Colburn House

33 Arnold Road

Pittston, Maine

Historic Structure Assessment

ARTIFEX
architects & engineers

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0.0 INTRODUCTION

Artifex AE was retained by Maine's Bureau of Parks and Lands to prepare an Historic Structure Assessment (HSA) of the 1765 Colburn House located at the Colburn House State Historic Site in Pittston, Maine. The Colburn House is an important historic resource for Pittston, the State of Maine, and the United States. Listed on the National Register of Historic Places, it is an example of a wood-framed colonial federal-styled residence of the period.

The purpose of this HSA is to provide a better understanding of the conditions and capacities of this historic building. All professionals are well-qualified with all architects meeting the professional qualifications standards of the National Park Service – Code of Federal Regulations 36 CFR Part 61 to evaluate the building based on conformance with the Secretary of the Interior's Standards for Treatment of Historic Properties.

The process utilized by the Artifex team in preparation of this assessment report included a site visit to the building to measure, photograph, and closely review the existing condition of the building. In addition, research included review of available documents, plans, and photographs of the building to provide insight into its architectural history, development, construction, and siting.

Equipped with this information we made professional assessments of areas that are in need of physical repair and described the efforts that would accomplish the desired results as individual tasks. We prioritized these tasks based on the critical nature of the needed work. This assessment includes a review of the building's major systems and recommendations for rehabilitation.

It should be understood that this assessment reviews building systems generally and presents a "level of magnitude" to building conditions and recommended improvement costs. It should be further understood that this assessment does not report on the presence of ACM's or hazardous materials, which may be present in the structure, especially in lead-based paints.

Project Participants:

This Historic Structures Assessment is a combined effort between the professional team members of both Artifex AE and our consultant from Sevee & Maher Engineers, Inc./Environmental Safety & Hygiene Associates, LLC (SME/ESHA), along with the State of Maine as the owner and user of the building. A list of the team members and their roles are outlined below:

Owner's Team
David Rodrigues, Director of Real Property Management, Maine Bureau of Parks and Lands

Artifex Architects Engineers (Firm of Record)
Principal in charge: Ellen Angel, NCARB
Architectural team: Michael Pullen, AIA
Emerson Jones, Architect in Training

Engineering team: Scott Homer, P.E. Structural Engineer
Rayshelly Lizotte, P.E. Civil Engineer

Sevee & Maher Engineers, Inc./Environmental Safety & Hygiene Associates, LLC (SME/ESHA) (Consultant)
Microbial Consultant: John M. Boilard, RIHT, CMC, Senior Industrial Hygiene & Safety Specialist

1.0 EXECUTIVE SUMMARY

This Historic Structure Assessment addresses the oldest portion of the historic Colburn House (the first building). The house is located within the Colburn House State Historic Site in Pittston, Maine. This assessment was completed to assist the State of Maine in the scheduling of future improvement, repairs, and maintenance and as supporting documentation in a grant application for restoration funding. The review of existing historical documents, field investigation, and discussions with MHPC and the State Bureau of Parks and Lands as building users have provided the basis for the description and recommendations for this building.

Included as Section 5.0 Preservation Plan is a prioritized list of recommendations and approaches to address phasing during any construction or repair work. The list is prioritized based on several factors including conditions of historic character defining features, structural integrity, Owner' needs and priorities, and code compliance (listed in no specific order). The costs associated with the recommendations are estimates based on current available pricing. For budgeting purposes, cost escalation adjustments should be made for elements that will not be addressed this fiscal year.

Additionally, we have grouped the recommendations into "Projects" which represent discrete tasks that are better performed collectively. These are tasks which disrupt areas of the building and therefore are easier to complete together. The major and most significant project (Project #1) is more the result of a collection of issues coalescing in a singular problem areas or cause – the basement and underfloor of the house. Many problems would not occur if the basement were weathertight: the freeze-thaw cycles would be lessened; the vermin would have no means of entry; the water would be kept from the subfloor structure; and inspection, maintenance, and repair would be easier to perform. Further, the foundation, although technically able to perform its function of supporting the house, does this by means of buttresses upon buttress – a collection of 200 years of good enough repairs. At this point, the good enough has become a liability, making it difficult to repair anything without tearing something else entirely apart.

Frost and frozen soils in the exterior ground pressing on the dry-laid foundation masonry, working the joints along the basement walls, particularly where the granite block top curb meets with the stone masonry, combined with a lack of fixity between the granite and the timber framing, has allowed some significant movement of the wood-framed wall sills, some bowing of the stone masonry foundation walls, and separations of the granite block joints, some of which have been mortared-over or filled with caulking. The movements in the foundations over time has opened joints between the stones of the masonry, to allow further infiltration of water and subsequent damage to the structure as a whole. The addition of cement mortar into the joints of the basement has had little benefit against this on-going problem. Issues of freeze/thaw resulting from a lack of heat in the building during winter months are extended into the general basement area, increasing the potential for heave damage to the foundations. The only way to save the structure is to rebuild the foundation. This will have effects on finishes within the house, which become the secondary repair projects.

Subsequent to this, we have listed three smaller projects:
Project #2 is a collection of projects dealing with interior and exterior finishes. Project #1 will cause some damage to finishes, but in areas where work is already needed such as plaster ceilings and walls. We have added a sprinkler system to this project which, although not technically required, seems a critical item for good stewardship.

Project #3 tackles some needed Americans with Disabilities Act issues – creating easier access into the property and the house.

And finally, Project #4 covers needed Mechanical and Electrical improvements – providing heating, air conditioning, ventilation and lighting to the property.

With the completion of these four projects, the Coburn House should be in good stead for the foreseeable future.

2.0 HISTORY AND USE

The Colburn House, also known as the Major Reuben Colburn House, is sited prominently on a bluff overlooking the Kennebec River, and proximal to State Route 27. The original structure was built circa 1765 by Major Reuben Colburn. The house remained in the family until 1941. Efforts were made by subsequent owners to restore the house. The property was acquired in 1972 by the State of Maine Bureau of Parks and Lands for use as a State Historic Site and is currently operated as the Colburn House State Historic Site.

The house and property are included in the Colburn House State Historic Site and is listed on the National Register of Historic Places, as certified by the National Park System, since June of 2004 (also as a contributing property in the 1969 listing of the Arnold Trail to Quebec Historic District). The Colburn House is registered as resource number 04000741, under the title of: Colburn House State Historic Site.

The area was initially developed in the mid 1700's when settlement of the area commenced. The Colburn House was one of the first houses constructed and was the first on the east side of the Kennebec River.

The house derives much of its significance from its relationship to the March on Quebec led by Colonel Benedict Arnold in 1775. Major Reuben Colburn was responsible for scouting out the trail used for the Arnold Expedition, and for constructing the 220 boats, Bateaux, used to convey the troops and supplies. Col. Benedict Arnold briefly used the Colburn House as his headquarters before embarking for Quebec.

2.1 CONSTRUCTION HISTORY

Constructed around 1765, the main house at the front was the only portion of the residence initially built. To the rear is a kitchen ell of wood frame construction which was added circa 1850. This rear portion of the building has had numerous renovations throughout the building's life and is currently configured for use as a caretaker's apartment.

2.2 ARCHITECTURAL SIGNIFICANCE

The Colburn House, built in 1765, consists of a frame block at the front with later frame additions at the rear. It is a 2½ story house with basement. The house contains approximately 2,186 square feet. The layout of the building is based around a central chimney. The house has been subject to several renovations over the years, with some modifications coming as updates to the house as a residence, and other modifications attempting to replicate the home's original appearance.

The house, with its symmetrical five-bay façade and gabled roof, is an example of a Georgian style residence from the late colonial period.

3.0 STRUCTURE CONDITION ASSESSMENT

3.1 SITE

A. Setting

The Colburn House is located at 33 Arnold Road in the town of Pittston, Maine. According to town records, the 4-acre property is situated between Arnold Road to the east and the Kennebec River to the west.

The municipal tax card identifies that the main house and ell have a contact (on grade) area of 1,803 square feet and has four plumbing fixtures. Three outbuildings including a barn exist on the property which is owned by the State of Maine.

B. Grading and Drainage

The Colburn House is situated on a knoll overlooking the Kennebec River, and the ground drains gently away from the house.

C. Utilities

Electric power is provided to the house from an underground service line entering through a basement window on the south side.

According to town records a drilled well and septic disposal system exist on the property serving the house.

3.2 Structural System

A. General Description

The review of this structure by Artifex for this assessment is based on a walk-through inspection of the existing building. No destructive demolition or numerical analysis was performed for this assessment. Any references to building code requirements are based on standards and recommendations for compliance with the Maine Uniform Building and Energy Code which includes the International Existing Building Code (IEBC 2015), with specific reference to Chapter 12: Historic Buildings.

The Reuben Colburn House is a two-story, gable-roofed building constructed in 1765. It is located on the west side of Arnold Road on a level area of a mostly sloping site, uphill on the east bank of the Kennebec River. The portion of the site on which the building is situated is mostly level locally, but slopes steeply down to the river, below, from the formal front of the building. The plan of the original building is a simple rectangle, approximately 28 feet wide by 38 the feet long, with a single-story gabled ell addition on north end of the East elevation. A single chimney is located slightly offset southerly from being centered on the main roof ridge of the building. It is set midway along the length of the main roof. Only the original 1765 portion of the building is being considered for this report. The ell, constructed later, in the 19th Century, is not part of the focus of this review.

The formal front of the house is on the south side wall, facing the downstream run of the river beyond. It consists of a centered ground-floor doorway with sidelights, between symmetrical pairs of two, double-hung windows on each side, on both the ground floor and the second floor levels. Over the doorway is a single window, offset toward the west rather than centered. At the east end the gable faces a bend in Arnold Road. There is a secondary entrance at the east end gable flanked by a single window each side, both floors, and a centered attic window in the peak above. The west end gable has a similar window layout, but no doorway. The north side of the main house faces the driveway loop as does the east side of the ell addition. There are three windows in the north wall, two for the second floor and a single first floor window. The first floor window is centered on the length of the main building, and below it, tucked into the corner of the ell junction, there is a bulkhead door and stair to a basement and crawlspace under the main building.

The principal entrance has a simple wood landing and two-tread stair down from floor to finished grade; the east entry has no landing, but two treads down. There is no walkway from the steps to the driveway or to Arnold Road, from either door.

The current elevation of the main level finish floor is about one-and-a-half feet above the exterior ground level, on average, at about 3 steps up above the surrounding existing finished grade level.

The structure of the building is timber-framed, with infill stud framing for the exterior wood stud walls. The gable ends are studded between timber-frame elements. The main floor is timber-framed over a half-basement with crawlspace. The main ground-level floor framing was nearly entirely visible, but portions of the framing over the elevated grade of the crawlspace could not be easily accessed at the time of the site visit. The basement is accessible via an exterior bulkhead stair in the intersection corner of the main building-to-ell junction on the north side of the building and through a hatch in the floor at the northeast corner of the building.

The second floor structure was visible for the north half of the main building, due to the absence of finished ceilings, but the south half was not visible at the time of the site visit due to the presence of architectural finishes (plaster) on ceilings. Wall framing could not be viewed due to the presence of architectural finishes throughout the level. It is probable that the second floor framing is similar to that of the original main level floor.

The main roof is constructed of random-width pine board sheathing over timber purlins and a ridge beam. The purlins and ridge run and span parallel to the exterior sidewall wall top plates, between heavy timber trusses. The simple, gable-type roof is sloped at a pitch of approximately 9:12 at the main roof. Timber ceiling joists span between the timber trusses and the east and west end walls, to support the second floor ceiling and form an attic. Four major timber collar-tied gable trusses are approximately equally spaced along the length of the building, forming five bays of ceiling joist spans. The trusses span from timber spandrel beams supported by timber-frame columns in the exterior side walls, north wall to south wall. The attic joists and roof ridge beam between trusses of center bay are interrupted by the brick chimney mass, as it passes from the floors below through the attic.

The original finish for the ceilings was of plaster over wood lath; in the absence of a finish ceiling, as in the northern half of first floor, the exposed underside of the floor sawn planking above was painted or left plain. The walls of the building were originally plaster on lath, or wood paneled as wainscot or full height panels, depending on the room. Exterior walls are studded and furred/plastered, but most of the interior partitions are walls formed using a single thickness of wood plank, often coated on one or both sides with plaster.

In the attic, loose insulation is present in the attic floor, between the joists, with the about half of the attic area floored by wood planking, and the balance of the attic floor joisting exposed. The presence of the insulation obscures the attic joist spaces and the second floor ceiling construction from view.

For the building walls, construction of the exterior wall framing is of rough-sawn studs between timber framing members. In the attic gable end, the wall studs are 4”x 3” rough-sawn lumber spaced at about 24-inches on center.

