## CONDITIONS ASSESSMENT REPORT

# Shawnee Indian Manual Labor Boarding School

Architecture Planning Conservation

Shawnee Tribe Cultural and Historical Preservation Committee | December 6, 2021





Architectural Resources Group

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# Table of Contents

1. Executive Summary
A. Methodology
B. Summary of Findings
C. Guidelines
D. Brief History of the Shawnee Indian Manual Labor Boarding School
2. West Building
A. Building Description
1. Exterior Description
2. Interior Description
3. Summary of Character-Defining Features
B. Existing Conditions & Recommendations
1. Summary of Exterior Conditions
2. Summary of Treatment Recommendations
C. Roofing, Gutters, and Downspouts
D. Exterior Walls
E. Porches
F. Windows and Doors
G. Interiors
H. Site Features
3. East Building
A. Building Description
1. Exterior Description
2. Interior Description
3. Summary of Character-Defining Features
B. Existing Conditions & Recommendations
1. Summary of Exterior Conditions
2. Summary of Treatment Recommendations
C. Roofing, Gutters, and Downspouts
D. Exterior Walls



# Table of Contents

- E. Windows and Doors
- F. Interiors
- G. Site Features

4. North Building55
A. Building Description
1. Exterior Description
2. Interior Description
3. Summary of Character-Defining Features
B. Existing Conditions & Recommendations
1. Summary of Exterior Conditions
2. Summary of Treatment Recommendations
C. Roofing, Gutters, and Downspouts
D. Exterior Walls
E. Porch
F. Windows and Doors
G. Interiors
H. Site Features
5. Next Steps
6. Planning for the Future
A. Historic Structure Report and Cultural Landscape Report
B. Master Plan
C. Interpretation
D. Estimate of Costs

- Appendices
  - A. Survey Drawings of Existing Conditions
  - B. ROM Estimate for Recommended Repairs

Architectural Resources Group (ARG) was retained by the Shawnee Tribe Cultural and Historical Preservation Committee to conduct an assessment and prepare recommendations for the stabilization, restoration, and maintenance based on existing conditions for the three buildings that are part of the Shawnee Indian Manual Labor Boarding School, commonly referred to today as the Shawnee Mission or Shawnee Methodist Mission, located in Fairway, Kansas. The School is composed of three remaining buildings, known as the East Building, North Building, and West Building. The goal of this work was to produce a report narrating the existing conditions and provide recommendations for the preservation of the structures. Both immediate and long-term repairs as well as basic cyclical maintenance needs are addressed in the body of this report.

#### METHODOLOGY

ARG conducted a visual survey of the exterior elevations, as well as the interior and cellars of each building during a site visit September 20-23, 2021. The exterior survey was conducted from ground using a digital camera and a Matterport scanner. A range of conditions were recorded, including open joints, wood rot, biological growth, paint deterioration, and compromised waterproofing. The overall survey was non-destructive and conditions were documented on sketches based on historic photographs of each building. The size and location of the conditions were recorded on elevations of each building and can be found in Appendix A. Measured drawings of the buildings were also prepared as part of this scope of work.

Based on this survey, a range of repair and treatment actions were developed, calling out high, medium and low priority repair and maintenance treatments. These recommendations are listed by priority, from high priority, to medium and low priority, followed by a section with recommended maintenance procedures.

- *High* priority recommendations indicate that deterioration is active and treatment within 1-2 years is needed to prevent or slow the rate of building deterioration and material loss.
- Medium priority recommendations designate minor material deterioration that should be addressed within 3-5 years to prevent more serious conditions from occurring.
- Low priority recommendations are made where deterioration is not currently active, but the item should be addressed within 5-7 years to avoid future deterioration. Low priority recommendations also include cosmetic repairs to maintain visual integrity of the exterior.
- Maintenance and Inspection Recommendations are items that should be carried out periodically to
  ensure safekeeping of the building materials and prevent major and costly interventions.

In this report, a separate condition assessment is provided for each building. The three building

sections include building descriptions, summaries of character-defining features, summaries of existing conditions and treatment recommendations, and detailed list of existing conditions and treatment recommendations for various exterior, interior, and site features. Next Steps and Planning for the Future, including a discussion of an updated interpretive installation, follow the condition assessment sections. Rough order of magnitude costs for repairs, treatments, and maintenance recommendations are included in Appendix B.

It should be noted that while assessment by a structural engineer specializing in historic structures was initially included in the project scope, this was postponed as structural documentation of the building was not available leading up to the survey. Partial documentation has been received, but more may be located in the archives of the Kansas State Historical Society and should be retrieved and reviewed as part of a structural assessment in the next phase of documentation.

#### SUMMARY OF FINDINGS

The three brick buildings comprising this historic site are in need of significant repair and maintenance work, ideally within the next 12 to 18 months.

The roofs have not been replaced in many years and show signs of significant deterioration at both the interior and exterior at each building. There are ongoing water infiltration issues at the roofs of the East and North Buildings and recent remediation and repairs due to water damage in all three buildings. Note that ongoing leaks at the West Building are difficult to determine as the building is not occupied, but the interiors show signs of water damage and recent repair. These water infiltration issues, both from leaking roofs, plumbing, and drainage hold the potential for extensive water damage to interior finishes and structural elements of the buildings. This is of particular concern at the East and West Buildings. The East Building attic retains the original lath and plaster finish on the walls that is vulnerable to moisture infiltration. This should be considered a high priority item, as is of particular concern since the attic may also be a highly significant historic space as it served as the boy's dormitory. As the West Building is the oldest residence in the state, its interior finishes are of significant historic interest. As many of the first floor finishes were lost in the remediation of a previous leak, it is critical that the remaining interior finishes be protected for future investigation.

Roof replacement and repair for all three buildings (as well as all other substantive work) should be carefully planned by preservation professionals and executed under their field supervision by contractor(s) with specific experience preserving cultural and historic resources and following the Secretary of the Interior's Standards. This is particularly crucial for the East Building as the attic, which appears to remain unaltered and was the boy's dormitory and is therefore significant. Any interventions that impact this space such as roof work must involve preservation professionals in the planning and on-site execution to avoid loss of historic fabric.

Repointing of the brickwork is needed to keep the buildings watertight and rotted wood at features such as the porches should be repaired or replaced. During the coming winter, we recommend that the attics and other interior spaces be monitored, and temporary protection installed if leaks are observed.

Based on documentation received after the site visit, structural stabilization efforts for the historic masonry and wood framing have been made, and below grade waterproofing improvement has been implemented. Interior modifications to facilitate interpretation are evident in all three buildings. Limited records were available at the time of this report but may indicate other preservation work.

Each of the three buildings included in the Shawnee Indian Manual Labor Boarding School site exhibit evidence of past restorations and stabilization campaigns. It is clear,

from the steel plates on the surface of the brickwork, that exterior walls were structurally stabilized by securing to the floor framing using tie rods. Out of plane sweeps are evident on some walls where ties rod plates are present. Strengthening of wood framing is evident as well. The cellars appear to have been stabilized and partially rebuilt and below grade waterproofing improvements have been undertaken.

Historic photos provide information on other improvements made in the past such as the porch replacement projects at the North and West buildings. The authenticity of interior features such as built-in cabinets is difficult to determine without additional investigation. Conjecture was not uncommon for historic sites at the beginning of the preservation movement.

Nevertheless, much historic building fabric remains. It appears that past stabilization work was done in a respectful manner and that those involved appreciated the significance of these historic and cultural resources. Almost certainly, those who designed these preservation efforts documented their work. Unfortunately, this information was not available prior to, or during the conditions survey and could not be factored into the assessment. These documents likely include more information regarding the level of intervention at the buildings and would allow for a better understanding of intact historic fabric and replacement materials.

However, for the most part, the maintenance needs are not difficult to identify. What must be emphasized is that future interventions should be undertaken to preserve as much original material as possible and therefore be carefully planned. Existing conditions before any intervention, including stabilization, restoration, conservation, and interpretation efforts should be carefully documented. These are historically significant buildings at a local, regional and very likely national level that warrant the highest level of conservation and preservation.

The West Building is the fist building constructed at the

School and reportedly the oldest residential building in the state. The building is uninhabitable and in need of extensive work before it can be opened to the public for interpretive display. It has been vacant since the caretaker moved out in 2000 and the building is used for storage. Because this building has not been occupied for nearly 20 years, it is unclear if some of the signs of deterioration including water damage at the second floor, and signs of repairs including drywall replacement, are ongoing, or if the source of the water infiltration has been addressed. This roof should be assessed at close range and repaired, especially in areas corresponding to water damage and should be repaired before the next rain or snow season. The building has two segments, with the main portion as the original structure, and rear segment as a later addition. A leak that was found in 2013 caused significant and extensive damage to the main portion of the house, and nearly all interior finishes including wallpaper, plaster, and flooring were removed. These spaces generally consist of exposed sub-floor and lath walls and ceilings. The rear segment shows signs of wear, deterioration, and previous repairs including water damage at the second floor ceiling, plaster patching on the walls, and in some areas, plaster replacement with drywall. More information including photographs, on the condition of each system is found in Section 2C. Due to the level of intervention during its time as the caretaker's residence, it is not readily apparent which features and materials are original and which are replacement. This should be determined before significant repairs are undertaken so as to avoid loss of historic fabric.

The East Building roof should be replaced before the next major rain or snow season to prevent the development of water infiltration problems causing damage to the structure and its interior. More information including photographs, on the condition of each system is found in Section 3C. As this building is the main site of interpretation for the Mission, it has been modified over the years and includes both central cooling and heating systems as well accessibility modifications such as an elevator.

The North Building windows and roof should be addressed in the next 12-24 months to prevent the development of water infiltration problems causing damage to the structure and its interior. More information including photographs, on the condition of each system is found in Section 4C. This building serves as a secondary site of interpretation and library for the Mission. Like the East Building, it has been modified over the years and includes both central cooling and heating systems. A recent leak in the HVAC system located in the attic caused major damage to the west end of the building, including complete loss of interior finishes and potential structural problems. Repairs to the walls and ceilings were in progress during ARG's survey.

A table summarizing the systems for each building are included in the following pages.

#### **GUIDELINES**

The recommendations contained in this report are based on *The Secretary of the Interior's Standards for the Treatment of Historic Properties (The Standards)* with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, and on the Code of Ethics of the American Institute for the Conservation of Historic and Artistic Works (AIC).

The *Standards* provide general information for stewards of historic resources to determine appropriate treatments. They are intentionally broad in scope to apply to a wide range of circumstances, and are designed to enhance the understanding of basic preservation principles. *The Standards* are neither technical nor prescriptive, but are intended to promote responsible preservation practices that ensure continued protection of historic resources. Further, the Code of the Ethics of AIC calls for treatments to be "suitable to the preservation of the aesthetic, conceptual, and physical characteristics of the cultural property." The Code of Ethics also requires an "informed respect for the cultural property, its unique character and significance, and the people or person who created it."

While deterioration is inevitable, properly informed conservation and maintenance measures can help to slow down deterioration and conserve the existing materials. Treatments listed in this report respond to goals related to the preservation of materials and elements original to the construction. Original or historic building materials, also known as historic fabric, contribute to the significance of a building because they inform the degree of architectural integrity a building retains. Retaining historic fabric increases the authenticity of the character-defining elements and serves broader preservation goals of advancing knowledge about the history of building design and technology. Repairs need to be both visually appropriate to retain character-defining features, and physically compatible to minimize loss of and damage to historic building materials.

West Building			
BUILDING FEATURE/SYSTEM	MATERIALS	CURRENT CONDITION	WORK DESCRIPTION
Roofing	Wood shingles over skip sheathing and copper flashing	Fair, with areas of curling shingles but no large areas of missing or displaced shingles. Flashing sealant shows early signs of deterioration and there is one area of bent piece of flashing.	Overall, repair. Replace sealant and missing shingles. Repair damaged flashing.
Fascia, Gutters, and Downspouts	Wood fascia with painted metal half- round gutters and downspouts	Wood fascia with painted metal half- Poor, with large areas of exposed wood and paint round gutters and downspouts	Repaint
Exterior Walls	Masonry	Fair, with isolated areas of cracking and open joints, especially at the stone foundation.	Repair cracks and repoint areas of open joints.
North Porch	Wood	Fair, with deteriorated wood elements and paint.	Replace damaged and deteriorated wood elements and repaint.
East Porch	Wood	Fair, with deteriorated wood elements and paint. The joist Replace damaged and deteriorated pocket on the south side of the porch is exposed.	Replace damaged and deteriorated wood elements and repaint. Cover joist pocket with appropriate trim.
Exterior Windows and Doors	Wood	Fair, with some doors with missing or damaged hardware.       Repair hardware on doors. Replace         Windows are replacements. Doors are generally operable.       glazing putty on windows and sealant         at window and door perimeters.       Repaint windows.	Repair hardware on doors. Replace glazing putty on windows and sealant at window and door perimeters. Repaint windows.
Interiors	Plaster on masonry, plaster on lath, and wallboard	Very poor, with large areas of missing and damagaed plaster.	Repair and replace materials in kind.
	Wood floors	Very poor, with heavy wear and signs of both isolated repairs and additional damage.	Inspect floors for structural damage.
Site Features	Concrete pathways	Good	Weed and monitor.

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Repair (very high priority)
Repair (high priority)
Repair (medium priority)
Repair (low priority)
Maintenance

Architectural Resources Group | Shawnee Indian Manual Labor Boarding School

East Building			
BUILDING FEATURE/SYSTEM	<b>MATERIALS</b>	CURRENT CONDITION	WORK DESCRIPTION
Roofing	Wood shingles over skip sheathing and copper flashing	Very poor, with large areas of missing displaced, and curling shingles. Flashing sealant shows signs of damage and cracknig at sealant.	Replace roof and flashing.
Fascia, Gutters, and Downspouts	Wood fascia with painted metal half- round gutters and downspouts	Wood fascia with painted metal half- Poor, with large areas of exposed wood and paint round gutters and downspouts	Repaint
Exterior Walls	Masonry	Fair to poor, with isolated areas of cracking and open joints, especially at the stone foundation.	Repair cracks and repoint areas of open joints.
Exterior Windows and Doors	Wood	Fair. Windows are replacements and many do not open for Replace sealant at window and door safety reasons. Doors are operable.	Replace sealant at window and door perimeters. Repaint windows.
	Plaster on masonry, plaster on lath, wallboard	Good to fair. Some walls show isolated signs of plaster cracking and damage. There are isolated areas of water damage due to roof leaks.	Repair and replace materials in kind.
lineriors	Wood floors	Good to fair. Some second floor rooms have heavily weathered floors, and one of the stair landings slopes to the south of the building.	Inspect floors for structural damage.
Site Features	Concrete pathways	Good	Weed and monitor.

Repair (very high priority) Repair (high priority)
Repair (high priority)
Repair (medium priority)
Repair (low priority)
Maintenance

<b>North Building</b>			
BUILDING FEATURE/SYSTEM	<b>MATERIALS</b>	CURRENT CONDITION	WORK DESCRIPTION
Roofing	Wood shingles over skip sheathing and copper flashing	Poor to fair, with isolated areas of displaced, and curling shingles. Flashing sealant shows early signs of deterioration.	Replace roof and flashing.
Fascia, Gutters, and Downspouts	Wood fascia with painted metal half-round gutters and downspouts	a with painted metal Fair, with isolated areas in poor condtion. There is general Repaint and repair gutters and downspouts paint deterioration and one fascia board is heavily damaged.	Repaint and repair
Exterior Walls	Masonry	Fair, with isolated areas of open joints.	Repair cracks and repoint areas of open joints.
Porch	Wood	Fair, with deteriorated wood elements and paint. Note Replace damaged and deter isolated areas of poor condtion due to water infiltration at wood elements and repaint. second floor porch.	Replace damaged and deteriorated wood elements and repaint.
Exterior Windows and Doors	Wood	Poor. While some windows are in good condtion, most are Replace glazing putty on windows and in very poor condtion with failed glazing putty and paint. Realant at window and door Doors are operable.	Replace glazing putty on windows and sealant at window and door perimeters. Repaint windows.
Interiors	Plaster on masonry, plaster on lath, and wallboard Wood Floors	masonry, plaster on lath,       Good to fair. Repairs at the west side of the building were       Repair and replace materials in kind.         ard       incomplete during the survey. Other areas have isolated       Plaster cracks.       Plaster cracks.         rs       Several areas have a significant slope in the floor, including inspect floors for structural damage.       Inspect floors for structural damage.         and a storage room at the east end of the building.       And a storage room at the east end of the building.       Inspect floors for structural damage.	Repair and replace materials in kind. Inspect floors for structural damage.
Site Features	Concrete pathways	Good	Weed and monitor.

KEY
Repair (very high priority)
Repair (high priority)
Repair (medium priority)
Repair (low priority)
Maintenance



West Building. South door of foyer and stair, both defining features.



West Building. Missing ceiling in the first floor west room. Note the ghosting from a crown molding.



West Building. Second floor room.



*East Building. Plaster ceiling at the attic. Note staining and large areas of missing plaster and missing lath.* 



East Building. Water damaged ceiling and wall in southeast room at the second floor.



Lifting and curling shingles. Note the plastic sheets used instead of shingles, indicated with red arrows.



North Building. Hole in fascia panel on west elevation.



Paint and glazing putty deterioration at a north elevation window.



North Building. Water damage at new sash, deteriorating finish at window sill.



West Building, 1940, Photo courtesy of HABS KAN-3 by Lester Jones. [https://www.loc.gov/item/ks0018/]



East Building, 1940, Photo courtesy of HABS KAN-3 by Lester Jones. [https://www.loc.gov/item/ks0018/]



North Building, 1940, Photo courtesy of HABS KAN-3 by Lester Jones. [https://www.loc.gov/item/ks0018/]

## BRIEF HISTORY OF THE SHAWNEE INDIAN MANUAL LABOR BOARDING SCHOOL<sup>1</sup>

At the height of its activity, the Shawnee Indian Manual Labor Boarding School was an establishment of 2,000 acres with 16 buildings, including the three large brick structures which still stand, and an enrollment of nearly 200 Indian boys and girls.

The West Building was the first permanent structure at the mission and is the oldest residence in the state of Kansas. Thomas Johnson, superintendent of the school, moved his family to the new building in October 1839, and school began the same month. The building has undergone various alterations including additions that have been both added and removed over time. It underwent significant alteration when it became the caretaker's residence in 1929 and in subsequent years.

The East Building was built in 1841. It contained fourteen school and lodging rooms for teachers and children. The chapel occupied part of the first floor, and the attic was the boys dormitory. It now serves as a museum building.

The North Building was erected in 1845 to accommodate increased enrollment. The building was divided into connecting rooms which were used as the girls' school and dormitory. At one time Johnson and his family lived here as well. Today it too serves as a museum building and contains a small library.

The school was closed by order of the Federal government in 1862, and for the next sixty years the buildings served variously as Union Army barracks, a dance hall, dairy bottling plant, apartments and a boarding house. In 1927 the state bought the three remaining buildings and began restoration work and landscaping on the 12-acre grounds. The West Building was converted to a caretaker's residence, and served as such until 2000. The East and North Buildings

1 This section is a summary of the National Register of Historic Places Nomination Form, completed in 1975 by Stephen Lissandrello from the National Parks Service, and other sources provided by the client.

are museums. Some rooms have been restored and refurnished. Others are incongruous in style of refurnishing. The furnishing of these rooms have mostly been funded by private historical societies and interpret the time period of the school, with little content on the school itself.

The grounds have been attractively landscaped, with no apparent attempt at historic reconstruction.

The site has undergone several significant site alterations and restorations. Details of these early projects are sparse but a general timeline includes:

- 1940s: Site restoration by the state of Kansas. A garage and wood shop were added during this project, which is located immediately to the south of the East Building.
- 1950s: The front porch of the West Building was replaced, but later research indicated that it was not historically accurate and it was later replaced in the early 2002 to its documented appearance in the 1870s.
- 1968: The site was added to the National Register of Historic Places
- 1970s: various repairs, including rebuilding chimney repairs at the East and North Buildings. The windows of the East building were also replaced.
- 1980s: Stabilization and renovation by the state of Kansas. This was an extensive project that included adding the existing building ties and gutter systems to each building, and structural stabilization of all three buildings.
- 1999: limited site archaeology as conducted around the West Building.
- 2000: Caretaker leaves, West Building is left unoccupied.
- 2001: Chimneys at the North and West Buildings are rebuilt. Major window repairs are undertaken at all three buildings. Drainage and foundation waterproofing is also addressed on all three buildings. Both the West and North Buildings receive new roofs.
- 2003: Alterations to the East Building including adding the elevator, bathroom renovations, and interior

painting. The electrical system in the North building was upgraded, and spot repairs were completed at the roof of the East Building.

- 2006: Site features are repaired and redesigned, including the parking lot and concrete paths to the buildings. The wood bridge between the East and West Buildings was replaced. The interior of the North Building is renovated.
- 2013: A leak is identified in the West Building, resulting in significant removal of interior finishes in mold re-mediation.
- 2016: Window repairs and replacements as well as masonry repairs are undertaken at the North Building.
- 2021: A leak from the air conditioning system in the North Building lead to the replacement of the ceilings and walls of the first and second floor rooms at the west end of the building.

Note that this is not a complete summary of alterations, renovations, or restorations, however there have been several large-scale interventions into the structures since it was obtained by the State of Kansas in the 1920s. Work has usually been in reaction to changes in use and periods of deferred maintenance, rather than as part of a continued maintenance program.

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#### **BUILDING DESCRIPTION**

#### **Exterior Description**

The West Building is a two-story brick building. It is composed of two sections, The building has two segments, with the main portion as the original structure, and rear segment as a later addition.

