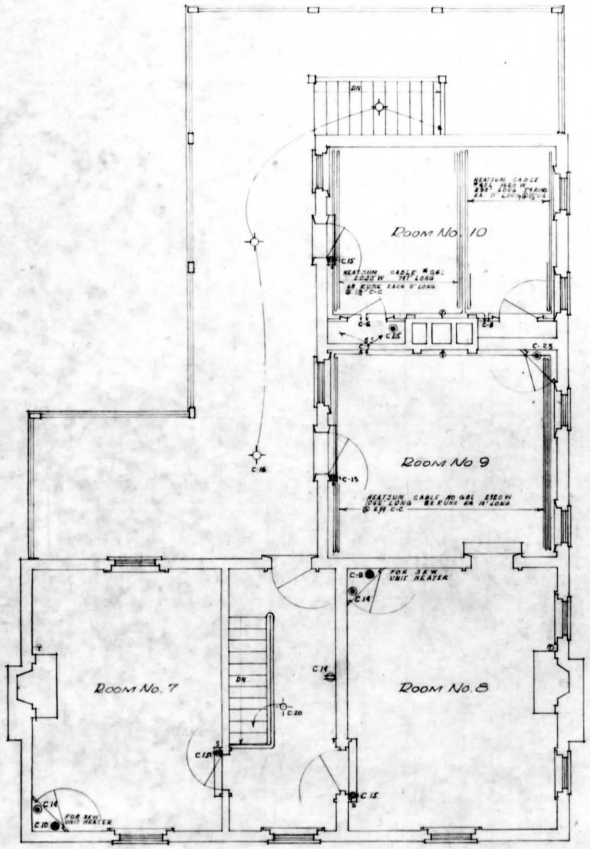
OTHER

PREPARED H. A. JUDD
DESIGNED H. A. JUDD
DRAWN G.R. DANIELSEN
CHECKED

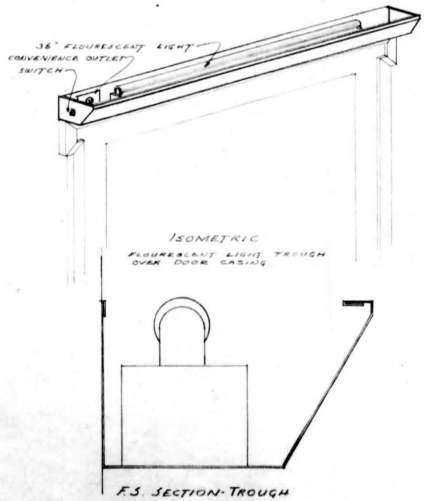
REVISED DATE | INITIAL

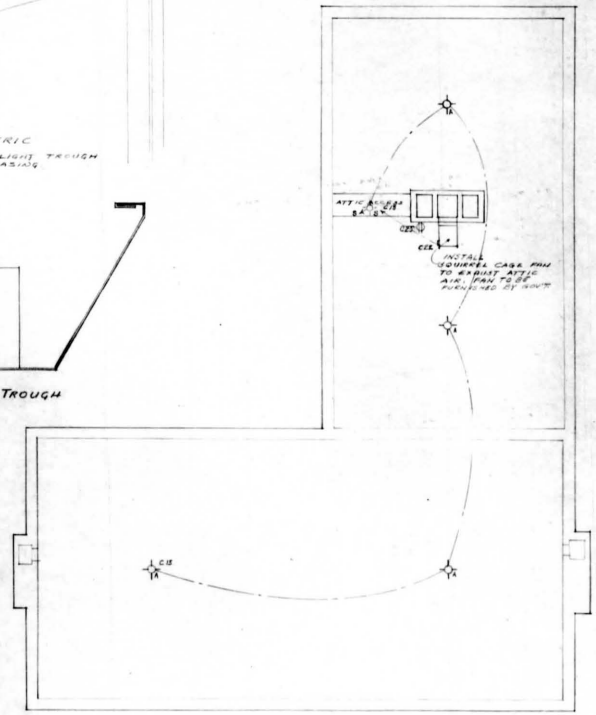
REGION ONE
FCP
SHEET 1 OF 2
DRAWING NO. NM-AJ 3001
DATE 11-26-56

BASIC DATA



SECOND FLOOR PLAN





ATTIC PLAN

HEATING DESIGNED ATTEST by A. CHUBUROFF
① THERMOSTATS TO BE LOCATED UNDER THE DIRECTION OF THE SUPERVISING ARCHITECT.
MFG. HONEYWELL T6A THERMOSTAT RECOMMENDED. HEATING TO CONFORM TO MANUFACTURERS SPECIFICATIONS AND THE REQUIREMENTS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS.

NOTES:
- SINGLE CONVENIENCE OUTLET OVER DOOR FOR 36" FLOUR. STRIP LIGHT IN TROUGH
- 110V FLOOR OUTLET (DUPLEX)
- 220V OUTLET FOR PORTABLE ELECTRIC HEATERS
- LIGHTS IN PORCH & STAIRS TO BE PIN HOLE APERTURE (LEIGHTOLIER NO. 7924 OR EQUAL)
- A TYPE T&E, 200 WATT (MAX SIZE), GLOBE & GUARD (RAINTIGHT)

ORIGINAL PRINT REVISED 8 APRIL 1937 JM-1-7-E.

SCALE 1/4 in. = 1 ft.

RECOMMENDED ____ DATE ____
APPROVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN & CONSTRUCTION
PREPARED BY OFFICE
FIELD REPRESENTATIVE - EASTERN OFFICE
TITLE OF DRAWING
ELECTRICAL INSTALLATION
LOCATION WITHIN AREA
ANDREW JOHNSON HOME RESTORATION
NAME OF AREA
ANDREW JOHNSON N.M. - GREENEVILLE, TENN.

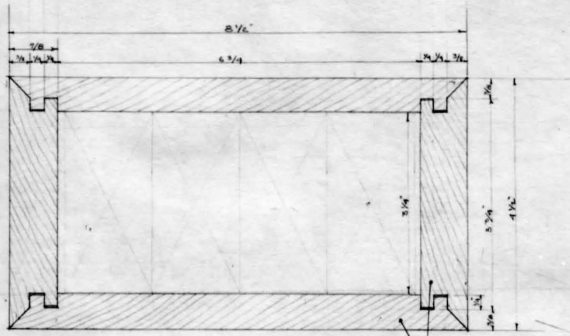
ORIENTATION REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV REGION
WASHINGTON
DES. & CONST.
A. STERN
E.
L.A.
WASHINGTON
A.
E.
L.A.
OTHER

PREPARED
C.E. PATTISON
H.A. JUDD
DESIGNED
H.A. JUDD
DRAWN
E.K. DANIELSEN
CHECKED

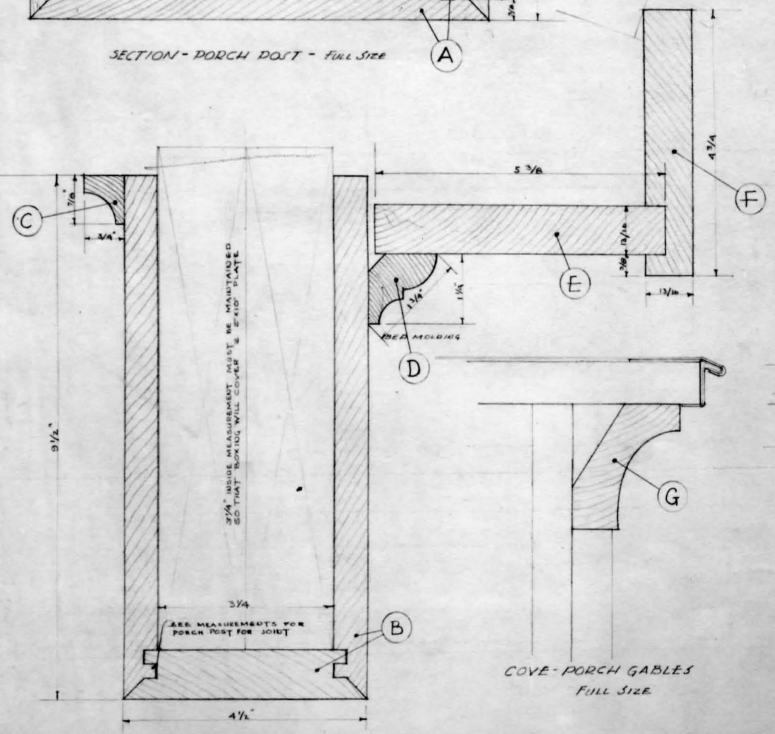
REVISED
DATE | INITIAL

REGION ONE
PCP
SHEET 2 OF 2
DRAWING NO. NM-AJ 3081
DATE 1-17-37

BASIC DATA



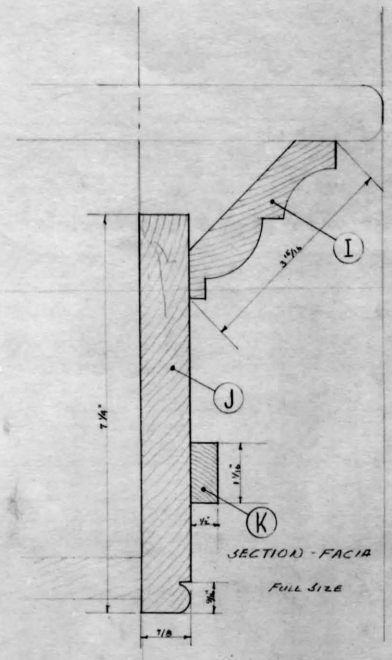
SECTION - PORCH POST - FULL SIZE



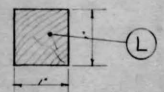
SECTION - PORCH PLATE & CORNICE - FULL SIZE

COVE - PORCH GABLES
FULL SIZE

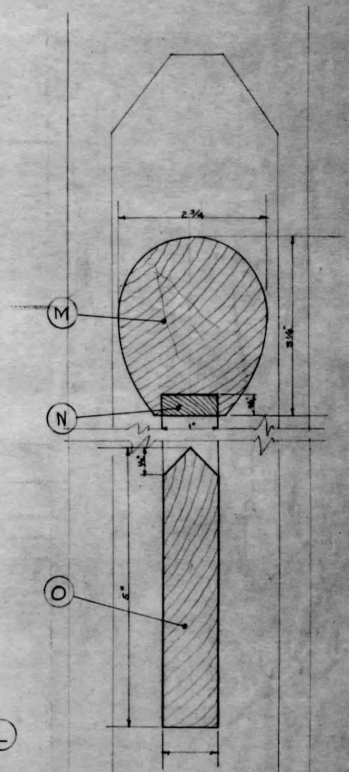
COVE - HOUSE GABLES
FULL SIZE



SECTION - FACIA
FULL SIZE



SECTION - BALUSTER
FULL SIZE



SECTION - PORCH RAIL
FULL SIZE

SCALE FULL SIZE

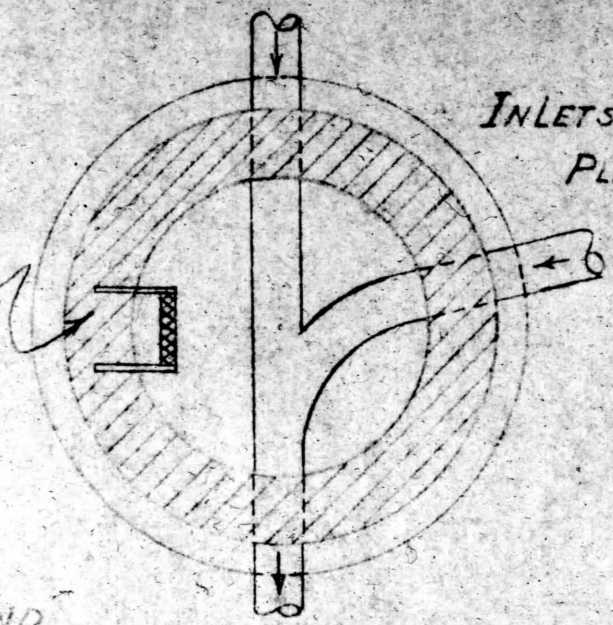
RECOMMENDED
APPROVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN & CONSTRUCTION
FIELD REPRESENTATIVE - EASTERN OFFICE
EXTERIOR MILLWORK DETAILS
ANDREW JOHNSON HOME RESTORATION
ANDREW JOHNSON N. HS. GREENEVILLE, TENN.

ORIENTATION REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV. REGION
WASHINGTON
DES. & CONST. EASTERN A. E. L.A.
WASHINGTON A. E. L.A.
OTHER
PREPARED H.A. JUDD
DRAWN H. A. JUDD
CHECKED
REVISED DATE | INITIAL

DRAWING ONE
RDP
SHEET 1 OF 3
RECORD SET MARCH 2005
DSC 1-20-05

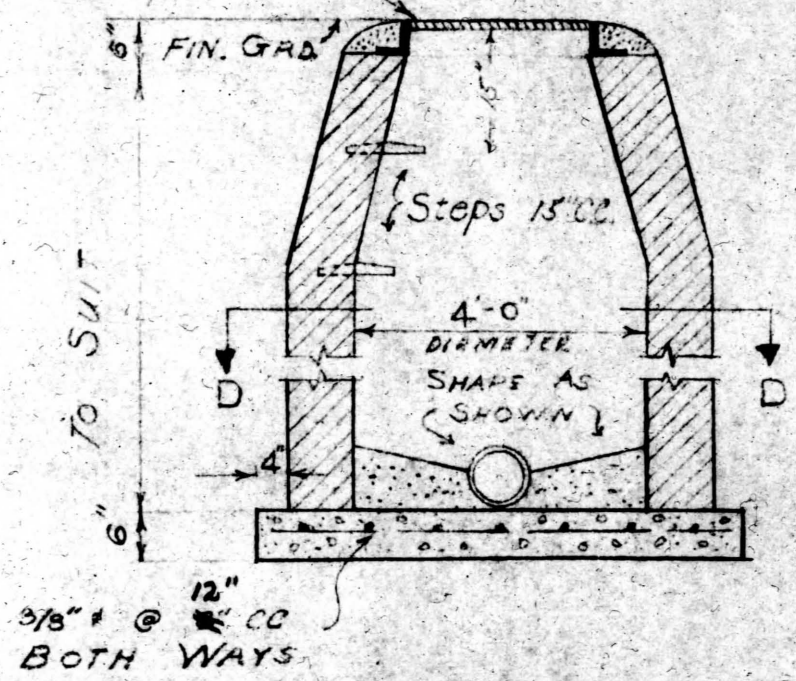
BASIC DATA



MANHOLE TO BE CONSTRUCTED OF BRICK OR CIRCULAR CONCRETE BLOCK.
OUTSIDE TO RECEIVE ½" MORTAR COAT.