The studding spans vertically between the major timber frame members, from sill to spandrel. It was not determined at the time of the site visit whether insulation was present in the exterior walls. There are some indications that batt insulation may have been introduced into stud cavities when recent rehabilitation work was done.

B. Foundations

The original foundations of the 1765 building are masonry walls around the perimeter of the building with a massive center fireplace/chimney block. The exterior perimeter foundation walls are of rubble-stone masonry, typically. The portion of the walls exposed to view along the south and east exterior have 1½-foot tall panels of cut granite stone running along the top as a more formal aesthetic to the building support. The northeastern portion of the building footprint is excavated to an ell-shaped basement wrapping around the north and east sides of the chimney foundation block. The balance of the area is crawlspace, in some places, less than a foot deep, formed by the remaining natural grade. A concrete slab -on-grade was cast on the floor of the basement area, but frost heave has broken up most of the north portion of the slab and cracked the remainder.

The rubble-stone walls likely vary in thickness from bottom to top. The average wall thickness is estimated to be about 16- to 18 inches. Originally, the stone was probably dry-laid, but, at some time cement mortar has been introduced into the visible stone joints at both the inside and outside of the walls.

The interior framing of the main floor is supported by the masonry of the chimney mass. The chimney and fireplaces above are carried by this mass, which is formed by two brick arched vaults built on a rubble-stone base. The rubblestone masonry of both the chimney mass and the exterior walls were laid from the bearing soils at the basement floor to the level of the original exterior soils grade. From the old natural grade level to the underside of the major timber beams, about the top 2 feet of foundation wall, the interior chimney base is constructed of brick masonry.

Extending south from the southeast corner of the chimney block to intersect with the south exterior wall is a retaining wall that maintains the high grade level of the west crawlspace. This was originally constructed of rubblestone masonry, but it has been augmented by the addition of a board-formed concrete wall cast against the east face of the wall and chimney block. A similar retaining wall was probably located to run from the northwest corner of the chimney block northward to intersect with the original north foundation wall, but after the ell addition resulted in removal of the old foundations at the junction, the retaining wall likely fell into disrepair and collapse and so was removed.

Over the life of building there have been many modifications to the original foundations. Along the north wall, the ell addition resulted in removal of about 17 feet of the foundations. To provide for support of the timber-framing in that area, at least one dry-laid pier/footing of fieldstone was placed as foundation support under the former sill beam, located at about its mid-length. Later, failure of the remaining original rubble-stone north wall at the ell intersection and along the balance of the 1765 building north wall resulted in re-construction of the bulkhead stair foundations and the north basement wall using a mix of concrete unit-masonry and panel-formed cast-in-place concrete.

At the chimney base block, there are two arched vaults which run north-south through the block. The south end of these two vault openings were walled to retain the soil fill of the crawlspace beyond. The infill walls do not reach to close the brick arches of the vaults. The west vault is open to view, and a chimney was added at the basement level in this vault to connect a basement furnace to the main chimney above. Use of this chimney extension has been discontinued.

The east vault, on the other hand, has been fully closed by added concrete and masonry on the north end of the vault opening. It appears that this was done in response to failing masonry of the east vault arch.

There appears to be a history of degradation of the masonry of the base block, largely due to water infiltration both from ground water into the basement and crawlspaces and from the brick chimney and fireplace flues above. The stone masonry of the base block has been repeatedly and coarsely re-pointed with cement mortar. In the west vault, the brick of the arched ceiling is heavily re-pointed and there are some displacements of the brick units visible in both of the vaults.

The foundations appear to bear on native base soils. There were no obvious indications of the presence of ledge-bearing noted. The bearing level of the crawlspace areas and the ell was not determined at the time of the sight visit. The foundations for the deeper basement areas probably bear just below the basement floor level, about six feet below the ground-level finished floor elevation. This sets the bottom of the deepest footings at about 4½ feet below the typical exterior finished grade, for frost depth. Current recommendations for frost depth in Maine start at 5 feet.

The added interior footing for the old sill at the ell junction is set on the natural grade, and so is not frost-protected, except to the extent that the basement retains warmth when the building is heated. Since the building has not been

heated, the footing is and has been susceptible to movements due to the presence of frost and water. Erosion of the footing subgrade over time has rendered this support unstable.

The granite blocks used for the upper foundations of the south and east walls are cut, single slabs set on edge as a both a finish veneer and a supporting element of the timber framing to the rubblestone walls. There are some significant displacements of the granite blocks noted relative to the sills, in excess of several inches in some locations. In an attempt to improve the situation, a single wythe of brick was added along the top of the east wall, possibly with the intent to provide additional support under the timber sill there. This brick obscures the upper portion of the foundation wall from view, and it allows a conduit for intruding moisture through the masonry. There is a bow in the brick, which may be due to the displacements of the granite curb blocks of the outer wythe of the wall.

The displacements are due to frost and frozen soils in the exterior ground pressing on the dry-laid foundation masonry, working the joints along the basement walls, particularly where the granite block top curb meets with the stone masonry. This, combined with a lack of fixity between the granite and the timber framing, has allowed some significant movement of the wood-framed wall sills, some bowing of the stone masonry foundation walls, and separations of the granite block joints, some of which have been mortared-over or filled with caulking. The movements in the foundations over time has opened joints between

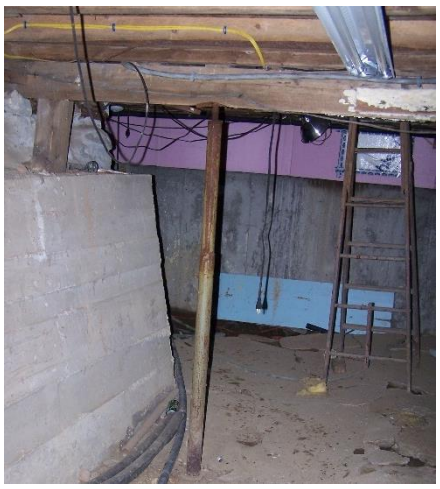
the stones of the masonry, to allow further infiltration of water and subsequent damage to the structure as a whole. The addition of cement mortar into the joints of the basement has had little benefit against this on-going problem. Issues of freeze/thaw resulting from a lack of heat in the building during winter months are extended into the general basement area, increasing the potential for heave damage to the foundations.

The masonry walls of the exterior east, south and west walls generally appear to be in poor to fair condition, due to rotations of the granite curb blocks on the east and south walls, and spalls and mortar loss along the west wall. Viewed from the interior the stone masonry has open joints and cracked mortar. The walls of the crawlspace area could not be viewed due to the high grade of the fill soils. Visible joints of the stone have been mortared, but it is not known when this mortar was added. The added brick masonry infills at the east wall prevent evaluation of the original masonry at the top of the wall; The brick appears to be bowed, and it may need reconstruction due to the effects of water infiltration.

The east and south stone walls in the basement area appear to be bowed inward, from top to bottom. This displacement has developed over the life of the building, due to push from frost or water in the retained soil outside it. This appears to be a persistent problem which might be best addressed from the outside by improving site drainage at the building perimeter. Further investigation of this condition is recommended, and this will likely require excavation along the building.

The brick masonry vault arches of the chimney block show signs of extensive water infiltrations, look to be weathered, and have been subject to repair in the past, with mixed result. The stone masonry supporting the brick vaulting has been mortared, repeatedly, and the joints of the west arch are heavily re-pointed.

The original stone masonry along the east side of the chimney base and the southeast crawlspace fill retaining wall was reinforced by the placement of a cast-in-place concrete wall to about four feet above the level of the basement floor. The concrete was cast directly against the old stone masonry walls, with a significant degree of batter on the outer face. This suggests that there may have been some significant displacements or deterioration of the retaining wall, and possibly the chimney base, which were intended to be addressed by the addition of the new concrete wall.



The north wall shows concrete on both interior and exterior faces. This section of the foundations, from the ell to the junction corner of the east wall, is probably solid concrete, replacing the original stone wall. Exposed areas of the north foundation wall appear to be in fair- to good condition, generally. Much of the upper portion of the concrete wall could not be seen from the interior side, due to the presence of insulation board. While the base of the wall was largely viewable, it could not be determined at the time of the site visit whether there is a strip footing supporting the concrete wall.

Due to the poor condition of the upper portion of the masonry walls, it is recommended that, at a minimum, the top 3 feet or more of the masonry should be removed and reconstructed to provide a more stable base for the support of the building superstructure above. The existing walls do not appear to extend to below the minimum recommended bearing depth of 5 feet below finished exterior grade, so frost and water intrusion through the masonry and basement floor will continue to be a problem, where the existing foundations remain. The concrete north wall appears to be serviceable, but also may not reach bearing levels that are below frost-depth, and the exterior concrete curb that is exposed to exterior view is not authentic to the building's historic fabric.

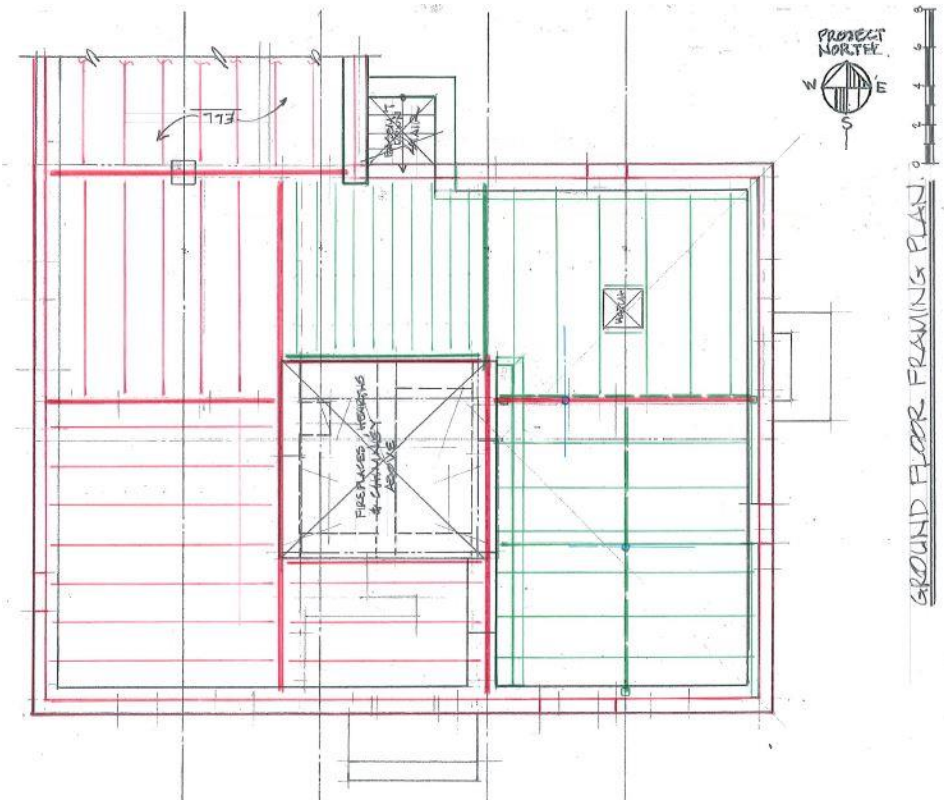
- *3.2.B.1 Removal and reconstruction of the top 3 feet of the remaining stone masonry walls is recommended, at a minimum. This includes historic restoration of the granite exterior curbing to support the timber framing for the east and south walls.*

Alternatively, given the historic value of the building, the expected long-term future use of the facility and the need to conserve the exhibits within the building, in may be worthwhile to remove the existing perimeter masonry foundations entirely, and replace the existing foundation with new walls to extend to below the minimum recommended bearing depth of 5 feet below finished exterior grade, so frost and water intrusion through the masonry and basement floor will be reduced or eliminated as a problem. Additional headroom depth and a re-conditioned basement area could be accommodated in the reconstruction.

- *3.2.B.2 Removal and reconstruction of the foundation walls to provide frost-protection to the foundations is recommended to restore the integrity of the building foundations and stabilize the building structure and envelope.*
- *3.2.B.3 Investigation of the subsurface conditions along the exterior foundation walls is recommended to ascertain condition of the foundations and site drainage. If results indicate, a scheme for improvements to site drainage and waterproofing around the building perimeter to maintain the integrity of the foundations should be developed and implemented.*

C. First Floor System

The floor structure was substantially visible from the Basement at the time of the site investigation. Access to the framing in areas of the basement crawlspace was limited by clearance restrictions. The framing scheme is roughly divided into two halves by original timber beams running east-west along the mid-line of the house and by the chimney/fireplace foundation block; the two halves are divided into three bays by transverse lines of timber beams that act as sills where they run over the chimney foundations.



Joists in the crawlspace were typically of whole logs, some with bark still on, with tops flattened to receive the floor planking. The log joist were about 8-inches in diameter, set at about 2 feet on centers.