This was the first permanent building constructed for the Mission, and housed the Mission superintendent, Thomas Johnson, and his family. The building is constructed with a simple Federal style. The brick bond varies, with the oldest section laid in a Flemish bond of alternating headers and stretchers in each row. The rear addition is laid in a common bond, with a row of headers after every five rows of stretchers. This is consistent with the brick bond used at the East and North Buildings.

The primary elevation is the north elevation, facing West 53rd Street. It includes a columned portico installed in 2002 based on photographs from the 1870s. This wall shows signs of several repair and repointing campaigns and a powdery yellow coating on the brick that is also found on the east elevation of the rear addition. There is one panel door on this elevation, with a five lite transom and the windows are double hung wood windows, with four over four sashes at the first floor and two over two sashes at the second floor. Each opening window is topped with a splayed lintel.

The east elevation on the original structure is dominated by a central chimney. The rear addition has a two-story raised porch supported by hexagonal columns with square bases. The second floor of the porch is accessed at the exterior from a staircase at the north side, directly against the original structure. The second floor includes a rail and balustrade, which is not found at the first floor. Two doors on the second floor access the porch, but only one door accesses the rest of the house. The room at the south end is independent and only accessible via the porch. There is a small set of stairs at the south end of the porch. There are three doors into the house from the first floor of the porch. The north door



West Building, north elevation



West Building, east elevation



West Building, south elevation of original structure.

leads into the foyer of the original structure. The other two doors lead into the former dining room and kitchen of the rear addition. Stairs at the south end of the porch bring includes a staircase at the north side of the porch. There are no windows on the east elevation of the original structure. The windows of the rear addition are nine over six double hung windows. Each door and the first floor windows have splayed lintels.

The south elevation consists of a partial elevation of the original structure that is a mirror of the north elevation, and the unfenestrated south wall of the rear addition. There is one panel door on this elevation that leads into the foyer of the original structure. The splayed lintel over this door is partially blocked by the porch structure. The windows are double hung wood windows, with four over four sashes at the first floor and two over two sashes at the second floor. Each window is topped with a splayed lintel.

The west elevation is a mirror of the east elevation of the original structure, with a central chimney and two windows. The second floor window is a nine over four double hung wood window, and the first floor window is a four over four double hung wood window. These windows do not have splayed lintels. The window pattern on the west elevation of the rear addition mirrors the east elevation, with windows in place of doors except the northmost opening on opening on the first floor, which is a door. The windows and door at the first floor of the rear addition have splayed lintels, the second floor windows do not have visible masonry lintels. Air conditioners are located on concrete pads along this elevation.

#### Interior Description

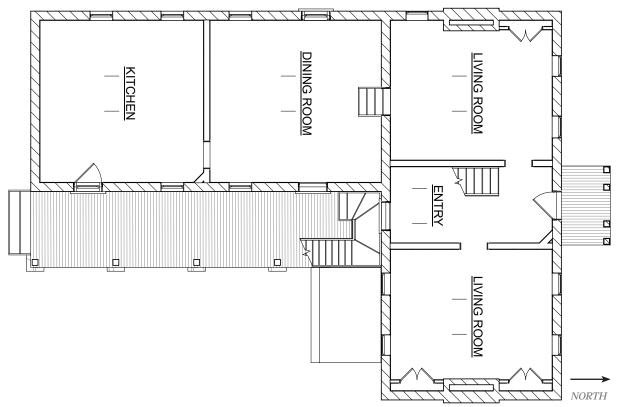
The main entrance opens into a foyer flanked by two rooms at the east and west, a door to the porch, and a staircase to the second floor. The plaster ceiling and finishes on the walls were removed in 2013 after a major leak was discovered in the structure. The ceiling is currently exposed lath, and the walls are bare plaster on solid masonry walls. Most of the wood trim at the door surrounds, base boards, and staircase are still intact.



South elevation, rear addition



West elevation



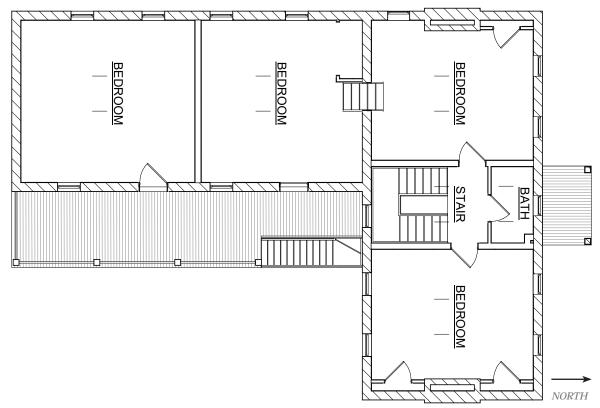
Floor plan, first floor

The east room has intact plaster on all walls and the ceiling, and a wood plank floor. The wood trim at the windows, door surrounds, built-ins, and mantel are still intact. The fireplace has been covered and ghosting from a stove is present on the wall above the mantle and in the floor in front of the hearth.

The west room has intact plaster on all walls, but the ceiling is exposed lath, with large areas of missing lath. A builtin closet, the mantel, fireplace, wood trim, and window surrounds are still intact.

A doorway on the south wall of the west room leads down several steps into the rear addition. This room is currently used as storage. Plaster is intact on the walls and ceiling. Note that the ceiling appears to be modern wallboard, as the seams between panels are visible. The walls show signs of previous, large repairs to the plaster. There are no decorative window or door surrounds present. The only wood trim in the space is the baseboards.

The kitchen is accessed through a doorway on the south wall of the previous room. This room has been heavily modified for use by the former caretaker. The plaster walls and ceilings are intact, except for wall openings that were opened to investigate the piping and electrical systems. The wood floor is obscured by old glue for linoleum or laminated floor covering. As with the previous room, the windows and doors do not have decorative surrounds, but wood baseboards are present.



Floor plan, second floor

The second floor is accessed via the staircase in the foyer. At the top of the staircase is a closet that was converted to a bathroom, and rooms to the east and west. All non-painted finishes and other items in the bathroom were removed in 2013, including the linoleum or laminated floor, all tile, trim, and all fixtures including the toilet and sink.

The east room has the same plan as the east room at the first floor, with plaster walls and ceiling, and a painted floor. The walls show signs of wallpaper having been applied, but is no longer intact. It was likely removed in 2013 during the mold remediation project. The window and door surrounds are intact. Two closets flank the fireplace with its wood mantle. The fireplace has been covered with a wood board, but the mantel retains some decorative painting.

As with the east room, the west room of the second floor is a mirror of the first floor, with plaster walls and ceilings, and a painted wood floor. A built-in closet, the mantel, wood trim, and window surrounds are still intact. The fireplace has been covered with a wood board.

A doorway on the south wall of the west room leads down several steps into the rear addition. This room has plaster walls except for the south wall which is wallboard. The ceiling, too is wallboard. The walls show signs of previous, large repairs and missing finishes. There are no decorative wood trim or window or door surrounds present. The only wood trim in the space is the baseboards. A door on the east wall leads out to the second level of the porch.

There is a room at the south end of the rear addition that is only accessible from the porch. The walls of this room are plaster, with lath visible on the north wall of the room. The floor is plywood with no finishes. The ceiling has a hatch that access the attic.



West room, first floor



Foyer



Dining room



East room, first floor



Kitchen

#### Summary of Character Defining Features

This building has been heavily modified, both in its time as a school building and as a caretaker's residence.

The exterior masonry is the most clear character-defining feature. While interventions in the past have include isolated areas of repairs, most of it appears to date from the original construction, except for the south wall of the rear addition and the west wall of the original building which have been rebuilt or modified.

In the portion of the structure that is the earliest building, intact, character-defining features include the main entry, staircase, window and door surrounds, and the builtins flanking the fireplaces in the east and west rooms. Additional investigation should be completed into the fireplaces and the built-ins to determine ways they may have been modified for later use. The window frames and sashes may not be original, as they appear to be called out for removal and replacement to match the existing in construction drawings for Stabilization and Renovation issued in 1983.

The floor plan of the original building should also be considered a character-defining feature, as it is typical of residential layouts of the period and mostly intact despite other structural changes and additions to the building. There are several hallmarks of the style of the period, including the two doors off the foyer, the built-ins still intact in the first floor east room, and hearth stones in rooms on both floors.



Landing at second floor



Bathroom



East room





South door of foyer and stair, both defining features.

West room



North bedroom in rear addition



Splayed lintel at north elevation, a defining feature.



South bedroom in rear addition



First floor east room built in, a defining feature.

#### **EXISTING CONDITIONS & RECOMMENDATIONS**

In general, care should be taken to preserve original materials and features. If in doubt, err on the side of caution. Remaining historic fabric should be preserved, and all substantive work should be carefully planned by preservation professionals and executed under their field supervision by contractor(s) with specific experience preserving cultural and historic resources and following the Secretary of the Interior's Standards. Any interventions that impacting significant or defining features this space such as roof work must involve preservation professional in the planning and on-site execution to avoid loss of historic fabric.

Note that a complete assessment of mechanical, electrical, plumbing, and HVAC systems was not within the scope of this project, but based on the observed conditions, each of these systems requires repair or significant replacement.

#### Summary of Conditions

#### Roofing, Gutters, and Downspouts

- The roof is in fair condition, with areas of curling shingles but no large areas of missing or displaced shingles.
- A section of flashing at the south chimney is curling and no longer sits flat with the roof.
- The sealant used to secure the flashing to the chimneys shows signs of deterioration including cracking.
- Paint on the soffit panels is heavily deteriorated and weathered.

#### Exterior Walls

- There is a crack in the masonry at the southeast corner of the original structure, between the cellar entrance and the window above.
- There are large areas of open joints at the ashlar foundation and in the brick masonry including the east chimney of the original structure.
- The brick shows signs of multiple repointing campaigns and areas of brick replacement.

#### Porches

- There is wood deterioration visible at the moldings around the column bases of both porches. Structural damage is likely present.
- There is extensive paint deterioration at the outermost exposed faces of both porches.
- The joist of the second floor porch is exposed in its beam pocket at the south elevation.
- The hand-hewn beam supporting the porch roof is exposed, but unlike the log rafters, it does not appear that this beam was ever covered, suggesting that the beam and rafters were both exposed historically.

#### Windows and Doors

- There is hardware ghosting on the two four-panel doors of the original structure, with an old non-functioning box lock at the interior of the door to the porch.
- Many windows show early signs of deteriorated paint and glazing putty.

#### Interiors

- Nearly all interior finishes in the original structure are heavily worm, damaged, or missing. In many areas the plaster shows signs of cracking and water damage.
- Many rooms have cracking plaster around windows, doors, and in corners. Some windows show signs of multiple previous repairs.
- In the original structure the plaster ceilings in the foyer and west room have been lost and the lath is exposed.
- There is ghosting from a crown molding in the first floor west room.
- The ceilings in the first floor west room and ceilings of the rear addition are in poor condition, with large areas of missing plaster or signs of replacement with wallboard.
- The east rooms at the first and second floors and the stair landing at the second floor have multiple patches over holes in the floorboards.

- There are several holes in the foyer floor that appear to be from an old radiator.
- The built-ins in the first floor east room are in poor condition. Much of their hardware is missing or painted over. The other built-ins have been converted to closets and are missing their original doors.
- The fireplaces in all but the first floor west room have been filled in. The west room fireplace appears to have been modified.
- The mantel in the first floor east room is pulling away from the wall. This may be an old condition, the hearthstone in this area was removed and the floor was reinforced due to sagging.
- The electrical system is not up to code, with electrical outlets in the floors of some rooms.
- There is no intact plumbing in the building, it was removed as part of remediation of the 2013 leak.

#### Site Features

 Site features include several garden patches and small walkways that are currently maintained by the local garden club and are in good condition.

#### Summary of Treatment Recommendations

The recommendations of this section are listed in order of severity and are listed in order of action required to restore and maintain the building. First, general prioritized recommendations are made, followed by specific treatment, maintenance, and inspection recommendations for each element or building system.

#### High priority treatments include:

- The roof is near the end of its service life. Records show it was replaced in 2003 but there is little to no information on maintenance. Areas of warped flashing should be repaired immediately and the sealant at the flashing should be replaced in order to prevent leaks.
- Open joints at the limestone foundation and brick masonry should be repointed.

- The masonry crack at the southeast corner of the original structure should be repaired and monitored.
- All painted elements such as the porches and soffit panels with weathered and deteriorated paint should be repainted to prevent further deterioration of the wood. Damaged wood should be repaired or replaced.
- The joist pocket on the south elevation should be covered to protect the joist from moisture and wind driven precipitation.

#### Medium priority treatments include:

- Sealant at doors and windows should be replaced.
- Glazing putty should be replaced and any deteriorated wood should be repaired before the windows are repainted.
- The floors should be repaired to correct tripping hazards.
- Interior walls should be repaired and repainted. Wallboard and plaster should be repaired or replaced in kind. Note that this is an extensive treatment for the first floor of the building due to material removed during remediation of the 2013 leak and associated damage, as well as general deterioration, but these areas appear to be static

#### Low priority treatments include:

- Window and door hardware should be repaired as needed. Ghosting from previous installations should be patched and repaired.
- Most of the windows are operable, with friction stops located on the tracks but require a tune up to function easily.
- Moldings and other trim should be replaced or reinstalled based on historic documentation.

#### ROOFING, GUTTERS, AND DOWNSPOUTS

The roof of the West Building is constructed of wood shingles over skip sheathing. The skip sheathing is mix of walnut "slab" skip sheathing that may be historic and modern skip sheathing of dimensional lumber. The rafters are composed of a similar mix of logs and dimensional lumber.

Flashing is visible at the chimneys and at the east porch where the roof slope changes. There are half-round gutters on the north and south elevations of the original building, and the east and west elevations of the rear addition. The gutters feed into downspouts located at the corners of the building and sit in front of soffit panels with screened vents for air circulation in the attic spaces.

The following conditions were observed:

- The roof is in fair condition, with areas of curling shingles.
- A section of flashing at the south chimney is curling and no longer sits flat with the roof.
- The sealant used to secure the flashing to the chimneys shows signs of deterioration including cracking.
- Paint on the soffit panels is heavily deteriorated and weathered.

#### Treatment Recommendations

- Sealant at the flashing should be replaced.
- Damaged flashing should be repaired or replaced. The soffits should be repainted to protect the wood.

#### Maintenance and Inspection Recommendations

- The gutters should be checked and cleared of debris twice a year following the heaviest times of tree shedding. Screened covers should be considered, they can prevent some of the larger debris from entering the gutter and simplify periodic cleaning.
- The roof should be inspected annually and monitored for leaking after heavy rains so that it can be repaired as needed. Documentation shows the roof was replaced in 2003.



Roof at north elevation.



Lifting flashing at south chimney. Note the deteriorated sealant.

- The HVAC system should be inspected annually and monitored for leaking at least twice a season during periods of heavy use.
- The soffits and fascia should be repainted every 5-7 years due to the amount of exposure they receive.

#### EXTERIOR WALLS

The exterior masonry walls are laid in Flemish bond at the original building, and in Common bond at the rear addition. The use of variations on Common bond is also used at the North and East Buildings.

Sections of the brick masonry on the north elevation and at the east porch elevation and adjacent south wall have fragments of a yellow coating that applied on the brick. It is unclear when this coating was applied, and how extensively it was applied, as traces are not easily found on the east and west elevations of the original structure or on the west elevation in general.

The visible foundation walls are composed of a local limestone set in ashlar. These walls are visible at the south east corner of the original building, at the base of the south wall of the rear addition, and along the west elevation.

The following conditions were observed:

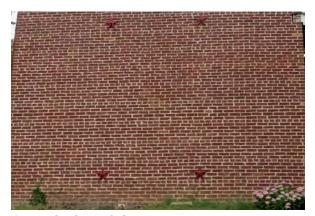
- There are large areas of open joints at the ashlar foundation.
- There are large areas of open joints, including at the east chimney of the original structure.
- There is a crack in the masonry at the southeast corner of the original structure, between the cellar entrance and the window above.
- The brick shows signs of multiple repointing campaigns and areas of brick replacement.
- There area cracks in the weathered mortar caps on the chimneys.
- There are traces of a yellow coating on the north elevation and sections of the west and south elevations.

#### Treatment Recommendations

 The crack in the masonry should be repaired and the brick should be repointed. A mortar analysis should be completed to identify the original mortar. A new repointing mix should match the original in color and should be compatible with the historic masonry.



Flemish bond at north elevation.



Common bond at south elevation.



*Open joints at east chimney. Note deteriorated paint at fascia panels.* 

- The foundation should be repointed. A mortar analysis should be completed to identify the original mortar. A new repointing mix should match the original in color and should be compatible with the historic masonry.
- Mortar caps on the chimneys should be repaired.
- Maintenance and Inspection Recommendations
- The foundation and masonry should be inspected annually for open joints.
- The cracked corner of the original structure should be repaired and monitored for future cracking, which may indicate a structural issue.



Masonry crack at southeast corner.



Repointing at an area of brick replacement. Note the different colors of mortar and the yellow coating on the bricks to the right.



Open joints and previous repointing efforts at the ashlar foundation.



Brick with traces of yellow coating.

#### PORCHES

There are two porches at the west building, an entry portico on the north elevation, and a large two-story porch on the east elevation.

The entry portico was replaced in 2002 and was based on an 1870s photo of the building.

There are pot-hangers mounted on the inner faces of the columns at the first floor of the east porch. Two hangers are also installed on the windows in this area.

The following conditions were observed:

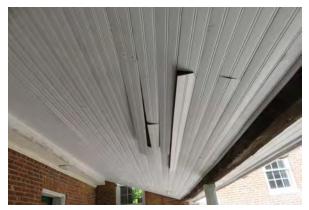
- The cladding at the second floor ceiling at the each porch is falling. Note that the hand-hewn beam supporting the porch roof is exposed, but unlike the log rafters, it does not appear that this beam was ever covered, suggesting that the beam and rafters were both exposed historically.
- There is wood deterioration visible at the moldings around the column bases of both porches. Note that there may be deterioration to the columns in these locations that is concealed.
- There is extensive paint deterioration at the outermost exposed faces of both porches.
- The joist of the second floor porch is exposed in its beam pocket at the south elevation.

#### Treatment Recommendations

- Heavily deteriorated wood elements should be repaired or replaced.
- All wood elements should be repainted.
- The joist pocket on the south elevation should be covered to protect the joist from moisture and wind driven precipitation.

#### Maintenance and Inspection Recommendations

- The porch floors should be inspected annually for paint deterioration. As paint is the first line of defense for wood, areas of bubbling, cracking, or peeling should be removed and repainted.
- Depending on the amount of foot traffic it may be necessary to repaint areas of the floors every 2-3 years.
- Areas of standing water should be cleared with a broom after rains.
- Wood trim elements should fit snugly together to minimize gaps and seams.



Falling cladding at the second floor of the east porch.



Paint and wood deterioration at north porch. Note the open seams in the column bases. These conditions are typical of both porches.



Exposed joist pocket, outlined in blue.

#### WINDOWS AND DOORS

The windows at the West Building are each double hung wood windows, but the size and configuration varies across the building. The original structure has four over four windows at the first floor and two over two windows at the second floor but only at the north elevation. The south and west elevations have the same four over four windows at the first floor, but have nine over six windows at the second floor. These second floor windows are more consistent with the rear addition, which has the nine over six windows on both floors.

Note that documentation suggests that the sashes and frames have been replaced in recent restoration campaigns. The bathroom window is a reconstruction, as 1870s photos show a door in this location.

At the interiors, the windows and doors of the original structure have wood surrounds. In the rear addition the windows have only headers and sills.

There are two styles of doors at the West Building, four panel doors at the two doors on the earliest section, and six panel doors on the rear addition. All doors are currently painted in the same scheme, a dark bluish green with burnt orange panels.

Based on photos, the door on the west elevation is a modern addition, the HABS photographs show a large window in this location.

The following conditions were observed:

- There is hardware ghosting on the two four panel doors of the original structure, with an old non-functioning box lock at the interior of the door to the porch.
- Many windows show signs of deteriorated paint and glazing putty.
- Sealant was added between the frames and masonry at some of the windows.
- The interior paint of the two four-panel doors is heavily damaged and abraded.



Window pattern on the rear of the original structure.



Window pattern at the north elevation.



Nine over six double hung window, exterior and interior from the rear addition.

#### Treatment Recommendations

- Window and door hardware should be repaired as needed. Ghosting from previous installations should be patched and repaired.
- Glazing putty should be replaced and any deteriorated wood should be repaired before the windows are repainted.
- Condition of perimeter sealant at windows and doors varies, with the windows generally in better condition. All sealant should be replaced, and can be done so on the same schedule.
- Most of the windows are operable, with friction stops located on the tracks but require a tune up to function easily.

#### Maintenance and Inspection Recommendations

- Monitor windows at the interior after high wind or rain events for leaks.
- Survey the windows annually for signs of glazing, sealant, and paint deterioration. Depending on exposure, some windows may require intervention sooner than others.



Two styles of exterior doors.



*Old box lock on the porch door. Note the repaired wood check in the lower left panel.* 



Deteriorated paint and glazing material at a window on the south elevation.

#### **INTERIORS**

The interior walls are a combination of plaster on lath and plaster on masonry. Most of the walls are plaster on masonry while the ceilings are plaster on lath. Note that in the rear addition some walls are plaster on lath but there are also modern wallboard finishes. Many of the walls have damaged or missing trim elements. Generally the walls are in poor condition.

The ceilings are generally in poor condition. The ceiling in the east room of the original structure appears to be the only intact plaster and lath ceiling and is in fair condition. The ceilings of all the second floor spaces are modern wallboard whose condition varies from fair to poor. The ceiling in the west room of the original structure is in very poor condition, more than half of the plaster is missing and much of the lath in the center of the room is missing.