C.I. MANHOLE FRAME AND COVER - 22" MIN. OPENING

SECTION DD

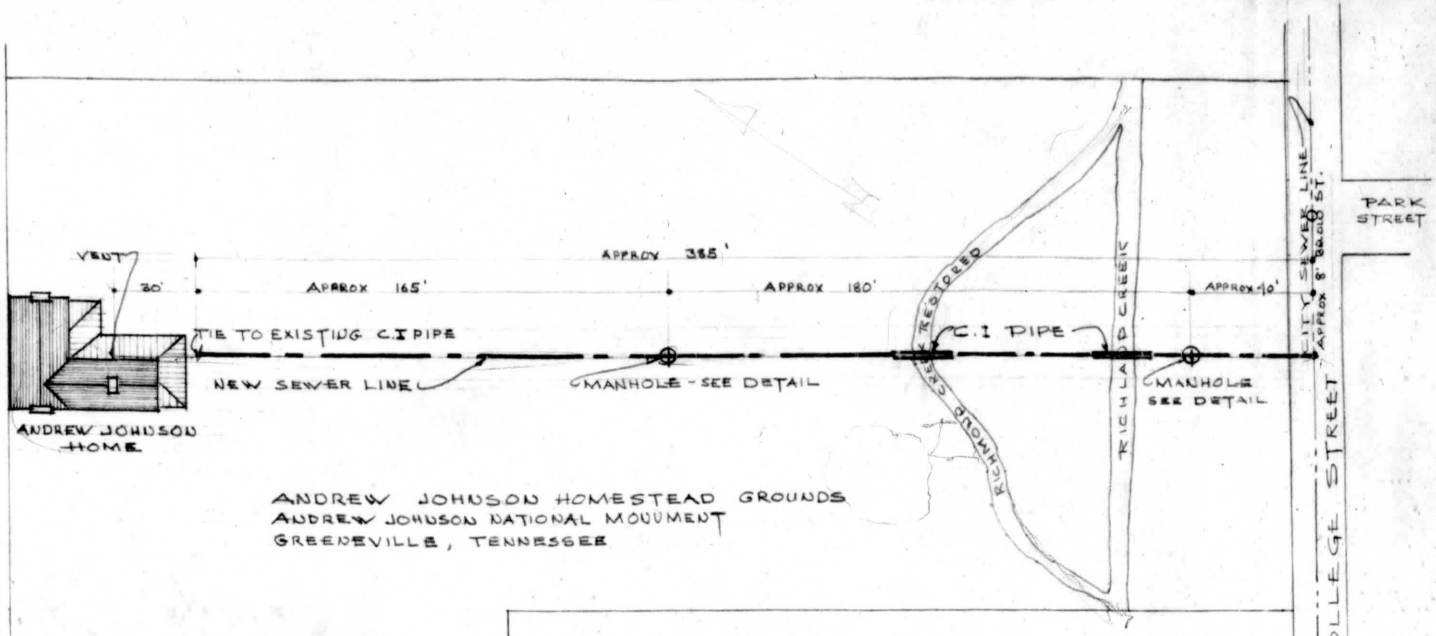


CROSS SECTION
TYPICAL MANHOLE

SCALE ½" = 1'0"

NATIONAL PARK SERVICE
EASTERN OFFICE OF
DESIGN & CONSTRUCTION

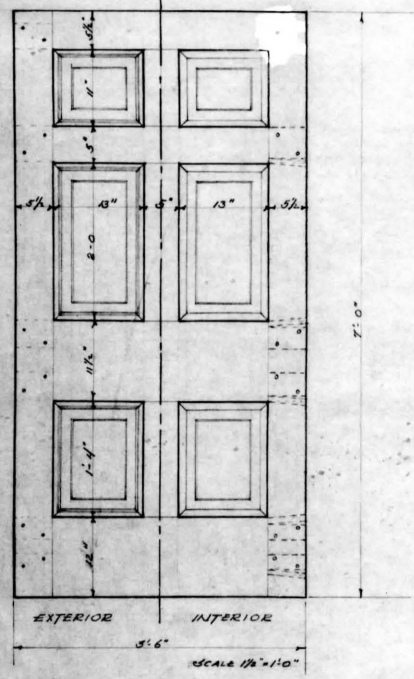
JUNE 3, 57.
NM-AJ-3063
SHEET 1

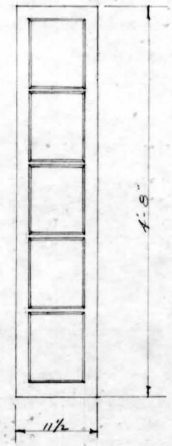


SEWER LINE LOCATION
ANDREW JOHNSON HOME

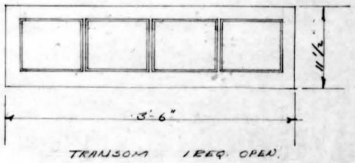
NATIONAL PARK SERVICE
FIELD REP. EASTERN OFFICE OF
DESIGN & CONSTRUCTION

JUNE 15, 1957
NM-AJ 3063

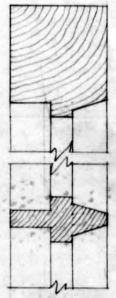




SIDELIGHT
2 REQ. OPEN.



TRANSOM 1 REQ. OPEN.



F.S. RAIL & MUNTIN



F.S. SECTION STILE & PANEL

MORTICE THRU STILES - WEDGE & GLUE TENONS - DOWEL WITH ¼" WOOD PEGS.
HEART POPLAR. HAND PLANE FINISH. REMOVE ALL MACHINE MARKS.

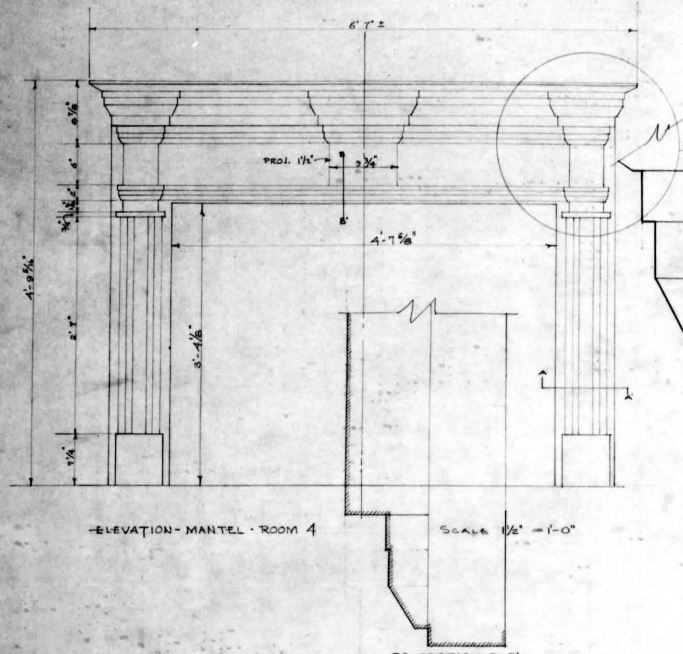
RECOMMENDED _____ DATE
_____
_____
_____
APPROVED _____

SCALE
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN & CONSTRUCTION
FIELD REPRESENTATIVE - EASTERN OFFICE

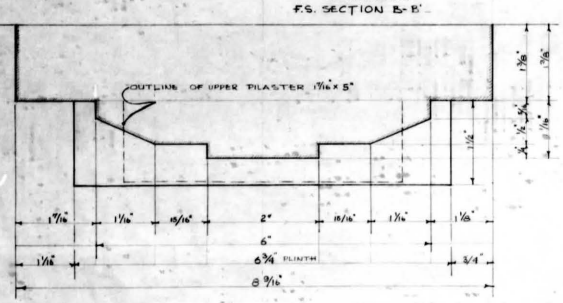
FRONT ENTRANCE
ANDREW JOHNSON HOMESTEAD
ANDREW JOHNSON NATIONAL MONUMENT

ONE
DRAWING NO.
NMJ-21
3054

ORIENTATION REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV. REGION
WASHINGTON
DSS, SCONSET, ATLANTA
WASHINGTON
OTHERS
PREPARED
REVISIONS
DATE | INITIAL

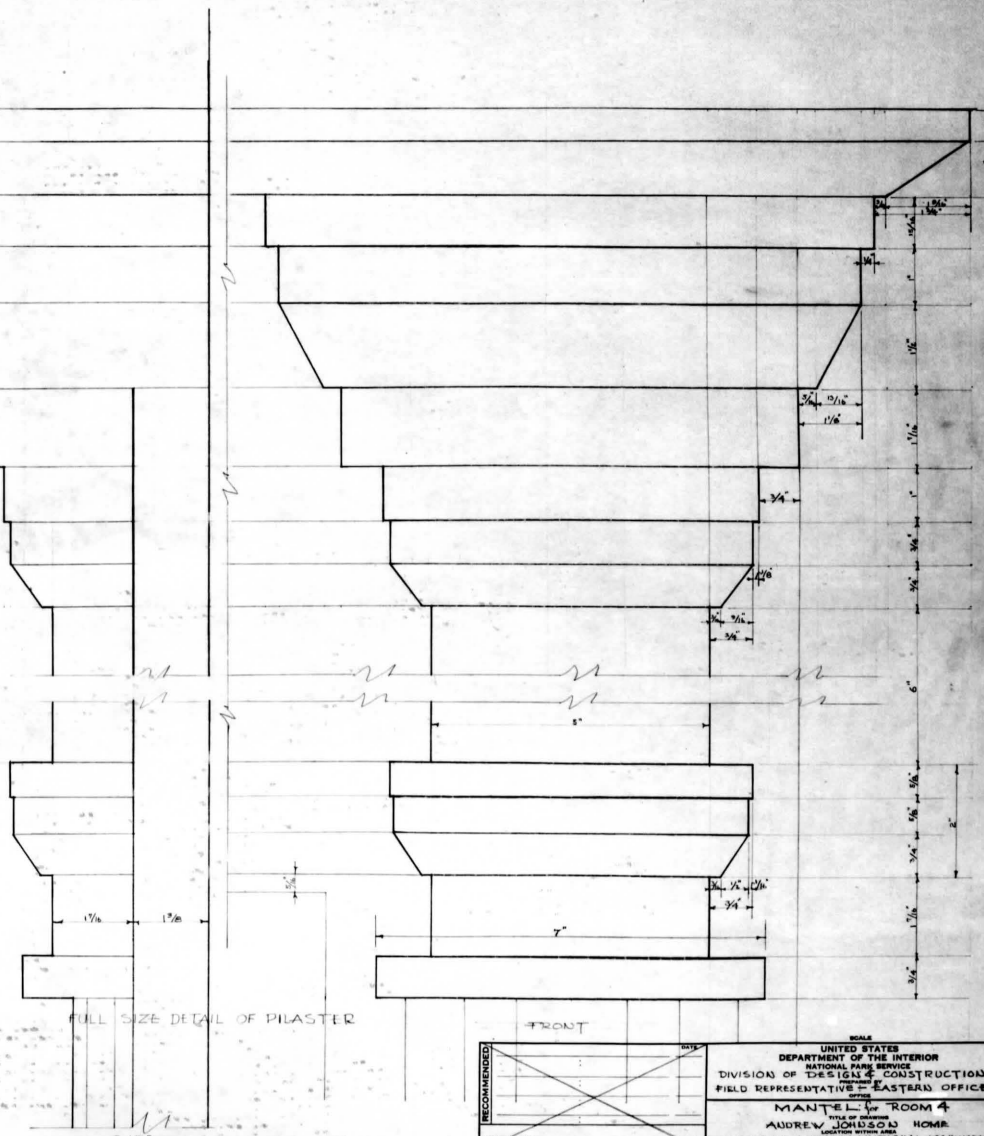


ELEVATION - MANTEL - ROOM 4 SCALE 1½" = 1'-0"



F.S. SECTION B-B'

FULL SIZE SECTION A-A'



FULL SIZE DETAIL OF PILASTER

BASIC DATA FROM ORIGINAL NOW LOCATED IN THE ANDREW JOHNSON TAILOR SHOP

ORIENTATION REVISED

OPERATIONS REGION — WASHINGTON

INTERP. REGION — WASHINGTON

COOP. ACTV. REGION — WASHINGTON

DES. & CONST. E.A. STERN A. E. L.A. WASHINGTON A. E. L.A. OTHER

PREPARED

DESIGNED H.A. JUDD DRAWN CHECKED

REVISED DATE INITIAL

RECOMMENDED DATE

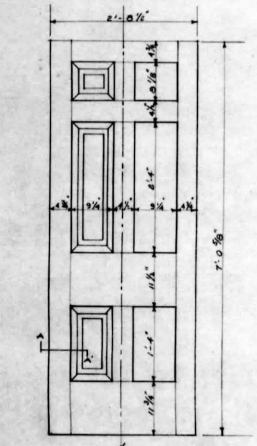
APPROVED

SCALE

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN & CONSTRUCTION
FIELD REPRESENTATIVE EASTERN OFFICE

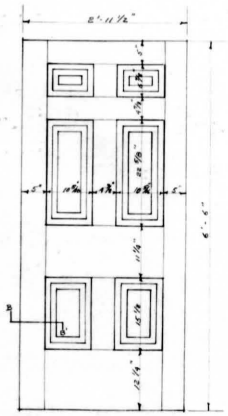
TITLE OF DRAWING: MANTEL FOR ROOM 4
LOCATION WITHIN AREA: ANDREW JOHNSON HOME
NAME OF AREA: ANDREW JOHNSON NATIONAL MONUMENT

REGION ONE
PCP
SHEET 1 OF 1
DRAWING NO. HM-AJ 3065
DATE 7-19-57



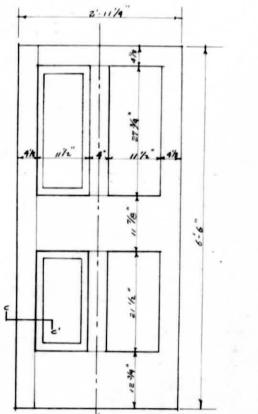
SCALE 1"=1'-0"

DOOR 108 2'-8¼" x 7'-0⅞"



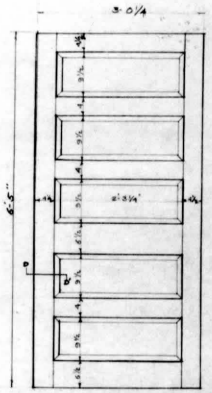
SCALE 1"=1'-0"

DOOR 103 2'-11⅞" x 6'-6"
DOOR 104 2'-11½" x 6'-6"



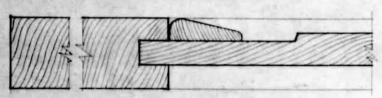
SCALE 1"=1'-0"

DOOR 210 2'-11¼" x 6'-6"

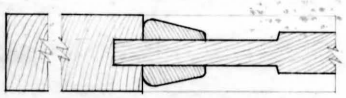


SCALE 1"=1'-0"

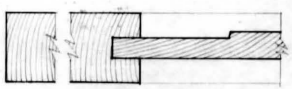
DOOR 105 3'-0 x 6'-5
DOOR 107 3'-0 x 6'-5



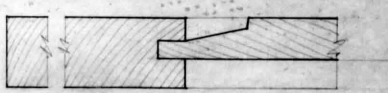
F. S. SECTION A—A'



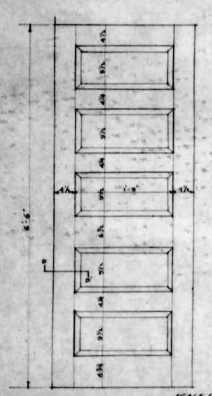
F. S. SECTION B—B'



F. S. SECTION C—C'

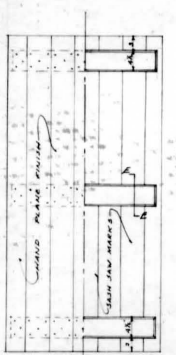


F. S. SECTION D—D'

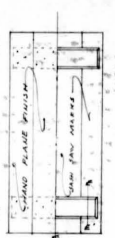


SCALE 1"=1'-0"

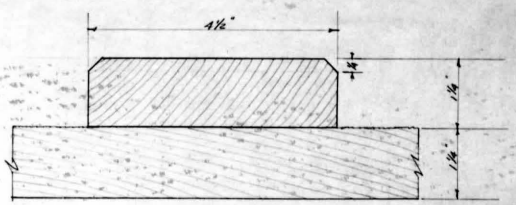
DOOR 106 2'-6" x 6'-6"



DOOR 002 2'-9" x 5'-8"
DOOR 003 3'-0" x 5'-5½"
DOOR 004 2'-11" x 6'-5"



DOOR 001 1'-8" x 8'-7"