In the basement area, most of the floor framing is not original, and has been replaced by sawn-lumber members. Along the north of the fireplace/chimney block the joists are 2”x 6” sawn-lumber spaced at about 12” o.c. and span north-south; in the northeast bay, the floor joists are approximately 4”x 6” at 27” on center, typically, some with sistered 2”x 6”s, spanning north-south from timber sills on the exterior masonry foundation walls to the interior timber beam line.

South of the mid-line beams, the floor joisting changes span direction to run east-west. The southeast bay of joists is rough-sawn 4”x 6” joists spanning from the east wall timber sill to the transverse timber beam which runs above the southeast crawlspace retaining wall and onto the chimney foundation block. The joists are not original construction. At about the mid-span of these joists, a newer 4”x 4” beam has been added to provide them with extra support. The new 4”x 4” is supported by a light-gage metal screw-jack post at its mid span, and by a piece of 4”x 4” inserted as a post from its

south end to the top of the original stone masonry wall. Screw-jack posts are not suitable supports for long-term use, especially in damp areas, such as basements, due to their light construction, propensity for corrosion and wasting, and their relatively low load capacity. The jack posts in this case have deformed bearing plates which indicate overload and have resulted in compression of the wood fibers of the beams which they are supporting. Oxidation present on the metal surfaces may progress, to unreversible damage and a loss of functionality for the posts.

The original floor is sheathed with random-width pine or fir planking sub-flooring, with a pine-planked finished floor.

At the foundations, the original timber framing for the floor was carried by 8"x 8" timber sills, into which the intersecting beams and joists were framed, flush to the top of the sill timber. Beams were joined to sills and timber girders using mortise and tenon joints, while the joists were framed using pocketed half-tenon "butt cog" joints.

The timber framing sills along each side of the chimney base were set upon a continuous base sill which acted as a buffer between the framing sill and the surface of the base masonry. The eastern base sill shows extensive rot and this rot is extending into the sill timber above it. The condition of the west sill was not noted due to difficulty of access at the time of the site visit

Due to rot and other issues, many of the original sills appear to have been replaced by newer lumber, and the original timber beams often have been supplemented by the addition of new members and supports.

Along the north, concrete foundation, the original sills were probably replaced when the concrete foundation wall was constructed, and steel strap hangers can be seen carrying the replacement floor joists.

Along the east wall, the replacement joists and reinforcement beams appear to be bearing on pockets constructed in the brick masonry infill that obscures the upper portion of the stone foundations and the timber sill from view. Based on the amount of displacement of the framing wall that can observed from the exterior of the building, exacerbated by dislocation of the granite curbs supporting the timber sills, it is likely that the sills along this wall have been substantially damaged by rot.

Along the south wall, the remaining foundation walls and timber sills appear to be the most intact, original construction of the basement area. Continuing on along the crawlspace area and turning along the west wall, it appears that the existing construction is substantially as original, also. Based on the amount of displacement of the framing wall and the dislocation of the granite curbing that can observed from the exterior of the building, it is likely that the timber sills along this wall have been substantially damaged by rot, but this was not verified at the time of the site visits. There are sagged areas of the first floor that were noted, particularly along the front, main entry hall threshold, that suggests that there is a loss of structural support in that area due to degradation of the sills and/or the foundation support.

There were some sags and humps noted in the plane of the floor, which suggests that there may be some differential settlements of the interior foundations or rot damage and shrinkage of the timber framing members, resulting over the lifetime of the building. Otherwise, the condition of the floor framing seems to be fair, generally. From the basement it can be seen that rot and fungal growth is occurring on both new and original framing members.

- *3.2.C.1 The mitigation of rot and fungi growth on the timbers of the structure is recommended.*
- *3.2.C.2 No modifications of the first floor framing are anticipated at this time, so long as the current occupancy use remains the same. Replacement of screw-jack posts and ad-hoc timber posting with proper columns, foundations and positive framing connections is recommended.*
- *3.2.C.3 Because of a lack of access to the timber sills at the masonry foundations, and poor condition noted at some spot-locations, further investigation of the perimeter and interior timber sills is recommended to verify the condition of the sills with regard to deterioration due to rot, etc., and that a scheme for remediation of any damaged or unsound conditions found be developed and implemented as needed.*

The original building was not built to conform to any defined building code. Based on the members used for the construction of the first floor, allowable live for the existing first floor system appear to be significantly less than those required by current IBC/ASCE7 model codes, depending on the occupancy-use of the structure. The available, usable live load is probably 35 psf or less; Current code requirements could be based on a Residential floor live load of 40 psf. For an occupancy that would be considered as Assembly, such as publicly accessible spaces without fixed seating, the code-compliant live load would be 100 psf.

Because this is an existing, “Historic” structure, the applicable building code for the evaluation of future work for this building will be the ICC “International Existing Building Code” (IEBC), a corollary to the IBC code.

As long as there are no changes to the current occupancy of the building and no modifications or additions to the existing structure that would increase the level of stress applied to any structural component by a magnitude greater than 5%, it is permissible to make repairs or replacements-in-kind to the existing structure without performing a full structural review and, if then necessary, upgrade or reinforcement of the existing structure.

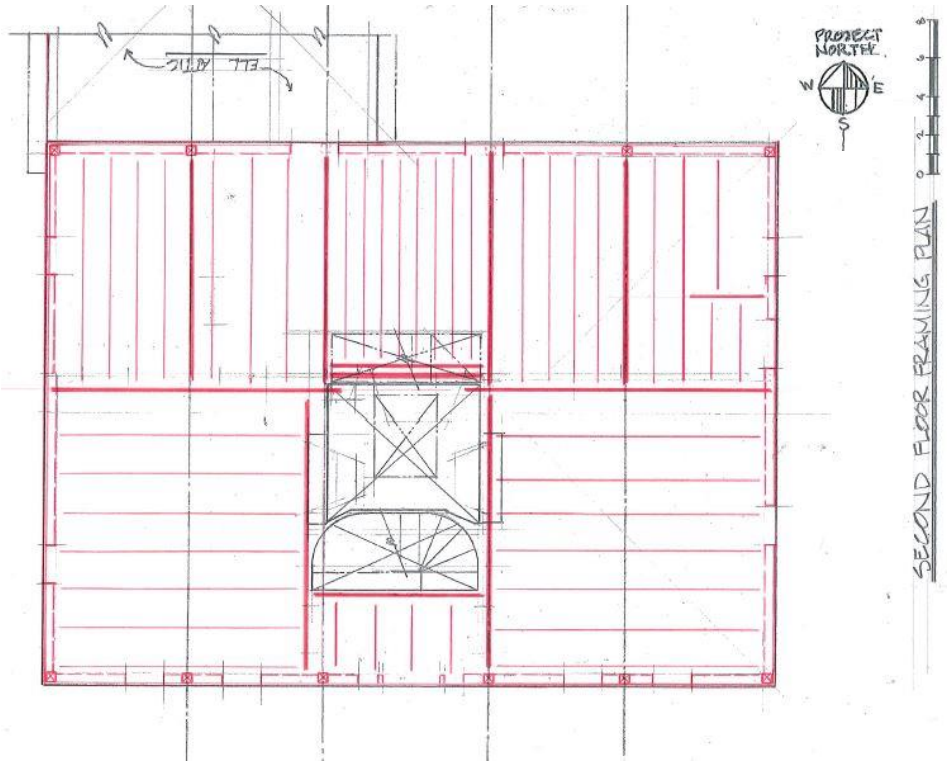
- *3.2.C.4 Since the floor structure as a whole has a history of successfully resisting the imposed live loads, and because these loads do not appear to have caused damage to*

the structure such that significant repair would be necessary, it is recommended that it is unnecessary to upgrade the existing, original structure to meet current Code requirements, as long as the occupancy and use of the building remains unchanged. Replacement- or Repairs-in-kind to rotted or weather-displaced or damaged elements of the structure are recommended.

- *3.2.C.5 A change of use or occupancy, or extensive alterations, additions or modifications to the existing building will likely require a full structural review of the existing building and result in the need to upgrade the building structure to meet the requirements of the current building code, MUBEC 2018 / IBC 2015, in contrast with the allowances and exceptions permitted by the IEBC.*

D. Second Floor System

The second floor is accessed by the main stair at the south, front side of the building. The floor structure of the north half of the building was viewable from below in the first floor "Keeping Room" and "Borning Room". The south half of the second floor structure was not directly visible at the time of the site investigation due to the presence of plastered finishes on the ceiling below and the floor planking. There is no sub-floor planking on the second floor framing, only a single layer of plank which serves as the finished floor. This allows some



assumptions of framing span directions to be derived based on the direction of planking joints. Otherwise, the actual sizes and configuration of the south side timber framing members could not be ascertained at the time of the site visits.

Consistent with timber framing systems, the upper levels are primarily supported by timber beams framed to perimeter timber columns using mortise and tenon joints. The floor joists of the north bays are 3"x 7" rough-sawn lumber at 18" o.c., typically, spanning north-south from timber spandrel beams on the exterior framed

walls to an interior timber beam line running east-west along the mid-line of the building. At either side of the fireplace-chimney core, there are 7"x 8" timber beams to support a timber header across the opening and around the masonry. Based on the direction of the second floor planking, it is likely that the south framing of the second floor bays is similar in construction to that of the first floor, in that the joist span direction is turned to east-west, rather than north-south. The joists span from the exterior spandrel beams at the gable ends to beam lines running north-south on each side of the chimney-fireplace core. The joist at the stair hall bridge, however, span north-south, the shorth direction. Like the north bay joists, it is probable that the south bay joists are 3"x 7" rough-sawn joists at 18" o.c. also.

Perimeter spandrel beams may typically be 8"x 8", based on the beams exposed in several of the rooms. The original floor is sheathed with a random-width pine or fir planking finished floor, with no sub-floor. The framing of the second floor is substantially as originally constructed. In the northeast corner of the building, north bay, there is an in-filled area of framing which suggests the former location of an opening to accommodate a stair from the first floor. Also on the north exterior wall, near the junction with the ell, two timber columns from the roof structure above appear to have been re-configured from the original, regular spacing, possibly to accommodate changes in the fenestration of the wall below.

Mid-line timber girders run from the exterior gable ends to the side of the fireplace-chimney block to pick up the north bay joists and the north and south timber header beams. Columns for the support of the interior ends of the mid-line girder timbers were not readily visible, but these appear to bear on the basement-level sills and the chimney base below. The inboard ends of these girders may extend to bear on the masonry chimney mass, but this could not be determined at the time of the site visits.

There were some slopes and humps noted in the planes of the floor, which suggests that there may be some differential deflection of the interior framing or shrinkage of the timber framing members, resulting over the lifetime of the building. There was a fair amount of "bounciness" and vibration transmission in the floor noted, based on a simple "heel drop" test. This is a reflection and result of the relatively long spans found in the second floor framing beams, and the absence of sub-floor sheathing. Otherwise, the condition of the floor framing seems to be good. There is evidence of cracking in the plaster finishes below, which may be the result of deflections in the framing. It may also be that the wood lathing that supports the plaster has separated from the attic floor joisting.

- *3.2.D.1 There were no obvious indications of significant structural distress to the typical second floor framing noted at the time of the site visit. No modifications of the second floor framing are anticipated at this time, so long as the current occupancy use remains the same.*
- *3.2.D.2 It is recommended that explorations of the plaster finish ceilings be made to verify that the lath that supports ceiling finishes is firmly fastened to the second floor framing. A scheme for refastening of the lath to the framing and repair-in-kind of the finished ceilings should be devised and implemented as necessary.*

The original building was not built to conform to any defined building code. Based on the assumption that the configuration of members used for the construction of the second floor roughly mirrors the first floor, allowable live loads for the existing second floor system appear to be significantly less than those required by current IBC/ASCE7 model codes, depending on the occupancy-use of the structure. The long spans of the second floor beams significantly reduce the available, usable live load. The available live load may be less than 30psf; Current code requirements would be based on a Residential upper floor load of 30 psf. For any occupancy

that would be considered as "Assembly", such as publicly accessible spaces without fixed seating, the code-compliant live load would be 100 psf.

Because this is an existing structure, the applicable building code for the evaluation of future work for this building will be the ICC "International Existing Building Code" (IEBC).