Most of the rooms have wood floors that are in poor condition. The kitchen has a wood that is covered in old adhesive from linoleum or another laminated floor covering that has been removed. The first floor rooms and one of the bedrooms at the second floor have stained wood floors that are in fair condition. The east and west bedrooms at the second floor of the original structure have painted wood floors that are heavily worn and in poor condition. The south room in the rear addition has an exposed plywood sub-floor.

While the windows and doors of the original structure have wood surrounds, the windows of the rear addition do not.

The following conditions were observed:

- Nearly all interior finishes in the original structure are heavily worm, damaged, or missing. In many areas the plaster shows signs of cracking and water damage.
- Many rooms have cracking plaster around windows, doors, and in corners. Some windows show signs of multiple previous repairs.
- In the original structure the plaster ceilings in the foyer and west room have been lost and the lath is exposed.



Exposed portion of brick wall below plaster in foyer.



Opening in rear addition south room showing lath behind wallboard.



Exposed lath in foyer.

- There is ghosting from a crown molding in the west room of the first floor of the original structure.
- The ceiling of the second floor north bedroom in the rear addition is in poor condition, with damaged wallboard at the center of the room.
- The east rooms at the first and second floors and the stair landing at the second floor have multiple patches over holes in the floorboards.
- A section of baseboard is missing in the foyer, corresponding with piping and holes in the floor suggesting there was a radiator in this location.
- The built-ins in the first floor east room are in poor condition. Much of their hardware is missing or painted over. The other built-ins have been converted to closets and are missing their original doors.
- The fireplaces in all but the first floor west room have been filled in. The west room fireplace appears to have been modified.
- The mantel in the first floor east room is pulling away from the wall. This may be an old condition, the floor was reinforced due to sagging.
- Many of the interior doors are missing, but those that are present are six panel doors with similar hardware to the door in the foyer that leads to the porch.
- The electrical system is not up to code.

#### Treatment Recommendations

- Water stained or damaged plaster should be assessed and replaced as needed. Note that in many cases, if the source of water has been removed the staining may be cosmetic and can be concealed with paint or wallpaper.
- Damaged or missing wallboard or plaster should be replaced in kind.
- Plaster cracks should be repaired in kind.
- The floors should be refinished and repaired as needed. Holes should be filled and heavily damaged boards should be replaced to match the existing.



Missing ceiling in the west room. Note the ghosting from a crown molding.



Wallboard ceiling at the second floor landing. Note the surface mounted conduit. The east and west walls of the foyer and stair are solid masonry with no room wiring behind the plaster.



Plaster wall at second floor room in the rear addition. Note the ceiling damage and unfinished drywall on the left.

- Exposed lath should be inspected and new ceilings should be installed. Where ceilings are intact but require repair, the lath should be inspected and plaster repairs should be completed. Where whole ceilings are missing, replacement with wallboard may be appropriate depending on historic documentation.
- Moldings and other trim should be replaced or reinstalled based on historic documentation.

#### Maintenance and Inspection Recommendations

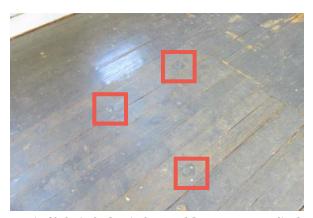
- Following repairs the interiors should be inspected seasonally and after heavy rains.
- If the building is to remain vacant, water service should be turned off at the meter.



Repaired hole in the floor of the first floor east room.



Holes in the floor of the second floor landing and second floor east room.



Repaired holes in the floor in the second floor east room, outlined in red.



Missing and over-painted hardware on built-ins.



First floor east room fireplace and mantel. Note the separation at the right side.



Six panel door with box lock, in the second floor west room, leading to the stair landing.



Plaster damage and exposed masonry below stairwell window.



Covered fireplace in second floor east room. Note that the builtins may have been converted to closets relatively early, as this is a mortis and tenon panel door, not a modern hollow door.

#### SITE FEATURES

Site features of the West Building include several garden patches and small walkways. These are currently maintained by the local garden club and are in good condition.

Little is known about the layout around the building and historic locations of associated structures. Interventions into the landscape should be preceded by archeological surveys.

#### Maintenance and Inspection Recommendations

- The landscaping is well-maintained with a routine mowing schedule and crew of volunteers that take care of the flowers and garden areas. This routine maintenance should continue.
- Sidewalks and pathways should be examined annually, such as in the spring, so that damaged or lifting pavement can be addressed before becoming a trip hazard.



Garden and butterfly way-stations flank the concrete path to hte main entrance.



Garden at the southeast corner of the site.

#### **BUILDING DESCRIPTION**

#### Exterior Description

The East Building is a two-story brick building constructed in 1841 that included teacher's quarters, classrooms, and chapel, and the boys dormitory. The brick masonry of the exterior is laid in a Common Bond, with a row of headers after every five or six rows of stretchers. This is consistent with the brick bond used at the rear addition of the West Building and the North Buildings.

The building currently serves as the main museum building for the School and interior sections have been heavily modified over the years. The primary elevation is the east elevation, with the main entrance on the north side, but the north and south sides of the facade are mirror images. The north and south wings were offices and living quarters for the School's teachers, but the south wing has been converted a kitchen/break room for employees and restrooms for museum visitors. An elevator has also been installed in the south foyer that access the second floor. The exterior door in this location is not accessible as a result of the elevator location.

At the exterior, there are two six-panel doors into foyers that flank the large, central room. Both doors have wood surrounds with five-lite transoms and small roofed awnings. Each door has a splayed lintel above the transom.

The windows are two over two double hung sash windows, however they are fixed closed from the interior, or painted shut at the exterior and do not operate. Each window has a splayed lintel.

The north elevation is an unadorned masonry wall, with two windows at the attic space near the roof. These windows do not have splayed lintels. One of the windows has been replaced by a vent for the HVAC system. Most of this elevation is obscured by a large tree.



East Building, east elevation



East Building, north elevation

The west elevation is a mirror copy of the east elevation, but has several stairs to each door to accommodate the decrease in grade from the east. The stairs are modern reconstructions built out of stone picked to blend with the limestone foundation. As with the east elevation, the doors have five-lite transoms and splayed lintels below the awnings. The windows, too, have the same style splayed lintels.

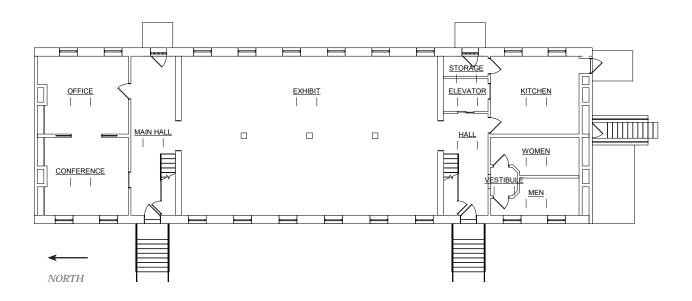
The south elevation is a mirror of the north elevation, with two windows below chimneys near the roof. This elevation contains most of the exterior meters and mechanical equipment for the building, and an employee entrance through the kitchen. Note that the windows and door on this elevation do not have splayed lintels.



East Building, west elevation.



East Building, south elevation



Floor plan, first floor

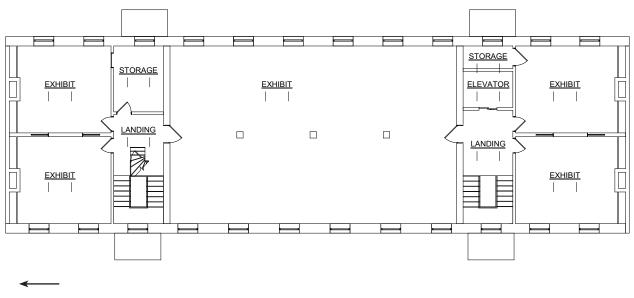
#### Interior Description

The main entrance opens into a foyer flanked by two rooms at the north, a door to the exterior at the west, a staircase, and an opening to the large central room to the south. The staircase to the second floor has large carved newel post and simple balustrade and rail to the second floor.

The rooms at the north include office of the site director, and a conference room. These rooms are finished with plaster applied directly to the masonry, with wood trim around windows and doors, and built-ins flanking the fireplaces.

The large central room encompasses the space between the north and south foyers, It has a row of columns running down the center of the room. The walls are plaster applied directly on the masonry, with wood trim around the windows and entrance ways, and a chair rail around the perimeter of the room. Hardware ghosting shows that this space was once separated from the foyers by a set of doors. It is unclear if these doors were original, and they have since been removed. The south foyer is a mirror image of the north foyer. There is an elevator to the east and a door to the exterior at the west. There is a staircase to the second floor with a large newel post and simple balustrade and rail to the second floor. While neither staircase in the building is highly decorative, this one is simpler than the one to the north.

Like the north foyer, there are two doors that lead to a south wing. While the layout of this area undoubtedly matched the north at one point, today the south wing has a kitchen for staff and employees, and restrooms for museum visitors.



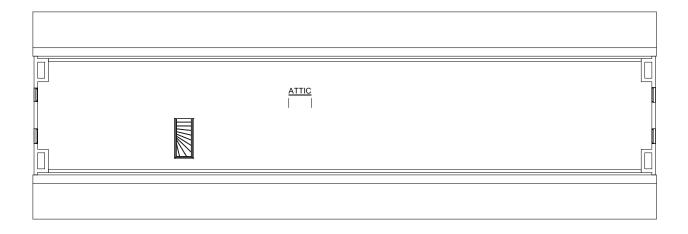
NORTH

Floor plan, second floor

The second floor is accessed via a staircase in each foyer. At the top of each staircase is a small room used for storage. At the south stair, this where the elevator opens onto the landing.

The rooms to the north of the stair, above the office and conference room, are exhibits. The east exhibit is a re-imagining of the space as a civil war barrack. The built-ins around the fireplace include arched glass cabinets that are not found in the other rooms of the East Building or other School buildings. The built-ins in the west room are simple federal style, matching the built-ins in the West Building. The west exhibit includes posters discussing the politics of the era. The doors to both of these rooms are five-panel doors currently painted green. The central room at the second floor is a large exhibit space that currently focuses on general frontier history. The room is bisected by a row large square columns similar to the first floor room. Both the north and south doors to this room are five-panel doors matching the two north rooms.

The two rooms at the south, above the kitchen and restroom, include exhibits about Indian Relocation and objects that would have been owned by teachers at the School. The builtins in these rooms are consistent with the federal-style builtins in other rooms, but they are finished with a wood stain instead of painted. The doors on these rooms are six-panel doors matching those found at the West Building and are painted green. Unlike in the other rooms in this building, the east and west rooms are separated by a pair of double doors that are each six-panel doors with a natural wood stain.



NORTH

Floor plan, attic floor

The floors at each second floor space are unfinished wood. The central room does show signs of a worn clear finish in some areas, but most of the floors are bare except for coverings that are part of the exhibits. The attic is accessed by a small, narrow stair at the north stair landing. This room served as the boys dormitory but is currently used for storage of unused doors and window sashes as well as HVAC equipment.

The space consists of a finished area that runs the length of the building, with crawl spaces over the eaves to the east and west. The finished walls are bare plaster on lath. There are large areas of plaster damage and loss, as well as openings cut into the walls to access duct work installed in the crawl spaces.

There is heavy soot staining on the ceiling, and graffiti on the walls. Some of this graffiti appears to date to various occupations of the building after the school closed, and to modern construction projects.

#### Summary of Character Defining Features

This building has been heavily modified, but contains several very significant character defining features.

As with the West Building, the exterior masonry is a clear character-defining feature. While interventions in the past have include isolated areas of repairs, most of it appears to date from the original construction.

Other character-defining features include the staircases, window and door surrounds, and federal-style built-ins at most of the fireplaces. Additional investigation should be completed into the fireplaces and the built-ins to determine ways they may have been modified for later use.

The window frames and sashes are not original, but documentation suggests they were based on what was there historically. They were replaced to match the existing in 1983. The originals may be stored in the attic, but further investigation is required.

The floor plan of the building should also be considered a character-defining feature, as the general layout is intact, and ghosting of doors and other interior walls can still be found on trim and floors.

The attic, which appeared to remain unaltered and was the boys dormitory, is highly significant. Any interventions that impact this space, such as roof replacement, should be carefully planned by preservation professionals and executed by contractor(s) with experience following the Secretary of the Interior's Standards.



Exterior brickwork, with splayed lintels over windows.



Door surround and transom at north entry on the east elevation.



Windows and trim at first floor central room, looking west.



Newel post and balustrade at south foyer staircase.



Built-ins in second floor northeast room.



Conference room built-in. Note the paint reveal showing stenciling above the cabinet.



Built-ins in second floor southwest room.



Attic, looking north.



Plaster and lath in the attic at the south end. Note the graffiti scratched into the plaster on the left.

#### **EXISTING CONDITIONS & RECOMMENDATIONS**

In general, care should be taken to preserve original materials and features. If in doubt, err on the side of caution. Remaining historic fabric should be preserved, and all substantive work should be carefully planned by preservation professionals and executed under their field supervision by contractor(s) with specific experience preserving cultural and historic resources and following the Secretary of the Interior's Standards. Any interventions that impacting significant or defining features this space such as roof work must involve preservation professional in the planning and on-site execution to avoid loss of historic fabric.

#### Summary of Conditions

#### Roofing, Gutters, and Downspouts

- The roof of the East Building as well as the awnings over the entrances on the east and west elevations are in poor condition, with large areas missing, displaced, and lifting shingles. Many of these areas can be identified from the attic as sunlight streams into the space. Many of the shingles along the ridge beam are missing. There are signs of previous repairs, including the use of plastic sheets instead of shingles in several areas.
- A section of flashing at the southeast chimney is curling and no longer sits flat with the roof.
- The sealant used to secure the flashing to the chimneys and at the joint between the masonry and the awnings are heavily deteriorated and cracked.
- The awning at the north entrance on the west elevation is sagging to the right side. There are gaps in the seams between wood elements and masonry on the right side.
- The north section of gutter on the west elevation is filled with pine needles.
- The south section of the gutter on the west elevation is bent.
- Paint on the soffit panels is heavily deteriorated and weathered. The vents have been painted over to varying degrees, from partially to completely blocked.
- The north elevation is covered in a layer of pollen and biological growth.

#### Exterior Walls

- There are large areas of open joints at the limestone foundation. There are signs of multiple past repointing campaigns that are cracking and failing.
- The waterproofing membrane is pulling away from the building in a section at the south end of the east elevation.
- The brick shows signs of multiple repointing campaigns and areas of brick replacement. There are open joints in the brick masonry associated with door and window openings. Some areas of open joints are due to cracking of perimeter mortar in areas of repointing.
- There area cracks in the weathered mortar caps on the chimneys as well as open and weathered joints in the chimney masonry.
- There are isolated areas of spalled bricks, mostly around window and door openings. In some areas, these include cracks in adjacent bricks.
- There are previous repairs to the bricks that were executed in mortar and do not match the masonry. Many of these have open joints at their perimeters.
- There are several bricks that have been damaged through scratchiti, with words and initials carved into the soft brick. The age of this damage is unclear.
- There are abandoned anchor holes above the cement parging on the east elevation.
- The north elevation is coated in a layer of green biological growth from the nearby tree. It should be gently cleaned with a biological growth cleaner.

#### Windows and Doors

- The door transoms on the east elevation are heavily overpainted.
- The door surround to the kitchen on the south elevation is in poor condition, with wood deterioration including checks and rot, paint loss, and displacement at the lintel board.
- The awnings and door surrounds show signs of paint deterioration. There are insect nests and biological growth staining the paint at the undersides.

• Some window sashes and frames show early signs of pain deterioration including staining.

#### Interiors

- The attic is in very poor condition. The floor is uneven and there are large sections of damaged and missing plaster. The attic is not currently interpreted by the museum, it is a storage area and contains HVAC equipment.
- Generally the walls are in good to fair condition, with some cracking of the plaster on masonry walls and in corners.
- The condition of the floors varies. They are well maintained but exhibit typical chips and gaps expected with a floor of such an age. The floor at the south stair landing slopes strongly to the south.
- The doors generally have large gaps between the bottom of the door and the thresholds. In some rooms this gap is mirrored in the base boards, suggesting that the exposed floor may be the subfloor, or the rooms were altered for some other floor finish.
- The first floor window and door surrounds show general overpaint. The second floor windows are generally the same, except in the exhibit rooms at the north and south. These rooms show less paint build-up and generally weathered finishes suggesting they were not repainted as often as the large central rooms.

#### Site Features

• The gravel path at the south elevation shows signs of erosion that have exposed the drainage pipe for the french drain.

#### Summary of Treatment Recommendations

The recommendations of this section are listed in order of severity and are listed in order of action required to restore and maintain the building. First, general prioritized recommendations are made, followed by specific treatment, maintenance, and inspection recommendations for each element or building system.

#### *High priority treatments include:*

 The roof of the building and the awnings should be replaced. At this time, damaged flashing should be repaired or replaced, and all sealant should be replaced. Given the potential importance of the attic and the presence of historic lath, plaster, roof framing and sheathing, a roof replacement project should be carefully designed and executed.

- The attic space should be documented and stabilized. This should take place before any work is done with the roof.
- Open joints at the limestone foundation and brick masonry should be repointed. The chimney caps should be repaired or replaced.
- The waterproofing membrane should be reattached to the masonry where it is coming loose at the base of the exterior wall.
- The awning over the northwest door should repaired.
- The gutters should be cleaned and repaired or replaced as part of reroofing.

#### Medium priority treatments include:

- Perimeter sealant at doors should be replaced. Sealant below window sills should be replaced.
- Cracks in interior plaster should be repaired in kind.
- Spalled or damaged bricks should be patched to match the adjacent masonry.
- Non-matching and damaged or deteriorated previous repairs in mortar or cement should be removed and replaced with compatible patching material matching the masonry.
- All painted elements with weathered and deteriorated paint should be repainted to prevent further deterioration of the wood. Care should be taken to leave the screens unobstructed.

#### Low priority treatments include:

- Additional ground cover should be added at the southern path to protect the drainage pipe from being walked on.
- The masonry should receive a general cleaning to remove isolated stains.
- Window and door hardware should be repaired as needed. Ghosting from previous installations should be patched and repaired.
- The floors should be refinished and repaired as needed. Holes should be filled and heavily damaged boards should be replaced to match the existing.

#### ROOFING, GUTTERS, AND DOWNSPOUTS

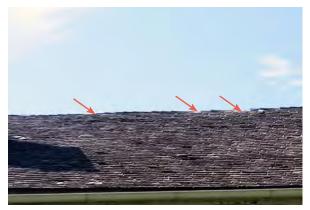
The roof of the East Building is constructed of wood shingles over skip sheathing. The skip sheathing is mix of walnut "slab" skip sheathing that may be historic and modern skip sheathing of dimensional lumber. The rafters are composed of a similar mix of logs and dimensional lumber.

Flashing is visible at the chimneys. There are half-round gutters on the east and west elevations. The gutters feed into downspouts located at the north and south corners of each elevation. The downspout at the southeast corner of the building is tied into a french drain installed at the east elevation that directs water to the south and west away from the building. The soffit panels and eaves behind the gutters have screened vents for air circulation in the attic.

Each of the doors on the east and west elevations have shingled awnings over the entrances.

The following conditions were observed:

- The roof is in poor condition, with large areas missing, displaced, and lifting shingles. Large areas of the ridge beam are exposed due to lost shingles. There have been several large leaks in recent years, but "reportedly" no comprehensive assessment or repair of the roof.
- The shingle roofs of the awnings vary in condition. They exhibit the similar signs of age and weathering as the roof, including heavily weathered shingles, sealant deterioration, and flashing damage.
- There are areas that were repaired with plastic sheets instead of shingles.
- From the attic there are numerous areas where sunlight comes through gaps and areas of missing shingles.
- The awning at the north entrance on the west elevation is sagging to the right side. There are gaps in the seams between wood elements and masonry on the right side.
- A section of flashing at the south chimney is curling and no longer sits flat with the roof.



Sections of missing shingles at the ridge beam, indicated with red arrows.



Lifting and curling shingles. Note the plastic sheets used instead of shingles, indicated with red arrows.



Daylight and blue sky is visible through several holes in the roof in the attic.

- The sealant used to secure the flashing to the chimneys shows signs of deterioration including cracking.
- The north section of gutter on the west elevation is filled with pine needles.
- The south section of the gutter on the west elevation is bent.
- Paint on the soffit panels is heavily deteriorated and weathered. The vents have been painted over to varying degrees, from partially to completely blocked.

#### Treatment Recommendations

- The roof should be replaced. At this time, damaged flashing should be repaired or replaced, and all sealant should be replaced.
- The soffits and fascia should be repainted to protect the wood, but care should be taken to leave the screens unobstructed.
- The gutters should be cleaned and repaired.

#### Maintenance and Inspection Recommendations

- The gutters should be checked and cleared of debris twice a year following the heaviest times of tree shedding. Screened covers should be considered, they can prevent some of the larger debris from entering the gutter and simplify periodic cleaning.
- Following replacement, the roof should be inspected annually and monitored for leaking after heavy rains so that it can be repaired as needed.
- The HVAC system should be inspected annually and monitored for leaking at least twice a season during periods of heavy use.
- Wood elements should be repainted every 7-10 years depending on the amount of exposure and weathering they experience.



Sagging awning at the northwest entrance. Note the failed sealant at the flashing above the awing.



Lifting flashing and deteriorated sealant at southeast chimney.



Pine needle and plant buildup in gutter visible from ground level, outlined in red.