F. S. SECTION E—E'

BASIC DATA EXISTING DOORS ANDREW JOHNSON HOME

SCALE AS NOTED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

RECOMMENDED DATE

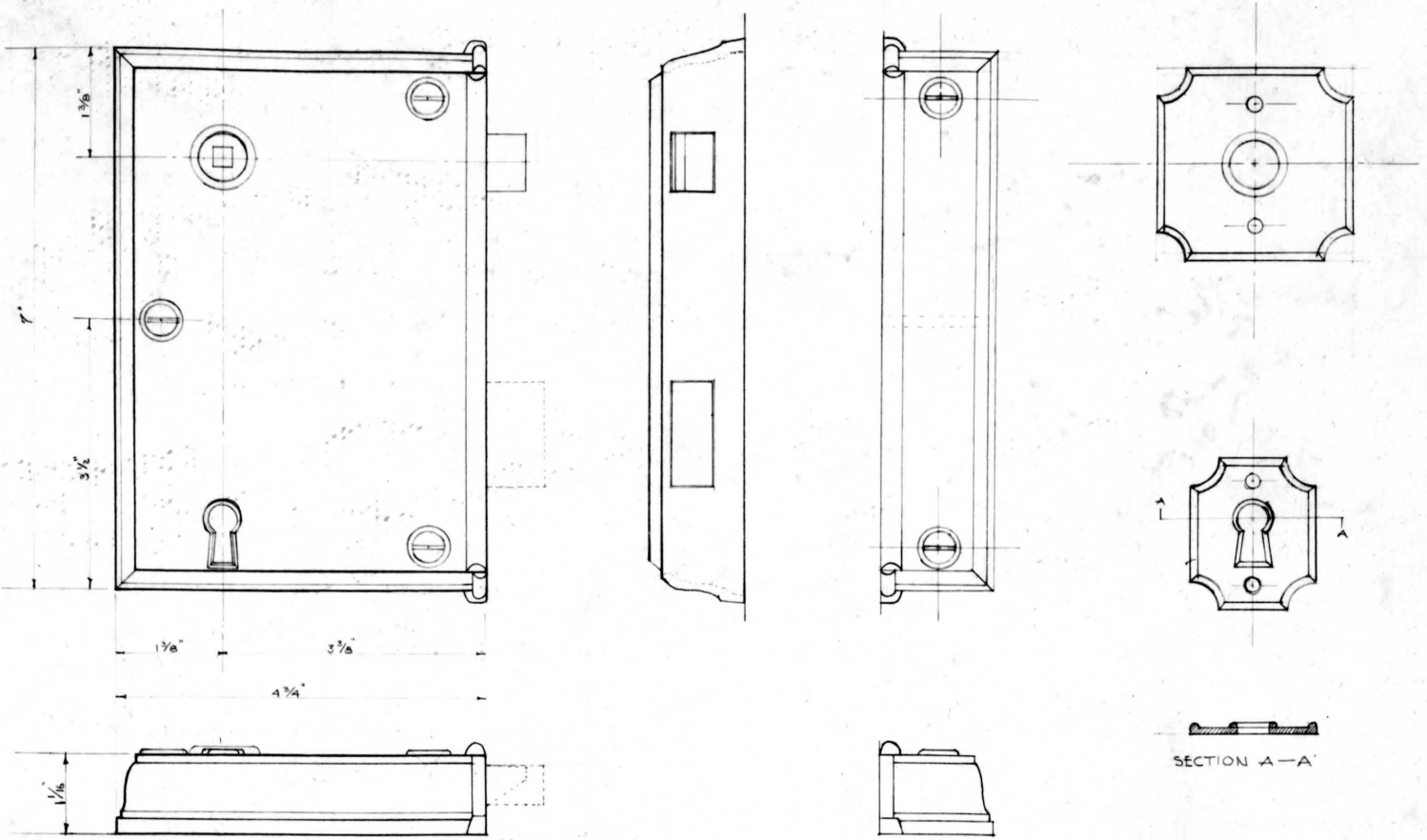
APPROVED

DOOR DETAILS

ANDREW JOHNSON HOME RESTORATION
ANDREW JOHNSON NATIONAL MONUMENT

REGION ONE
PCP
SHEET 1 OF 1
DRAWING NO. NM-AJ 30,66
DATE 12-20-67

ORIENTATION REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV. REGION
WASHINGTON
DSD & CONST. EASTERN
A.
E.
L.A.
WASHINGTON
A.
E.
L.A.
OTHER
PREPARED H.A. JUDD
H.A. JUDD
DRAWN
CHECKED
REVISED DATE | INITIAL



CAST IRON FRONT ENTRANCE LOCK

ANDREW JOHNSON HOME

DRAWN BY : H.A. JUDD

BASIC DATA : ORIGINAL KEEPER, ANDREW JOHNSON HOME
COMPLETE LOCK, OPPOSITE HAND IN OLD LINK HOME, GREENEVILLE VICINITY, TENNESSEE

SCALE FULL SIZE

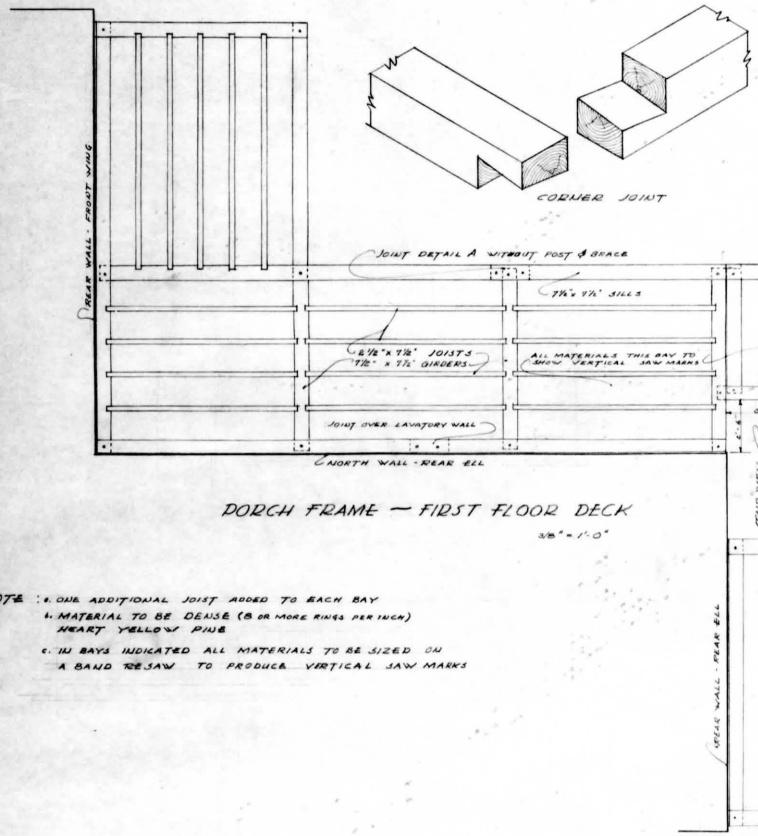
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
EASTERN OFFICE

REGION ONE
PCP
SHEET 1 OF 1

ANDREW JOHNSON HOME RESTORATION
ANDREW JOHNSON HOMESTEAD
ANDREW JOHNSON NATIONAL MONUMENT

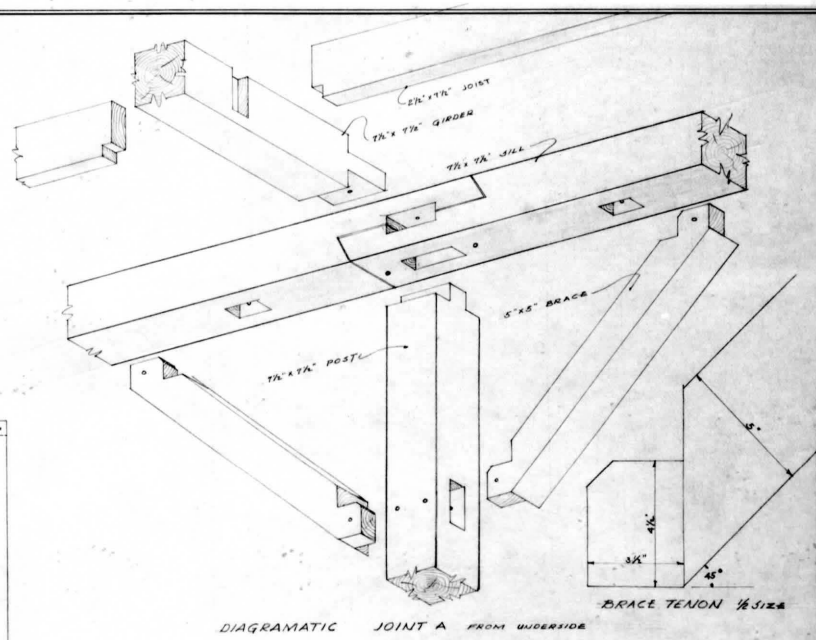
DRAWING NO. NM-AJ 3067

DATE, 10-4-57



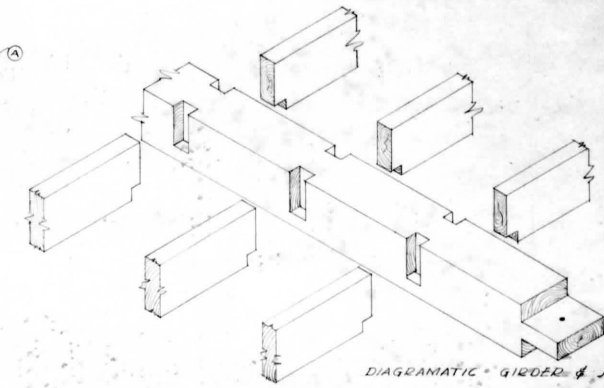
PORCH FRAME — FIRST FLOOR DECK

3/8" = 1'-0"



DIAGRAMATIC JOINT A FROM UNDERSIDE

BRACE TENON ½ SIZE



DIAGRAMATIC - GIRDER & JOIST ASSEMBLY

NOTE : a. ONE ADDITIONAL JOIST ADDED TO EACH BAY
b. MATERIAL TO BE DENSE (8 OR MORE RINGS PER INCH) HEART YELLOW PINE
c. IN BAYS INDICATED ALL MATERIALS TO BE SIZED ON A BAND RESAW TO PRODUCE VERTICAL SAW MARKS

BASIC DATA ORIGINAL FRAMING

ORIENTATION REVIEWED
OPERATIONS REGION
WASHINGTON
INTERP. REGION
WASHINGTON
COOP. ACTV. REGION
WASHINGTON
DES. & CONST. REGION
A.
E.
L.A.
WASHINGTON
A.
E.
L.A.
OTHER
PREPARED H. A. JUDD
DESIGNED H. A. JUDD
DRAWING
CHECKED
REVISED DATE | INITIAL

RECOMMENDED DATE
APPROVED

SCALE
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF DESIGN & CONSTRUCTION
FIELD REPRESENTATIVE - EASTERN OFFICE
PREPARED BY OFFICE

PORCH FRAMING - FIRST FLOOR DECK
TITLE OF DRAWING
ANDREW JOHNSON HOME RESTORATION
LOCATION OF AREA
ANDREW JOHNSON N.M. - GREENEVILLE, TENN.
NAME OF AREA

REGION ONE
PCP
SHEET 1 OF 1
DRAWING NO. NM AJ 3028
DATE

A P P E N D I X I I

SPECIFICATIONS

1. Specifications for Special Brick

2. Specifications for Electrical Installation

3. Specifications for Sewer Line

SPECIFICATIONS FOR BRICK

ANDREW JOHNSON HOME, GREENEVILLE, TENNESSEE

1. All brick shall be hand made, sound, whole, new, well burned, clay matching the color, texture and size of the brick in the existing building, the Andrew Johnson Home. Brick shall be type SW conforming to ASTM specification C-62, latest edition. Tests for brick shall be in accordance with ASTM specification C-67, latest edition.

2. Clay for brick shall be thoroughly pugged and free from lumps, stones, and pebbles.

3. Brick sizes and shapes shall be as detailed on Drawing NM-AJ-3059. The size of rectangular brick, No. 1, may vary as follows: length - 8-1/4" to 8-1/2", height - 2-5/8" to 3", and width - 3-1/2" to 4". Variations in sizes of cornice bricks, numbers 2 and 3, shall not be greater than samples of existing brick furnished by the Government.

4. The color and markings of the brick shall be similar to the darkest shades from an old-fashioned green hardwood fired field kiln. The lighter shades shall be sorted out for use as paving brick. The color of the cornice brick shall be of the dark shades.

5. Samples showing the range of shades and texture of new brick to be furnished shall be submitted with the bid. These samples need not be of the sizes specified. Samples of original brick will be furnished on request to the Superintendent, Andrew Johnson National Monument, to assist bidders in matching brick specified. The successful bidder will be furnished an additional quantity of original brick to insure proper duplication. All samples of new brick and the proportion of the several shades to be furnished must be approved by the Contracting Officer or his authorized representative.

6. Bricks shall show no sign of efflorescense or staining when subjected to the following wick test:

> Bricks shall be brushed clean, placed on end in distilled water about 1 inch deep and allowed to stand therein at room temperature for 14 days.

7. Delivery of brick shall be made to the building site within 60 days after date of acceptance of the bid. Bricks not in conformity with approved samples and contract drawing or found broken at time of delivery will not be accepted.

SPECIFICATIONS FOR ELECTRICAL INSTALLATION

SPECIAL PROVISIONS

WARNING

Andrew Johnson Home Building, which is to receive the electrical system in accordance with the work covered by these drawings and specifications, is one of our National Shrines. The building is not fireproof. Fire or other damage to this building from careless workmanship would be an irreparable loss, notwithstanding the fact that the Contractor is held responsible under Article 11 of the General Provisions for any damage to persons or property which would result from his fault or negligence in connection with the prosecution of the work. Therefore, the Contracting Officer shall have full discretion to suspend all work under this Contract at the first notice of any negligence on the part of the Contractor, which in the opinion of the Contracting Officer is likely to result in damage to the structures.

SECTION II

SPECIAL PROVISIONS

1. SCOPE OF WORK: The work to be done hereunder includes the furnishing of all labor, materials, equipment, permits and appurtenances necessary to construct the electrical system in the Andrew Johnson Building as shown on the drawing and further specified. The work includes the installation of new facilities, all as follows:

a. New Work: Includes the placing and wiring of the electrical system and the furnishing of conduit, wire, panelboard, controls, outlets, fixtures, and miscellaneous electricals together with the connection thereof to accomplish the electrical system as covered by the drawing and specifications.

2. LOCATION: The project is located in the Andrew Johnson Home building, Andrew Johnson National Monument, Main Street, Greeneville, Tennessee.

3. DRAWINGS AND SPECIFICATIONS: The Contract Drawing consists of Number NM-AJ-3061, Sheets 1 and 2. This drawing and specifications together with the latest National Electric Code, Federal Specifications, Rules of the Utility Company supplying the electric service, as applicable, whether or not listed or referred to herein, are a part of this contract.

4. CONTRACTS AND BONDS: The Standard Government Form of Contract for Construction, Form No. 23, The Standard Government Form of Performance Bond, Form No. 25, and the Standard Form of Payment Bond, Form No. 25A are a part of these specifications.

5. CONTRACT APPROVAL: This contract shall be subject to the approval of the Superintendent of the Andrew Johnson National Monument and shall not be binding until so approved.

6. SPACE FOR STORAGE OF MATERIALS FOR CONSTRUCTION PURPOSES: The contractor shall provide suitable storage for material and equipment on the site and shall maintain all storage space in a safe and orderly condition. The Government assumes no liability for loss or damage to materials or equipment due to improper storing, lack of protection from the elements, or from any other cause whatsoever.

Inflammable materials shall not be stored on the site.

7. EXAMINATION OF SITE: Before submitting bids for the work each bidder will be held to have examined the site and satisfied himself as to the existing conditions under which he will be required to operate, or that in any manner will affect the work under this contract. No allowance will be made subsequently in this connection in behalf of the contractor for any error or negligence on his part.

8. AVAILABILITY OF UTILITIES: Electric power and water in reasonable quantities are available to the contractor without cost. However, contractor shall supply the temporary connections.

9. BARRICADES AND SIGNS: The contractor shall erect and keep in satisfactory condition, during the progress of the work, suitable signs and barricades for the protection of the public as may be considered necessary in the opinion of the contracting officer.

10. SANITARY FACILITIES: These facilities are available on the site.

11. GOVERNMENT CHANGES: The Government reserves the right to increase or decrease the scope, quantity of work, material and supplies in the following sections of the specifications all of which apply to recognized trades. The quality of materials and supplies may be changed or modified. The Contracting Officer shall have the right to increase or decrease the scope of the work or any quantities by not more than 25 per cent (25%) or totally eliminate or change minor items or portions.

12. LIQUIDATED DAMAGES: Liquidated damages in lieu of actual damages will be deducted from the contract amount for delay in completing the work beyond the time fixed and agreed upon in the contract for its completion or beyond such time as may be established because of justifiable extensions of time granted pursuant to other provisions of the contract as follows: twenty-five dollars ($25.00) for each calendar day until completion and acceptance in writing, as described in the General Provisions of these specifications.

13. INSPECTION: All work under this contract will receive daily supervision by a qualified member of the staff of Andrew Johnson National Monument. In addition it will receive intermittent and general electrical supervision by a technically qualified Electrical Engineer of the Eastern Office, Division of Design and Construction, representing the Contracting Officer. In all questions relating to the interpretation of these specifications or drawings, the decision of the Contracting Officer will be final.

14. PAYMENTS: Partial payments will be made in accordance with Paragraph 7 of the General Provisions, at the end of each calendar month or as soon thereafter as practicable, for work accomplished and materials used during the month, with allowances

made for materials delivered and not placed.