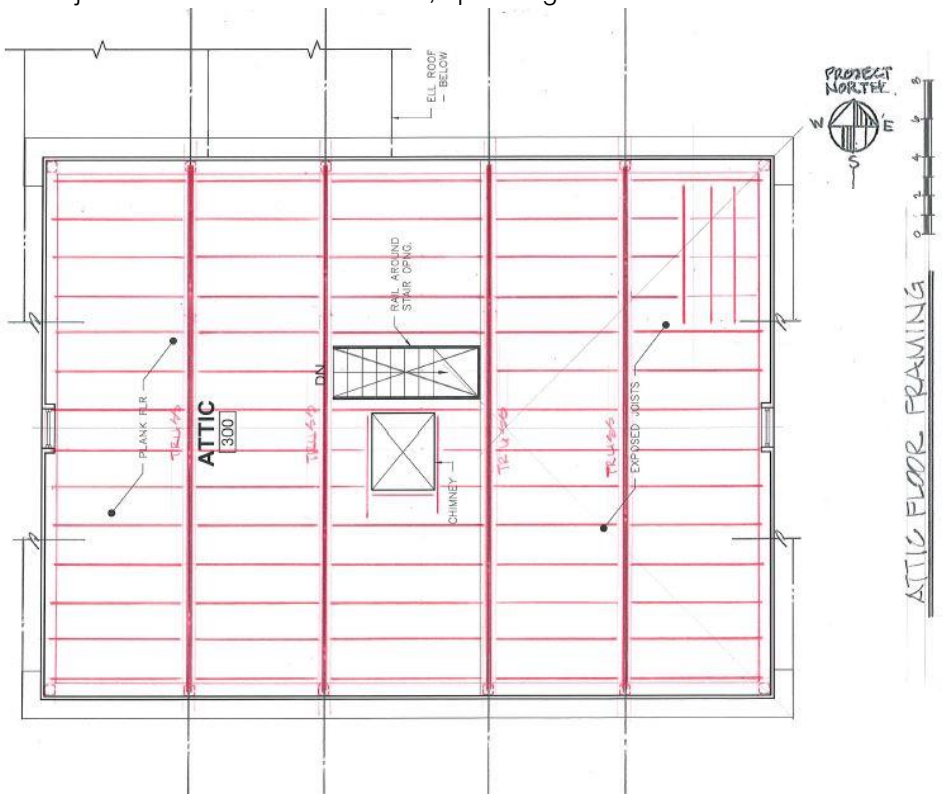
As long as there are no changes to the current occupancy of the building and no modifications or additions to the existing structure that would increase the level of stress applied to any structural component by a magnitude greater than 5%, it is permissible to make repairs or replacements-in-kind to the existing structure without performing a full structural review for Code compliance which, if necessary, would likely result in the need to upgrade or reinforce the existing structure.

- *3.2.D.3 Since the floor structure as a whole has a history of successfully resisting the imposed live loads, and because these loads do not appear to have caused damage to the structure such that significant repair would be necessary, it is recommended that it is unnecessary to upgrade the existing, original structure to meet current Code requirements, as long as the occupancy and use of the building remains unchanged.*
- *3.2.D.4 A change of use or occupancy, or extensive alterations, additions or modifications to the existing building will require a full structural review of the existing building and result in the need to upgrade the building structure to meet the requirements of the current building code, MUBEC 2018 / IBC 2015, in contrast with the allowances and exceptions permitted by the IEBC.*

E. Roof Framing

The framing for the roof was accessible by a narrow, enclosed stair running along the north side of the chimney core up to an attic space. The roof and attic floor structure were substantially visible from the attic at the time of the site investigation. The roof is a simple gable-type roof, with the center ridge line running east-west, the full length of the house. The north and south long-side planes of the roof are pitched at a slope of about 9:12. The roof structure is classic timber-framing, with four major collar-tied rafter trusses spanning the full width of the building, north to south, as the principal structure. The trusses break the roof space into five, roughly equal bays. The center bay is wider than the others, to allow the truss bottom chord members to pass to either side of the chimney-fireplace core masonry. Above the second floor fireplaces, the masonry core reduces in size until, above the ceiling level, the masonry core is just the chimney.

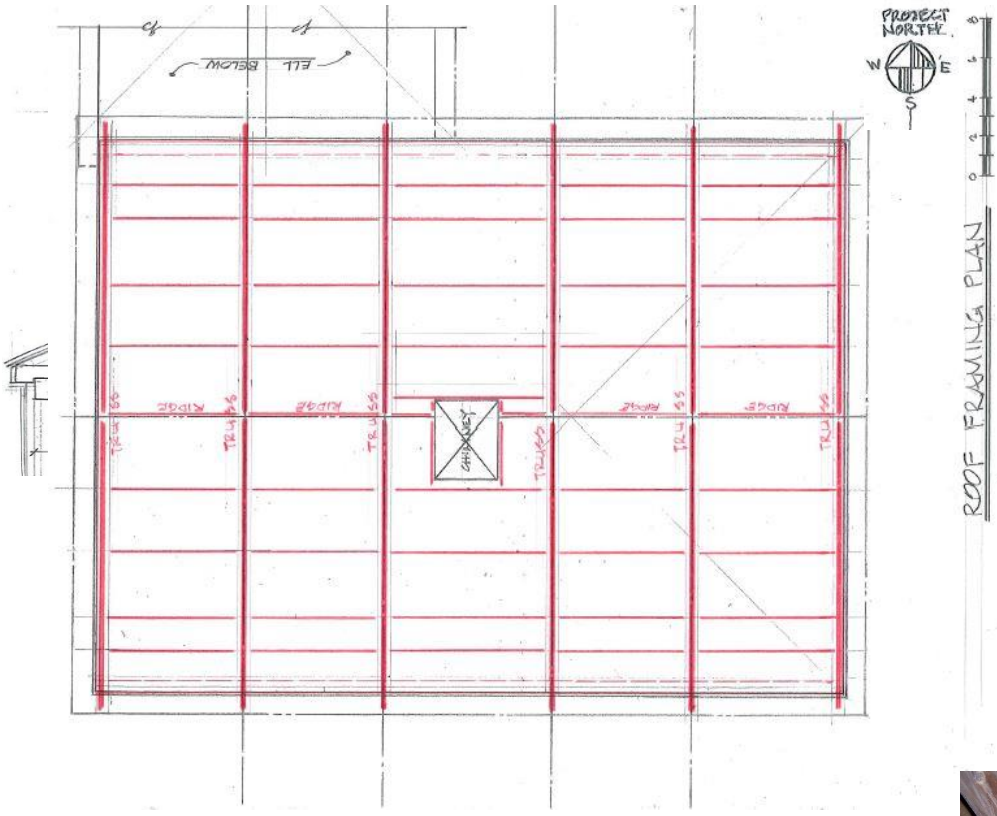
The attic floor framing, which composes the ceiling of the second floor spaces below, consists primarily of 2”x 6” joists at about 18” on center, spanning about 7 feet between bottom



chord members of the main trusses. The attic joists frame flush with the 7”x 6” bottom chord members of the main trusses, and frame into the wall top plates at the east and west ends. At the time of the site visit, about half of the area of the attic floor was covered by board planking. There is evidence that the extent of the flooring has been greater in the past.

The principal rafters and the bottom chord (tie-beam) of the trusses bear on the 8”x8” timber columns of the north and south walls, which carry the load to the foundations; timber-framing joints make the connection to form the typical framing bents. Along the walls, a heavy timber wall top spandrel beam, 8”x 8”, runs continuously between the columns, and turns the corners to form the gable-end spandrels, which receive the ends of the attic joists. The studs of the walls are connected to the spandrels using mortise and tenon joints.

The roof of the building is framed by 4 ½"x 3½" rough-sawn joist-purlins, spaced at approximately 4 feet on center. These joist-purlins flush-frame into the 6"x 8" truss top-chord principal rafters, parallel with the timber top-spandrels that run along the framing of the exterior walls. The principal rafters of the trusses meet at the



peak in a half-lap joint, and a ridge-purlin is offset slightly from the lap of the ridge peak. The roof is sheathed with 1" thick wood planking. There is evidence that, at some time during the life of the building, sheet metal patches were added over gaps in the shrinking plank sheathing. Also apparently, there has been the addition of a layer of plywood sheathing over the planking, at least to certain areas, prior to installation of the current asphalt shingle roofing.

The main trusses are simple gable trusses, with a principal rafter plus a mid-level collar-tie, with no diagonal web members. The principal rafters of the trusses are 6"x 8" timbers. The 7"x 6" bottom chords appear to span the full width of the building without a splice. The collar-tie members are located at about 2/3 the height of the truss, measure about 4"x5", and unlike the rest of the truss, are of oak, rather than the typical softwood.

Evidence of past significant water intrusion and damage by rot was not noted in the roof sheathing or purlins at the time of the site visit. The original wood roof planking was visible in the attic space at the time of the site visit. Generally, the roof does not show obvious signs of unusual sheathing deterioration or failure, beside the widening of joints between the boards due to shrinkage and age. From the attic, wood planking for the roof appears to be in generally fair condition. The effect of the addition of the new plywood sheathing and re-roofing shingles to the top of the roof planking could not be determined at the time of the site investigations. Over the general balance of the roof, it appears that the planking has not been subject to significant water infiltration in recent years.

The attic floor rafters seem to be in fair condition, but the presence of insulation in the joist cavities hides most of the floor the framing from view. Throughout the attic framing there is evidence of damage by mice or other rodents, including pathways which have been chewed in the wood members. This presents a loss of strength for the joists affected, but due to the limited use of the attic space, this does not appear to have resulted in problems for the ceilings below, yet. There is evidence of cracking in the plaster finishes below, which may be the result of deflections in the framing. It may be that the wood lathing that supports the plaster has separated from the attic floor joisting.

Despite there being some evidence of powder-post beetle infestations in the furniture and other elements in the living areas, there were no obvious signs of powder-post damage noted at the time of the site visits; typically, powder-post beetles prefer hardwood timbers to softwood, so this may explain the lack of signs.

- *3.2.E.1 Generally, the condition of the roof and timber joist-purlins appears to be fair- to good.*

- *3.2.E.2 The condition of the four timber roof trusses appears to be generally good, but joints between the column posts and the truss principal rafter and bottom chord members were obscured by the presence of other framing and finishes.*

- *3.2.E.3 The condition and serviceability of the attic insulation is poor, and the habitation of pests in the insulation is undesirable. It is recommended that all the existing attic insulation be removed, the space cleared of debris and other living things, and, if desired, a new system of insulation selected and installed*

- *3.2.E.4 Many of the attic floor joists have been damaged by pests. It is recommended that plan for removal and replacement of damaged joists with new, or some other remediation, be developed and implemented.*

The original building was not built to conform to any defined building code. Based on a simplified, general analysis of the existing joist-purlins, the snow loads that the original roof system can safely resist appear to be significantly less than those required by current IBC/ASCE7 model codes. The original live load capacity was probably 20 psf or less. Current code requirements would be based on a local basic ground snow load of 60 psf for Pittston, Maine. This results in a simple “balanced snow load” for the sloped roof of approximately 42 psf. For an unheated building, this becomes over 50psf. “Unbalanced snow load” for some elements of the roof could exceed 80 psf. An analysis of the main roof trusses was not performed for this review, but the maximum allowable load capacity resulting for the trusses would likely be less than that of the roof joists-purlins.

Because this is an existing structure, the applicable building code for the evaluation of future work for this building will be the ICC "International Existing Building Code" (IEBC).

As long as there are no modifications or additions to the existing structure that would increase the level of stress applied to any structural component by a magnitude greater than 5%, it is permissible to make repairs or replacements-in-kind to the existing structure without performing a full structural review and, if necessary, upgrade or reinforcement of the existing structure.

- *3.2.E.5 Since the roof structure as a whole has a history of successfully resisting the imposed snow loads, and because these loads do not appear to have caused damage to the structure such that significant repair would be necessary, it is recommended that it is unnecessary to upgrade the existing, original structure to meet current code requirements, and so no changes to the structure need be made generally, in accordance with the allowances and exceptions permitted by the IEBC.*

It is often desired to add additional thermal insulation to the roof or attic framing of these older structures, to gain improvements in energy efficiency for the building. Doing so may change the effective snow loading to the structure as it is determined by the Building Codes. In its current configuration, when the building is heated during snow months, the roof structure is considered a "warm" roof, in which the heat lost through the roof system acts to reduce the magnitude of the effective snow loading. Where the building has been left unheated over an extended period of years, this may not necessarily be in effect.

Adding thermal insulation over the full area of the attic or roof will increase the snow retention of the roof, increasing the effective snow loads on the roof. The work may be determined to be an "Alteration" to the existing system and structure, under the provisions of the IEBC. This would result in the need to perform an analysis of the existing structure based upon the current Code requirements, rather than allowing the use of its original load bases, per IEBC. Under the current standards for structural loading, without the exemptions granted an existing building, it is highly unlikely that the existing structure would be found to be adequate. The effort required to bring the existing structure into Code-compliance would be extensive and costly.