Area of damaged gutter outlined in red. Note you one can see the edges of the shingles due to the bent gutter.



Deteriorated paint at south fascia.

#### EXTERIOR WALLS

The exterior masonry walls are laid in common bond. The use of variations on common bond is also used at the North and West Buildings.

The base of the east elevation has a layer of cementitious parging on the masonry above a black waterproofing membrane attached to the masonry that is part of the french drain system installed on this elevation. The parging appears to be part of an older waterproofing system installed on this elevation, as the current membrane is anchored several brick courses below the parging. This suggests water infiltration of the cellar.-

The visible foundation walls are composed of uniformly shaped blocks of a local limestone. These walls are visible at the north and west elevations.

The stairs on the west elevation are clad in fieldstone to match the limestone foundation, with rails on both sides up the stairs to the entry ways.

The following conditions were observed:

- There are large areas of open joints at the limestone foundation. There are signs of multiple past repointing campaigns that are cracking and failing.
- The waterproofing membrane is pulling away from the building in a section at the south end of the east elevation.
- There are open joints in the brick masonry associated with door and window openings and behind downspouts.
   Some areas of open joints are due to cracking of perimeter mortar in areas of repointing.
- The brick shows signs of multiple repointing campaigns and areas of brick replacement.
- There are several bricks that have been damaged through scratchiti, with words and initials carved into the soft brick. The age of this damage is unclear.
- There are previous repairs to the bricks that were executed in mortar and do not match the masonry. Many of these have open joints at their perimeters.



*Open joints and plants growing in the gaps of the stone foundation.* 



Location of the waterproofing membrane pulling away from the masonry.



Open joints behind downspout at northeast corner.

- The northern set of stairs to the entryway has failed repairs and spalls at the lower north corner.
- There are abandoned anchor holes above the cement parging on the east elevation.
- There area cracks in the weathered mortar caps on the chimneys as well as open and weathered joints in the chimney masonry.
- There is a segment of pipe sticking out on the north side of the west elevation that has dripped an unknown substance down the nearby masonry.
- There is an abandoned anchor on the west elevation from an old downspout located in the middle of the elevation.
- The north elevation is coated in a layer of green biological growth from the nearby tree. It should be gently cleaned with a biological growth cleaner.

#### Treatment Recommendations

- The foundation should be repointed. A mortar analysis should be completed to identify the original mortar. A new repointing mix should match the original in color and should be compatible with the historic masonry.
- The waterproofing membrane should be reattached to the masonry where it is coming loose.
- The northwest staircase should be repaired. Failed patches should be removed and the railing should be re-set in at the base of the stairs.
- Open joints should be repointed with a mortar compatible with the bricks and uniform in color. A mortar analysis should be completed to identify the original mortar. A new repointing mix should match the original in color and should be compatible with the historic masonry.
- Mortar caps on the chimneys should be repaired.
- Spalled bricks should be patched to match the adjacent masonry.
- Non-matching and damaged or deteriorated previous repairs in mortar or cement should be removed and replaced with compatible patching material matching the masonry.



Area of repointing and brick replacement at the east elevation.



Scratched initials in the brick face. Note the mortar patch a few courses above.



Patch executed in grey mortar.

- The scratchiti damage is superficial and can be patched or grouted to match the masonry and discourage further defacing.
- Where possible, the cementitious parging should be removed from the brick and previous anchor holes should be patched.
- The masonry should receive a general cleaning to remove isolated stains.

#### Maintenance and Inspection Recommendations

• The foundation and masonry should be inspected annually for open joints.



Heavily weathered and c racked mortar cap on the southeast chimney. This condition is typical of the other chimneys as well.



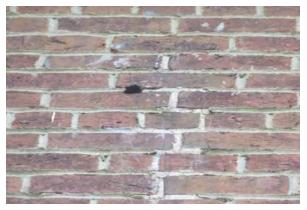
Damaged corner of northwest stair. Note that this area has been repaired, but that repair has failed.



*Pipe at the north end of the west elevation leaking an unknown substance down the brick.* 



Cement parging and abandoned anchor holes above waterproofing membrane at the east elevation.



Old anchor and staining from old downspout location.

#### WINDOWS AND DOORS

The windows at the East Building are double hung four-overfour wood windows, except for the attic windows. At the north one window has been replaced with a vent for the HVAC system and the other has been replaced with a four pane casement window. At the south window one window has been replaced with a vent for the HVAC system, and the other has been replaced with a fixed single pane window.

Note that documentation provided to ARG suggests that the sashes and frames have been replaced in recent restoration campaigns.

At the interiors, the windows and doors have wood surrounds. There is very little paint buildup on the sashes compared to the interior frames, indicate that the sashes are modern replacements. This is consistent with documentation of work at the North and West Buildings.

There are two styles of exterior doors at the East Building. The foyer doors are each six panel doors with modern hardware. The kitchen door is a four-panel door with modern hardware. All exterior doors are currently painted dark bluish green with patinated bronze modern hardware.

The two doors on the east elevation have five-lite transom windows.

Except for windows and doors on the north and south elevations, each window and door has a splayed lintel.

The following conditions were observed:

- The door surround to the kitchen on the south elevation is in poor condition, with wood deterioration including checks and rot, paint loss, and displacement at the lintel board.
- The awnings and door surrounds show signs of paint deterioration. There are insect nests and biological growth staining the paint at the undersides.



Wood and paint deterioration at kitchen door.



Deteriorated paint and insect nests below awning. Note the overpaint and deteriorated paint at the door surround.



Second floor windows at the west elevation, showing signs of paint deterioration at bottom rail of upper sash.

- The window sashes and frames are generally in good condition, with some windows on the west elevation showing early signs of pain deterioration including staining.
- Most of the windows are not operable, this appears to be for safety reasons as the building often hosts large school groups. Note that the site visit also coincided with high humidity and high temperatures, it is possible the layers of latex paint have swelled and stuck together.
- Sealant was added between the door surrounds and masonry, as well at below window sills at flashing. Particularly below sills and at doors, this sealant is showing signs of deterioration.

#### Treatment Recommendations

- Window and door hardware should be repaired as needed. Ghosting from previous installations should be patched and repaired.
- The window sashes on the west elevation should be cleaned and repainted as needed.
- Perimeter sealant at doors should be replaced. Sealant below window sills should be replaced.

#### Maintenance and Inspection Recommendations

- Monitor windows at the interior after high wind or rain events for leaks.
- Survey the windows annually for signs of glazing, sealant, and paint deterioration. Depending on exposure, some windows may require intervention sooner than others.



Windows on the first floor did not open and appear to be painted shut. It is unclear if this was intentional or due to high temps and humidity during the site visit.



Deteriorated sealant at door surround.



Sealant at window frame.

#### **INTERIORS**

The interior walls are a combination of plaster on lath and plaster on masonry, with most walls consisting of plaster on masonry.

The ceilings are flat plaster on lath, with rooms such as the bathrooms having drop ceilings. Most rooms have small crown moldings that are typical to conceal the joint between plaster walls and plaster ceilings. Vents for the HVAC system have been added in the ceilings of each room.

The floors are all hardwood floors. Most of the first floor has replacement flooring, except for the office and conference room areas which appear to be original. The second floor and attic floors are similar to the office and conference room floors.

There are several types of interior doors present in the building. The first floor includes four-panel doors at the office and conference room. These doors are all painted dark bluish green. The six-panel doors and their surrounds have ghosting from many hardware changes. The second floor interior doors consist of five-panel doors at the north end painted dark greenish blue and six-panel doors at the south end. The two southernmost rooms are separated by a pair of six-panel doors with a natural wood finish matching the built-ins in these rooms. The same door surround is present in the north rooms at the first and second floors, but doors are not present in those areas. The door to the attic is a plank door. Plank doors are also found at the storage areas below the stairs in the north and south foyers.

The windows all have pull down screens installed. They are mounted within the window surround and appear to decrease the heat gain of the building.

The following conditions were observed:

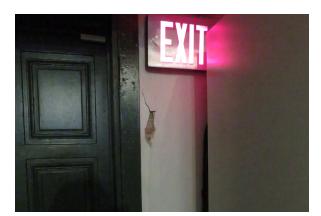
 The attic is in very poor condition. The floor is uneven and there are large sections of damaged and missing plaster. The attic is not currently interpreted by the museum,



Plaster ceiling at the attic. Note staining and large areas of missing plaster and missing lath.



Water damaged ceiling and wall in southeast room.



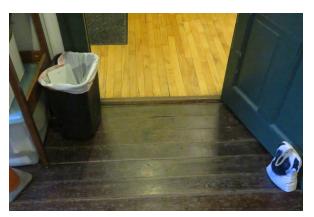
Plaster cracking at northwest door. The masonry is exposed in this area, and multiple previous finishes are visible.

it is a storage area and contains HVAC equipment. The condition of the plaster makes it difficult to determine to state of the roof and whether the water damage is recent.

- A leak over the second floor southeast room caused heavy water damage to the ceiling and wall in that location.
- Generally the walls are in good to fair condition, with some cracking of the plaster on masonry walls and in corners. Cracking of plaster directly applied onto masonry is not uncommon and may be to thermal changes between the interior and exterior or settling of the structure following previous interventions into the foundation.
- The condition of the floors varies. They are well maintained but exhibit typical chips and gaps expected with a floor of such an age.
- The floor at the south stair landing slopes strongly to the south.
- The interior doors are generally in fair condition. The doors generally have large gaps between the bottom of the door and the thresholds. In some rooms this gap is mirrored in the base boards, suggesting that the exposed floor may be the subfloor, or the rooms were altered for some other floor finish.
- The windows are generally in good condition from the interior. The first floor window and door surrounds show general over-paint. The second floor windows are generally the same, except in the exhibit rooms at the north and south. These rooms show less paint build-up and generally weathered finishes suggesting they were not repainted as often as the large central rooms.

#### Treatment Recommendations

- The attic space should be documented and stabilized.
- The water damaged ceiling in the southeast room should be repaired in kind.
- Plaster cracks should be repaired in kind.



Transition between north foyer (above) and office (below) floors.



Large threshold at south door to second floor central room, due to floor slope. Note the broken board to the right.



Left: six-panel door in south exhibit rooms, with box lock. Right: ghosting and damage from many different door installations at office door.

• The floors should be refinished and repaired as needed. Holes should be filled and heavily damaged boards should be replaced to match the existing.

### Maintenance and Inspection Recommendations

- Following repairs the interiors should be inspected seasonally and after heavy rains.
- Should the attic be interpreted in the future, equipment and materials in the finished area should be relocated.



Left: panel door to attic Right: Storage door in north foyer.

#### SITE FEATURES

Site features of the East Building include a gravel path along the south elevation and a paved walkway around the north side of the building to a bridge leading to the West Building. These paths are all in good condition.

Little is known about the layout around the building and historic locations of associated structures. Interventions into the landscape should be preceded by archeological surveys.

The following conditions were observed:

• The gravel path at the south elevation shows signs of erosion that have exposed the drainage pipe for the french drain.

#### Treatment Recommendations

• Additional ground cover should be added at the southern path to protect the drainage pipe from being walked on.

#### Maintenance and Inspection Recommendations

- The landscaping is well-maintained with a routine mowing schedule. This routine maintenance should continue.
- Sidewalks and pathways should be examined annually, such as in the spring, so that damaged or lifting pavement can be addressed before becoming a trip hazard.



Area with thin gravel cover. Piping from the downspout in this corner can be seen through gravel in some areas.



Paved walkway from parking area to the main entrance of the East Building.

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#### **BUILDING DESCRIPTION**

#### Exterior Description

The North Building is a Federal Style two-story brick building constructed in 1845 that included classrooms and the dormitory for female students. The brick masonry of the exterior is laid in a Common Bond, with a row of headers after every five or six rows of stretchers. This is consistent with the brick bond used at the rear addition of the West Building and the East Buildings. Some elevations do show variations with as many as seven or eight rows of stretchers. It is unclear if theses are the result of later alterations to the building. Except for the cellar door that is set in the dressed limestone block foundation, the doors and windows have Federal Style flat wood lintels with raised wood corner blocks.

The building currently serves as a library for the museum building for the School and interior sections have been heavily modified over the years. At the time of the survey the building was not open to the public as it was undergoing repairs at the west end of the building for a water leak in the HVAC system.

The primary elevation is the south elevation, with a two-story porch spanning most of the facade. The main entrance is denoted by a plaque on the door surround. There are ten doors into the building on this elevation, five on each level. Four of the five doors face south, with the other two facing east. Note that one of the spaces at the second floor west wing is only accessible via the second floor of the porch. This may have been the main dormitory space. Each of the doors are six-panel doors. The south-facing doors have five-lite transoms above the doors, consistent with the East Building. There are two additional doors on the north side of the building that are also six-panel doors, and a vertical panel door at the west elevation leads to a partial cellar. Each of the ten windows are twelve-over-twelve double hung wood windows.



South elevation.



West elevation.

The west elevation includes two brick chimneys, a panel door that accesses a partial cellar below the west end of the building, six twelve-over-twelve windows, and a single fixed pane window at the attic.

The north elevation has two six-panel doors and sixteen twelve-over-twelve windows. The door at the west end of the elevation has a small set of stairs to accommodate the change in grade across this elevation.

The east elevation has four twelve-over-twelve windows and a single fixed pane window at the attic. The south half of this elevation was rebuilt. It may have been rebuilt as part of the removal of later additions, as historic accounts indicate the building was added on to and at one point had a larger footprint but locations of these later additions are not clear.

Documentation provided by the client indicates that the twelve-over-twelve windows are replacements that were added in 1982, when they replaced two-over-two windows more consistent with the East and West Buildings. The basis for the change to the twelve-over-twelve sashes is unclear.

A project in 2016 included the repair of lintels, sills, and sashes, but based on the existing condition of the windows, only those that were heavily deteriorated were repaired.

#### Interior Description

The main museum entrance opens into a large room with a staircase in the northwest corner of the room, a door to the exterior at the north wall, and doors to rooms at the east and west.

The east most room as a library and office for the Shawnee Indian Mission Foundation and contains one of the south doors on the porch.

The room to the west of the main entrance is a narrow exhibit room that leads to yet another exhibit room to the west. This next room contains a door to the exterior at the south wall, two closets,<sup>1</sup> and a door to a foyer to the west. The foyer

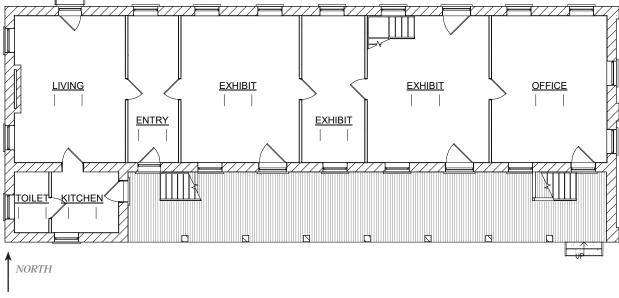


North elevation



East elevation

<sup>1</sup> The closet spaces were not accessible during the survey due to exhibit furniture and office furniture stored in this room due to the leaks at the north rooms.



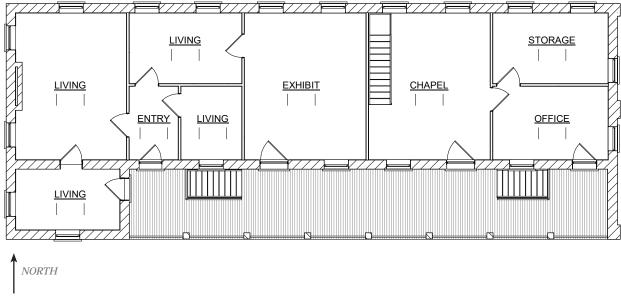
Floor plan, first floor

contains two built-ins near the door and a door on the west wall leading to a parlor-like space. This west-most room includes a fireplace, door to the exterior on the north wall, and the doorway to the kitchen and modern restroom. This room has been heavily repaired due to a recent leak in the attic. The ceiling was replaced, and most of the finishes were under plastic and plywood protection for the ceiling replacement.

The kitchen includes one of the exterior doors to the porch that faces east. The kitchen and restroom have been heavily modified for modern use.

The second floor follows roughly the same room layout, with some changes. The largest change is that the west half of the floor is only accessible from the porch. The interior stairs at the first floor access an open space at the second floor referred to as the chapel, and two rooms to the west that are used as storage and a small office. This small office contains an exterior door that leads out on to the porch. The rooms on the west side of the second floor are only accessible from the porch and appear to make up the dormitory section of the structure. This should be confirmed with historic documentation. The west-most two rooms have seen significant intervention and repair recently, due to a leak in the HVAC system in the attic above. The ceilings of both rooms was replaced. The east wall of the larger room was replaced, and

Doors in the interior vary and include two panel doors, five panel doors, six panel doors, and vertical plank doors. All the interior doors, door surrounds, windows, and window surrounds are finished with a translucent stain and clear coat. Several doors are also stored in the small room to the east of the dormitory entry. These likely belong in the two west rooms that are undergoing plaster repairs.



Floor plan, attic floor

#### Summary of Character Defining Features

This building has been heavily modified, but contains several very significant character defining features.

As with the West and East Buildings, the exterior masonry is a clear character-defining feature. While interventions in the past have include isolated areas of repairs, most of it appears to date from the original construction.

Other character-defining features include the porch and exterior staircases, the window and door surrounds with their intact flat wood lintels with raised wood corner blocks, and intact interior features including the staircase and potentially the fireplaces and mantels. These could not be fully assessed during the survey as they were enclosed for protection during the ongoing work, but glimpses of the wood and condition suggest that could be significant features. While the window sashes are not original, the frames appear to be the originals based on the provided documentation and condition.

The floor plan of the building is certainly a characterdefining feature, as the general layout is intact, and the significance of the access to the second floor west rooms suggest this was the dormitory area. As the dormitory area in the East Building is not currently interpreted, and likely needs significant intervention and restoration before it can be interpreted, this space provides a unique opportunity at the School.



Detail of 1940s HABS photo showing two over two windows at the north elevation.



Transom and lintel with wood blocks.



Masonry. Note the red coating on the brick, which has worn off most of the mortar joints.



Door and window surround at the interior.



Porch and exterior stairs.



Interior stair

#### **EXISTING CONDITIONS & RECOMMENDATIONS**

In general, care should be taken to preserve original materials and features. If in doubt, err on the side of caution. Remaining historic fabric should be preserved, and all substantive work should be carefully planned by preservation professionals and executed under their field supervision by contractor(s) with specific experience preserving cultural and historic resources and following the Secretary of the Interior's Standards. Any interventions that impacting significant or defining features this space such as roof work must involve preservation professional in the planning and on-site execution to avoid loss of historic fabric.

#### Summary of Conditions

#### Roofing, Gutters, and Downspouts

- The roof is in fair to poor condition, with areas of displaced and lifting shingles, and areas where moss is growing in between shingle gaps. From the attic there are several areas where sunlight comes through gaps and areas of missing shingles.
- The sealant used to secure the flashing to the chimneys shows signs of deterioration including cracking.
- A section of the fascia on the east elevation shows significant deterioration and wood rot.

#### Exterior Walls

- There are large areas of open joints at the limestone foundation. There are signs of multiple past repointing campaigns that are cracking and failing.
- One of the building ties at the west elevation shows signs of rust and paint deterioration.
- There are open joints in the brick masonry associated with door and window openings and behind downspouts.
   Some areas of open joints are due to cracking of perimeter mortar in areas of repointing.

- The brick shows signs of multiple repointing campaigns and areas of brick replacement and previous repair.
   Some of these repairs were executed in mortar and do not match the adjacent masonry.
- There are several bricks that have been damaged through scratchiti, with words and initials carved into the soft brick. The age of this damage is unclear.
- There area cracks in the weathered mortar caps on the chimneys as well as open and weathered joints in the chimney masonry.

#### Porch

- There is wood deterioration at the ends of the tongue and groove floor boards at the first floor, at the moldings around the column bases of both floors, and at the soffit between the first and second floors between columns.
- The painted floor is in fair condition, with areas of wear in sections that experience high traffic.

#### Windows and Doors

- Despite a project in 2016 addressing the windows and doors, many of the window sashes are in poor condition, with heavily deteriorating paint and glazing putty is actively falling way from the sashes. These windows do not appear to have been repaired during the 2016 project. The lintels and raised wood blocks were also selectively treated in 2016 and many of those that were not repaired are in poor condition, with wood checks and deteriorated paint.
- Some window show signs of water deterioration at the interior, including at sashes and sills. In most cases these appear to be at windows that were repaired in 2016. Moisture was not observed during the survey despite heavy rains a few days earlier.
- Some of the windows are painted shut, especially at the porch.

- The transom above the northwest door has an opaque replacement pane of glass that does not match the rest of the glass.
- Sealant was added between the window frames and door surrounds and masonry. In some areas, this sealant is not painted and the grey color stands out from the red brick and white trim.

#### Interiors

- The walls are in good to fair condition, with some cracking of the plaster on masonry walls and in corners. Cracking of plaster directly applied onto masonry is not uncommon and may be to thermal changes between the interior and exterior or settling of the structure following previous interventions into the foundation.
- The condition of the floors varies. They are well maintained but exhibit typical chips and gaps expected with a floor of such an age. The floor in the second floor west room slopes to the middle. It is unclear if this condition is the result of the repaired leak or a pre-existing condition and should be investigated further. The floor in the east room that is used for storage has a slight slope, this may be due to the loading in the room and should be investigated further.
- The interior doors are generally in good condition. The operability of the hardware varies. Some doors show signs of water damaged finishes, but are otherwise in good condition.
- The windows are generally in fair condition from the interior. Some windows show signs of water infiltration, but most of these coincide with windows that were repaired in 2016 based on their exterior conditions.