15. MEASUREMENT AND PAYMENT AT BID PRICES: The quantities of work accomplished for all items bid on a unit basis shall be the total quantities for each item, measured as installed, in accordance with the plans and specifications. These quantities shall be paid for at the unit prices bid for each item, and shall constitute full payment for all materials furnished by the Contractor, use of tools, equipment, labor, superintendence, overhead expense, and such incidentals as may be necessary to make the various individual bid items a finished job complying with these specifications.

16. FIRE PREVENTION: The Contractor shall take the necessary precautions to protect materials and the structures from damage by fire, by compliance with all fire prevention regulations and such other precautions required by the Contracting Officer and/or the Insurance Company as may be necessary, including the following safeguards, where applicable.

a. A carefully instructed fire watch with fire extinguishing equipment shall be at hand during all welding and cutting operations. The use of welding and cutting equipment shall be restricted except when all precautions have been taken and the use of such equipment approved by the Contracting Officer.

b. Smoking shall be prohibited in all buildings and all areas.

c. The use of heating devices such as heaters or stoves operated by gasoline, kerosene, L. P. gas or alcohol shall be prohibited.

d. The area shall be kept cleaned up and all debris, refuse, oily rags, etc. removed each evening before leaving the work.

e. Storage space well removed from the building shall be provided for flammable materials.

f. The entire area shall be inspected at the close of each day's operations by the Contractor. This inspection shall assure that there are no carelessly discarded cigarettes or cigars, heating devices left unsafe, improperly stowed or disposed of painter's equipment and electrical defects in temporary wiring.

17. REPUTATION OF BIDDERS: The reputation of bidders as being skillful and successful in carrying out the work of the type and magnitude required by these specifications, and the adequacy of their resources and facilities for accomplishing the work satisfactorily and within the specified time, will be considered in making the award. Each bidder shall cite in his bid works similar in character and magnitude to that covered

by these specifications which have been successfully accomplished by him.

The Contracting Officer shall have the right to submit questionnaires to the bidder concerning the latter's financial resources, experience and equipment, and to reject the bid if the bidder fails to reply to the questionnaires, or if the replies thereto are unsatisfactory. The information contained in the replies of the questionnaires will be considered confidential.

18. CONTRACTOR'S PROTECTION: The Electrical Contractor shall, during the continuance of work under this contract, and also extra work in connection with it, maintain liaibility insurance in sufficient amount to protect himself from any liability or damage for injury to any employees, the public or other persons, including any liability or damage which may arise by virtue of any statute.

The policies shall be, in all respects, satisfactory to the Contracting Officer. Evidence that such insurance is in force shall be submitted immediately upon the signing of the contract, by either presenting the policies for inspection, or the Liability Company's usual form of certificate. The policies and certificates shall certify, among other things, that the insurance will not be cancelled or lapsed during the progress of the work covered by these specifications.

All insurance policies shall be issued only by companies authorized to do business under the laws of the State in which the work is to be accomplished.

SECTION III

CONSTRUCTION PROVISIONS

1. SCOPE OF WORK: The work covered by these specifications consists in furnishing all labor, equipment, supplies and materials and in performing all operations, including cutting, channeling and chasing, necessary for the installation of complete interior wiring systems, electrical equipment and electric service connections, in strict accordance with these specifications and drawings and subject to the terms and conditions of the contract.

2. APPLICABLE PUBLICATIONS: The following specifications, standards and codes, of the issues listed below and referred to thereafter by basic designation only, form a part of these specifications to the extent indicated by the references thereto:

a. Federal Specifications:

J-C-103 & AM-5	Cable and wire; rubber-insulated, building - Type (0 to 5,000 volt service).
J-C-129A	Cable and wire; thermoplastic-insulated, building - Type (0 to 600 volt service).
W-B-616 & AM-2	Boxes and outlet-fittings, floor; for rigid-steel conduit and electric-metallic tubing (steel).
W-C-586	Conduit outlets (cast-iron, malleable-iron, and cast-aluminum, with cover and accessories - for shore use).
W-C-601A & AM-1	Connectors, wire; pressure, solderless (for electric cable and wire).
W-F-406 & AM-6	Fittings; cable and conduit
W-F-412 & AM-1	Fixtures, lighting; direct, industrial. Porcelain-enameled-steel, for incandescent lamps.
W-L-101E, AM-2 and latest supplements	Lamps: electric; incandescent, large tungsten-filament.
W-L-142 & AM-1	Lampholders (sockets); medium-screw-shell, general service.
W-O-821A & AM-3	Outlet-boxes; steel, cadmium or zinc-coated, with covers and accessories.
W-P-131A & AM-2	Panelboards; equipped with automatic circuit breakers.

W-R-151A & AM-2	Receptacles (convenience-outlets), adapters attachment-plug-caps, cord-connector-bodies, current-taps, motor-base plugs and plug bodies; 250 volts.
W-S-865	Switches, enclosed (safety), surface mounted.
W-S-893 & AM-4	Switches; snap, multiple-type and combination devices, flush-type with wall plates.
HH-T-101A & AM-1	Tape; Friction.
WW-C-581C & AM-1	Conduit, electrical, steel, rigid, zinc-coated.

b. National Board of Fire Underwriters Pamphlet:
No. 70. National Electrical Code - Standard for Electric wiring and Apparatus. Current issue.

c. National Bureau of Standards Handbook:
H 30 National Electrical Safety Code.

d. National Electrical Manufacturers Association Standards:
ICI Industrial Control. Current Issue.

e. Underwriters' Laboratories, Inc. Standards:
Industrial Control Equipment. Current issue.
Cabinets and Boxes. Current issue.

f. Local Serving Public Utility:
Electric Service Requirements.

3. GENERAL: The installations shall conform to the latest applicable rules of the National Electrical Code and the workmanship shall be of the highest grade. Electrical materials shall be new and approved by the Underwriters' Laboratories, Inc. wherever standards have been established by that agency. In the event defective equipment is furnished or equipment is damaged in the course of installation or testing, it shall be replaced or repaired in a manner meeting with the approval of the Contracting Officer. The contract drawing indicates the extent and general arrangement of the wiring system. If any departures from the contract drawings are deemed necessary by the Contractor, details of such departures and the reasons therefor shall be submitted as soon as practicable, and within 30 days after award of the contract to the Contracting Officer for approval. No such departures shall be made without the prior written approval of the Contracting Officer.

4. STANDARD PRODUCTS: Unless otherwise indicated in writing by the Contracting Officer, the materials to be furnished under this specification shall be the standard products of manufacturers regularly engaged in the production of such equipment and shall be the manufacturers' latest standard

design that complies with the specification requirements.

5. MATERIAL AND EQUIPMENT SCHEDULES: As soon as practicable and within 30 days after the date of notice to proceed and before commencement of installation of any materials or equipment, the Contractor shall submit to the Contracting Officer for approval a complete list, in triplicate, of materials, fixtures, and equipment to be incorporated in the work. The list shall include catalog numbers, cuts, diagrams, drawings and such other descriptive data as may be required by the Contracting Officer. Approval of materials will be based on manufacturers' published ratings. Any materials, fixtures and equipment listed that are not in accordance with the specification requirements will be rejected.

6. GROUNDING: The conduit system and neutral conductor shall be grounded. The ground connection shall be made at the main service equipment and shall be extended to the point of entrance of the building water service. Connection to the water pipe shall be made by a suitable ground clamp.

7. WIRING: Wiring shall consist of insulated conductors installed in rigid zinc-coated steel conduit in accordance with Article 346 of the National Electrical Code. Minimum size of conduit shall be 1/2 inch.

a. Conductor sizes shall be not less than #12 AWG. Conceal all wiring, except exposed wiring will be permitted in the basement, attic, and other unfinished areas.

8. Outlets: Each outlet in the wiring system shall be provided with an outlet box to suit the conditions encountered. Boxes installed where they are exposed to the weather, in basement areas shall be of the cast-metal type having threaded hubs. Boxes in other areas shall be of the cadmium-plated or zinc-coated sheet-metal type. Each box shall have sufficient volume to accommodate the number of conductors entering box in accordance with the requirements of the National Electric Code. Boxes shall be not less than 1-1/2 inches deep unless shallower boxes are required by structural conditions and are specifically approved by the Contracting Officer. Ceiling and bracket outlet boxes shallnot be less than 4-inch octagonal except that smaller boxes may be used where required by the particular fixture to be installed. Flush or recessed fixtures shall be provided with separate junction boxes when required by the fixture terminal temperature requirements. Boxes installed in concealed locations shall be set flush with the finished surfaces and shall be provided with the proper type extension rings or plaster covers where required. Boxes shall

be installed in a rigid and satisfactory manner and shall be supported by bar hangers in frame construction or shall be fastened directly with wood screws on wood, bolts and expansion shields on concrete or brick, toggle bolts on hollow masonry units, and machine screws or welded threaded studs on steel work. Location of outlets shown on drawings is approximate; the contractor shall study the building plans in relation to the spaces and equipment surrounding each outlet so that the lighting fixtures are symmetrically located according to the room layout. When necessary, with approval of the Contracting Officer, outlets shall be relocated to avoid interference with mechanical equipment or structural features. Duplex receptacles shall be rated 15 amperes, 125 volts, composition with "T" slots. Contact arrangement shall be such that contact is made on two sides of an inserted blade.

Special purpose or heavy duty receptacle shall be of the type, rating and number of poles indicated on the drawing. Each special outlet shall be furnished with plug to be turned over to the Contracting Officer and a receipt secured.

9. SWITCHES:

a. Lighting wall switches shall be of the totally enclosed tumbler type. Bodies shall be phenolic compound. Wiring terminals shall be of screw type or of the solderless pressure type having suitable conductor-release arrangement. Not more than two switches shall be installed in a single-gang position. Switches shall be rated 20 ampere, 120 volt for use on alternating current only and shall be suitable for the control of incandescent lamp loads, and inductive loads up to their full rated capacity.

10. SERVICE EQUIPMENT BREAKERS: Service disconnecting means shall be of the thermal-overload circuit-breaker type equipped with an external handle for manual operation and shall be enclosed in a code, gage, sheet-steel cabinet suitable for surface mounting. Enclosures shall have hinged doors and catches. Neutral connections shall be solid throughout.

11. PANELBOARDS: Shall be of the dead-front safety type provided with the size and number of single or double-pole branches as indicated on drawings. Mains shall be arranged for a grounded, solid-neutral system.

12. CABINETS: Cabinet boxes shall be constructed of zinc-coated sheet steel and shall conform to the Underwriters' Laboratories, Inc., Standard for Cabinets and Boxes. Trims and doors shall have suitable primer coat and a finish coat of a color specifically designated by the Contracting Officer.

13. PANELBOARD CABINETS: Shall be provided with not less than 4-inch wiring gutters at the sides, top and bottom. Cabinet heights shall not exceed 72 inches. Cabinets shall be mounted so that the distance from the floor to the center of the top circuit breaker will not exceed 6 feet, 6 inches. Flush cabinets shall be provided with trims having adjustable trim clamps. Trims shall be fitted with hinged doors having combination lock and latch. All locks shall be keyed alike. A directory holder with clear plastic or glass plate and metal frame shall be mounted on the inside of each door. A neatly typed directory properly identifying each circuit shall be mounted in the frame.

14. LIGHTING FIXTURES: Lighting fixtures equipped with lamps of types and sizes as indicated on the drawings shall be furnished and installed complete. Lamps of the proper type, wattage and voltage rating shall be furnished and installed in each fixture.

a. Lamps shall be delivered to the project in their original cartons and installed in the fixtures just prior to the completion of the project.

b. The Contractor shall furnish all lighting fixtures except outdoor fixtures as follows:

2 wall brackets on first floor porch (rear)

1 wall bracket foot of stairs to basement

and indoor fixtures as follows:

1 hall light foot of stairs at first floor.

15. ATTIC FAN: The attic fan will be furnished by the Contracting Officer.

16. REPAIR OF EXISTING WORK: The work shall be carefully laid out in advance and where cutting, channeling, chasing or drilling of floors, walls, partitions, ceilings or other surfaces is necessary for the proper installation, support or anchorage of the wiring system or other electrical work, this work shal be carefully done and any damage to buildings, piping or equipment shall be repaired by skilled mechanics of the trades invdved at no additional cost to the Government.

17. °APPROVAL OF WIRING PLANS: Before proceeding with any cutting or chasing, the Contractor shall submit - in the form of pencil diagrams or prints of working drawings - the layout and fittings

of all conduits and wiring for the approval of the Contracting Officer.

18. TESTS: After the interior wiring system installation is completed, and at such time as the Contracting Officer may direct, the Contractor shall conduct an operating test for approval. The equipment shall be demonstrated to operate in accordance with the requirements of this specification. The test shall be performed in the presence of the Contracting Officer or his authorized representative. The Contractor shall furnish all instruments and personnel required for the tests and the Government will furnish the necessary electric power.

T H E E N D

SPECIFICATIONS FOR SEWER LINE

ANDREW JOHNSON HOME

GREENEVILLE, TENNESSEE

1. PROTECTION OF EXISTING FEATURES: Clearing for all parts of the project shall be only to such width and extent as will give sufficient room for the proper execution of the work. The route of moving all equipment and materials shall be approved by the Contracting Officer and all trees or shrubs designated to be saved shall be carefully preserved by the Contractor. All cleared material shall be burned or otherwise disposed of as directed by the Contracting Officer.

2. EXCAVATION: Excavation for all sewer pipe shall be to the line and grade as staked in the field. Care shall be exercised not to disturb the bottom of the trench and final material shall be removed by hand just prior to laying pipe or setting foundations. In ledge areas the pipe shall be padded with selected backfill material to form a cushion of at least four (4) inches against ledge or large boulders.

3. BACKFILL: After it has been successfully tested, the sewer piping shall be backfilled. Backfill adjacent to concrete structures shall not be placed until the concrete has been cured and stripped. Especial care shall be exercised to prevent movement or damage to pipes and structures. Backfill material shall be free of large boulders, roots, brush, trash and other objectionable material. Backfill over pipes shall be placed by hand and firmly tamped in six inch (6") layers until at least 6" of cover is obtained over the top of the pipe. Machine backfilling may be used above this point, except through roads which shall be compacted in six (6") inch layers to finish grade.

4. SEWER PIPE: Sewer pipe shall be 4" meeting one of the following specifications with exceptions as noted herein. Minimum cover over the top of the pipe shall be 18 inches. Pipe passing under the stream and for a distance of 10 feet on both sides of the stream shall be cast iron as specified below:

a. Vitrified Clay: Sewer pipe shall be standard strength bell and spigot clay tile, conforming to Federal Specifications SS-P-361a, uncracked with perfect bells.

Oakum shall conform to Federal Specifications T-O-56, Class 1.

Bituminous joint compound shall be hot bituminous type (CPI-2 or approved equal) handled, heated and poured in accordance with manufacturer's directions.

b. Asbestos-Cement: Sewer pipe shall be Class 1 (standard strength) asbestos-cement sewer pipe conforming to Federal Specification SS-P-331a.

Vitrified clay pipe and asbestos cement sewer pipe as specified herein shall be considered equally acceptable alternate materials.

c. Cast Iron Soil Pipe: Cast iron soil pipe and fittings shall be extra heavy, free of cracks and blow holes, conforming to Federal Specification WW-P-401, Class A. Joints shall be leaded and caulked.

d. Pipe Installation: The utmost care shall be exercised in laying and bedding pipe to the proper grade. Batter boards shall be set at 50 foot intervals or closer where necessary. The sewer shall be laid to a minimum uniform grade of 1%. Clay pipe and cast iron pipe shall be laid with bell upgrade. Joints shall be swabbed clean internally and a one-piece gasket of oakum lapped at the top, shall be placed around the pipe and rammed with a proper caulking tool. The bituminous compound shall then be poured at the specified temperature so that the joint is completely filled. Asbestos-cement pipe shall be laid in strict accordance with the pipe manufacturer's directions.

5. MANHOLES: The manholes shall be constructed as detailed and as specified herein. They may be constructed of brick or circular cement block.

Manhole frames and covers shall be cast iron, coated with coal tar pitch varnish, and weigh not less than 165 lbs. All parts coming in contact with each other shall be machined to prevent the cover from rocking in any position. All cast iron covers shall be marked "S" or "Sewer." (J.B. Clow & Sons, F-3302, Size No. 2, or approved equal).

Manhole steps shall be cast iron installed as shown on the plans. (J.B.Clow & Sons, F-3650, or approved equal).