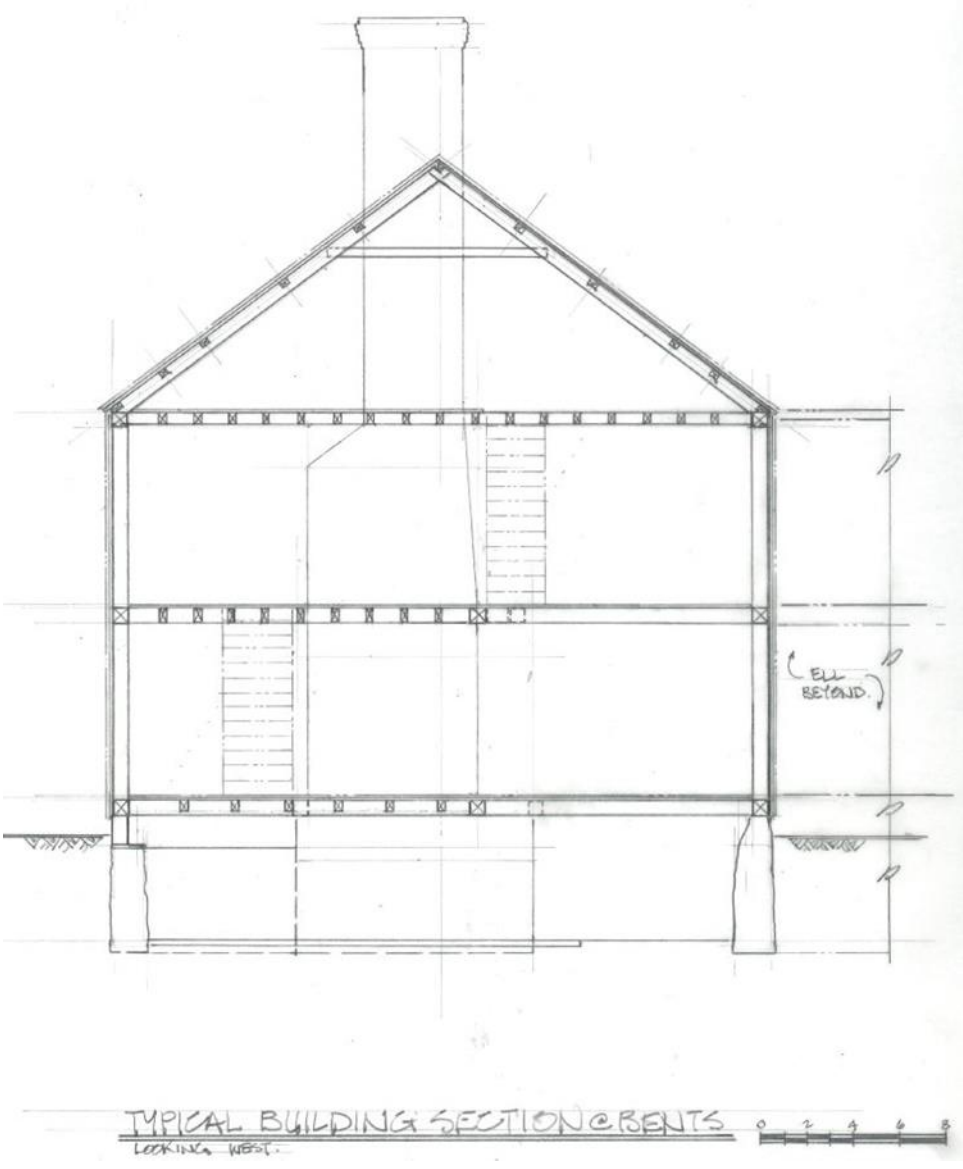
- *3.2.E.6 A change of use or occupancy, or extensive alterations, additions or modifications to the existing building, such as the addition of thermal insulation to the attic, will require a full structural review of the existing building and result in the need to upgrade the roof structure to meet the requirements of the current building code, MUBEC 2018 / IBC 2015, in contrast with the allowances and exceptions permitted by the IEBC.*

F. Building Frame

The typical construction of the structure is traditional post-and-beam timber framing, with wood infill-stud walls. The building is constructed using similar 6 bents. The bents are joined by spandrel beams at each floor level to form the box of the structure. The gable end walls are constructed similarly to the interior frame bents, but have the infill studs to form the end walls.

Bracing for the structure is probably accomplished by timber knee-braces combined with shear-wall action of the wood-sheathed stud walls. Typically, timber knee-braces or diagonal members would be incorporated, from beams to columns, into the timber frame system. Due to the presence of architectural finishes, evidence of such bracing was not noted at the time of the investigations. Destructive investigation for elements of the structure was not part of the scope of this report.

In addition to the resistance to lateral loads presented by the timber frame and stud walls, the masonry mass of the central chimney and fireplaces acts to anchor the building.



The displacements of the exterior wall framing due to settlement and degradation of the base sills were significant, particularly on the east and south walls. This has been accompanied by the dislocation of the granite block curbing and failure of other parts of the foundation masonry. This has resulted in deterioration of the exterior clapboard siding the opening of joints in the exterior trim and siding, and water intrusion into the interstitial spaces of the walls and foundations.

Timber sills forming the sole of the walls were not able to be viewed extensively, but based on the degree of movement and dislocation noted, it is likely that a program of widespread replacement or repair is needed, generally. Rot was noted in the corners of exterior of the building suggesting that the condition of the framing bents at the foundations and first floor is poor. Weathered areas along the exterior wall base should be reviewed specifically for indications and extent of deterioration.

- *3.2.F.1 Since the building frame structure as a whole has a history of successfully resisting the imposed live loads, and because these loads do not appear to have caused damage to the structure such that significant repair would be necessary, it is recommended that it is unnecessary to upgrade the existing, original structure to meet current Code requirements, as long as the occupancy and use of the building remains unchanged.*
- *3.2.F.2 A change of use or occupancy, or extensive alterations, additions or modifications to the existing building will require a full structural review of the existing building and result in the need to upgrade the building structure to meet the requirements of the current building code, MUBEC 2018 / IBC 2015, in contrast with the allowances and exceptions permitted by the IEBC.*
- *3.2.F.3 Because the weather envelope of the building has been compromised for a long period of time, a review of weathered areas along the exterior walls, especially at the base and foundations, should be made to determine the presence and extent of any damage to the existing timber sills due to rot and weathering. Where found, a plan for remediation and repair of the damaged sills and timber frame columns should be developed and implemented.(See also Section #3.2.C.)*
- *3.2.F.4 It is recommended that a plan for remediation of the building foundations that support the sills and timber frame columns should be developed and implemented.(See also Section #3.2.B.)*

G. Lateral Force Resistance System

The lateral force resistance system (LFRS) for this building is the timber-frame exterior walls, possibly with some timber diagonal bracing incorporated within, combined with walls sheathed with planking and finished with plaster to act as shear walls. There is also some contribution from partial diaphragm action by the roof and floor sheathing planes. There is no other dedicated lateral force resisting system provided in the structure.

- *3.2.G.1 No modifications to the existing LFRS are recommended. In-kind repair and replacement of any damaged or missing roof or wall sheathing, as encountered, is recommended.*

- *3.2.G.2 Since the building frame structure as a whole has a history of successfully resisting the imposed live loads, and because these loads do not appear to have caused damage to the structure such that significant repair would be necessary, it is recommended that it is unnecessary to upgrade the existing, original structure to meet current code requirements, as long as the occupancy and use of the building remains unchanged.*

- *3.2.G.3 A change of use or occupancy, or extensive alterations, additions or modifications to the existing building will require a full structural review of the existing building and may result in the need to upgrade the building structure to meet the requirements of the current building code, MUBEC 2018 / IBC 2015, in contrast with the allowances and exceptions permitted by the IEBC. (See also Section #3.2.F.)*

H. Summary

Overall, for a building of more than 250 years of age, the condition of the timber framed superstructure appears to be generally fair- to good; the heavy timber construction seems to have held up. To date, the structure above the ground floor has experienced relatively little modification over the years. The most important issues are the result of excessive movement of the structure due to loss of support for the building frame and stud walls at the foundation level. This is largely due to decay of the timber foundation sills combined with frost movement of the foundations and displacement of the sill supports along the building perimeter. At the interior, the intrusion of water, and the generally high degree of dampness in the basement, has contributed to decay of the ground floor level framing and, with the lack of stable interior temperature control to prevent frost heave, damage to the stone and brick masonry of the building.

Most of the problems noted in this structural report have been the result of water intrusion through gaps in the weather envelope of the building and to failures of the original stone masonry foundations. Various piecemeal attempts at augmenting the original foundations have not been beneficial to the overall building system.

Many of the past repair or maintenance efforts have run their life and should be revisited and remediated as soon as practicable. Maintenance of the weather-protection envelope of the building is vital. The importance of a coordinated and consistent program of maintenance and repair for the extension of the useful life of this building cannot be over-emphasized. Some consideration should also be given to providing a minimum level of interior temperature stabilization and air-quality conditioning, to improve the security of the building finishes and collections.

If the use of the building is to remain essentially unchanged, and renovation work is limited to discrete damaged elements of the existing building, it is possible to retain the structure as it is, with any necessary repairs made, to function as it has for generations.

If the use of the building is to be changed, or if significant renovation alterations are planned for the building, there will be a need to extensively upgrade the structure, to meet the more stringent requirements of the modern building codes. This could improve and extend the utility of this building for the future, but it would come at the cost of losing the original historic construct of the building and at a significant monetary expense.

3.3 ENVELOPE- EXTERIOR WALLS

References to room numbers within this report can be found in the appendix as sheets A100 & A101

A. Exterior Wall Construction

The Colburn House uses a traditional timber-framing system for the building superstructure. The framing has settled greatly over the years and is as much as 5 degrees out of plumb along the north wall of the house. Intermediate areas of wall between major framing members are stud framed.

- *1. For recommendations regarding framing, see section 3.2 – Structural System*

Level reading 5.05 degrees

B. Exterior Finishes

Clapboards with skived joints are fastened with cut-nails on most of the exterior. Clapboards at the south wall, particularly at the first floor and in the areas adjacent to the entry, have failed and are falling from the building. This failure is likely due to the tilt of the south façade causing water to wash down the building. As this area of siding has been redone in recent years and has already failed, it demonstrates the presence of a recurring issue that should be addressed.

Skived joints at clapboards

- *1. We recommend that the failed siding at the south façade be repaired as soon as possible to avoid further damage to the building sheathing and structure. We also recommend that a low-profile drainable housewrap be installed generally between the siding and sheathing (extents shown on drawing 1/A200). This would aid in allowing the siding to dry while also protecting the sheathing and structure of the building from penetrating moisture.*

- *2. We recommend that the exterior be prepared and painted as paint has peeled in several locations about the building.*

Due to building settlement, siding has pulled away from the corner trim at the northeast corner of the building. Sections of framing and sheathing have become exposed to weather and is permitting the entry of both water and vermin. This issue is not a recent development as the exposed materials have been painted the same color as the rest of the house.

- *3. We recommend rehabilitating failed sections of the exterior finish as indicated on drawing A200.*

A section of cornice molding at the north roof slope was observed to be missing. The gutter largely obscures this area.

- *4. We recommend that missing section be replaced in kind.*

All trim, sash, doors, and siding are currently painted a brick red.

C. Exterior Masonry

Two sides of the house, the south and east sides, are set on a granite foundation with rubblestone underpinning below grade. The west wall is parged rubblestone masonry. New concrete has replaced the original masonry at the north wall.

Fieldstone foundation at west wall

- *1. The Colburn House foundation has settled significantly, resulting in the tilting of the structure. We recommend a new foundation be installed under the entire building, resetting the existing granite caps. (See section 3.2.B for recommendations regarding foundation)*

D. Exterior Appendages

A rear kitchen ell is attached to the west end of the north wall. This addition is not included in the scope of work covered by this report.

- *No recommendations at this time.*

3.4 ENVELOPE - ROOFING & WATERPROOFING

A. Roofing Systems

The existing roofs of the main house are textured architectural asphalt shingles, which simulate cedar shingles. Shingles on the south (front) side of the house appear to be in good condition. Shingles on the north side are in poor condition.

- *1. We recommend replacement of the shingles on the main house over a continuous coverage waterproof membrane.*

B. Sheet Metal Flashings

Lead-coated copper step flashings exist where the roof closes around the brick chimney. These are showing signs of wear and have outlived their service life.

- *1. We recommend that the LCC step flashings be replaced in-kind extending a minimum of 8" above the roof surface.*

The metal drip edge along the rakes and eaves is conspicuous due to its shiny finish.

of

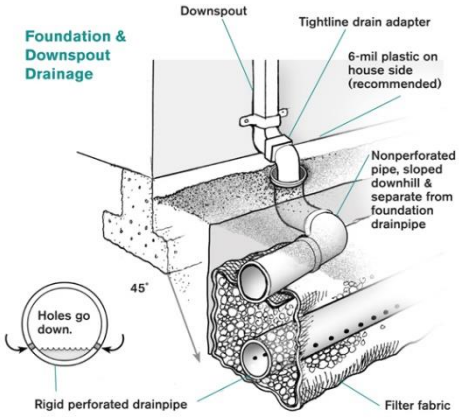
- *2. We recommend that at the time of roof replacement a prefinished aluminum drip edge matching the roof trim color be installed.*

Metal flashing was not observed at the east portico entry. The entablature should be properly roofed and flashed.