#### Site Features

• Site features include several small walkways that are currently in good condition.

#### Summary of Treatment Recommendations

The recommendations of this section are listed in order of severity and are listed in order of action required to restore and maintain the building. First, general prioritized recommendations are made, followed by specific treatment, maintenance, and inspection recommendations for each element or building system.

#### High priority treatments include:

- The roof should be repaired to prevent water intrusion and a reroofing planned. See recommendations for east building.
- The foundation should be repointed. A mortar analysis should be completed to identify the original mortar. A new repointing mix should match the original in color and should be compatible with the historic masonry.
- A comprehensive repair and restoration campaign should be scheduled for the windows and include glazing putty replacement and repainting.
- Mortar caps on the chimneys should be repaired.
- The gutters should be cleaned. Screened covers should be considered, they can prevent some of the larger debris from entering the gutter and simplify periodic cleaning.
- The rusting building tie on the west elevation should be cleaned, treated, and coated with a rust inhibiting coating.
- All wood elements should be repaired and repainted. Deteriorated elements should be assessed and replaced as needed.

#### Medium priority treatments include:

- The damaged fascia board at the west elevation should be replaced.
- The soffits and fascia should be repainted to protect the wood, but care should be taken to leave the screens unobstructed.

- Open joints should be repointed with a mortar compatible with the bricks and uniform in color. A mortar analysis should be completed to identify the original mortar. A new repointing mix should match the original in color and should be compatible with the historic masonry.
- Spalled bricks should be patched to match the adjacent masonry. Non-matching and damaged or deteriorated previous repairs in mortar or cement should be removed and replaced with compatible patching material matching the masonry.
- Old repairs including dutchmen should be checked for soundness and replaced as needed.
- Perimeter sealant at doors and windows should be replaced and painted to match the wood surrounds.
- Plaster cracks should be repaired in kind.

Low priority treatments include:

- The missing transom lite at the northeast door should be replaced with glass to match the adjacent panes.
- Window and door hardware should be repaired as needed. Ghosting from previous installations should be patched and repaired.
- The floors should be refinished and repaired as needed. Holes should be filled and heavily damaged boards should be replaced to match the existing.
- The red coating on the brick should be investigated further to determine when it was applied and what the reasoning behind it was.
- The masonry should receive a general cleaning to remove isolated stains.

#### ROOFING, GUTTERS, AND DOWNSPOUTS

The roof of the North Building is constructed of wood shingles over skip sheathing. The skip sheathing is mix of walnut "slab" skip sheathing that may be historic and modern skip sheathing of dimensional lumber. The rafters are composed of a similar mix of logs and dimensional lumber.

Flashing is visible at the chimneys. There are half-round gutters on the north and south elevations. The gutters feed into downspouts located at the east and west corners of each elevation. The soffit panels and eaves behind the gutters have screened vents for air circulation in the attic.

The following conditions were observed:

- The roof is in fair to poor condition, with areas of displaced and lifting shingles, and areas where moss is growing in between shingle gaps.
- From the attic there are several areas where sunlight comes through gaps and areas of missing shingles.
- The sealant used to secure the flashing to the chimneys shows signs of deterioration including cracking.
- A section of the fascia on the east elevation shows significant deterioration and wood rot.
- Paint on the soffit panels is in fair condition. The vents have been painted over to varying degrees, from partially to completely blocked.

#### **Treatment Recommendations**

- The roof should be replaced.
- The damaged fascia board at the west elevation should be replaced.
- The gutters should be cleaned.
- The soffits and fascia should be repainted to protect the wood, but care should be taken to leave the screens unobstructed.



Roof looking south.



Roof from attic. Note the new sheathing boards. Spots of daylight coming through the roof are circled in red.



Deteriorating sealant at west chimney.

#### Maintenance and Inspection Recommendations

- The roof should be inspected annually and monitored for leaking after heavy rains so that it can be repaired as needed.
- The HVAC system should be inspected annually and monitored for leaking at least twice a season during periods of heavy use. The gutters should be checked and cleared of debris twice a year following the heaviest times of tree shedding. Screened covers should be considered, they can prevent some of the larger debris from entering the gutter and simplify periodic cleaning.
- Wood elements should be repainted every 7-10 years depending on the amount of exposure and weathering they experience.



Hole in fascia panel on west elevation.



Painted over vents at the soffit underside.

#### EXTERIOR WALLS

The exterior masonry walls are laid in common bond. The use of variations on common bond is also used at the East and West Buildings.

The brick at the porch shows signs of a red coating that was applied to the masonry. It has worn off most of the mortar joints, but is still visible in some areas.

The visible foundation walls are composed of dressed blocks of a local limestone. These walls are visible at the south, east, and west elevations.

The following conditions were observed:

- There are large areas of open joints at the limestone foundation. There are signs of multiple past repointing campaigns that are cracking and failing.
- One of the building ties at the west elevation shows signs of rust and paint deterioration.
- There are open joints in the brick masonry associated with door and window openings and behind downspouts.
   Some areas of open joints are due to cracking of perimeter mortar in areas of repointing.
- The brick shows signs of multiple repointing campaigns and areas of brick replacement.
- There are several bricks that have been damaged through scratchiti, with words and initials carved into the soft brick. The age of this damage is unclear.
- There are previous repairs to the bricks that do not match the masonry. Many of these have open joints at their perimeters.
- There area cracks in the weathered mortar caps on the chimneys as well as open and weathered joints in the chimney masonry.

#### Treatment Recommendations

 The foundation should be repointed. A mortar analysis should be completed to identify the original mortar. A new repointing mix should match the original in color and should be compatible with the historic masonry.



Open joint around cellar door.



Paint deterioration and rust at building tie.



Open joints below window at the porch.

- Open joints should be repointed with a mortar compatible with the bricks and uniform in color. A mortar analysis should be completed to identify the original mortar. A new repointing mix should match the original in color and should be compatible with the historic masonry.
- The rusting building tie on the west elevation should be cleaned, treated, and coated with a rust inhibiting coating.
- Mortar caps on the chimneys should be repaired.
- Spalled bricks should be patched to match the adjacent masonry.
- Non-matching and damaged or deteriorated previous repairs in mortar or cement should be removed and replaced with compatible patching material matching the masonry.
- The scratchiti damage is superficial and can be patched or grouted to match the masonry and discourage further defacing.
- The red coating on the brick should be investigated further to determine when it was applied and what the reasoning behind it was.
- The masonry should receive a general cleaning to remove isolated stains.

#### Maintenance and Inspection Recommendations

• The foundation and masonry should be inspected annually for open joints.



Previous repair that does not match the adjacent masonry.



Area of repointing that does not match the rest of the masonry. Note the traces of red coating on the masonry on the right side.



Scratchiti on brick.



Cracks at mortar cap and open joint at chimney.

#### PORCH

The porch at the south elevation has two levels accessed from the interior and two staircases at the east and west ends of the porch.

Photographs show that the porch was restored following the 1940s HABS documentation. Photographs show the floor as missing, but the flat lintels with raised corner blocks at the windows and doors and the staircases to the second floor can be seen intact.

The following conditions were observed:

- There is wood deterioration at the ends of the tongue and groove floor boards at the first floor.
- The painted floor is in fair condition, with areas of wear in sections that experience high traffic.
- There is wood deterioration visible at the moldings around the column bases of both floors.
- There is a wood deterioration at the soffit above the first floor in one of the bays between columns. The location of deterioration indicates that water is coming in at the second floor porch edge or the column base at the second floor above the damaged area. There may be additional concealed deterioration in this area.

#### Treatment Recommendations

- Heavily deteriorated wood elements should be repaired or replaced.
- All wood elements should be repainted. Deteriorated elements should be assessed and replaced as needed.

#### Maintenance and Inspection Recommendations

- The porch floors should be inspected annually for paint deterioration. As paint is the first line of defense for wood, areas of bubbling, cracking, or peeling should be removed and repainted.
- Depending on the amount of foot traffic it may be necessary to repaint areas of the floors every 2-3 years.
- Areas of standing water should be cleared with a broom after rains.
- Wood trim elements should fit snugly together to minimize gaps and seams.



1940s HABS photo showing missing porch floor at the first floor. Note that the staircases is still intact and may be original.



1940s HABS photo showing missing porch floor at the second floor.



Damage and deterioration at tongue and groove floor at the first floor.



Paint deterioration, checking, and open seams in wood trim at column bases.



West staircase to the second floor of the porch. This is one of two potentially historic staircases at the porch.



Wood deterioration at porch soffit.



Vents to the crawl space below were added when the floor was replaced after the 1940s.



Second floor porch, looking east.



Rail termination at the masonry. Note the wood blocking added to stabilize the railing.

#### WINDOWS AND DOORS

The windows at the North Building are double hung twelveover-twelve wood windows, except for the attic windows which are fixed single pane windows. Photographs and drawings indicate that the frames are original but that the sashes have been replaced. Several of windows were repaired and restored in a 2016 project, but this does not appear to have been a comprehensive window repair and restoration project, as many windows are in poor condition.

At the interior many of the sills show signs of water damage. It is unclear if this damage is ongoing or predates the new sashes in the windows. No wet or damp sections were observed despite rains days before the survey.

Generally the exterior doors are in good to fair condition. There are two sizes of six-panel doors, with the central four doors on the south elevation being slightly wider than others on the building. The doors appear in the 1940s HABS documentation and may be original to the building.

Each exterior door has a five-lite transom and sits recessed in a wood door surround. Each exterior door retains its early hardware including knobs, escutcheon plates, and box locks at the interior. Modern dead bolts have been added to the doors.

The door thresholds are wood, with heavy wear including nicks and paint deterioration.

Both the doors and windows are topped with Federal Style flat wood lintels with raised wood corner blocks. Some of these show signs of repair and replacement, but others are in poor condition.

The following conditions were observed:

 Many of the window sashes are in poor condition, with heavily deteriorating paint and glazing putty is actively falling way from the sashes. These windows do not appear to have been repaired during the 2016 project.



1940a HABS photos showing existing windows and doors.



Doors and window as seen in 2021.



Paint and glazing putty deterioration at a north elevation window.

- Some window show signs of water deterioration at the interior, including at sashes and sills. In most cases these appear to be at windows that were repaired in 2016. Moisture was not observed during the survey despite heavy rains a few days earlier.
- Areas of previous repair including previous dutchman repairs are visible below the paint.
- Some of the windows are painted shut, especially at the porch.
- The transom above the northwest door has an opaque replacement pane of glass that does not match the rest of the glass.
- The lintels and raised wood blocks were selectively treated in 2016 and many of those that were not repaired are in poor condition, with wood checks and deteriorated paint.
- Sealant was added between the window frames and door surrounds and masonry. In some areas, this sealant is not painted, and the grey color stands out from the red brick and white trim,

#### Treatment Recommendations

- A comprehensive repair and restoration campaign should be scheduled for the windows and include glazing putty replacement and repainting.
- The missing transom lite at the northeast door should be replaced with glass to match the adjacent panes.
- Old repairs including dutchmen should be checked for soundness and replaced as needed.
- Interior sills should be repaired and monitored for water damage following heavy rains.
- Window and door hardware should be repaired as needed. Ghosting from previous installations should be patched and repaired.
- Perimeter sealant at doors and windows should be replaced and painted to match the wood surrounds.



Water damage at new sash, deteriorating finish at window sill.



Repaired window where seams from dutchman repairs are visible through the paint. Note the unpainted grey sealant at the edges of the window frame.



Window at the porch that is painted closed.

#### Maintenance and Inspection Recommendations

- Monitor windows and door thresholds at the interior after high wind or rain events for leaks.
- Survey the windows annually for signs of glazing, sealant, and paint deterioration. Depending on exposure, some windows may require intervention sooner than others.



Sashes and surrounds that were repaired in 2016.



*Transom with opaque replacement glass at the northwest door.* 



Window with heavy paint and glazing putty deterioration. This window does not appear to have been included in the 2016 scope.



Paint and wood deterioration at flat lintel and raised wood block detail.



Unpainted grey sealant added at the door surround.

#### INTERIORS

The interior walls are a combination of plaster on lath and plaster on masonry, with most walls consisting of plaster on masonry.

The ceilings are flat plaster on lath, with vents in most rooms that have been added for the HVAC system.

The floors are all hardwood floors, most of which appear to be original. Note that the flooring in the western rooms could not be fully assessed due to protection in place for the wall and ceiling repairs.

There are several types of interior doors present in the building, including two, five and six panel doors, and a plank door below the interior staircase. There is a non-original four panel door at the modern restroom. Like the exterior doors, these doors appear to retain their original hardware.

The first floor includes four-panel doors at the kitchen and restrooms, and six-panel doors at the office and conference room. These doors are all painted dark bluish green. The six-panel doors and their surrounds have ghosting from many hardware changes. The second floor interior doors consist of five-panel doors at the north end painted dark greenish blue and six-panel doors at the south end. The two southernmost rooms are separated by a pair of six-panel doors with a natural wood finish matching the built-ins in these rooms. The same door surround is present in the north rooms at the first and second floors, but doors are not present in those areas. The door to the attic is a plank door. Plank doors are also found at the storage areas below the stairs in the north and south foyers.

Like the East Building, the windows in this building all have pull down screens installed. They are mounted within the window surround and appear to decrease the heat gain of the building.



Library at east end of the first floor.



Inside the main entry door.



Plaster cracks in the exhibit room to the west of the main entry room.

The following conditions were observed:

- Interior finishes are generally in good to fair condition.
- Generally the walls are in good to fair condition, with some cracking of the plaster on masonry walls and in corners. Cracking of plaster directly applied onto masonry is not uncommon and may be to thermal changes between the interior and exterior or settling of the structure following previous interventions into the foundation.
- The condition of the floors varies. They are well maintained but exhibit typical chips and gaps expected with a floor of such an age.
- The floor in the second floor west room slopes to the middle. It is unclear if this condition is the result of the repaired leak or a pre-existing condition and should be investigated further.
- The floor in the east room that is used for storage has a slight slope, this may be due to the loading in the room and should be investigated further.
- The interior doors are generally in good condition. The operability of the hardware varies. Some doors show signs of water damaged finishes, but are otherwise in good condition.
- The windows are generally in fair condition from the interior. There is very little overpaint on the sashes, consistent with replacement units. Some windows show signs of water infiltration, but most of these coincide with windows that were repaired in 2016 based on their exterior conditions.

#### Treatment Recommendations

- Plaster cracks should be repaired in kind.
- The floors should be refinished and repaired as needed. Holes should be filled and heavily damaged boards should be replaced to match the existing.

#### Maintenance and Inspection Recommendations

• Following repairs the interiors should be inspected seasonally and after heavy rains.



Exhibit room between small exhibit space and west foyer. This area is used to store materials from the west room which is under repair.



West room at the first floor. This room is undergoing repairs for a recent leak.



Kitchen and door to the modern restroom.



Water damaged finish at door to the north elevation in the first floor west room.



Hinge ghosting and typical five-panel door with early hardware.



Typical wood floor at the second floor.



New wall at second floor west room. Note that this floor slopes to the center of the room.



Water damaged finish at window sill from previous water infiltration issue.

#### SITE FEATURES

Site features of the East Building include stairs up the hill from street level and a paved walkway to the southeast corner of the building. These paths are all in good condition.

Little is known about the layout around the building and historic locations of associated structures. Interventions into the landscape should be preceded by archeological surveys.

#### Maintenance and Inspection Recommendations

- The landscaping is well-maintained with a routine mowing schedule. This routine maintenance should continue.
- Sidewalks and pathways should be examined annually, such as in the spring, so that damaged or lifting pavement can be addressed before becoming a trip hazard.



Path at primary south elevation.



Path at the north elevation.

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# Next Steps

Based on the survey, there are several large exterior maintenance projects that were identified as high priority for the site based on existing conditions:

- Roof replacement at the East and North Building.
- Roof repair at the West Building.
- Repointing of foundations at all three buildings.
- Comprehensive window repair and painting at the North Building.
- Repainting of wood elements at the West Building.

These projects should be addressed in the near future to delay deterioration and preserve the historic fabric present at each building. They should be designed by preservation design professionals and executed by contractors with specific experience preserving cultural and historic resources.

In addition to these high priority items, ARG recommends that the site be thoroughly researched and documented in its current configuration. This should include the development of a Historic Structures Report and Master Plan but should also include a Cultural Landscape Report and Interpretive Plan. These documents will establish guidelines moving forward and will be used in grant applications and fund-raising efforts for future work at the School.

The preservation, management and interpretation of historic sites such as the Shawnee Indian Manual Labor Boarding School is customarily guided by research and planning documents prepared by preservation and interpretive professionals. Briefly, the historic significance of the site is established, the physical building fabric is documented and assessed, and this information is used to inform interpretive planning, ultimately resulting in implementation of an interpretive program and improvements to accommodate public visitation. There obviously have already been visitation upgrades made to this site such as restrooms and parking as well as interpretive displays.

In the case of the Shawnee Indian Manual Labor Boarding School, the landscape surrounding the buildings may also be determined to be a significant historical aspect of the resource. Some of the historic documentation and planning work may have already been completed but was not made available to us at the time of our site inspection.

The existing exhibits in the buildings may be considered somewhat outdated and not representative of current trends in interpretation of historic resources and themes that include indigenous peoples. There may also be some inaccuracies regarding the history of the Shawnee Tribe and the site in the exhibits.

It must be emphasized that improvements to the buildings and property for interpretation or any restoration work other than stabilization should not be executed until a Historic Structure Report is prepared. It would be best to complete all studies outlined, if possible, to avoid unintended adverse impacts on this resource including the buildings, below ground resources and landscape.

In addition to minimizing impact on the significant components of the resource, there is a practical aspect to preparing documents such as historic structure reports as well. Granting entities that fund historic preservation projects have become increasingly sophisticated in understanding site management. They are not likely to consider funding any projects for sites that lack well-executed documentation and planning documents.

Provided below are the studies that are recommended in planning for the future of the Shawnee Indian Manual Labor Boarding School in rough sequential order.

#### Historic Structure Report and Cultural Landscape Report

Industry standards for stewardship of historic buildings normally begins with the preparation of an Historic Structure Report (HSR). An HSR is acknowledged in the museum and preservation professions as the baseline for preserving and managing historic and cultural resources. HSRs are detailed and robust document and includes chapters on historic significance, building chronology or changes over time, existing conditions, cultural landscape, recommendations for maintenance and repair and other information tailored to the specific needs of the property. The National Park Service

and the Association for Testing and Materials (ASTM) both have guidelines for the preparation of these documents that were authored by experts in the fields of architectural history and preservation.

The Shawnee Indian Manual Labor Boarding School sits on a parcel of land that is most likely also a character defining feature of the site and may become an important aspect of interpretation. Further, there may be below-ground resources present. For these reasons, the HSR should include a thorough cultural landscape section that assesses the historic relationship between the landscape and the buildings, the historic use of the property and other topics. In some cases, a Cultural Landscape Report (CLR) is separate document. Regardless of whether the CLR is part of the HSR, or a separate report, this site warrants a comprehensive consideration of the full range of archaeological remains (including architectural remnants, agricultural features, and even the potential for burials of boarding school indigenous children and slaves/workers) that may be present within the 12-acre National Landmark designation.

#### Master Plan

The HSR can serve as a bridge between documentation and planning for upgrading interpretation of a historic cultural resource such as the Shawnee Indian Manual Labor Boarding School. It includes recommendations for care and repair over time and will provide a roadmap for physical preservation. However, larger and more complex sites for which updated interpretation is desired may benefit from a master plan study resulting in a master plan document. These are typically prepared by architects and landscape architects who specialize in historic preservation.

The master plan study would first identify the goals for use of the cultural resource based upon the desires and input of the various stakeholders. Once the goals have been established, the planning process would define an overall space program for the site. The various components of the program would be aligned with the existing physical resources. Improvements such as parking or infrastructure, if needed, would be identified. These might also include additions or upgrades to visitor parking circulation and amenities, identifying locations for interior and exterior interpretive displays and administrative office space. If future construction is contemplated, the potential location(s) for these improvements would be located on site drawings. Upgrades or improvement of site should not impact the significance of the existing resource including below ground resources. The HSR and cultural landscape studies will provide guidance for avoiding these conflicts. Master plans for historic sites and museums typically consist of narratives describing the plan and drawings that illustrate how the plane can be implemented. Implementation of most master plans for nonprofits occur over several years. The master plan or its components can be used for fund raising and provides a basis to solidify the vision of the stakeholder and provides direction for the organization.

#### Interpretation

Separate or concurrent with the master plan, an interpretive plan for the site and buildings would be the next logical step. A specialist in interpretive design would be retained for preparing the interpretive plan, and the team is typically lead by an architect who would manage the process and design modifications to the buildings for the exhibits. Interpretive plans are based upon the historical research that is developed in the HSR and may also include other disciplines such as historic interiors consultant. Some interpretive designers function in a design/build capacity meaning that they both design exhibits, fabricate and install. For this site, retaining a qualified and creative interpretive consultant would be very important to assure exhibits that would be compelling and attract visitors.

An updated, accurate interpretation of the site that highlights its relevance to the history of the Shawnee people, its prominent legacy as one of the earlist Federallymandated Native American boarding schools, and the

importance of the buildings from an architectural history perspective, as much of the historic fabric remains unaltered, would be of great value. The potential for re-imagining this historic site to accurately portray the full history it represents is substantial and could very well substantially increase the number of visitors.

#### Estimate of Costs

The following table provides a rough order of magnitude costs for the studies outlined above. Actual costs will vary depending on the final scope of work and what additional historic information is provided. It should be recognized that this is a relatively large site with three buildings. Further, to our knowledge, the below ground resources are yet to be identified. The potential for additional interpretation of the landscape may be significant.