6. TESTING: Before backfilling all sewer pipe shall be tested by plugging the low ends and filling the pipe with water which shall remain sufficiently long to make visual inspection of the lines.

The alignment and grade of sewer lines shall be tested by visual line of sight between manholes acceptable to the Contracting Officer.

Sufficient backfill material shall be placed between couplings and fittings to hold the water pipes in place while testing. No tests shall be attempted until poured joints have been properly set up. No temporary bracing other than at open end of line will be permitted during tests.

All leaks shall be repaired to the satisfaction of the Contracting Officer and all final testing shall be carried on in the present of the Contracting Officer.

7. PAYMENT: Payment for this work will be made in lump sum for furnishing and installing sewer piping and manholes and making all necessary connections as indicated herein.

APPENDIX III

ILLUSTRATIONS

1. The Residence of President Johnson in 1865
2. The Andrew Johnson Home on August 3, 1875
3. The Andrew Johnson Home as altered by his daughter in 1885
4. The Andrew Johnson Home, August, 1956, the Start of the Restoration
5. The Front, Andrew Johnson Home as Restored
6. Removing Front Gable
7. Front Cornice and Roof Completed
8. Front Entrance Before Restoration
9. Front Entrance After Restoration
10. Original Brick Cornice
11. Original Wood Shingle
12. Original Exterior Window Casings
13. Corner Blocks from Window Casings
14. Step in Foundation and Fractured Wall
15. View from Northeast at Start of Restoration
16. Removing Deteriorated Porch Framing
17. Typical Condition of Porch Framing
18. Joint of Original Porch Deck and Addition in 1869
19. Framing New Porch Platform
20. Morticing New Porch Timbers
21. Framing Second Floor Deck of Porch

22. Roofing Porch and House

23. Basement Area of Porch, Rear Ell, Before Restoration

24. Basement Area of Porch, Rear Ell, as Restored

25. Utility Area before Restoration

26. Whitewash Marks Showing Outline of Original Porch

27. Stairway Floored in Second Floor

28. Porch as Restored

29. Southeast Elevations Before Restoration

30. Window and Joint of 1869 Addition

31. Condition of South Wall with Porch Removed

32. Rebuilding Southeast Corner

33. Scaffolding South and East Elevations

34. South Wall Partially Restored

35. South and East Elevations as Restored

36. Original Sidewalk curb

37. Early Sidewalk Level

38. Installing Footing Drains

39. Electrified Porch Lantern

40. Room One after Removal of Furnace but before Restoration

41. Room One as Restored

42. Room Two (Kitchen) before Restoration

43. Room Two (Kitchen) as Restored

44. Room Two (Kitchen) Southeast Corner Restored

45. Fireplace Room 3 before Restoration

46. Fireplace Room 3 as Restored

47. Cast Iron Fireplace Jambs and Backs

48. Doorway Room 4 to Hall Before Restoration

49. Doorway Room 4 to Hall as Restored

50. South Wall Room 4 before Restoration

51. Original Mantle for Room 4 now in Tailor Shop

52. South Wall Room 4 as Restored

53. Entrance Hall looking to the Rear before Restoration

54. Entrance Hall looking to the Rear as Restored

55. Room 5 South Wall before Restoration

56. Room 5 South Wall as Restored

57. Fireplace Wall, Room 5, before Restoration

58. Fireplace Wall, Room 5, after Restoration

59. South Wall, Room 6, before Restoration

60. South Wall, Room 6, After Restoration

61. Fireplace Wall, Room 6, before Restoration

62. Fireplace Wall, Room 6, After Restoration

63. North Wall, Room 6, before Restoration

64. North Wall, Room 6, after Restoration

65. Northwest Corner of Room 7 before Restoration

66. Northeast Corner of Room 7 before Restoration

67. North Wall of Room 7 as Restored

68. North Wall of Room 9 before Restoration

69. East Wall of Room 9 before Restoration

70. Northeast Corner of Room 9 as Restored

71. Northeast Corner of Room 10 before Restoration

72. Northeast Corner of Room 10 as restored

73. West Wall of Room 10 restored

74. Exhaust Fan, Attic

75. Air Intakes and Insulation, Attic

76. Typical Door Lock

77. Front Door Keeper

78. Original Penciling of Mortar Joints

79. Painter Penciling Mortar Joints

80. Pencil Markings on Original Plaster

81. Entrance Frame Similar to Original of Johnson Home

PHOTO NO. 1 THE RESIDENCE OF PRESIDENT JOHNSON IN 1865

"The Residence of President Johnson in 1865" from a woodcut publishd in "Frank Leslie's Illustrated Newspaper" on September 23, 1865. This is the earliest known view of the house. Note second-story window on left, which indicates that the sash were five-lights high. The doorframe appears to be similar in detail to the windows rather than the classical frame shown in Photo No. 2. Parts of this earlier frame were found under the existing frame when repairs to the head flashings were being made.

The house was occupied by military personnel at the time of this picture, which may account for the missing blinds and window sash.

Neg. No. EODC 359



THE RESIDENCE OF PRESIDENT JOHNSON AT GREENVILLE, EAST TENN

PHOTO NO. 2 THE ANDREW JOHNSON HOME - AUGUST 3, 1875

The Andrew Johnson Home as it appeared on August 3, 1875, the day of his funeral. Photo, by L. W. Keen, Jonesboro, Tennessee, is one of twelve stereopticon views taken on that occasion.

This is the only photograph found showing the house as Andrew Johnson would have known it. From it we acquired information for the proportion of the entrance door and the sidelights; for the chimney caps; the height and design of the picket fence; the grade line at the sidewalk and numerous other details.



PHOTO NO. 3 THE ANDREW JOHNSON HOME - 1885

This is the Andrew Johnson Home, as altered by his daughter, Martha Johnson Patterson, after she acquired the home in 1885.

This alteration to modernize the home to the Victorian style then in vogue drastically changed the appearance of the house. Not one detail of the exterior remained unchanged.

It was at this time that the brick was first painted. The first coat c. 1885 was brown with an oxide red trim. A few years later, when the first bay window was cut in Room 5 to the porch, the brick was painted iron oxide red and the trim a dark green. This photograph presumably shows that period.

Neg. No.



PHOTO NO. 4 THE ANDREW JOHNSON HOME - 1956

The Andrew Johnson Home at the start of the restoration.

In 1901, the 1885 porch was enlarged to span the entire South Elevation. The red paint was renewed on the brick, and the trim was painted white.

Note that the Victorian head has been removed from the first floor window on the left. The original trim was found still intact underneath.

Ph: Henry A. Judd - 1956

Neg. No. EODC 360



PHOTO NO. 5

The front of Andrew Johnson Home as restored.

Ph: Henry A. Judd, April 28, 1958
Neg. No. EODC 417



PHOTO NO. 6 REMOVING FRONT GABLE

Workmen have removed all 1885 woodwork and are taking down the masonry of the gable built in 1885.

Brickwork has been washed with a lye solution to remove the numerous coats of paint.

Ph: Henry A. Judd - c. 1957

Neg. No. EODC 361


NO
PARKING

PHOTO NO. 7 FRONT CORNICE AND ROOF COMPLETED

The new brick cornice and the wood shingle roof have been completed.

Pencilling has been started at the top. Here the painer is lowering his scaffold so he may continue to pencil the mortar joints.

Ph: H. A. Judd - 1957

Neg. No. EODC 362


ANDREW JOHNSON NATIONAL MONUMENT
A MISSION 66 PROJECT
TO RESTORE THE
HOME OF ANDREW JOHNSON

PHOTO NO. 8 FRONT ENTRANCE - BEFORE RESTORATION

Patches of paint have been removed to compare paint with other sections of the house.

Building Restoration Specialist Harry Martin is measuring the frame.

Ph: Henry A. Judd - 1957

Neg. No. EODC 363



PHOTO NO. 9 FRONT ENTRANCE - AFTER RESTORATION

With Mrs. Margaret Johnson Patterson Bartlett, a great granddaughter of Andrew Johnson, Architect Judd and Superintendent Benjamin Davis study drawings used in the restoration.

Note that the door is now a single six-panel door. The sidelights and transom are once again divided into small lights.

This entrance frame dates from the 1869 alterations made just before Johnson's return to Greeneville after retiring from the Presidency.

Negative is the property of the National Park Service.

Ph: Moody Studio - 1957

Neg. No. EODC 364



PHOTO NO. 10 ORIGINAL BRICK CORNICE

This photograph shows the original brick cornice where it had been protected by the porch roof. From this cornice, we were able to accurately reconstruct the front cornice.

Ph: Moody Studio - 1957

Neg. No.



PHOTO NO. 11 ORIGINAL WOOD SHINGLES

Original wood shingles found derelict in the attic. These shingles of white oak were 18 inches long and applied 6 inches exposed to the weather. When made, these shingles were dressed on all sides and tapered from butt to top.

A modern top grade red cedar sawn shingle was used in the restoration.

After a few months of weathering, cedar shingles appear the same as the oak which would have been available only by special order and at an excessively high cost.

Ph: Henry A. Judd - c. 1956

Neg. No. EODC 365

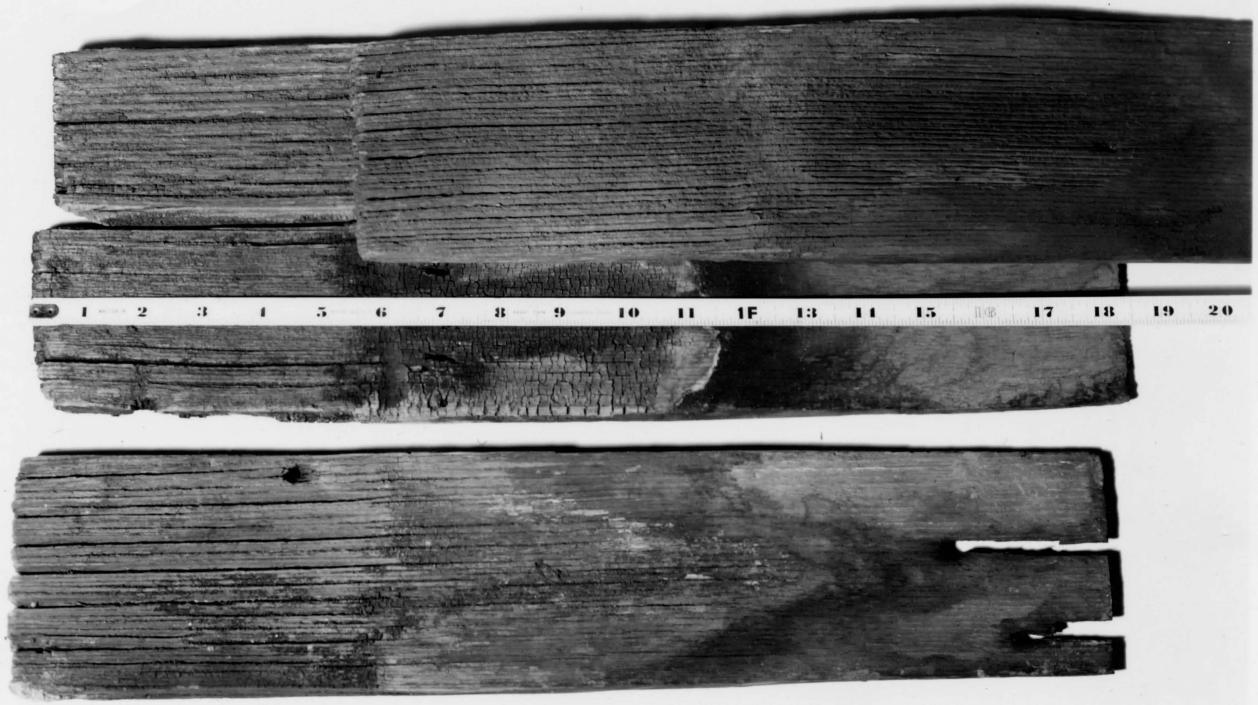

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

PHOTO NO. 12 ORIGINAL EXTERIOR WINDOW CASINGS

Original exterior casings used on the front section of the house. This casing was still in position on the five windows in the front elevation. The lintel and corner blocks had been covered by the Victorian trim of c. 1885.

A lintel of this same detail was found still in position underneath the head of the existing doorframe.

Ph: Henry A. Judd - c. 1957

Neg. No. EODC 366

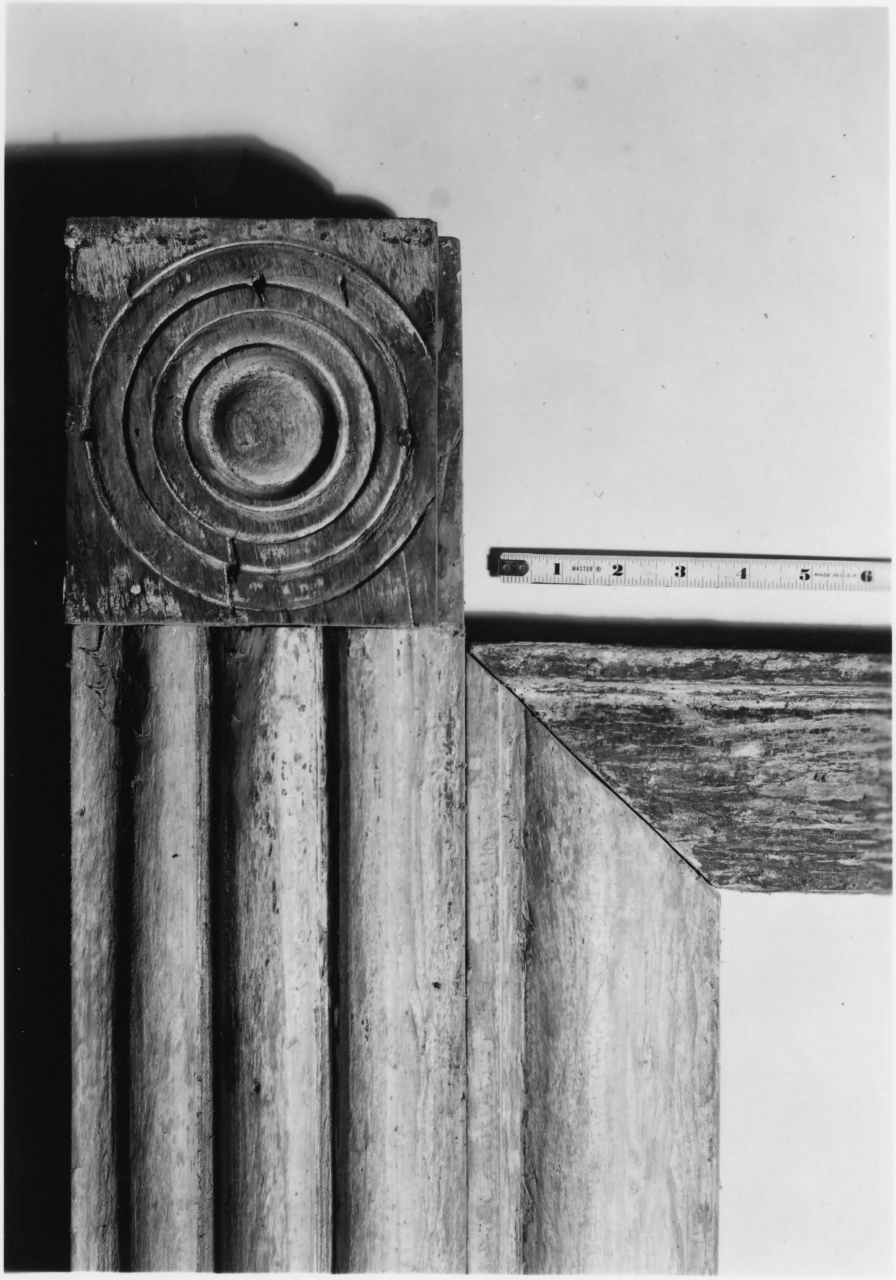

1 2 3 4 5 6

PHOTO NO. 13 CORNER BLOCKS FROM WINDOW CASINGS

Shown here are two of the corner blocks removed from the front windows. Of the ten blocks found, no two were turned alike.

The paint on the blocks would be the colors used before they were covered by the Victorian trim of 1885. From these blocks, we were able to determine the color of the exterior woodwork in Johnson's time.

Ph: Henry A. Judd - c. 1957

Neg. No. EODC 367

MASTER
MADE IN U.S.A.

PHOTO NO. 14 STEP IN FOUNDATION AND FRACTURED WALL

This view shows the foundation and masonry wall below the south front window. The crack indicated by the arrow runs from the step in the foundation to the roof, at which point it had opened nearly two inches. Note that the wall has no footings.