- *3. We recommend that the entablature at the east entrance should be roofed and flashed.*

C. Perimeter Foundation Drainage

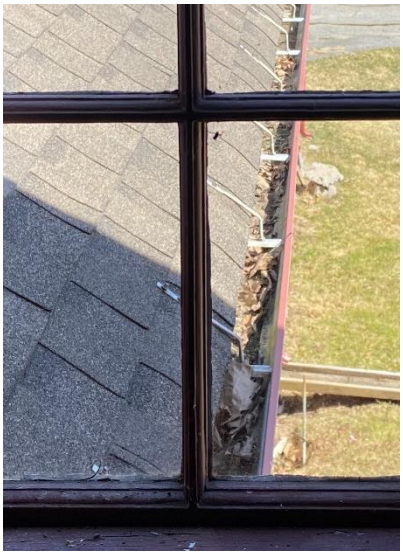
It does not appear that a PFD exists at the Colburn House. Rainwater and seasonal groundwater have infiltrated and with freezing have caused movement in the perimeter stone foundation walls.



- *1. We recommend installation of a perimeter foundation drain at the footing elevation to provide suitable drainage. This would need to outlet at an elevation lower than the existing footing elevations.*

D. Drainage System, Gutters & Downspouts

Gutters and downspouts exist on the eave sides of the house. Hangers for the gutters are fastened through the asphalt shingles creating opportunities for water infiltration to occur.

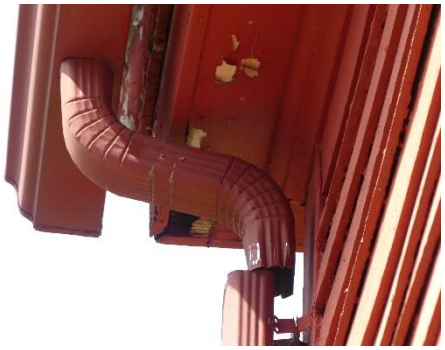


- *1. We recommend at the time the roofs are replaced that strap-type hidden hangers be installed under the roofing as recommended by the manufacturer.*
  Also, gutters and downspouts need to be maintained on an annual basis to remove organics and monitor performance.

Modern aluminum gutters with downspouts are installed at the north and south roof slopes of the house. The two downspouts at the south elevation discharge directly on the ground at the foundation. One of the downspouts on the north elevation discharges into a wooden trough sending the water away from the building. The other downspout from the north roof gutter discharges directly onto the kitchen ell roof where it is collected by another gutter system.

- *2. We recommend that ground level leaders be installed at downspouts to effectively move rainwater away from the building foundation.*

The west downspout on the south side of the building has become disconnected and is discharging water onto the façade of the building. This has resulted in significant loss of paint in this area.



- *3. We recommend disjoined downspout be reconnected.*

3.5 WINDOWS & DOORS

A. Doors

General Conditions

Doors throughout are wood stile and rail doors with metal hardware – typically iron. Entry doors have six raised panels – although the raised panels are only at the interior with flat panels toward the exterior. All interior doors have four flat panels with the exception of the door communicating between the Dining room and the Borning room which has raised panels on the Borning room side. It is possible that raised panels exist on the doors of the Parlor and Dining room which communicate with the Keeping room but were not directly observed at time of site visit.

Doors separating the Parlor and Dining rooms from the Hall were observed to be missing. Existing traces of hardware indicated that doors were previously installed at these locations.

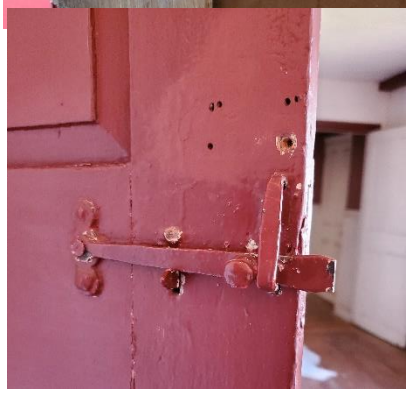
Doors were generally observed as being in good condition. The south entry door requires repainting.

- *1. We recommend that the south entry door be prepared and repainted inside and outside.*

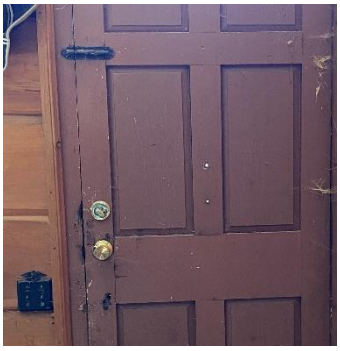
Hardware

Thumb-latch style face-latching iron hardware is prevalent throughout the building. A modern, polished brass lockset is present on the east entry door.

Locking hardware was not observed at the basement access bulkhead door.



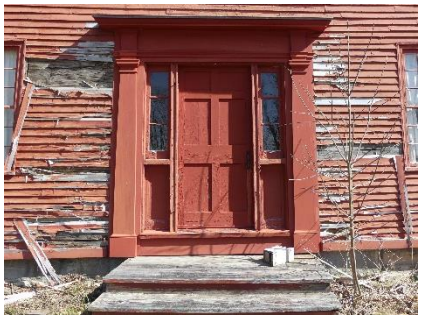
- *2. We recommend that locking hardware be installed at the basement access bulkhead for security purposes.*
- *3. We recommend that hardware be cleaned and, on painted surfaces, that prior holes be filled prior to painting*



Casing & Trim

South and east entry doors feature Doric pilasters supporting an entablature. The east entry is presumed to be from the Greek revival period and features wide, flat fluting on the pilasters. The south entry surround is of recent construction intended to replicate what may have been there originally. An Italianate hooded surround was added in the 1870s and was removed sometime later. The earliest depictions of this building were done while the Italianate details were present. The current reconstruction demonstrates a higher level of skill and proportion than is demonstrated elsewhere on the building.

- *3. We recommend replacement of the top wood piece of the entablature at the east entry and install copper flashing – see section 3.4.B.3.*
  Trim was also observed to be missing at the base of the pilasters at the east entry. Trim should be replaced to protect exposed sheathing and framing.



Door trim at the interior is typically narrow with mitered corners. Trim was observed to be in good condition.

Finishes

Except for those doors at the Keeping room and Borning room, doors throughout are painted. Doors were observed to be in good condition.

- *No recommendations at this time.*

B. Windows

General Conditions

Windows are single-glazed, wood framed sash. Windows are present in five forms: three-paned sidelights at south entry; four-paned transom light at east entry; 9-over-9 windows at the first floor, 9-over-6 windows at the second and third floors; and 6-over-6 windows at the north side of the second floor. Operable windows are assumed to be single-hung with fixed upper sash.

The windows were generally observed to be in fair to good condition.

The southeast window located in the Parlor has had a failure at the upper sash and has tilted inward.

- *1. We recommend that the upper sash of this window be repaired as needed and fixed in place.*

Basement windows have largely been covered over and insulated. A three-lite sash window is present on the ground by a window opening along the west wall. Other openings have been covered with wire mesh. The mesh at the opening on the south wall has been pulled back to allow electrical connections to pass through and currently allows animals to enter the building at this location.

- *2. We recommend that the basement level opening on the south wall be covered to prevent animals from entering the building. This opening to be replaced when new foundation is installed.*

Hardware

No sash locks or sash cord, weights, or pulleys were observed. Sliding bolts within the frame of the window sash were observed in some of the windows. These would have been used to hold the window sash in particular locations (i.e., open or closed).

- *3. Due to the general absence of locking hardware, for security purposes operable sashes should incorporate discrete wooden stops in the jambs to limit total vertical movement.*

Casing & Trim

Window trim at the exterior was observed to be in good condition generally. Sills are thick wood sills without apron molding or brackets. Molding is typically flat with applied molded trim at the edges. Trim has mitered corners. Windows on the east and south elevations have fancy molded trim, while those on the west elevation have plain boards. Windows on the second-floor north façade have flat trim without the added molding. The north window of the Keeping room and the west window of the Borning room appear to have been redone and have fancier exterior molding replicating the style used on the south and east facades and is not in keeping with the trim on the facades where these windows are located.

A historic depiction of the house dated to 1886 illustrated the presence of window hoods at the first floor. Hoods are period appropriate to the building and would have protected the first story windows, but hoods were commonly used in other periods as well. Window hoods are no longer present on the building, and it is unknown

when they were installed or when they were removed. It is known, however, that the illustrator who depicted the house in 1886 took some liberties with the representation of the house, so it cannot be determined at this time if window hoods were ever present on the building.

Interior window trim observed to be in good condition generally. Style and appearance of trim varies by room.

- *No recommendations at this time but an ongoing program of maintenance should be put in place to best preserve these historic windows.*

Finishes

Window sash and trim are typically painted. Sills require repainting generally.

- *4. We recommend that windows should be prepared and repainted as needed. Any reputtying of the glazed units and stabilization of the sash should be addressed as part of this project.*

2nd story window w/ hardware & # tack

Storm Windows

Photographs, mounting hardware, and numbering tacks provide evidence that the house once had wood frame storm window sash mounted at the exterior. Some storm sashes were observed at the ell, but none on the main house.

Window at ell showing use of # tacks

- *5. We recommend existing storm windows be restored, and missing storm windows be recreated. These are to be reinstalled on the building to help preserve historic windows and assist with overall thermal performance.*

3.6 INTERIOR FINISHES

A. Wall Finish Materials

Wall finishes vary throughout the building. Horizontal and vertical wood paneling is used in the Keeping and Borning rooms. Wood paneling is also used between chambers 201 & 202 and to close off the attic stair in chamber 203. Remainder of the house is finished in plaster. Small holes (approximately 1 foot square in size) appear in several places throughout the house.

- *1. We recommend that areas of missing plaster finish be filled and refinished to match surrounding wall finish. And cracked plaster be repaired.*
- *2. Based on prior Lead paint analysis, we recommend remediation of painted surfaces*

B. Ceiling Finish Materials

The ceilings of the Keeping room and Borning room are simply the structure left exposed. Structural framing and underside of deck is painted in the Keeping room and natural in the Borning room.

Plaster is used throughout the remainder of the house for the ceiling finish. A large section of plaster has fallen from the ceiling in the southeast corner of chamber 202.

- *1. We recommend that areas of missing plaster to be refinished to match surrounding ceiling finish.*

Painted ceiling finishes in much of the house have peeled extensively. It is purported that decease animals within the ceiling structure are causing areas of discoloration at the plaster ceiling finish.

- *2. We recommend that ceiling stains be remediated and that ceilings be prepared and painted as needed.*

C. Floor Finish Materials

Floor finish materials vary from exposed concrete and dirt in the basement to linoleum and wood floors in the remainder of the house.

The following are observations and recommendations for upgrades to floor finish by floor level:

Basement Floor Level:

Floor surface is largely dirt with sections of concrete on the east side of the house. Basement is not excavated under most of the house. A

historic report compiled by Crosby Milliman in 1992 mentions that an eight-foot-deep foundation of dry-laid fieldstone masonry was used under the Colburn House. If that is the case, then the cellar has refilled by the way of dirt washing into the cellar between the open joints of the fieldstone masonry. The presence of large rocks in the unexcavated portion of the basement would suggest that the cellar has not simply refilled via the washing in of silt and mud; although, the rocks could have been left there from now missing sections of wall. It is most likely, however, that the basement was never fully excavated.

- *1. Basement is full of debris and dirt. We recommend that basement be cleaned of loose insulation, wiring, tools, loose concrete, and other debris. Floor finish in new basement to be concrete slab-on-grade with epoxy seal coating.*

First Floor Level:

All floors at this level are wide plank floors. Floors in the hall and parlor were observed to have staining due to water entering the building along the south wall.

- *2. We recommend, that following efforts made to weatherproofing the south façade (see section 3.3 – Envelope-Exterior Walls for recommendations), water-stained floors be refinished to match historic appearance.*

Second Floor Level:

Floors are wide plank throughout. One room (chamber 206) in the northwest corner of the house was converted or use as a bathroom and has linoleum installed over the wood floor.

- *3. We recommend the linoleum floor be removed and the wood floor beneath be restored to its original appearance.*

Attic Level:

Approximately half of the attic space is floored but was likely fully floored originally as flooring was removed when the attic was insulated in the 1950s. It is believed that a stair once accessed the attic in a location that is no longer floored. The remainder of the attic is exposed floor framing.

- *It is recommended that loose insulation be removed and replaced..*

D. Trim and Built-Ins

A built-in corner cupboard, or china cupboard, is located in the southwest corner of the Dining room. This cupboard was observed to be in good condition.

The Dining room and the chamber located immediately above it contain wood fireplace mantels with mantel shelves. Both mantels are Greek Revival in style and are made from the same trim used at the windows and doors of their respective rooms.