Rough Order of Magnitude Costs for Documentation and Planning Studies			
Historic Structure Report	\$75,000.00 - \$95,000.00		
Cultural Landscape Report	\$50,000.00 - \$75,000.00		
Master Plan	\$150,000.00 - 200,000.00		
Interpretive Plan	\$85,000.00 - \$95,000.00		
Archeological Study if needed	\$50,000.00 - \$75,000.00		
New interpretive installation	\$2,500,000.00 - \$5,000,000/\$8,000,000		

#### New Interpretive Installation

The design and construction costs for a new interpretive installation will be directly affected by several factors. The first is the type of exhibits. More expensive exhibits may have interactive displays using electronic media such as are found in science and natural history museums. One approach may be to have an introductory video that outlines the history of the site and the salient interpretive themes and then less costly static displays. Traditional interpretive installations would employ signage and displays of physical objects. There could also be a combination of both.

The square footage of interior spaces to be used for exhibits is another factor and will also have a direct impact on construction costs for interpretation. For this rough order of magnitude cost exercise, we have assumed five floors of interpretation which approximates the current condition at the site. Specifically, our assumption is two floors each in the north and east buildings and the ground floor in the west building. This may be more than necessary; however, it is very difficult to project adequate space needs at this early stage. We are assuming a total of approximately 14,000 square feet for interpretation which is generous and can be scaled back if needed. The remaining interior spaces would be allocated for administrative use.

For this rough order of magnitude projection, we have assumed some upgrades to electrical systems and preparing the interiors for new exhibitions. However, we do not at this time have specific information on the electrical service for each building and what, if any, recent upgrades have been made to building systems.

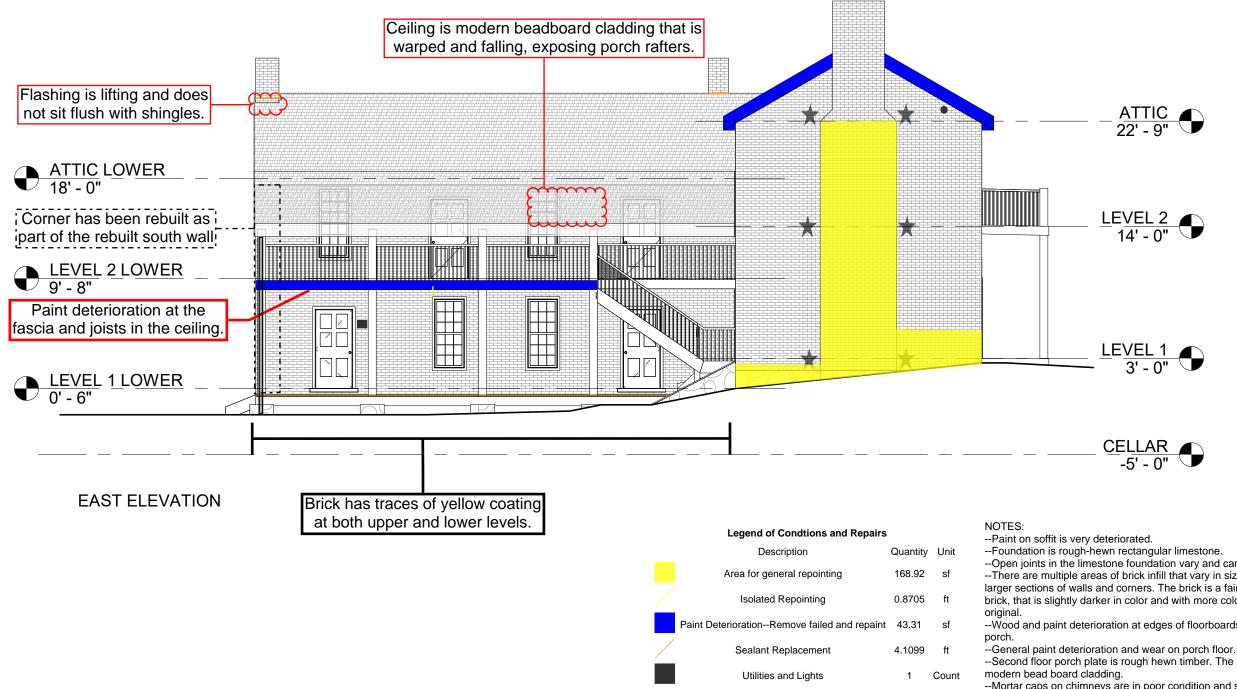
Using the assumptions outlined in the previous paragraphs for square footage, possible electrical upgrades, etc., we believe the new interpretive installation could cost approximately \$2.5 million at the low end and \$5 to 8 million at the high end. These rough order of magnitude costs are based upon our previous experience with new interpretive installations at historic sites. Using these past projects as a guide, the breakdown of these costs are approximately as follows:

New Interpretive Installation		
Architectural Design and Permit Drawings	8%	
Exhibit Design and Bid Documents	14%	
Exhibit Implementation and Installation	28%	
Building Alterations	30%	
Electrical Upgrades	10%	
General Conditions, G.C. Overhead and Profit	10%	

Other cost factors to consider will be upgrades for accessibility. The buildings and path of travel from parking may not currently meet current Americans with Disabilities Act (ADA) requirements. Further, there may be opportunities for exterior exhibits based upon archeological and/or historic studies. These have yet to be identified.

The planning process, that includes the preparation of the Historic Structures Report and master plan, will serve to narrow and define the scope of work for the ultimate goal of preserving this historic and cultural resource and installing a new interpretative program. The final cost of the interpretive project to be implement can be adjusted during the planning process.

Appendix A: Existing Condition Survey Drawings



Wood deterioration--Repair or Replace

6.01

sf

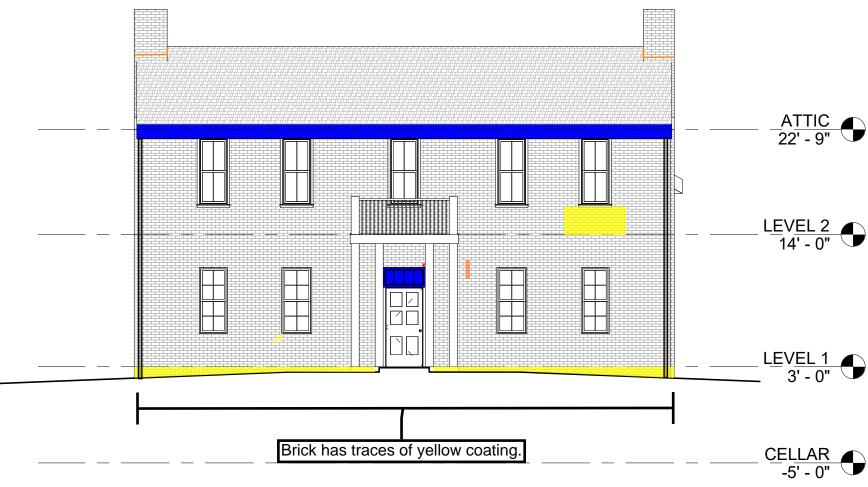
--Open joints in the limestone foundation vary and can be very large in size. --There are multiple areas of brick infill that vary in size from single bricks to larger sections of walls and corners. The brick is a fair match for the existing brick, that is slightly darker in color and with more color variation than the

--Wood and paint deterioration at edges of floorboards at the first level of the

--Second floor porch plate is rough hewn timber. The rafters are concealed by

--Mortar caps on chimneys are in poor condition and should be replaced during repointing.

--Porch roof has isolated areas of lifting shingles



## NORTH ELEVATION

Lege	nd of Condtions and Repairs		
	Description	Quantity	Unit
X Abandoned A	nchorsRemove and Repair	1	Count
Area	or general repointing	34.85	sf
Iso	plated Repointing	1.3550	ft
Paint Deteriorat	ionRemove failed and repaint	58.32	sf
Pa	aint Drip Removal	0.55	sf
Sea	alant Replacement	6.8705	ft

#### NOTES:

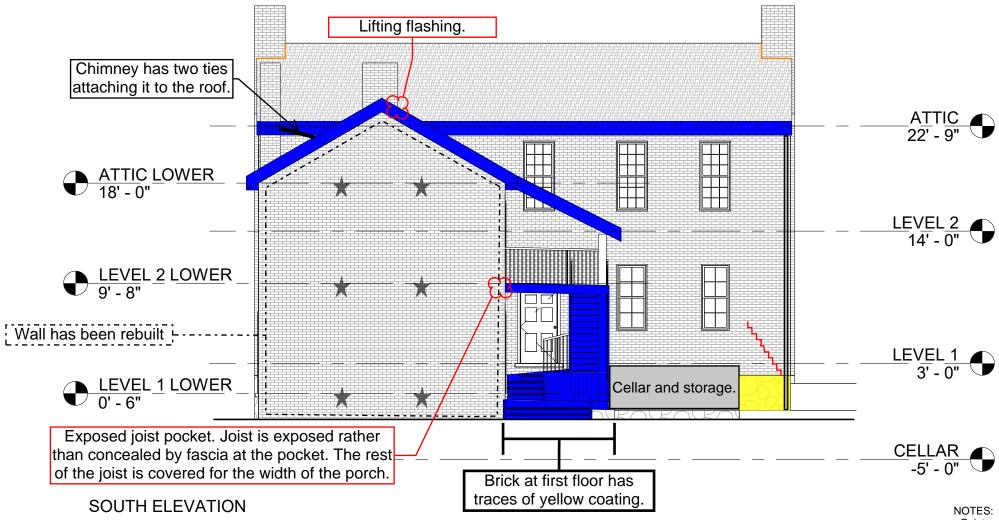
--There are multiple areas of brick infill that vary in size from single bricks to larger sections of walls and corners. The brick is a fair match for the existing brick, that is slightly darker in color and with nt more color variation than the original.

--Wood and paint deterioration at porch, especially at floor and column bases.

--The brick bond on this portion of the building is not consistent with the rear addition or with the other buildings at the site.

--Sealant around windows and doors appears to be in serviceable condition, date of previous repair or replacement is unknown. --The roof shingles shows early signs of curling but is overall in good to fair condition. Sealant at chimney flashing shows signs of cracking and should be replaced.

--Mortar caps on chimneys are in poor condition and should be replaced during repointing.



Legend of Condtions and Repairs		
Description	Quantity	Unit
Area for general repointing	12.27	sf

· · · · · · · · · · · · · · · · · · ·		-
Crack Repair	7.3293	ft
Paint DeteriorationRemove failed and repaint	139.29	sf
Sealant Replacement	7.3480	ft

--Paint on soffit is very deteriorated.

--There are multiple areas of brick infill that vary in size from single bricks to larger sections of walls and corners. The brick is a fair match for the existing brick, that is slightly darker in color and with more color variation than the original.

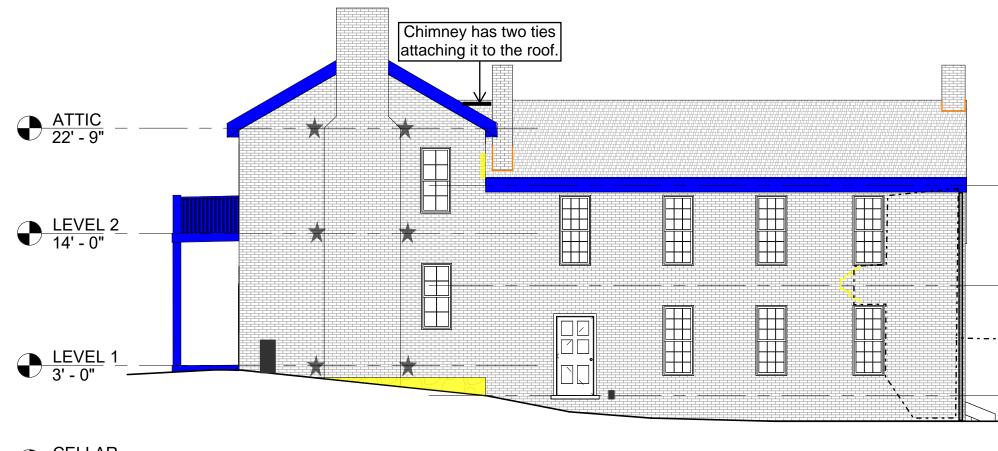
--Sealant around windows and doors appears to be in serviceable condition, date of previous repair or replacement is unknown. --The roof shingles shows early signs of curling but is overall in good to fair condition. Sealant at chimney flashing shows signs of cracking and should be replaced.

--Wood and paint deterioration at edges of floorboards at the first level of the porch.

--General paint deterioration and wear on porch floor.

--Open joints in the limestone foundation vary and can be very large in size.

--Mortar caps on chimneys are in poor condition and should be replaced during repointing.



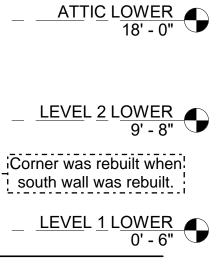
• CELLAR --5' - 0"

WEST ELEVATION

# Legend of Condtions and RepairsDescriptionQuantityUnitArea for general repointing10.80sfIsolated Repointing6.3545ftPaint Deterioration--Remove failed and repaint101.77sfSealant Replacement9.4526ft

Utilities and Lights

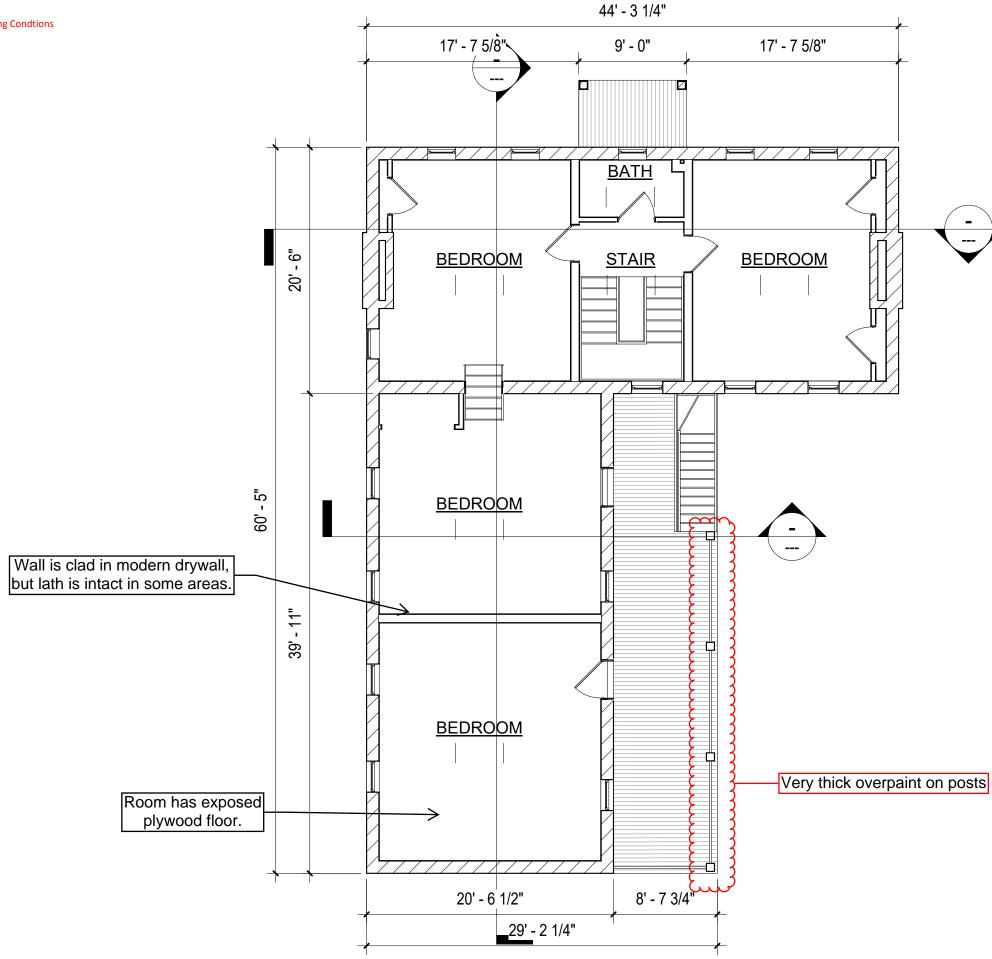
Architectural Resources Group | Shawnee Indian Manual Labor Boarding School



NOTES:

--Paint on soffit is very deteriorated.

- Unit --There are multiple areas of brick infill that vary in size from single bricks to larger sections of walls and corners. The brick is a fair match for the existing brick, that is slightly darker in color and with more color variation than the original.
- ft --Sealant around windows and doors appears to be in serviceable condition, date of previous repair or replacement is unknown. --The roof shingles shows early signs of curling but is overall in
- sf good to fair condition. Sealant at chimney flashing shows signs of cracking and should be replaced.
- ft --Open joints in the limestone foundation vary and can be very large in size.
- 2 Count --Mortar caps on chimneys are in poor condition and should be replaced during repointing.



LEVEL 2 FLOOR PLAN

West Building

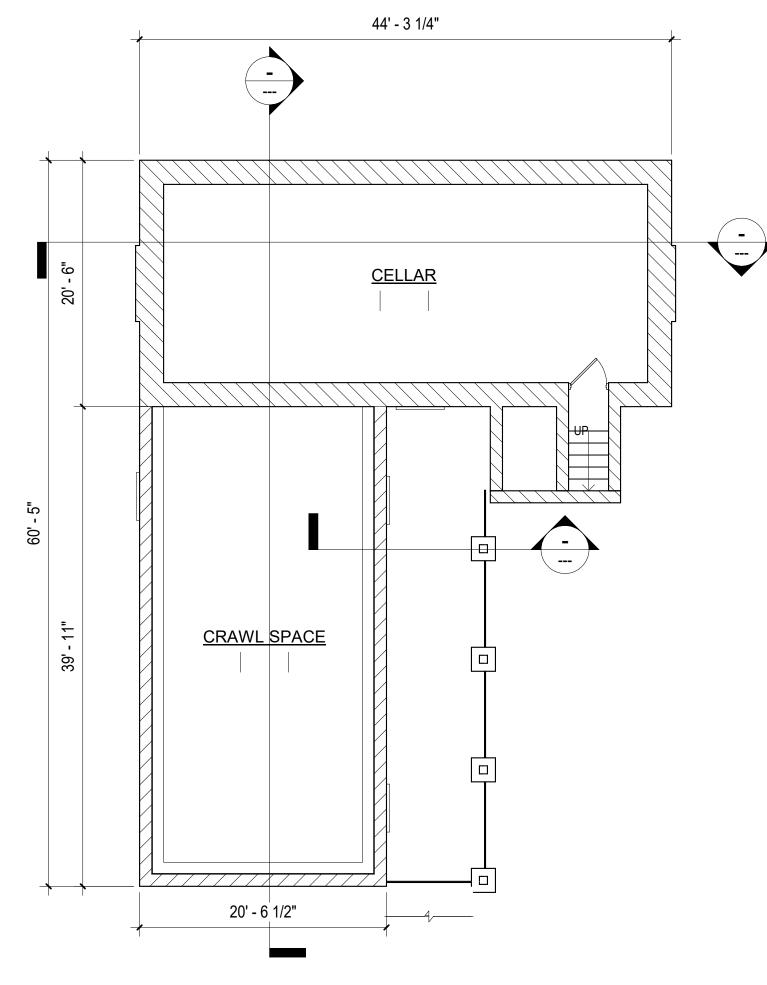
NOTES:

--Floors are painted. Finish is heavily worn. --There are patches on the floors where holes or penetrations are covered with sheet metal nailed in place.

--Very few intact finishes. Wallpaper was removed and plaster stripped to lath in some places, likely from the remediation of the water leak in 2013.

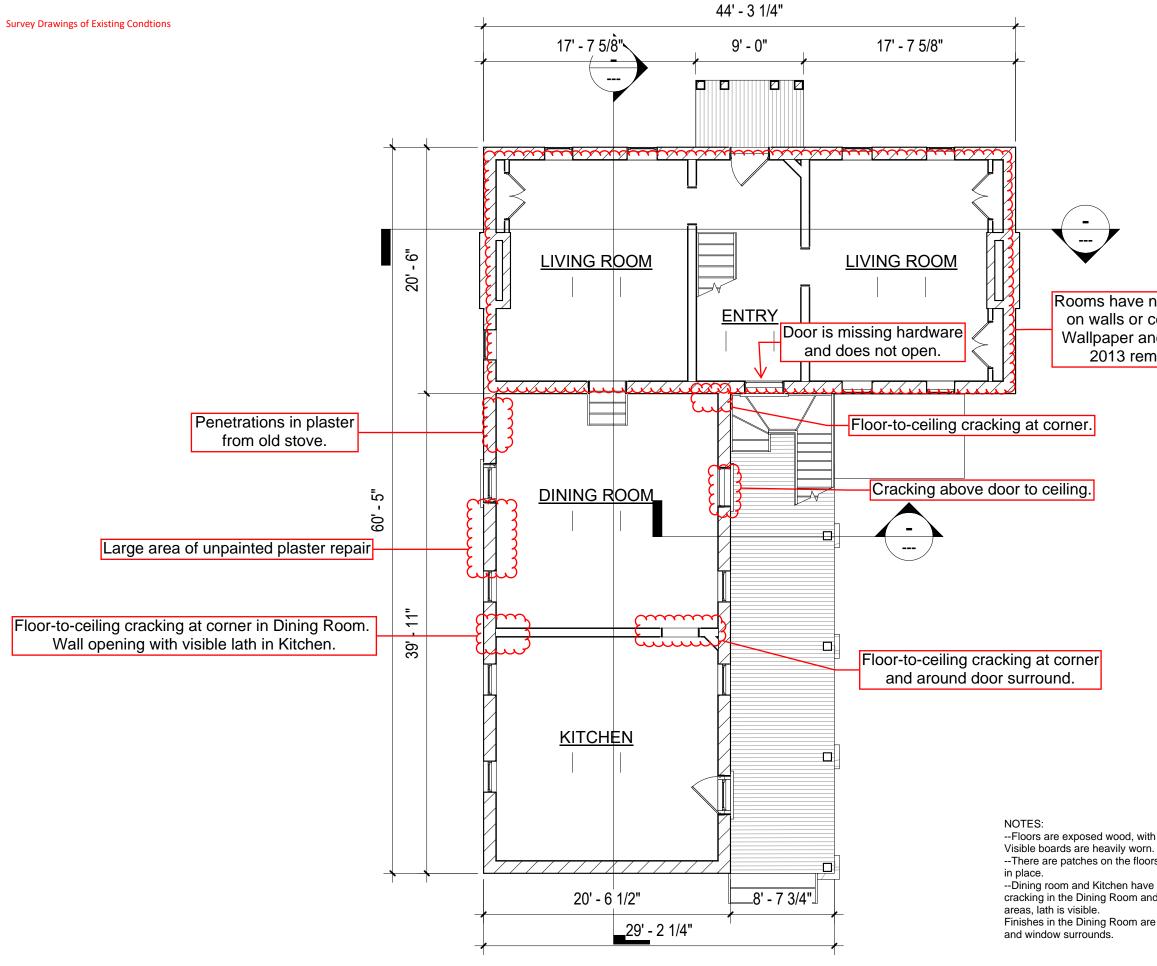
--There are multiple repairs to the plaster around the windows and mantles in all rooms.