The course of brick in line with the arrow runs from a single course on the right to a row lock, which terminates into two brick courses just left of the area covered by this photograph. The north end of the building has one more course of brick to make up its height than the south end.

Ph: Henry A Judd - c. 1957

Neg. No. EODC 368

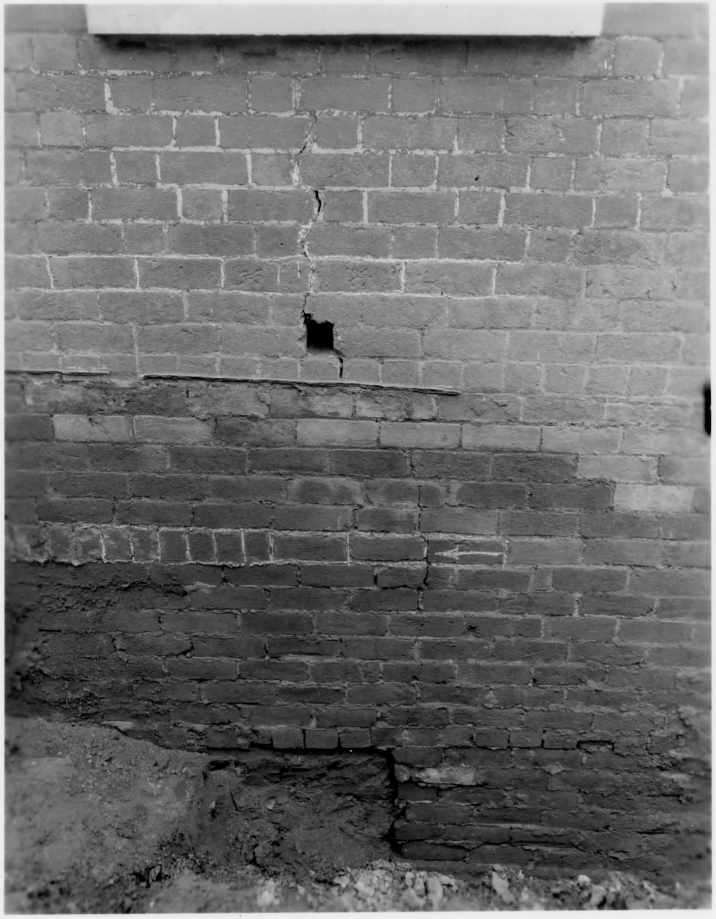


PHOTO NO. 15 VIEW FROM NORTHEAST AT START OF RESTORATION

View, from the NE, of Porch area at the start of the restoration. A large percentage of the porch area had been enclosed to form additional rooms. Porch posts below the Victorian capitals are those of the 1869 alterations. Roof had been altered twice since that time.

Ph: Moody Studio - 1957

Neg. No.



PHOTO NO. 16 REMOVING DETERIORATED PORCH FRAMING

The porch had been altered so many times and original timbers had so deteriorated that it was necessary to remove the entire porch and reconstruct it from new materials. Here the porch is about 50% removed.

Ph: Henry A. Judd - 1957

Neg. No. EODC 369



PHOTO NO. 17 TYPICAL CONDITION OF PORCH FRAMING

This photograph shows the deteriorated condition of the original porch framing. Note diagrammatic view of Joint A on Drawing NM-AJ-3068, Appendix I, which shows the same joint as in this photograph. Enough evidence was found to reconstruct the porch deck as the original.

Ph: Henry A. Judd - 1957

Neg. No. EODC 370

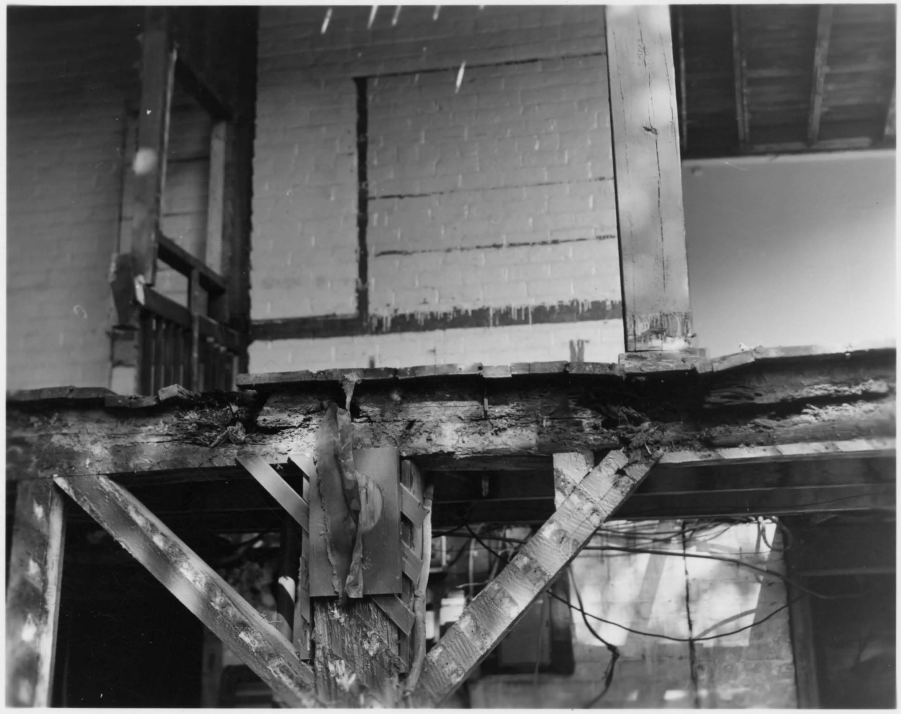


PHOTO NO. 18 JOINT OF ORIGINAL PORCH DECK AND ADDITION IN 1869

This photograph shows where the rear ell of the porch (c. 1869) on the left butts to the original porch on the right. Sill on the right is a replacement, which probably dates from the early 1900's when a kitchen was built in the area shown.

Ph: Henry A. Judd - 1957

Neg. No. EODC 371



PHOTO NO. 19 FRAMING NEW PORCH PLATFORM

Carpenters are constructing a new porch platform. All timbers are the same size as the original. They were cut in a band-saw mill, where the vertical movement of the saw would duplicate saw marks of the old-time mill saw.

Note that the porch is being framed before construction of a foundation. Shipment of the brick was delayed and the first load, shown being unloaded in this photograph, did not arrive until after the frame had been started.

Ph: Henry A. Judd - 1957

Neg. No.



PHOTO. NO. 20 MORTICING NEW PORCH TIMBERS

Carpenters Snelson and Martin are shown using an old boring machine fitted with a 2-1/2 inch bit to bore a mortice in the porch framing. This same method would have been used in Johnson's time. This machine is the property of Architect Judd.

In the background, Carpenter Marshall is cleaning a corner cut.

Note vertical saw marks on timber.

Ph: Henry A Judd - c. 1957

Neg. No. EODC 372



PHOTO NO. 21 FRAMING SECOND FLOOR DECK OF PORCH

Framing members for the second floor deck and posts have been completed. Here the carpenters are cutting the porch rafters and ceiling joists.

The built-up posts shown were later encased to give the effect of the original solid posts.

New foundation under porch has been completed. The walls within the porch area have been largely repaired.

Ph: Henry A. Judd - c. 1957

Neg. No. EODC 373



PHOTO NO. 22 ROOFING PORCH AND HOUSE

The standing seam 40 lb. tin porch roof has been completed. Carpenters are removing the old tin roof on the house and applying wood shingles.

Trash in foreground is old tin roofing removed from main house.

Ph: Henry A. Judd - c. 1957

Neg. No. EODC 374



PHOTO No. 23 BASEMENT AREA OF PORCH - REAR ELL - BEFORE RESTORATION

This shows the condition of the basement area of the porch at the rear of the ell before restoration.

Note section of old rail used as post.

See Photo No. 23.

Ph: Moody Studio - 1957

Neg. No.

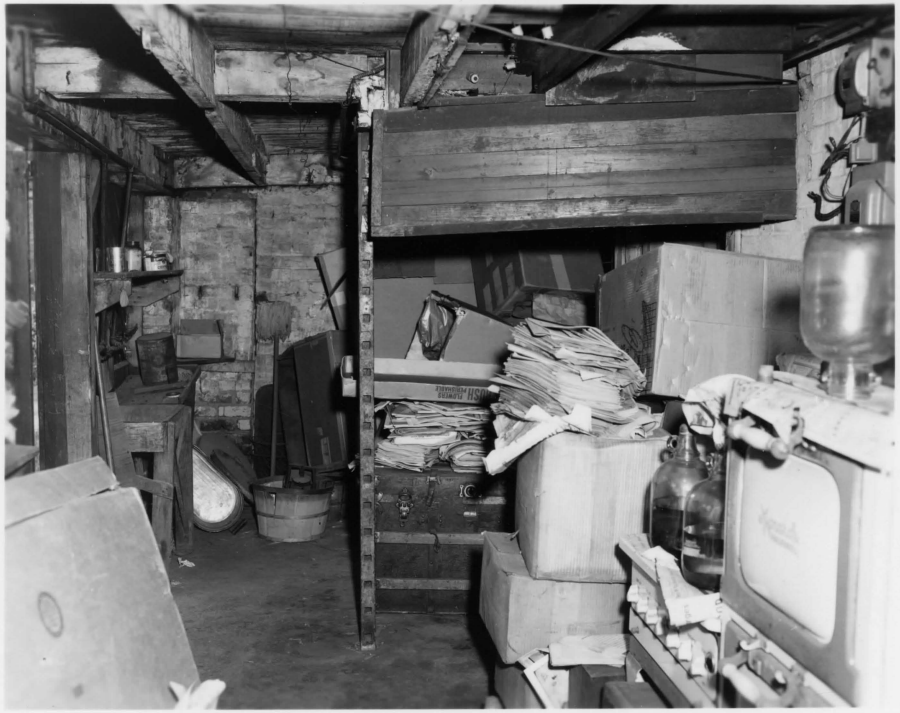


PHOTO No. 24 BASEMENT AREA OF PORCH - REAR ELL - AS RESTORED

This is the basement area of the porch at the rear of the ell as restored. (See Photo No. 23).

The door leads to Room 2 (Kitchen). Newel and top rail of stair are patterned from derelict pieces found built in wall above this point.

Door at extreme right leads to the utility area. This door is not a restoration of the original conditions, but was so installed to make a practical and usable utility area.

The lamp is one of three built by Mr. Clifford Rhea, a local tinsmith, from measurements taken from an original lantern of the period owned by Supervising Architect, Historic Structures, Charles E. Peterson.

Ph: Henry A. Judd - 1957

Neg. No. EODC



PHOTO NO. 25 UTILITY AREA BEFORE RESTORATION

This is view of area under porch, now used as a utility area, as found.

Note haphazard installation of utilities. This condition is typical of the utilities as found throughout the house.

Note wide spacing of porch joists. The new joists have been respaced to allow for an extra joist in each bay.

Ph: Moody Studio - 1957

Neg. No.



PHOTO NO. 26 WHITEWASH MARKS SHOWING OUTLINE OF ORIGINAL PORCH

View from the north porch showing the outline of the original porch, c. 1850, on the rear wall, front wing of the house. Areas enclosed by the 1850 porch were whitewashed. About 1870 a second story was added to the rear wing and to the porch. Areas enclosed by this porch were painted. This photograph was made after paint had been removed enough to expose the original whitewash. Ceiling and floor lines of the 1870 porch can also be seen.

Ph: Henry A. Judd - September 1956

Neg. No. EODC 376



PHOTO NO. 27 STAIRWAY FLOORED IN SECOND FLOOR

This view shows where stairway to second floor has been floored in. Baluster spacing is still clearly visible. Original rails less balusters were still in position inside the walls on the left. The door on the right, c. 1920, was cut in to lead to an apartment. This is now bricked in and restored to its original condition.

Ph: Moody Studio - 1957

Neg. No.



PHOTO NO. 28

Porch as restored.

Ph: Moody Studio - 1958
Neg. No. EODC 453



PHOTO NO. 29 SOUTHEAST ELEVATION BEFORE RESTORATION

South and east elevations before restoration. South porch was built in 1901.

Note original rails at second floor level of enclosed area of porch on the rear, or east elevation.

Ph: Moody Studio

Neg. No.

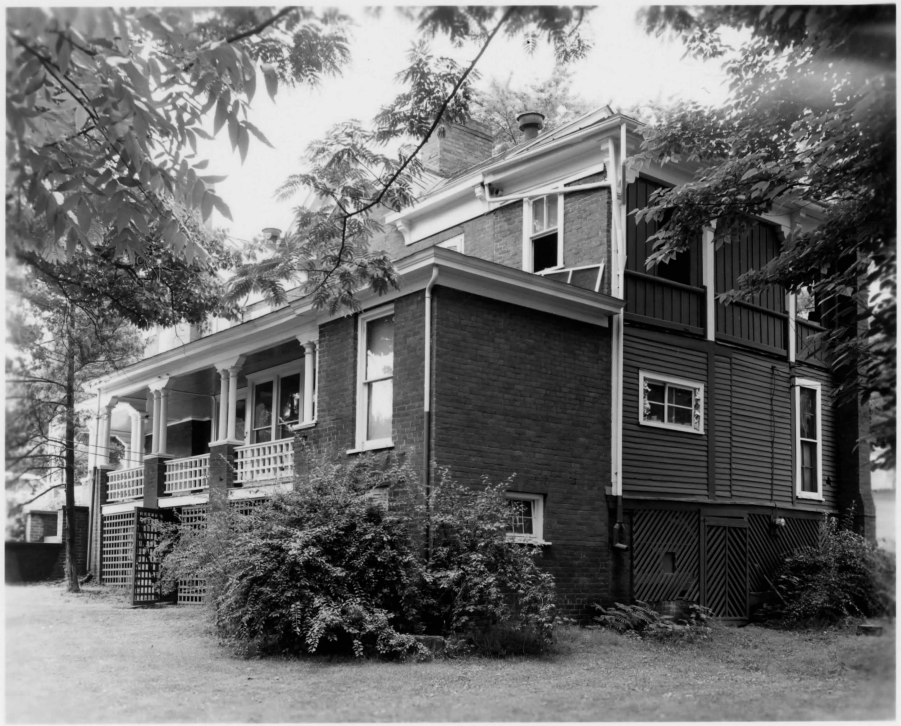


PHOTO NO. 30 WINDOW AND JOINT OF 1869 ADDITION

This window was installed when the second floor of the rear ell was built c. 1869. The long vertical joint at the left is where this 1869 addition was butted to the original structure. Note that the brick of the addition are smaller than the original brick.

Note the deteriorated condition of the masonry above the window. Lack of support due to bay windows below caused the wall at the right to settle.

Ph: Henry A. Judd - 1956

Neg. No.



PHOTO. NO. 31 CONDITION OF SOUTH WALL WITH PORCH REMOVED

View of the rear of the house looking Northwest showing rear wing of house after removal of the south porch c. 1885. Two bay windows, c. 1890 and 1902, were removed thus eliminating support for the badly cracked wall above which is also removed. All new windows are required for the south elevation. The gable end facing to the left will be removed when the roof is restored. The door and window openings on the rear wall are to be filled in. The basement door on the south side elevation will also be filled in while the window adjacent to it will remain. The brick on the second floor of the rear wing is badly scored to hold plaster and will require extensive patching. Numerous coats of paint must be removed from the brick on the basement and first floors levels.

Ph. G. Whittington, October 1956
Neg. No. EODC 378



PHOTO. NO. 32 REBUILDING SOUTHEAST CORNER

This view shows the mason and helper rebuild the southeast corner of the house. It was at this point that the wall had settled two inches.

Ph. Henry A. Judd, c. 1956
Neg. No. EODC 379



PHOTO. NO. 33 SCAFFOLDING SOUTH AND EAST ELEVATIONS

Scaffolding is in place in preparation to reconstruct the south wall. Basement area of the wall has been completed.

Ph. Henry A. Judd, c. 1956
Neg. No. EODC 380



PHOTO. NO. 34 SOUTH WALL PARTIALLY RESTORED

The masonry on the south wall has been completed and the restored porch is partially framed.

Ph. Henry A. Judd, c. 1956
Neg. No. EODC 381



PHOTO NO. 35

South and East elevations as restored.

Ph: Moody Studio - 1958
Neg. No. EODC 454



PHOTO. NO. 36 Original Sidewalk Curb

View of the original sidewalk curbing north of the house. A modern cement curb had been cast over this.