In the Parlor, a paneled wainscot is present on three walls. This wainscot is approximately 40 inches in height and has a repeating pattern of a small panel over a large panel. The fourth Parlor wall, where the fireplace is located, is completely paneled up to the ceiling where it terminates with a piece of cornice molding. In the chamber immediately above the Parlor, the chimney wall is fully paneled in a similar manner but with a smaller fireplace opening and with the addition of a closet door integrated with the paneling.

There are a total of five extant fireplaces in the house. The fireplace located in the Keeping room is exceptionally large compared to the others in the house because it was intended for cooking as well as to heating the space. Besides the hearth itself there is a brick oven located on the right-hand side. Above this fireplace is an overmantel with shelf and a large, wood panel. Based on photographs dating from the early 2000s to as recent as 2019, this hearth and overmantel area have been extensively reworked. The entire overmantel is new work.

Wood baseboard trim is found in the Hall, Dining room, and much of the upstairs. Wood ceiling trim is only found in the two principal chambers on the second floor.

E. General

Per a prior report completed for the Maine Bureau of Parks and Lands, there is extensive lead paint throughout the house. A general program of remediation, repainting and refinishing should be developed and executed covering interior trim, doors, windows, floor finishes, wall finishes, and ceiling finishes, being careful to preserve the home's historic character. Fireplace hearths should be swept of debris.

A general program of pest control should be in place to prevent further damage to both the structure and the artifacts.

- *1. Establish a program of general maintenance and preservation.*

F. Indoor Air Quality/Mold Assessment – see appendix for report

A third-party assessment was conducted on indoor air quality and mold. Many of the issues documented in the report are the result of water instruction into the building through the failed siding at the south façade, and through the basement. Recommendations related to these building failures are covered in other sections of this report. The effects of insects and vermin are also noted. Additional recommendations from the Indoor Air Quality and Mold Assessment report are as follows:

- *1. The earthen floor areas in the basement need to be covered either by use of seam-sealed poly sheeting or have a cement floor cover poured [complimentary to recommendation for new basement foundation – see section 3.2.B]. In addition, installation of an air-to-air exchanger and/or dehumidification system may also be required to control moisture in this space.*

- *2. The "wet rot" areas for wood framing and floor joists in the basement area need to be cut-out and replaced. Adjacent non-removed wood material areas need to be treated with a wood hardener and preservative.*

  The "wet rot" fungus tends to grow on porous surfaces, so after removal and treatment of remaining wood areas, all wood materials exposed in the basement space should be treated with a penetrating sealant.

  Mold remediation actions should only be performed by properly trained and equipped personnel, such as a trained/certified mold remediator with American Council for Accredited Certification (ACAC) or Institute of Inspection, Cleaning & Restoration Certification (IICRC) credentials, so that impacted spaces are properly isolated and there is no spread of contamination to other occupied building areas.

  All impacted areas/surfaces need to be returned to IICRC S520 Conditions 1 as outlined by the IICRC document: ANSI/IICRC S520 Standard and Reference Guide for Professional Mold Remediation.

  SME/ESHA strongly recommends that all biological remediation be conducted following guidelines established by the New York City Department of Health. The document produced by the New York City Department of Health Bureau of Environmental and Occupational Disease Epidemiology entitled "Guidelines on Assessment and Remediation of Fungi in Indoor Environments" outlines work practices and equipment to be utilized during the remediation procedure and recommendations outlines in U.S.EPA: Mold Remediation in Schools and Commercial Buildings, Publication EPA 402-K-01-001.

  When hiring contractors that will perform cleaning/sanitizing of materials/surfaces in which biocides or sanitizing agents are utilized to kill, clean otherwise control mold growth, such actions must be performed by a licensed Master Applicator certified by the State of Maine Pesticides Bureau.

- *3. Following mold remediation actions, a third-party visual evaluation should be conducted, and possibly include surface and air sampling for mold activity determination, for verifying completeness of the remedial actions.*

4.0 ANALYSIS AND COMPLIANCE

Accessibility Compliance Overview

Multiple codes apply to the occupancy and operations at the Colburn House in Pittston, Maine.
On a local basis, the State-adopted MUBEC codes apply, including the 2015 International Building Code and the 2015 International Existing Building Code. The State-adopted NFPA Life Safety Code 101 and other NFPA codes apply as well. All three codes refer to historic buildings which applies to the Colburn House as it is listed on the National Register of Historic Places.

The following are highlights from the applicable building and fire codes that apply:

2015 International Building Code (IBC)

- Use Group: The existing First and Second Floors are classified Assembly (A-3).
- The basement level is below grade and the building is classified as a two-story building above the grade plane.
- IBC Construction Type is 5B and V (000) in NFPA LSC 101.
- Occupant loads per floor level are based on an Assembly A-3 (museum) classification.

  1,010 nsf x 2 = 2,020 nsf. 2,020 nsf / 15nsf per person = 135 persons.

2015 International Existing Building Code (IEBC)

Chapter 4- Prescriptive Compliance Method

- Section 410.1 Accessibility for existing buildings- The provisions of Sections 410.1 through 410.9 apply to additions and alterations to existing buildings, including those identified as historic buildings.
- Section 410.7 Alterations affecting an area containing a primary function- Where an alteration affects the accessibility to, or contains an area of primary function, the route to the primary function area shall be accessible. The accessible route shall include toilet facilities and drinking fountains serving the area of primary function.
- Section 410.8.1 Entrances- Accessible entrances shall be provided in accordance with Section 1105.
- Section 410.8.13 Thresholds- The maximum height of thresholds shall be ¾ inch. Such thresholds shall have beveled edges on each side.
- Section 410.9 Historic buildings- These provisions shall apply to facilities designated as historic structures that undergo alterations unless technically infeasible.
- Section 410.9.1 Site arrival points- At least one accessible route from a site arrival point to an accessible entrance shall be provided.

Chapter 5- Classification of Work

- Section 502.1 Scope- Repairs, as defined in Chapter 2, include the patching or restoration or replacement of damaged materials, elements, equipment, or fixtures for the purpose of maintaining such components in good or sound condition with respect to existing loads or performance requirements.
- Section 805.4.2 Door swing- In the work area and in the egress path from any work area to the exit discharge, all egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

Chapter 12 - Historic Buildings

- Section 1201.2 Report – A historic building undergoing repair, alteration, or change of occupancy shall be investigated and evaluated.
- Section 1202.1 General - Repairs to any portion of an historic building or structure shall be permitted with original or like materials and original methods of construction, subject to the provisions of this chapter.
- Section 1202.4 Replacement – Replacement of existing or missing features using original materials shall be permitted. Partial replacement for repairs that match the original in configuration, height, and size shall be permitted.
- Section 1203.3 Means of Egress – Existing door openings and corridor and stairway widths less than those specified elsewhere in this code may be approved, provided that, in the opinion of the code official, there is sufficient width and height for a person to pass through the opening or transverse the means of egress.
- Section 1204.1 Accessibility requirements- The provisions of Sections 705, 806, and 906, as applicable, shall apply to facilities designated as historic structures that undergo alterations, unless technically infeasible. Where compliance with the requirements for accessible routes, entrances or toilet rooms would threaten or destroy the historic significance of the building or facility, as determined by the code official, the alternative requirements of Sections 1204.1.1 through 1204.1.4 for that element shall be permitted.
- Section 1204.1.1 Site arrival points- At least one accessible route from a site arrival point to an accessible entrance shall be provided.
- Section 1204.1.2 Multilevel buildings and facilities- An accessible route from and accessible entrance to public spaces on the level of the accessible entrance shall be provided.
- Section 1204.1.3 Entrances- At least one main entrance shall be accessible.
- Section 1204.1.4 Toilet and bathing facilities- Where toilet rooms are provided, at least one accessible family or assisted-use toilet room complying with Section 1109.2.1 of the IBC shall be provided *(does not apply for Business occupancies).*

- Section 1205.15 Accessibility Requirements – The provisions of Section 1012.8 shall apply to facilities designated as historic structures that undergo a change of occupancy, unless technically infeasible. Where compliance with the requirements for accessible routes, ramps, entrances, or toilet rooms would threaten of destroy the historic significance of the building or facility, as determined by the authority having jurisdiction, alternative requirements of Section 1204.1.1 through 1204.1.4 for those elements shall be permitted.

2018 NFPA Life Safety Code 101

Chapter 6 – Classification of Occupancy and Hazard of Contents

- Section 6.1.14.4.3 – The fire barrier minimum fire resistance rating specified in Table 6.1.14.4.1(a) and Table 6.1.14.4.1(b) shall be permitted to be reduced by 1 hour, but in no case shall it be reduced to less than 1 hour, where the building is protected throughout by an approved automatic sprinkler system in accordance with 9.7.1.1(1) and supervised in accordance with 9.7.2, unless prohibited by the double-dagger footnote entries in the tables.

Chapter 7 - Means of Egress

- Table 7.3.1.2 Occupant Load Factor
    - Assembly Use @ Ground & Second Levels: 15 nsf/ person = 135 persons.

Chapter 13 – Existing Assembly Occupancies

- 13.1.1.4 The provisions of this chapter shall apply to life safety requirements of existing assembly buildings.

Chapter 43 - Building Rehabilitation - Historic Buildings

- Section 43.1.2.4 – Historic buildings undergoing rehabilitation shall comply with the requirements of Section 43.10.
- Section 43.1.2.5 – Nothing in this chapter shall be interpreted as excluding the use of the performance-based option of Chapter 5.
- Section 43.6.2 Means of Egress
- Section 43.6.2.2.3 In a building with rehabilitation work areas involving more than 50% of the aggregate floor area within the building, the means of egress, including the exit and exit discharge paths serving the rehabilitation work area shall be provided with illumination, emergency lighting, and marking of means of egress in accordance with the requirements of other sections of this code applicable to new construction.
- Section 43.10.1 General Requirements – Historic buildings undergoing rehabilitation shall comply with the requirements of one of the following:

    (2) Sections 43.3, 43.4, 43.5, 43.6, and 43.7 as the relate, respectively, to repair, renovation, modification, reconstruction, and change of use or occupancy classification.

- Section 43.10.3 Repairs - Repairs to any portion of a historic building shall be permitted to be made with original or like materials and original methods of construction, except as otherwise provided in Section 43.10.
- Section 43.10.4.7.2 - In buildings of three or fewer stories in height, exit enclosure construction shall limit the spread of smoke by use tight-fitting doors and solid elements; however, such elements shall not be required to have a fire rating.
- Section 43.10.5.3 Door Swing – Where approved by the authority having jurisdiction, existing front doors shall not be required to swing in the direction of egress travel, provided that other approved exits have sufficient capacity to serve the total occupant load.
- Section 43.10.5.5 Interior Finishes – Existing interior wall and ceiling finishes shall meet one of the following criteria:
  (1) The material shall comply with the requirements for flame spread index of other sections of this Code applicable to the occupancy.

2010 ADA Standards for Accessible Design

The Americans with Disabilities Act of 1990 (revised 2010) included standards and guidelines in its Regulations that apply to enabling access to the built environment for people with disabilities. Regulations promulgated in Title II of the Act apply to State and Local Government entities and protects qualified individuals with disabilities from discrimination on the basis of disability in services, programs, and activities provided by State and local government entities.

State and local government facilities must follow the requirements of the 2010 Standards, including both the Title II regulations at 28 CFR 35.151: Nondiscrimination on the Basis of Disability in State and Local Government Services; and the 2004 ADAAG: 36 CFR part 1191, appendices B and D. A description of those sections is described below.

- 35.151.b.1 Alterations - Each facility or part of a facility altered by, on behalf of, or for the use of a public entity in a manner that affects or could affect the usability of the facility or part of the facility shall, to the maximum extent feasible, be altered in such a manner that the altered portion of the facility is readily accessible to and usable by individuals with disabilities, if the construction was commenced after January 26, 1992.
- 35.151.b.3.ii -If it is not possible to provide physical access to an historic property in a manner that will not threaten or destroy the historic significance of the building or facility, alternative methods of access shall be provided pursuant to the requirements of Section 35.150.
- 35.151.b.4 Path of Travel - An alteration that affects or could affect the usability of or access to an area of a facility that contains a primary function shall be made so as to ensure that, to the maximum extent feasible, the path of travel to the altered area and the restrooms, telephones, and drinking fountains serving the altered area are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs, unless the cost and scope of such alterations is disproportionate to the cost of the overall alteration.
- 35.151.b.4.i Primary function - A “primary function” is a major activity for which the facility is intended. Areas that contain a primary function include, but are not limited to, the dining area of a cafeteria, the meeting rooms in a conference center, as well as offices and other work areas in which the activities of the public entity using the facility are carried out.