--Sections of second floor railing were replaced at the south end due to damage caused by "teenagers".



CELLAR FLOOR PLAN

West Building



## LEVEL 1 FLOOR PLAN

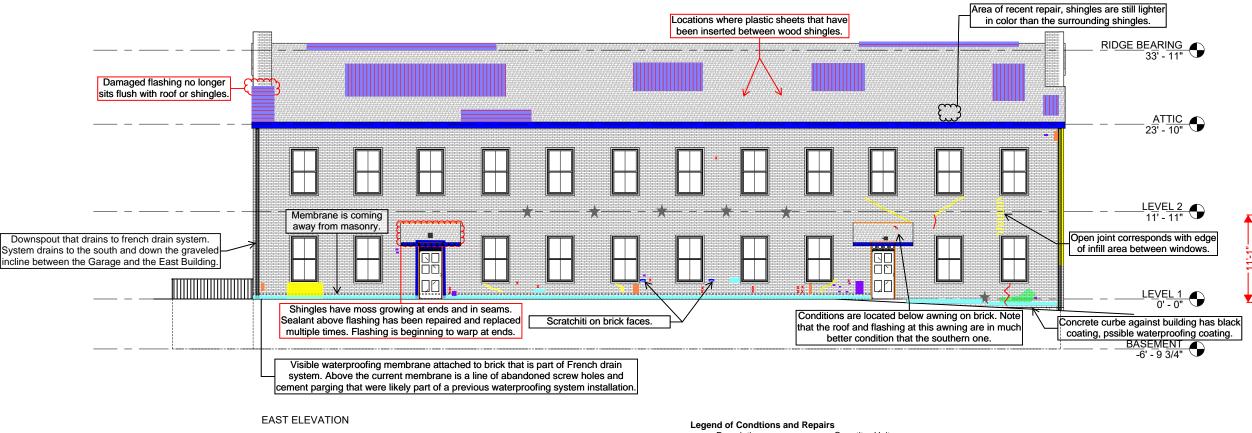
Rooms have no intact plaster or other finishes on walls or ceilings, except inside built-ins. Wallpaper and plaster were removed during 2013 remediation due to water leak.

--Floors are exposed wood, with previous flooring finishes removed during 2013 remediation.

--There are patches on the floors where holes or penetrations are covered with sheet metal nailed

--Dining room and Kitchen have intact wallboard ceilings and plaser walls. There is significant cracking in the Dining Room and isolated areas of damage due to investigative openings. In some

Finishes in the Dining Room are heavily deteriorated. Plaster has cracks in corners, and at door



Legend of Conditions and Repairs	5		
Description	Quantity	Unit	
X Abandoned AnchorsRemove and Repair	15	Count	NOTES:
Area for general repointing	18.95	sf	There are multiple areas o spandrels between windows
Biological Growth Removal	4.88	sf	slightly more color variation
Crack Repair	6.4798	ft	infill occur below windows.
Isolated Repointing	37.0542	ft	The roof has large areas o
Lifting shingles	162.09	sf	There is heavy paint build-
Missing or slipped shingles	59.34	sf	surrounds and transom wind trim, but this paint is heavily
Mortar or Sealant Residues	40.99	sf	Mortar caps on chimneys a
Old Patch Removal and Replacement	2.59	sf	repointing.
Paint DeteriorationRemove failed and repaint	99.40	sf	Windows are later replace
Paint Drip Removal	2.40	sf	There are screened vents
Sealant Replacement	50.3003	ft	partially blocked from being
Utilities and Lights	3	Count	The roof shingles show sig Flashing is visible below signal

re multiple areas of brick infill that vary in size from single bricks to the s between windows. The brick is a good match for the existing brick, with ore color variation and flash marks than the original. most of these areas of

f has large areas of warped shingles.

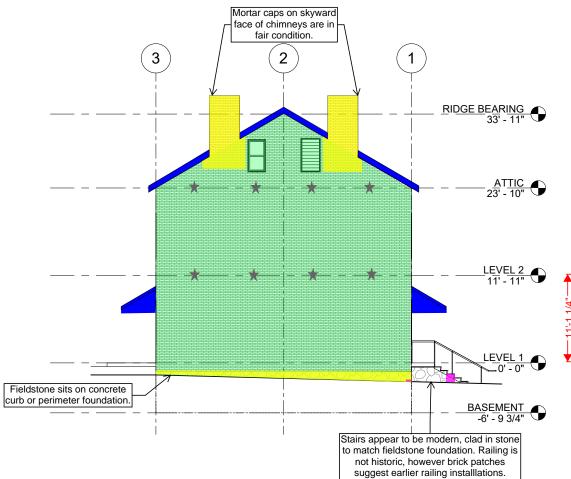
heavy paint build-up on window frames, door frames, as well as door and transom windows. There is less paint build-up on awnings and fascia his paint is heavily deteriorated.

aps on chimneys are in fair condition and should be replaced during

are later replacements and are not original.

re screened vents on the soffit behind the gutter. Many of these screens are plocked from being painted over.

f shingles show signs of lifting, curling, and heavy weathering. It visible below sills. East Building



NORTH ELEVATION

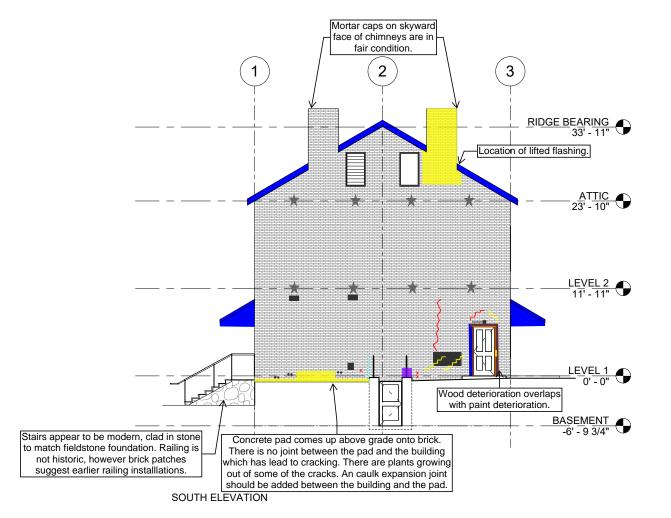


Note that right chimney was rebuilt in the 1970s

--There are multiple areas of brick infill that vary in size from single bricks to the spandrels between windows. The brick is a good match for the existing brick, with slightly more color variation and flash marks than the original. --Mortar caps on chimneys are in fair condition and should be replaced during

--Open joints in the fieldstone vary and can be very large in size. --There is a general film of biological growth on the brick due to the shade and debris from a nearby tree. General cleaning is recommended. --Foundation is non-dimensional limestone.

Page 2 of 7



#### Legend of Condtions and Repairs Description Quantity Unit Abandoned Anchors--Remove and Repair 3 Count Area for general repointing 50.36 sf Crack Repair 10.7421 ft Isolated Repointing 11.4273 ft 0.59 sf Mortar or Sealant Residues Old Patch Removal and Replacement 1.45 sf Paint Deterioration--Remove failed and repaint 48.97 sf Utilities and Lights 5 Count

Wood deterioration

х

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NOTES:

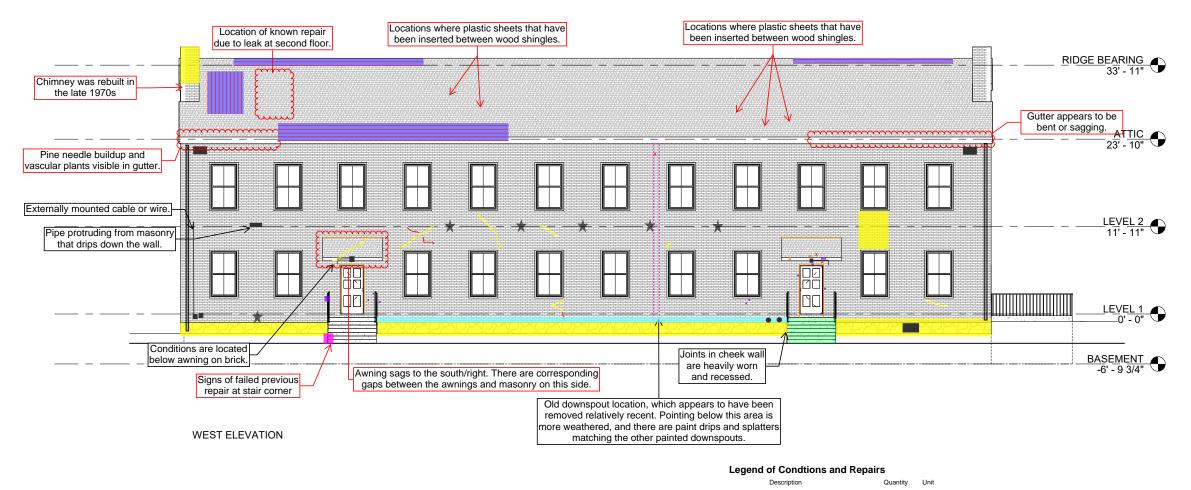
4.70 sf

--There are multiple areas of brick infill that vary in size from single bricks to the spandrels between windows. The brick is a good match for the existing brick, with slightly more color variation and flash marks than the original. most of these areas of infill occur below windows.

 of infill occur below windows.
 -Mortar caps on chimneys are in fair condition and should be replaced during repointing.

--Open joints in the fieldstone vary and can be very large in size. --This elevation includes most of the exterior mounted utilities. --Kitchen door and exterior door surround appear to be modern replacements.

--Pipe protrusions from the brick are set in cement or mortar, and many have cracks.



X	Abandoned AnchorsRemove and Repair	3	Count	
	Area for general repointing	193.77	sf	
	Biological Growth Removal	19.43	sf	NOTES: There are r
	Crack Repair	4.7726	ft	the spandrels brick, with sli
	Isolated Repointing	34.5236	ft	of these area
	Lifting shingles	24.02	sf	There is he
	Missing or slipped shingles	99.42	sf	door surroun awnings and
	Mortar or Sealant Residues	34.31	sf	There are c window fram
	Old Patch Removal and Replacement	0.94	sf	Mortar caps repointing.
	Paint Drip Removal	0.24	sf	Open joints Windows a
	Patch Repair	1.53	sf	There are s screens are
	Sealant Replacement	47.0496	ft	The roof sh
	Utilities and Lights	8	Count	

multiple areas of brick infill that vary in size from single bricks to els between windows. The brick is a good match for the existing slightly more color variation and flash marks than the original. most eas of infill occur below windows.

has large areas of warped shingles.

heavy paint build-up on window frames, door frames, as well as inds and transom windows. There is less paint build-up on

nd fascia trim, but this paint is heavily deteriorated.

e drips and splatter from white paint, likely from repainting the mes and trim on the building.

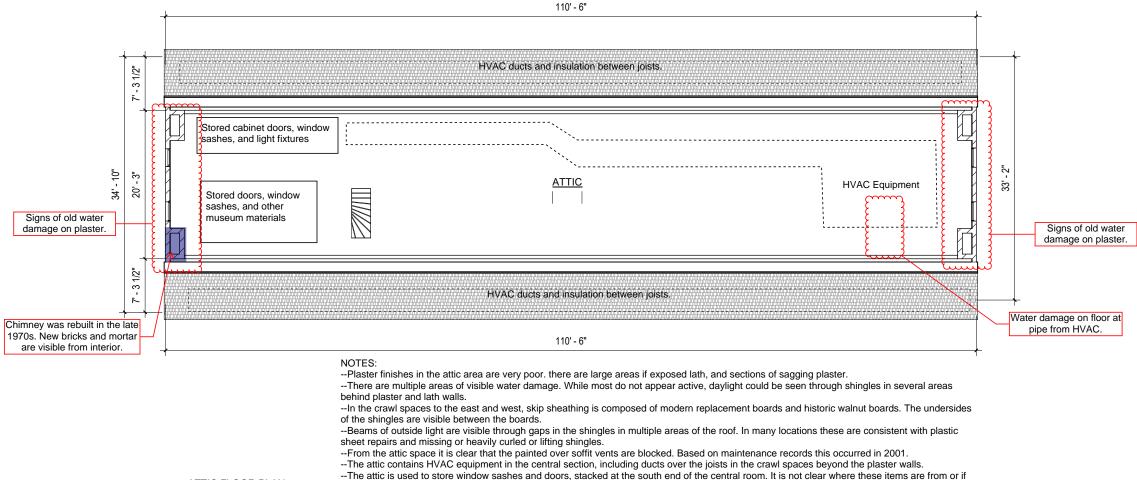
aps on chimneys are in fair condition and should be replaced during

nts in the fieldstone vary and can be very large in size.

are later replacements and are not original.

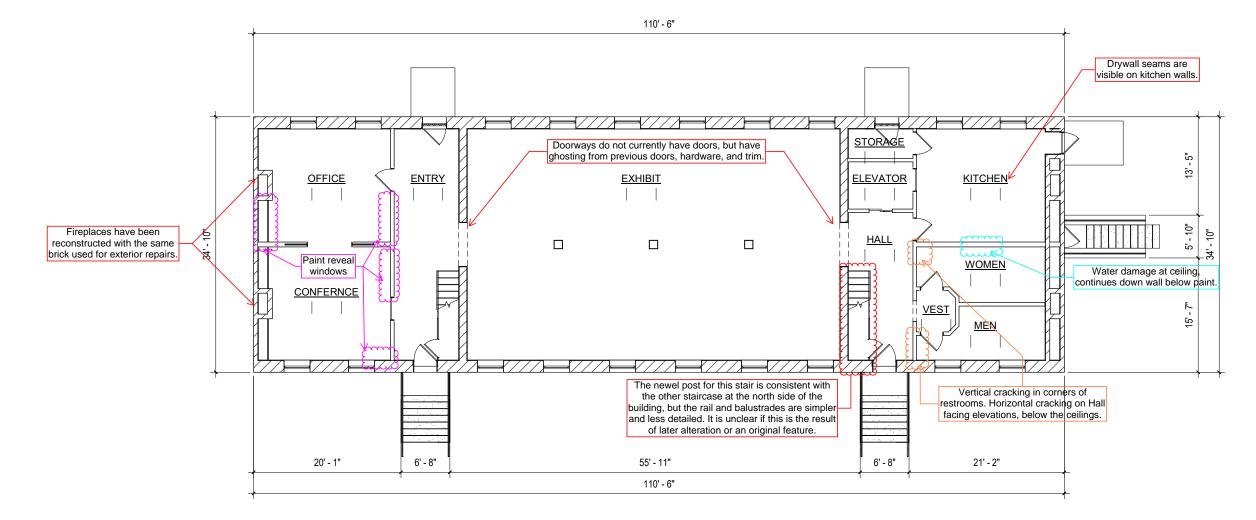
screened vents on the soffit behind the gutter. Many of these e partially blocked from being painted over. shingles show signs of lifting, curling, and heavy weathering.

East Building



ATTIC FLOOR PLAN

they are original to this building or others at the site. --There is graffiti written on and scratched into the plaster in many locations. Some are dated and may correspond with renovation and restoration campaigns, but this should be investigated further.



LEVEL 1 FLOOR PLAN

NOTES: painted.

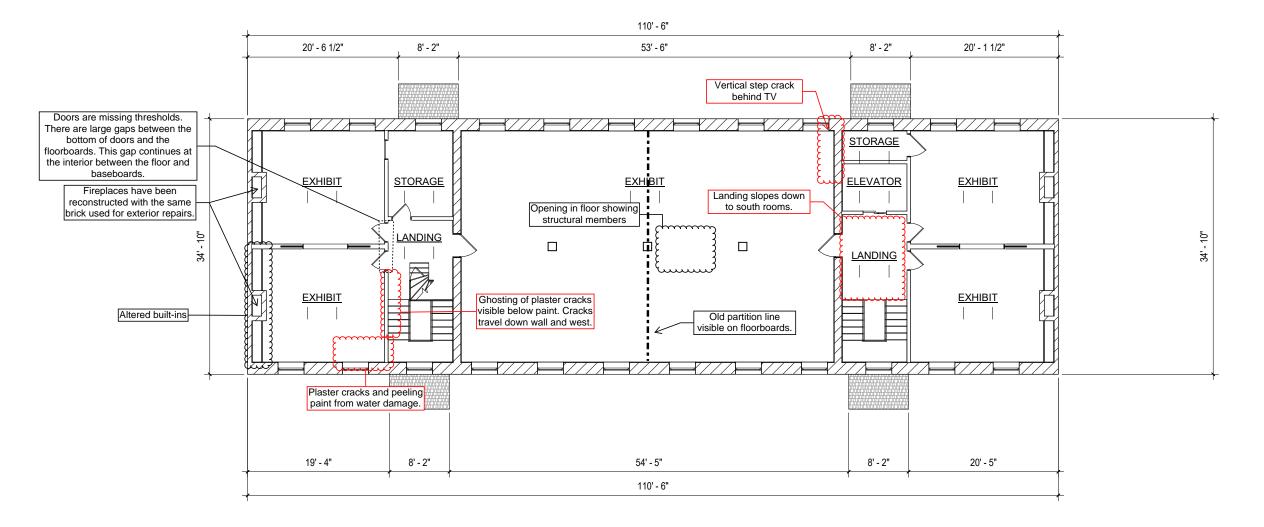
--Office and conference room include paint reveal windows showing early stencil finishes. These were completed prior to 2003 where they were called out to be left unpainted when the rest of the interior was

--Hardware on built-ins in conference room is heavily overpainted and does not operate smoothly.

--Conduit is often surface mounted on walls because they appear to be solid masonry with plaster applied directly to the masonry. --Kitchen has drywall, the seams are visible in some areas.

--East and west walls of central room have a chair rail at the sill level.





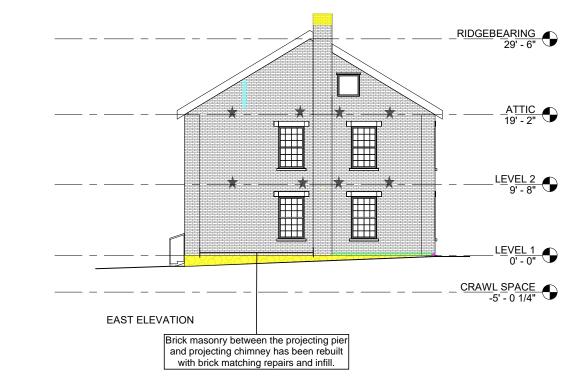
LEVEL 2 FLOOR PLAN

NOTES: --Built-ins in northy exhibit. This room Hardware on built operate smoothly. --Conduit is often s masonry with plast --East and west was chair rails are not f

--Built-ins in northwest exhibit room appear to have been altered for installed exhibit. This room is displayed as a civil war barrack. Hardware on built-ins in conference room is heavily overpainted and does not operate smoothly.

--Conduit is often surface mounted on walls because they appear to be solid masonry with plaster applied directly to the masonry.

--East and west walls of central room have a chair rail at the sill level. These chair rails are not found on the rooms at the north and south.



 Legend of Conditions and Repairs

 Description
 Quantity Unit

 Area for general repointing
 29.37
 sf

 Biological Growth Removal
 6.56
 sf

 Isolated Repointing
 0.4527
 ft

 Mortar or Sealant Residues
 2.02
 sf

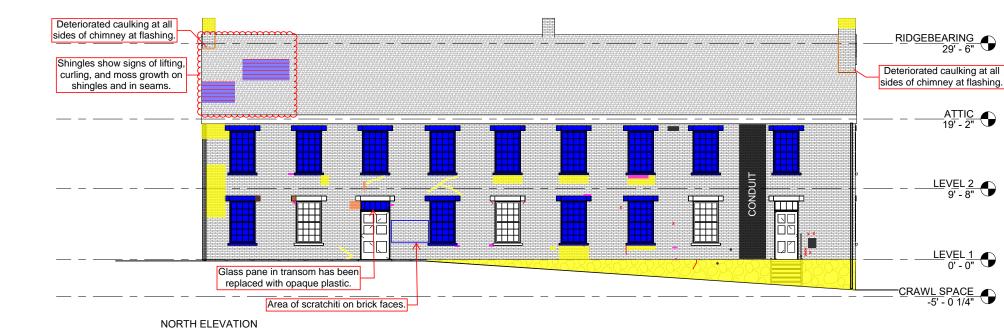
 Patch Repair
 0.11
 sf

NOTES:

--There are multiple areas of brick infill that vary in size from single bricks to the spandrels between windows. The brick is a good match for the existing brick, with slightly less color variation than the original. -- The brick is laid in a common bond pattern with variation in the number of stretcher rows between header rows. The variation on the right side which is presumed to be original at this time, is carried over in to the rebuilt section at the left. white paint, likely from repainting the window frames and trim on the building. --Open joints in the fieldstone vary and can be very large in size.