Ph. James F. O'Gorman, September 1956
Neg. No. EODC 382



PHOTO. NO. 37 EARLY SIDEWALK LEVEL

While excavating along the front to stabilize the foundation we found, at the level shown, evidence of an early sidewalk.

Ph. Henry A. Judd, c. 1956
Neg. No. EODC 383

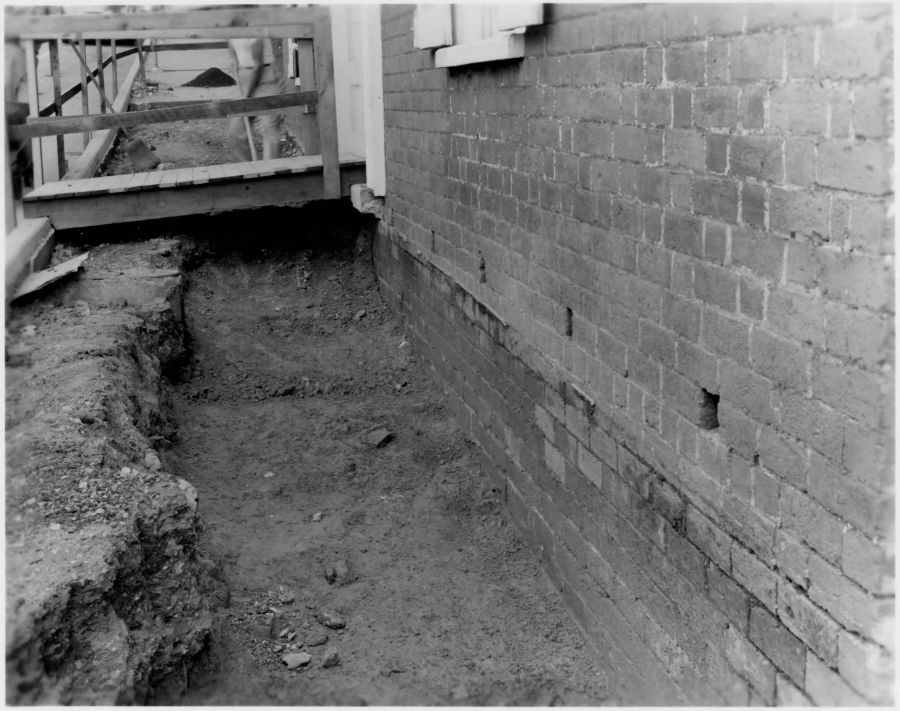


PHOTO NO. 38 INSTALLING FOOTING DRAINS

Footing drains were installed around the entire building and tied into an existing 18" drain leading to Richland Creek.

Ph: H. A. Judd - C- 1957
Neg. No. EODC 384

WILLIAMS

PHOTO NO: 39 ELECTRIFIED PORCH LANTERN

Electrified lamp, one of three, used to light the porch area. (See Photo No. 24.)

PH: H. A. Judd - 1957
Neg. No. EODC 385



PHOTO NO. 40 ROOM ONE - BEFORE RESTORATION

Room one after the removal of the hot air furnace. Only a few of the numerous holes cut in the masonry walls for heat ducts and other utilities are shown. Note foundation at lower right corner where four courses of brick had been removed. In no case was a lintel installed when an opening was cut. The floor is 10 inches below the original floor level. At the right the excavation is below the footing of the wall.

PH: H. A. Judd C- 1957
Neg. No. EODC 386

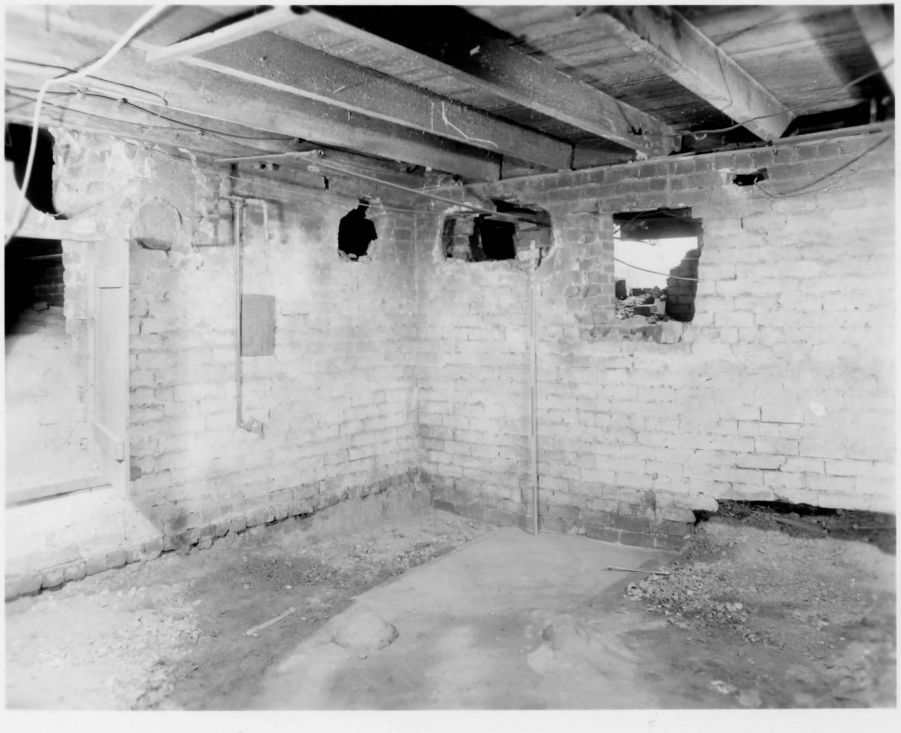


PHOTO NO. 41 ROOM ONE - AS RESTORED

This is the same view shown in Photo No. 40 after restoration.

Mrs. Margaret Johnson Patterson Bartlett, a great grandaughter of Andrew Johnson, and Architect Judd are sorting Andrew Johnson papers which have been stored in this room.

The box to the rear of Architect Judd is an original packing crate used by Johnson to ship his belongings back to Greeneville. The large box between Mrs. Bartlett and Mr. Judd is part of the original kitchen flour bin.

PH: Moody Studio - 1957
Neg. No. EODC 387



PHOTO NO. 42 ROOM TWO (KITCHEN) BEFORE RESTORATION

Kitchen (Room 2). Condition before restoration. Fireplace had been bricked in. Mantle shelf is notched for stove pipe. Hot air ducts run through rough cut holes in wall. Door at left to Room One was probably put in in 1885 or soon after.

PH: Moody Studio - 1957
Neg. No.


MAJESTIC
MAJESTIC

PHOTO NO. 43 ROOM TWO (KITCHEN) AS RESTORED

Kitchen (Room 2) as restored (see Photo No. 42). Fireplace has been repaired and a new hearth installed. The mantle has been restored to its original condition. Walls have been stabilized and holes patched and replastered. A new floor has been installed. Ceiling joist in front of hearth base is new. All others are original.

PH: H. A. Judd - 1957
Neg. No. EODC 388



PHOTO NO. 44 ROOM TWO (KITCHEN) SOUTHEAST CORNER AS RESTORED

Table and flour bin are originals. Woodwork has been painted a green which was found on the mantle, table and flour bin. Walls have been painted white with a flat paint with silicone added to leave brush marks and simulate white wash.

PH: H. A. Judd - 1957
Neg. No. EODC 389



PHOTO NO. 45 FIREPLACE, ROOM 3, BEFORE RESTORATION

Note concrete hearth and stucco face and lining in fireplace.

Marks of location of chair rail are clearly visable.

PH: Moody Studio - 1957
Neg. No.

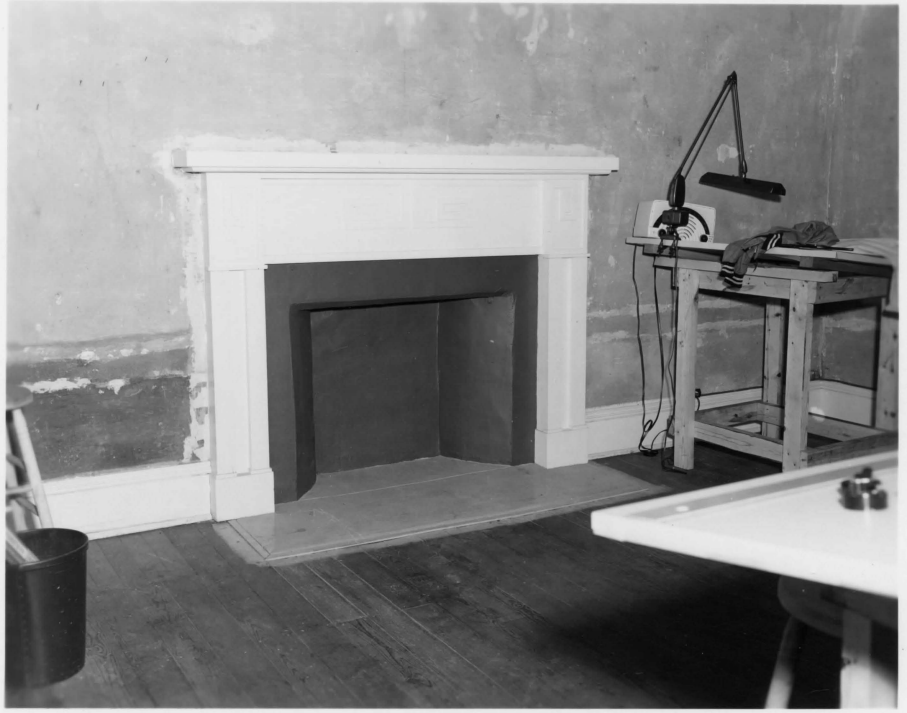


PHOTO NO. 46 FIREPLACE, ROOM 3, AS RESTORED

Cast iron jambs and back in fireplace. New brick hearth is patterned after original hearths in the Judge Millegan House ca: 1855. Graining on mantle is the same color and type as the earliest of two grainings found on the mantle. Chair rail has been reconstructed.

PH: H. A. Judd - 1957
Neg. No. EODC



PHOTO NO. 47 CAST IRON FIREPLACE JAMBS AND BACK

Cast iron Fireplace jambs and back before installation. Two sets (6 pieces) were located in Philadelphia by Supervising Architect, Charles E. Peterson and were purchased to replace the originals now missing in rooms 3 and 4.

Ph: H. A. Judd - 1957
Neg. No. EODC 391



PHOTO NO. 48 DOORWAY ROOM 4 TO HALL BEFORE RESTORATION

Door from Room 4 to Hall before restoration showing French doors installed c. 1920 - compare with Photo No. 49.

Hall stairway, while not the original to the house, apparently was built during the 1869 alterations. We arrived at this date by a comparison of paint with other items of a known date.

Negative is property of National Park Service.

Ph: Moody Studio - 1957
Neg. No.



PHOTO NO. 49 DOORWAY - ROOM 4 TO HALL - AS RESTORED

Doorway from Room 4, Andrew Johnson Bedroom, to Hall as restored. Width of opening was determined from notches on the floor. Trim and door are patterned after originals in the area.

Note trough light over door. Each room in the house is furnished with a similar light.

Ph: H. A. Judd - 1957
Neg. No. EODC 392



PHOTO NO. 50 SOUTH WALL - ROOM 4 - BEFORE RESTORATION

Cast iron mantle with mirror dates from the 1885 alterations by Andrew Johnson's daughter. Note outline of original mantle in plaster. (See Photo No. 52.)

Ph: Moody Studio - 1957
Neg. No.



PHOTO NO. 51 ORIGINAL MANTLE FOR ROOM 4

This mantle now in the Andrew Johnson Tailor Shop is the original mantle from Room 4 (Andrew Johnson Bedroom). (See outline in plaster Photo No. 50.) The Tailor Shop chimney and wall behind the mantle was so damaged and the mantle so scarred it was decided best to leave this mantle as is and to make a duplicate for the home.

Ph: H. A. Judd - 1957
Neg. No. 393



PHOTO NO. 52 SOUTH WALL - ROOM 4 - AS RESTORED

The mantle is a duplicate of the original now located in the Tailor Shop. The fireplace is again equipped with cast iron jambs and back. (See Photo No. 47.) Window sizes were determined from original pockets in the masonry for the head and sill. The modern hardwood floor has been removed and the original floor patched.

Ph: H. A. Judd - 1957
Neg. No. EODC 394



PHOTO NO. 53 ENTRANCE HALL LOOKING TOWARD THE REAR BEFORE RESTORATION

French doors are c. 1920. Stairway, while not the original, apparently was there during Johnson's lifetime. Workmanship and paint colors match that of work known to be c. 1869.

Ph: Moody Studio - 1957
Neg. No.



PHOTO NO. 54 ENTRANCE HALL - AS RESTORED

Entrance hall looking toward the rear as restored.

Ph. H. A. Judd - 1957
Neg. No. 395



PHOTO NO. 55 ROOM FIVE - SOUTH WALL - BEFORE RESTORATION

Bay window was added c. 1885 or soon after. Note trace of chair rail at original window sill level.

Ph: Moody Studio - 1957
Neg. No.



PHOTO NO. 56 ROOM FIVE - AS RESTORED

Room 5 looking south after restoration (See Photo No. 55). Bay window has been removed and the wall rebuilt as the original. Chair rail has been replaced.

Ph: H. A. Judd - 1957
Neg. No. EODC 396


STEAM
RED SEAL
LYCOMING

PHOTO NO. 57 FIREPLACE WALL, ROOM 5, BEFORE RESTORATION

This mantle probably was in Room 3 before the alterations of c. 1869. The mantle had been cut in two and shortened in length when it was put in this room. The vertical block at the center of the mantle covers the resulting joint. The French doors date from about 1920.

Ph: Moody Studios - 1957
Neg. No.



PHOTO NO. 58 FIREPLACE WALL - AFTER RESTORATION

Fireplace wall and north wall of Room 5 after restoration.

Ph: H. A. Judd - 1957
Neg. No. EODC 397



PHOTO NO. 59 SOUTH WALL - ROOM 6 - BEFORE RESTORATION

South wall, Room 6, Dining Room before restoration. Original south wall was removed and the extension erected in 1901.

Ph. Moody Studio - 1957
Neg. No.



PHOTO NO. 60 SOUTH WALL - ROOM 6 - AFTER RESTORATION

South wall of Dining Room (Room 6) after restoration. Cabinet on right was originally used where shown but was reused in another room added in 1901.

Door to the cabinet on the left is the original door which had been reused elsewhere in the house. The balance of the cabinet has been reconstructed from new materials.

Ph: H. A. Judd - 1957
Neg. No. EODC 398



PHOTO NO. 61 FIREPLACE WALL OF ROOM 6 BEFORE RESTORATION

Mantle dates from 1869. The China cabinet was added in 1901 to replace the original which was moved to the pantry.

Ph: Moody Studio - 1957
Neg. No. EODC 399



PHOTO NO. 62 FIREPLACE WALL, ROOM 6, AS RESTORED

Modern hardwood floor has been removed and the original floor patched where necessary. Note length of hearth which was across front of cabinet to south wall.

This fireplace once had a crane installed. We have not replaced it but it can be done at any time.

Cabinet was restored to its original location. It was removed from this position in 1901 and reused in the pantry.

Ph: H. A. Judd - 1957
Neg. No. EODC 400



PHOTO NO. 63 NORTH WALL OF ROOM 6 BEFORE RESTORATION

Door, casings and base are originals. Panels have been removed from door and a glass installed.

Note traces of shelves of corner cabinet on right.

Ph: Moody Studio
Neg. No.



PHOTO NO. 64 NORTH WALL OF ROOM 6 RESTORED

Original corner cabinet was cut down when moved in 1901 and could not be reused. Cabinet shown is new construction. Door is new with panel spacing taken from the original which had been altered in 1901. Chair rail is new. Design is from outline in the paint at sides of original door casings.

Chandalier is a coal oil type of the period. The colors in the shade match fragments of an original from the house.

Ph: H. A. Judd
Neg. No. EODC 401



PHOTO NO. 65 NORTHWEST CORNER OF ROOM 7 BEFORE RESTORATION

Northwest corner of Mrs. Johnson's bedroom (Room 7) before restoration. Note traces of original corner closet. Window on right was originally in room 10 and was moved to this location c. 1920.

Ph. Moody Studio - 1957
Neg. No.