--Mortar caps on chimneys are in poor condition and should be replaced during repointing.

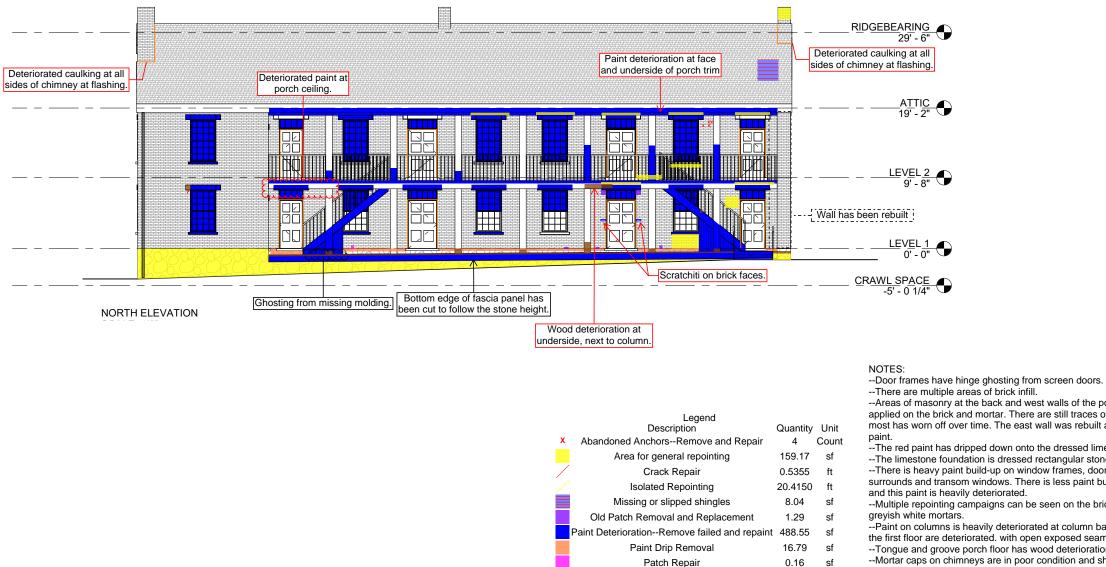
--Window sashes and surrounds including lintels and sills are new.



	Legend of Condtions and Repairs	5	
	Description	Quantity	Unit
X	Abandoned AnchorsRemove and Repair	8	Count
	Area for general repointing	182.14	sf
/	Crack Repair	4.3104	ft
	Isolated Repointing	18.4758	ft
	Missing or slipped shingles	30.57	sf
	Paint DeteriorationRemove failed and repaint	323.59	sf
	Paint Drip Removal	2.01	sf
	Patch Repair	2.42	sf
/	Sealant Replacement	11.1538	ft
	Utilities and Lights	1	Count
	Utilities and Lights	2	Count
	Wood deterioration	0.87	sf

NOTES: --There are multiple areas of brick infill that vary in size from single bricks to the spandrels between windows. The brick is a good match for the existing brick, with slightly less color variation than the original. --There are several discernible repointing campaigns where the mortar does not match the rest of the facade. --Open joints in the fieldstone vary and can be very large in size. --There are screened vents on the soffit behind the gutter. Many of these screens are partially blocked from being painted over. --Brick work below window sills has been repointed for at least 2 courses on each window, with some windows having rebuilt spandrels. --There is heavy paint build-up on window frames, door frames, as well as door surrounds and transom windows. There is less paint build-up on the porch and trim, but this paint is heavily deteriorated. Note that windows with no paint deterioration consist of replacement sashes and surrounds including lintels and sills. --Mortar caps on chimneys are in poor condition and should be replaced during repointing.

--The roof shingles show signs of lifting, curling, and heavy weathering.



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repointing.

147.2742 ft

21.23 sf

Sealant Replacement

Wood deterioration

--Areas of masonry at the back and west walls of the porch retain a red paint that was applied on the brick and mortar. There are still traces of the paint on the mortar, but most has worn off over time. The east wall was rebuilt and does not show signs of

--The red paint has dripped down onto the dressed limestone at the base of the wall. --The limestone foundation is dressed rectangular stone.

--There is heavy paint build-up on window frames, door frames, as well as door surrounds and transom windows. There is less paint build-up on the porch and trim,

--Multiple repointing campaigns can be seen on the brick, including white, pink, and

--Paint on columns is heavily deteriorated at column bases. Some base moldings on the first floor are deteriorated. with open exposed seams.

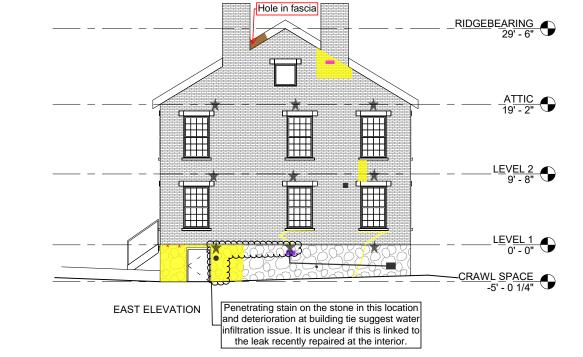
--Tongue and groove porch floor has wood deterioration at exposed ends of boards. --Mortar caps on chimneys are in poor condition and should be replaced during

--Windows were rehabilitated in 2016 and exhibit paint deterioration at exterior and some glazing deterioration. Sealant around the windows and doors was replaced at this time, but shows signs of isolated failure.

--There are screened vents on the soffit behind the gutter. Many of these screens are partially blocked from being painted over.

--The roof shingles show signs of lifting, curling, and heavy weathering.





Legend			NOTES:
Description	Quantity	Unit	There are
× Abandoned AnchorsRemove and Repair	2	Count	The field
Area for general repointing	58.19	sf	There is surrounds
Isolated Repointing	22.3448	ft	but this pa
Old Patch Removal and Replacement	0.82	sf	Multiple r
Patch Repair	0.53	sf	Mortar ca repointing.
Utilities and Lights	2	Count	Stone for
Wood deterioration	2.60	sf	Sealant a

are multiple areas of brick infill.

Id stone of this elevation is dressed rectangular stone.

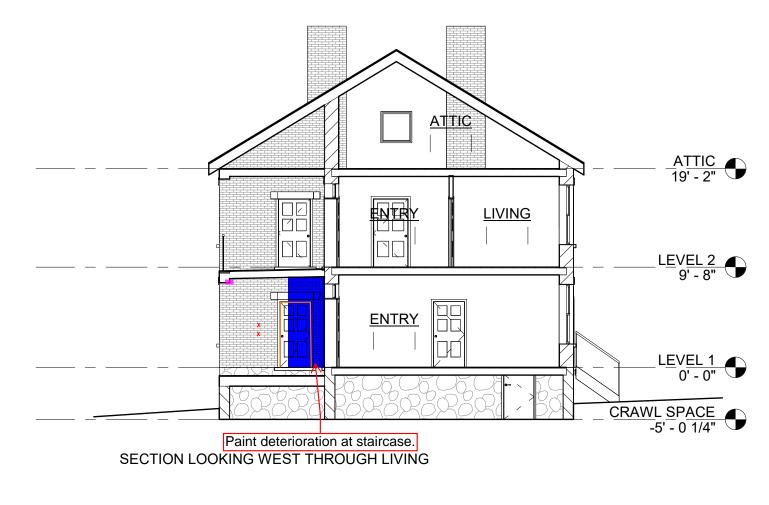
is heavy paint build-up on window frames, door frames, as well as door ids and transom windows. There is less paint build-up on the porch and trim, paint is heavily deteriorated.

e repointing campaigns can be seen on the brick. caps on chimneys are in poor condition and should be replaced during

oundation shows signs of several repointing campaigns.

at windows on this elevation is grey and unpainted.

-Locations of dutchman repairs on sashes are visible through paint.



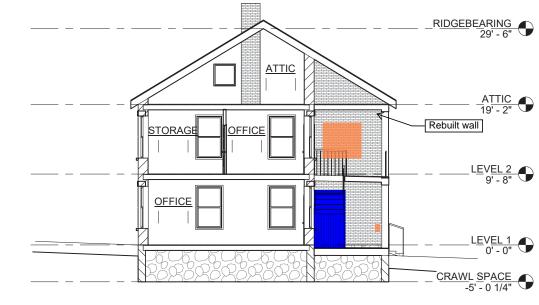
	Description	Quantity	Unit
x	Abandoned AnchorsRemove and Repair	2	Count
	Paint DeteriorationRemove failed and repaint	30.91	sf
	Patch Repair	0.35	sf
/	Sealant Replacement	15.4583	ft

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North Building

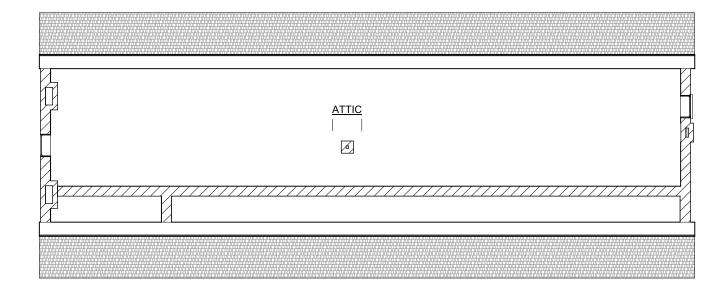
NOTES: --The masonry retains more red paint than other areas. There are still traces of the paint on the mortar, but most has worn off over time. --The east wall is rebuilt and does not show signs of paint. --Open joints in the fieldstone vary and can be very large in size. The field stone of this elevation is dressed rectangular stone. --There is heavy paint build-up on window frames, door frames, as well as door surrounds and transom windows. There is less paint build-up on the porch and trim, but this paint is heavily deteriorated.

Page 5 of 9



SECTION LOOKING EAST THROUGH OFFICE



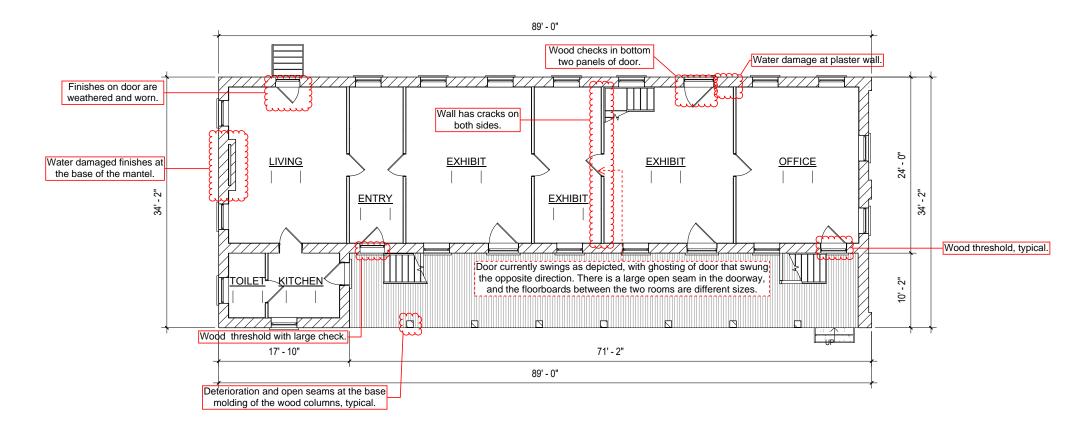


LEVEL 1 FLOOR PLAN

North Building

Page 7 of 9

Survey of Existing Condtions



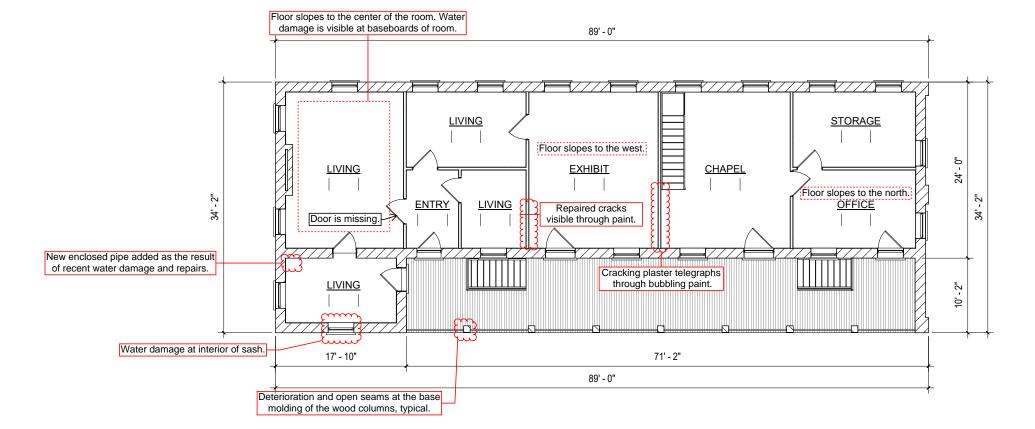
LEVEL 1 FLOOR PLAN

North Building

Page 8 of 9



Survey of Existing Condtions



LEVEL 2 FLOOR PLAN

NOTES: --Mantel on north wall was covered during the survey. This room has a new ceiling and east wall due to recent water damage from AC in the attic. --Water damage to window sills in all rooms is typical. --Most interior doors have ghosting from missing hardware such as box locks.

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Appendix B: ROM Estimate for Recommended Repairs

#### Appendix B

#### **Cost Projections**

The following conceptual, rough order of magnitude cost projections are based upon conditions observed during our site visit in September 2021 and construction costs from other projects we have undertaken for historic buildings with similar scopes of work. Exterior envelope maintenance work could readily be observed and quantified. This is not so for structural and building systems.

Structural and mechanical, electrical, and plumbing (MEP) upgrades have been undertaken for each building in the past; however, drawings or other documents for these improvements were not available during our visit or prior to completion of this report. Further, we had no discussions with staff responsible for the maintenance of the buildings who would be able to identify deficiencies. We have therefore assumed a worst-case scenario for work listed in the cost projections.

The projected costs included in this appendix were prepared by a contractor specializing in historic preservation and assume the participation of a qualified historic preservation architect in repair planning and documentation.

East, North, and West buildings.

#### East Building - Shawnee Indian Manual Labor Boarding School

Exterior envelope weatherproofing, maintenance, and roof replacement. Interior scope includes repairs, historic plaster conservation at 3rd floor dormatory space, systems maintenace, and structural upgrades.

Bid Item Description			Total Task
Bid Item 1: Mobilization/Demobilization		\$	6,554.81
Bid Item 2: Abandoned Anchors		\$	1,602.46
Bid Item 3: Cleaning of Elevations and Removal of Biological Growth		\$	42,304.88
Bid Item 4: Crack Repairs		\$	3,188.20
Bid Item 5: Rake/Tuckpoint Mortar Joints		\$	35,092.56
Bid Item 6: Roof Replacement		\$	246,854.76
Bid Item 7: Mortar/Sealant Residue		\$	8,281.10
Bid Item 8: Old Patch and Spall Repairs		\$	2,956.92
Bid Item 9: Deteriorated Paint		\$	7,327.81
Bid Item 10: Sealant Replacement		\$	2,228.33
Bid Item 11: Utilities and Lights		\$	3,662.76
Bid Item 12: Wood Deteriorated		\$	2,869.16
Bid Item 13: Access to Work Area Via Scaffold		\$	107,525.00
Bid Item 14: Design Professional		\$	26,400.00
Bid Item 15: Conservation of Historic Plaster		\$	107,841.25
Bid Item 16: Misc. Plaster and Paint repairs		\$	5,060.00
Bid Item 17: Replace missing/damaged insualtion @ 2nd floor ceiling		\$	3,162.50
Bid Item 18: Structural Upgrades		\$	384,401.88
Bid Item 19: General Conditions/Management		\$	92,400.00
	Subtotal		1,089,714.38
	Contingency @ 20%		217,942.88
		~	21 704 20

Insurance @ 2% \$ 21,794.29

Total \$ 1,329,451.54

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#### North Building - Shawnee Indian Manual Labor Boarding School

Exterior envelope weatherproofing, maintenance, and roof replacement. Interior scope includes plaster repair and HVAC maintenance. Also includes structural upgrades.

id Item Description			Total Tas
Bid Item 1: Mobilization/Demobilization		\$	6,554.81
Bid Item 2: Abandoned Anchors		\$	1,220.92
Bid Item 3: Cleaning of Elevations and Removal of Biological Growth		\$	42,304.88
Bid Item 4: Crack Repairs		\$	701.72
Bid Item 5: Rake/TuckPoint Mortar Joints		\$	33,238.98
Bid Item 6: Roof Replacement		\$	191,302.90
Bid Item 7: Mortar/Sealant Residue		\$	<b>33.9</b> 1
Bid Item 8: Old Patch and Spall Repairs		\$	2,109.90
Bid Item 9: Deteriorated Paint		\$	35,177.76
Bid Item 10: Sealant Replacement		\$	3,980.2
Bid Item 11: Utilities and Lights		\$	1,144.6
Bid Item 12: Deteriorated Wood		\$	15,078.3
Bid Item 13: Access to Work Area Via Scaffold		\$	107,525.0
Bid Item 14: Design Professional		\$	3,162.5
Bid Item 15: Plumbing Maintenance		\$	6,325.0
Bid Item 16: HVAC Maintenance		\$	6,325.0
Bid Item 17: Misc. Plaster and Paint Repairs, repair water damage		\$	10,752.5
Bid Item 18: Replace damaging/missing insulation		\$	3,162.5
Bid Item 19: Structural Upgrades		\$	307,932.6
Bid Item 20: General Conditions/Management		\$	92,400.0
	Subtotal	•	870,439.16
	Contingency @ 20%	\$	174,087.8

 Contingency @ 20% \$
 174,087.83

 Insurance @ 2% \$
 17,408.66

Total \$ 1,154,335.78

#### West Building - Shawnee Indian Manual Labor Boarding School

Exterior envelope weatherproofing, maintenance, and roof replacement. Interior scope includes new building systems, new kitchenette, new restrooms, and restoration or repair of historic finishes. Also includes structural upgrades.

Bid Item Description	Total Task
Bid Item 1: Mobilization/Demobilization	\$ 6,554.81
Bid Item 2: Abandoned Anchors	\$ 76.31
Bid Item 3: Cleaning of Elevations and Removal of Biological Growth	\$ 42,304.88
Bid Item 4: Crack Repairs	\$ 1,061.28
Bid Item 5: Rake/Tuckpoint Mortar Joints	\$ 18,098.28
Bid Item 6: Roof Replacement	\$ 139,490.11
Bid Item 7: Deteriorated Paint	\$ 13,095.89
Bid Item 8: Sealant Replacement	\$ 419.16
Bid Item 9: Utilities and Lights	\$ 457.85
Bid Item 10: Deteriorated Wood	\$ 3,668.86
Bid Item 11: Access to Work Area Via Scaffold	\$ 107,525.00
Bid Item 12: Design Professional	\$ 60,000.60
Bid Item 13: Replace missing plaster, 3 coat system	\$ 65,780.00
Bid Item 14: Patch/repair cracked plaster	\$ 10,120.00
Bid Item 15: Fill gaps in wood floor boards and associated baseboards and repair areas of material loss	\$ 11,214.23
Bid Item 16: Install new hardwood floor at plywood floor	\$ 6,641.25
Bid Item 17: Provide new restrooms. Assume 4 toliets 1 accesible	\$ 191,268.00
Bid Item 18: Remove kitchen, counters, etc.	\$ 1,214.40
Bid Item 19: Provide new kitchenette	\$ 17,988.30
Bid Item 20: Provide new energy-efficient eletric heating and cooling system. Ensure compatibility	
with historic character of building. Heat pump for heating and fan coil for cooling	\$ 122,086.42
Piping, valves and specialties	\$ 9,042.30
Split systm electrical heat pump	\$ 38,250.00
Air distribution ductwork	\$ 90,423.00
Diffusers, registers and grilles	\$ 4,521.15
Thermostats	\$ 4,521.15
Unit Ventilation	\$ 904.23
Bid Item 27: Replace entire plumbing system 4 WC, 4 LAV, 1 sink, 1HB	\$ 189,750.00

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Bid Item 28: Replace entire electrical service	\$ 50,625.30
Main normal power	\$ 34,425.00
Machine and equipment power	\$ 6,701.40
User convenience power	\$ 10,052.10
Telecom and security system	\$ 10,052.10
Bid Item 29: replace all lighting fixtures with new LED style lighting, modern digital dimmers, motion sensing lighting controls, and automatic daylight dimming.	\$ 132,825.00
Bid Item 30: Replace damaging/missing insulation	\$ 3,162.50
Bid Item 31: Structural Upgrades	\$ 180,072.75
Bid Item 32: General Conditions/Management	\$ 92,400.00

 Subtotal
 \$
 1,676,793.61

 Contingency @ 20%
 \$
 335,358.72

 Insurance @ 2%
 \$
 33,535.87

 Total
 \$
 2,045,688.20

#### Excludes:

- Permits.

- Regulatory Reviews

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