PHOTO NO. 66 NORTHEAST CORNER OF ROOM 7 BEFORE RESTORATION

Mantle is original. Window on left is one originally in room 10 and moved here about 1920 when the window at the right, a closet and a bathroom in the east end of the room were erected. Door leads to closet.

Ph: Moody Studio - 1957
Neg. No.
N



PHOTO NO. 67 NORTH WALL OF ROOM 7 AS RESTORED

Original corner cabinet was found dismantled in the basement and was repaired and restored to its original location. Fireplace and hearth were rebuilt. The two north windows are removed and the walls patched. A section of original plaster by mantle has been saved to show writing by the soldier occupants of the house during the Civil War.

Ph. H. A. Judd - 1957
Neg. No. EODC 402



PHOTO NO. 68 NORTH WALL OF ROOM 9 BEFORE RESTORATION

Opening to Room 10 on right was cut in when this section of house became an apartment in 1920.

Ph. Moody Studio
Neg. No.



PHOTO NO. 69 EAST WALL OF ROOM 9 BEFORE RESTORATION

Room 9 and 10 were added c. 1869. Note line of original roof over mantle. Coal grate was installed in chimney c. 1885. Mantle and corner closet date from the original construction of the room.

Ph: Moody Studio
Neg. No.



PHOTO NO. 70 NORTHEAST CORNER OF ROOM 9 AS RESTORED

Door, window and mantle are original. Opening to Room 10 has been closed in. Coal grate has been removed. The modern floor was removed and the original patched where necessary.

Ph: H. A. Judd - 1957
Neg. No. EODC 403



PHOTO NO. 71 NORTHEAST CORNER OF ROOM 10 BEFORE RESTORATION

Original doorway on left became a bathroom door when the apartment was made in 1920. A new entrance door (center) from the porch was put where a window originally stood. The window was moved to Room 7 (see Illustration 65). Door on right leads to a kitchen enclosed within the porch.

Ph: Moody Studio - 1957
Neg. No.



PHOTO NO. 72 NORTHEAST CORNER OF ROOM 10 AS RESTORED

Window has been returned to its original location from Room 7. Modern floor has been removed and the original floor patched where necessary.

Ph:
Neg. No. EODC 404



PHOTO NO. 73 WEST WALL OF ROOM 10 RESTORED

Closet on left and mantle are original. Closet on right is new construction. The original closet in this location was removed in 1920 to make access to Room 9. The interior of the restored closet is now used as an access to the attic. The plumbing stack and electrical conduits are within this area.

PH:
Neg. No. EODC 405



PHOTO NO. 74 EXHAUST FAN, ATTIC

Exhaust fan installed into center flue of back chimney to exhaust attic air during summer months. Air intake openings are installed in the two front chimneys (see Photo No. 75.) Chimney is capped and a lead pan installed just below base of fan. Rain water is drained to house gutters from lead pan through a small pipe at the right of chimney.

Large pipe entering chimney on left is stack from plumbing which is within the chimney above the roof level and not visable to the public.

Exhaust fan is operated from a switch at the foot of access ladder in a closet Room 10 below.

Ph: H. A. Judd - 1957
Neg. No. EODC 406



PHOTO NO. 75 AIR INTAKES AND INSULATION ATTIC

Air intake to attic - one is located in each of the two front chimneys and the air is exhausted by a fan in the rear chimney (see Photo No. 74). Air in the south chimney is pulled from the first floor through the fireplace in Room 4. Air in the north chimney is pulled from the second floor through the fireplace in Room 7. During the winter months when the exhaust fan is not needed, the doors to the two intakes can be closed.

Six inches of vermiculite insulation has been poured between the joists in all the attic area.

Ph: H. A. Judd - 1957
Neg. No. EODC 407


South

PHOTO NO. 76 TYPICAL DOOR LOCK

Typical lock of the period found in the Andrew Johnson Home.

Photo shows both faces.

Patented
May 5, 1863
June 7, 1864

D. M. & Co.
New Haven

Ph: H. A. Judd - 1957
Neg. No. EODC 408


MAY. 5. 18
JUNE 7. 18


D.M.&C.Co
NEW HAVEN

PHOTO NO. 77 FRONT DOOR KEEPER

Original Front Door lock keeper beside marks on casing showing original position. See drawing NM-AJ 3067 "CAST IRON FRONT DOOR LOCK" - Appendix I.

Ph: H. A. Judd - 1957
Neg. No. EODC 409

PHOTO NO. 78 ORIGINAL PENCILING OF MORTAR JOINTS

The mortar was a rather drab buff color which did not show up well in the joints. To add a little accent to the joints a white line about a quarter of an inch wide was painted over the mortar. In many cases where brick spacing was irregular it was idealized by painting the penciling lines across the brick to equalize the spacing.

The line was made by using a special brush called a brick stripper to apply a paste white lead cut to the consistency of heavy cream. The brush was guided by a straight edge which could be any length within a man's natural reach.

The brick penciling shown here was protected over the years by a second floor room added to the house c. 1869. This penciling stopped at the roof line of the original roof which crossed the lower left of the picture.

Ph. H. A. Judd - 1956
Neg. No. EODC 410



PHOTO NO. 79

Painter penciling mortar joints.

Ph: Unknown - 1958
Neg No: EODC 455

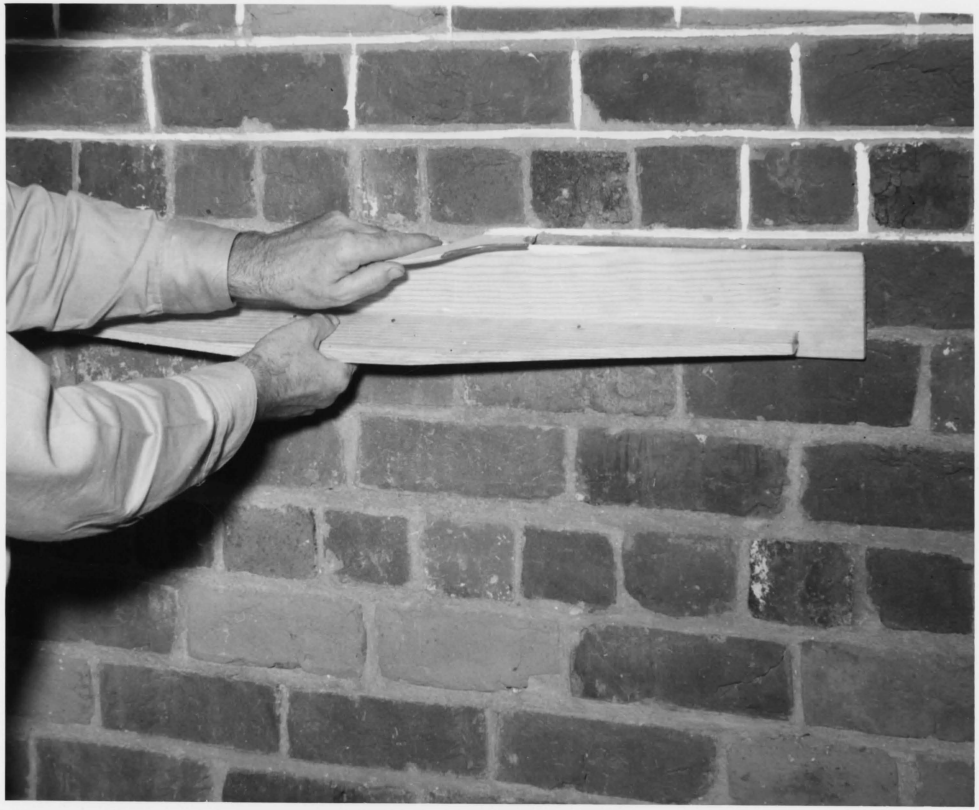


PHOTO NO. 80 PENCIL MARKINGS ON ORIGINAL PLASTER

Evidence of the military occupation of the home was found throughout the original part of the house by the pencil notations made by the soldiers on the plaster walls. These have been covered by wall paper since 1869 when Johnson returned to the home from Washington.

Wherever possible this original plaster was saved. This illustration shows a small section of the hall wall just inside the front door.

Ph: H. A. Judd - 1957
Neg. No. EODC 411



PHOTO NO. 81 ENTRANCE FRAME SIMILAR TO ORIGINAL OF JOHNSON HOME

The original Entrance Frame on the Andrew Johnson House, 1851-1869, was probably very similar in character to this frame on the Davis House on Maple Avenue in Greeneville.

The molded lintel of the original Johnson frame was found still in place under the head of the existing classical frame.

Ph: Moody Studio, January, 1958
Neg. No. HABS (Library of Congress)



A P P E N D I X I V

PAINT SAMPLES

a. Exterior trim color

b. White used to simulate whitewash on brick under porches (See page 50.)

c. Interior trim color

d. Ceiling color Second Floor Hall and Rooms 7 and 8

e. Trim color, Kitchen

WALLPAPER SAMPLES

f. Center Hall

g. Room 3

h. Room 4

i. Room 5

j. Room 6

k. Room 7

l. Room 8 - similar to original paper found under base

m. Room 9

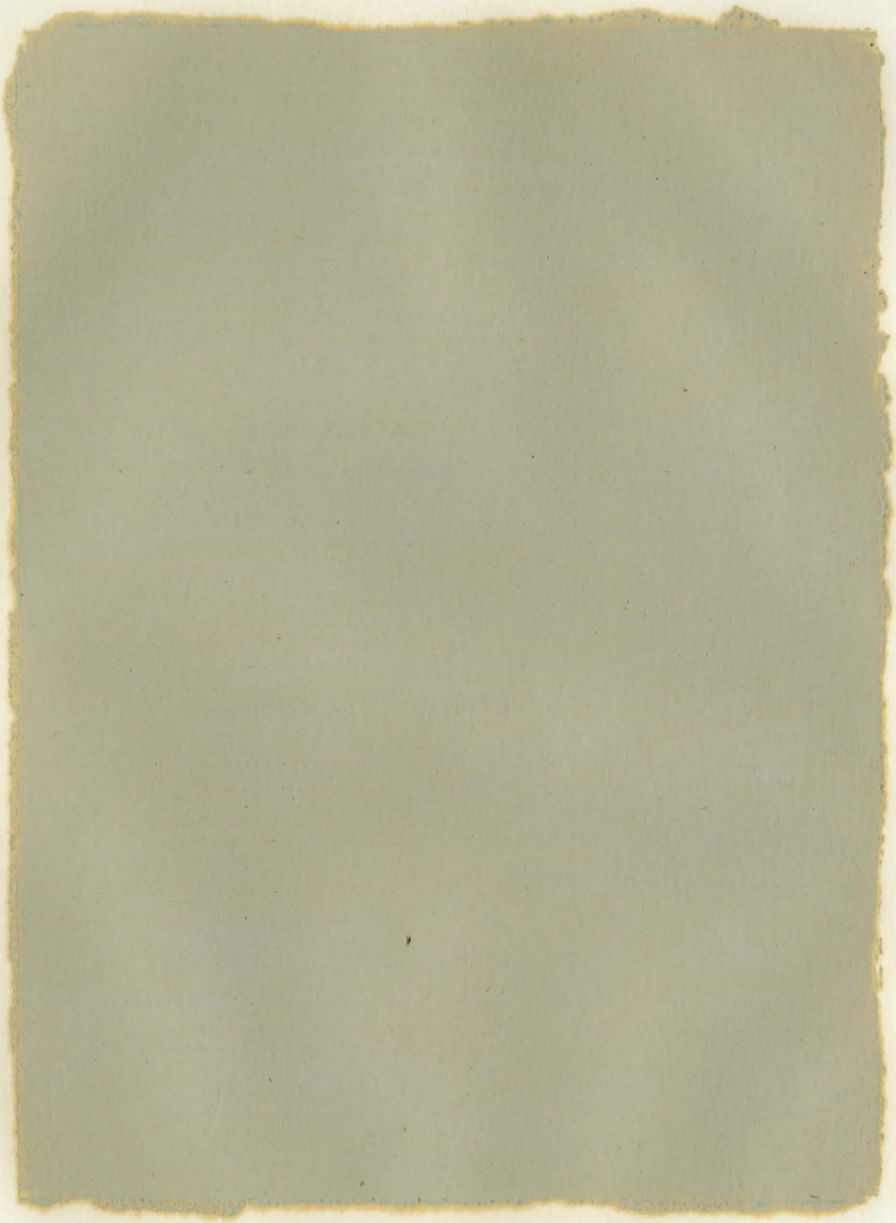
n. Room 10

PAINT SAMPLES

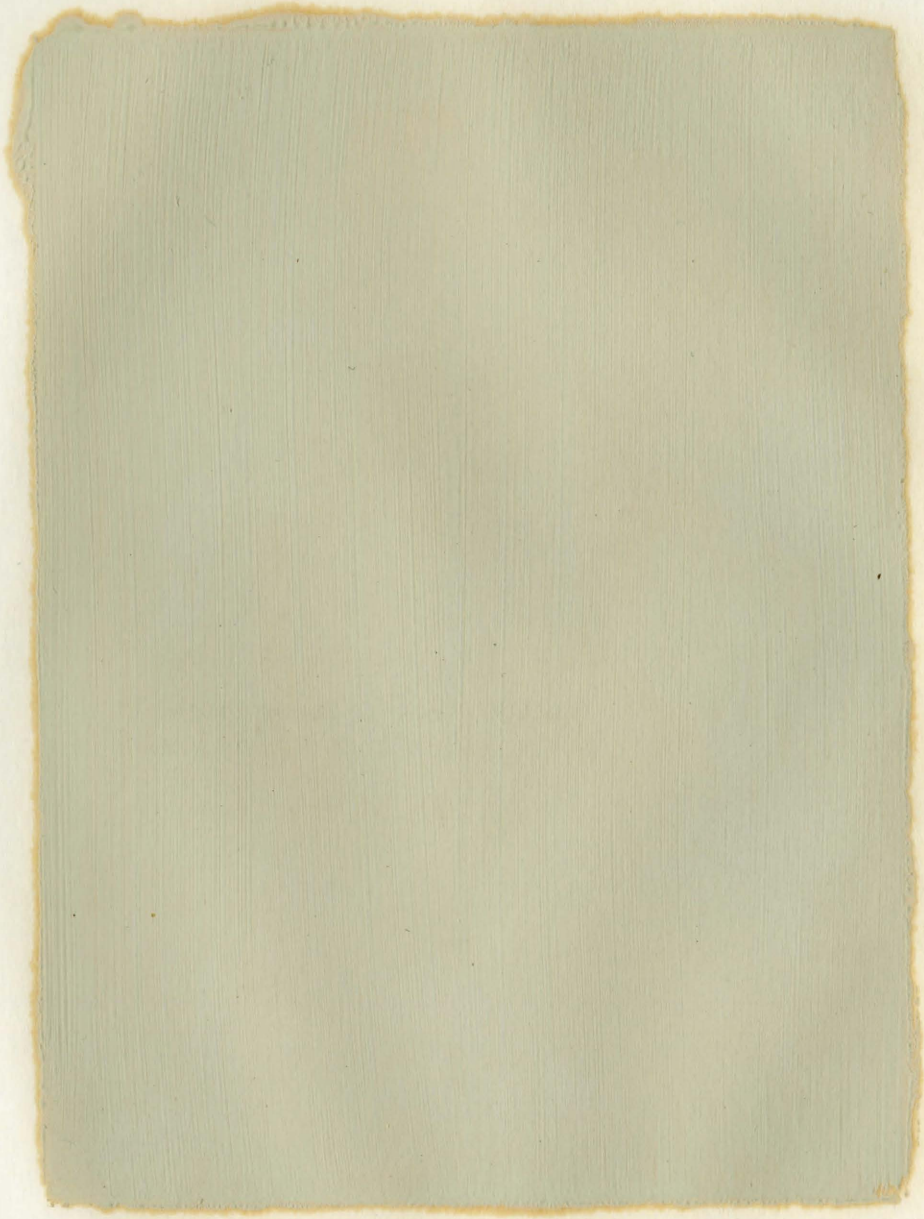
EXTERIOR TRIM COLOR



INTERIOR TRIM COLOR



CEILING COLOR, SECOND FLOOR
HALL AND ROOMS SEVEN AND EIGHT



TRIM COLOR, KITCHEN



WALLPAPER SAMPLES



CENTER HALL



ROOM THREE



ROOM FOUR



ROOM FIVE

SEE BORDER FOR ROOM 8 - SAME USED IN ROOM 5



ROOM SIX





ROOM SEVEN



ROOM EIGHT



ROOM NINE



ROOM TEN





BOUND BY
HM