- 35.151.b.4.ii A - An accessible path of travel may consist of walks and sidewalks, curb ramps, and other exterior and interior pedestrian ramps, clear floor paths through lobbies, corridors, rooms, and other improved areas; parking access aisles; elevators and lifts; or a combination of these elements.
- 35.151.b.4.iii Disproportionality - A. Alterations made to provide an accessible path of travel to an altered area will be deemed disproportionate to the overall alteration when the cost exceeds 20% of the cost of the alteration to the primary function area.
- 35.151.b.4.iv.A - When the cost of alterations necessary to make a path of travel to the altered area fully accessible is disproportionate to the cost of the overall alteration, the path of travel shall be made accessible to the extent that it can be made accessible without incurring disproportionate costs.
- 35.151.b.4.iv.B – In choosing which accessible elements to provide, priority should be given to those elements that will provide the greatest access, in the following order:
    1. An accessible entrance;
    2. An accessible route to the altered area;
    3. At least one accessible restroom for each sex or a single unisex restroom;
    4. Accessible telephones;
    5. Accessible drinking fountains; and
    6. When possible other accessible elements such as parking, storage, and alarms.

Currently, the Colburn House is not compliant with ADA standards. Major elements missing include an accessible route to the primary entrance from an accessible parking space, and an accessible route to museum materials on the upper floor level.

We recommend that based on the priorities identified in 35.151.b.4.iv.B that the following accessible elements be implemented initially:

1. *A van-accessible parking space be created and identified as such with signage.*
2. *An accessible route be developed from the parking space to the primary function spaces on the ground floor.*
3. *An accessible toilet room and drinking fountain be developed on the accessible path of travel.*
4. *On the ground floor where thresholds are > ¾" high that tapered wedges be installed on both sides.*
5. *Additionally, although not required by current building codes, we recommend a sprinkler system be installed throughout the house. Current events have shown that this historic asset could be destroyed before services could reach the property.*

5.0 SIGNIFICANCE, USE, AND TREATMENT

The Artifex team has gathered information regarding the history of the Colburn House while a survey of existing conditions provided the basis for determining how to treat the building with respect, perform needed repairs properly, and plan for the future care of the building. The planning work begins with recommendations for specific items, identified throughout the report, and preservation work that will allow the building to continue to function as an essential program facility well into the future.

The pages that follow provides synthesized recommendations for an appropriate overall general approach to the treatment of the building based on its historical and architectural significance and present physical condition; and also provide specific guidance on how to package, budget, and execute maintenance, repairs, and alterations to allow the building to hold its place and continue to serve its purpose.

The Colburn House has survived over two hundred and fifty years of use, with much of its early historic fabric intact. Because of its architectural and historical importance as well as its continued use, the preservation of the building is a priority for the Maine Bureau of Parks and Lands.

A. Significance

The level of significance of the Colburn House has already been determined by the two primary historic preservation reviewing authorities with jurisdiction in the State of Maine: the Maine Historic Preservation Commission (MHPC), and the U.S. Department of the Interior. By virtue of the Colburn House having been listed on the National Register of Historic Places (which is administered by these two agencies at the state and national levels, respectively) in 2004, historical data and physical evidence have already been used to evaluate the historical, architectural, and cultural significance of the property.

The nomination of the Colburn House was based on its significance related to its site and historic events. The period of significance is from the 1765 date of construction to 1950. The listing should be considered an authoritative opinion that the Colburn House is worthy of continued respect and care. It also reflects a wide base of knowledge, respect and support within the local and state preservation, and history communities.

B. Treatment

To apply our knowledge of the building and to use that knowledge to establish a pragmatic yet appropriate framework for treatment, the consultants rely on processes, standards and guidelines promoted by the Department of the Interior, known as the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties

In support of a wealth of specific information intended to foster good stewardship of historic properties, the Standards and Guidelines include four basic treatment standards based on more than 50 years of application to the preservation and protection of cultural resources. These treatment standards are:

- Reconstruction
- Restoration
- Rehabilitation
- Preservation

Preservation is identified by the project team as the most appropriate treatment to apply to the Colburn House. This treatment allows for preservation and restoration activities for those features that require them, while recognizing that some change will be inevitable. This selection of a treatment is tied to the intended use of the building going forward; in the case of the Colburn House, the current use of the building as a museum is expected to continue. Therefore, this recommendation is entirely appropriate given the building's exterior character, its interior layout, and its history of occupancy over time. If future changes are accomplished in accordance with the Secretary of the Interior's standards and guidelines, the building is assured a continued place of dignity and usefulness.

PRESERVATION is defined as "the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project."

The complete set of preservation guidelines is provided in the appendices. The *Secretary's Standards for Rehabilitation* which establish the basic parameters of a preservation project are included as an appendix.

To illustrate the application of the standards and guidelines to the Colburn House, the following are three categories of character-defining features that could come into play as the Maine Bureau of Parks and Lands maintains and upgrades the building for continued use.

Materials

When repairs are required, original building materials should be replaced in kind; local stone for local stone, Douglas fir for Douglas fir, Vermont slate for Vermont slate. In many cases, original materials can be located and used; but when traditional replacement materials are not available or are economically unfeasible, substitute materials that mimic the look, feel, and workability of original materials may be considered. Care should be taken when deciding to use a synthetic material, however, since modern products may interface poorly with traditional building materials, offer limited longevity compared to traditional materials, and present color shifts and other deteriorative changes over time.

Wood Windows and Doors

Wood windows and doors are character-defining features and essential elements in this historic building's distinctive architectural design.

Repairing and weatherizing existing wood doors and windows is always the preferred approach for historic buildings and provides energy efficiency comparable to new elements. When windows have exceeded their useful lives and retention is not practical or economically feasible, an approach that combines repairing old

windows where possible and introducing new matching wood components to restore the windows is recommended.

Paint Finishes

Original paint formulations and colors are character-defining elements that are often lost over time because the paint materials themselves are relatively short-lived. Traditional lead-based paints, which offer excellent durability and color stability, are no longer available in the United States. The highest quality latex-based paints available should be employed instead, after thorough surface preparation. Older photos of the Colburn House may show additional paint treatment of doors and windows and trim; however, the current paint scheme is conventional and appropriate for the period of significance. If the intent is to reproduce the original colors or those from a significant period in the building's history, they should be based on the results of a scientific paint analysis.

5.1 RECOMMENDATIONS AND PRIORITIZATION

Based on our on-site assessment of the existing condition of the Colburn House and the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties* and referencing those conditions which we see as needing attention, we have formulated the following list of prioritized actions for the treatment of this historic property. Each item consists of a series of rehabilitation or restoration measures that are best done concurrently to lessen cost and achieve the desired result. Also included is an estimate of Probable Project Cost for each identified project which includes probable construction costs plus a 20% contingency, plus 10% professional fees, plus 10% overhead and profit and general conditions for the Contractor. A breakdown of the estimated costs is included in the appendices.

PROJECT #1 - STRUCTURE REMEDIATION AND EXTERIOR REPAIR $519,150

FOUNDATION

Repair Tasks: Removal of existing perimeter foundation walls at main house. Excavate fully under main house and install new full basement foundation with finish slab-on-grade. Save and reinstall granite at south and east façades. Full perimeter foundation drain to be installed.

TIMBER FRAMING AND SILLS

Repair Tasks: Mitigate wet rot and fungi. Remove rotted sections of framing and replace with new. Treat exposed first-floor framing to prevent further fungal growth. Replace or repair rotted, weather-displaced, or damaged elements of the structure. Probe timber building sills to determine the conditions and extent of any deterioration. Replace ad-hoc posts with proper construction.

EXTERIOR SIDING & TRIM

Repair Tasks: Remove siding as indicated on drawing 1/A200. Install drainable building wrap beneath reinstalled siding. Rehabilitate northeast corner where siding has separated from the cornerboard. Replace

in-kind missing section of cornice trim. Replace trim and entablature cap at east entry as indicated on drawing 2/A200.

Siding and building trim throughout, including window trim, cornice, and corner boards, to be repaired, prepared, and painted.

Replacement -- Where woodwork cannot physically or economically be repaired, replace with new to match the existing in all details

Repair Tasks: Strip paint from damaged regions to expose extent of deterioration. Repair small areas of deterioration with wood epoxy, replace larger areas of damaged wood with dutchman patches; replace whole pieces with naturally rot resisting wood. Back prime all new wood ahead of installation. All fasteners should be stainless steel.

ROOFING, FLASHING, GUTTERS & DOWNSPOUTS

Repair Tasks: Replace shingles on roof of main house. Install new flashing at chimney and new prefinished metal drip edge at eaves and rakes. Install gutter strap hangers beneath the shingles as recommended by the manufacturer. Install ground leaders at downspouts. Reconnect downspout at southwest corner. Roof and flash entablature of east entry.

PROJECT #2 – WINDOWS, DOORS, & INTERIOR FINISHES $201,100

INTERIOR FINISHES

Structural system remediation would create sufficient damage as to make this project almost required. Plaster walls and ceilings would likely sustain additional damage, requiring much remediation. This would provide the opportunity to also paint interiors and woodwork, remediating lead paint.

In addition to work required on ceilings and walls, remove linoleum flooring, repair damaged floorboards, refinish floor in entryway.

SPRINKLER SYSTEM

Perform recommendation for installing rural sprinkler system as part of replastering ceilings as noted in the report

REPAIR OF WINDOWS, DOORS, & STORM WINDOWS

Full inspection of windows and repair as needed. Repair and/or replacement of wood storm windows. Paint and place. Clean and repair all historic hardware.

PROJECT #3 – ADA ACCESSIBILITY $26,300

ACCESSIBLE ROUTE IMPROVEMENTS

Provide van-accessible parking space. Provide new accessible route to ground floor primary function spaces. Alter existing bathroom to provide accessible facility. Install accessible drinking fountain. Install wedges or otherwise adjust ground-floor thresholds to meet accessibility requirements.

PROJECT #4 – MECHANICAL SYSTEMS $15,000-90,000

MECHANICAL SYSTEMS

Although not a portion of this report, current costs for an appropriate, discreet system for heating, ventilating, and air conditioning would be an excellent investment. The systems could be simple or complex, depending on the level of conservation of materials desired.

Colburn House	CD: Critical Deficiency (within 2 years)		
Pittston, Maine	SD: Serious Deficiency (within next 3-5 years)		
	MD: Minor Deficiency (within next 6-10 years)		
5.2 Prioritized Work Schedule			
Recommended Improvements	**Probable Cost**	**Deficiency Level**	**Project No.**
3.2 STRUCTURAL SYSTEMS			
3.2.B.1. Replacement of top 3 feet of foundation	$63,400	**CD**	
3.2.B.2. Total replacement of foundation (alternative to 3.2.B.1) *Price by Contractor	$250,000	**CD**	**1**
3.2.B.3. Water control drainage system at exterior foundation walls	Covered 3.4.C.1	**SD**	**1**
3.2.C.1. Mitigation of rot and fungi	$7,000	**CD**	**1**
3.2.C.2. Replacement of ad-hoc posts with proper construction	$6,000	**SD**	**1**
3.2.C.3. Investigation of timber sills	$3500- 8000	**CD**	**1**
3.2.C.4. Replace or repair rotted or weather-displaced or damaged elements of structure	$75,000	**CD**	**1**
3.2.D.2. Investigation of plaster finish support	$2,700	**MD**	**1**
3.2.E.3. Remove existing insulation and install new at attic floor level	$9,800	**SD**	**1**
3.2.E.4. Repair/remediation of damaged attic joists	$2,700	**SD**	**1**
3.2 STRUCTURAL SYSTEMS SUBTOTAL:	**$353,200**		
3.3 ENVELOPE-EXTERIOR WALLS			
3.3.B.1. Repair siding at south wall	$2,690	**CD**	**1**
3.3.B.2. Paint exterior siding and trim	$13,000	**SD**	**1**
3.3.B.3. Rehabilitate northeast failed corner	Covered 3.2.C.4	**CD**	**1**
3.3.B.4. Replace missing cornice trim	$500	**SD**	**1**
3.3.C.1. New foundation under main house	Covered 3.2.B.1	**CD**	**1**
3.3 ENVELOPE-EXTERIOR WALLS SUBTOTAL:	**$16,190**		
3.4 ENVELOPE-ROOFING & WATERPROOFING			
3.4.A.1. Replacement of main house roof shingles	$19,000	**SD**	**1**
3.4.B.1. Chimney base flashings	$550	**SD**	**1**
3.4.B.2. Metal drip edge	$240	**MD**	**1**
3.4.B.3. Roof east entry entablature	$150	**SD**	**1**
3.4.C.1. Perimeter foundation drain	$20,885	**CD**	**1**
3.4.D.1. Gutter strap hangers	$400	**SD**	**1**
3.4.D.2. Ground leaders for downspouts	$180	**MD**	**1**
3.4.D.3. Reconnect southwest downspout	$200	**CD**	**1**
3.4 ENVELOPE-ROOFING & WATERPROOFING SUBTOTAL:	**$41,605**		
3.5 WINDOWS & DOORS			
3.5.A.1. Front façade door repair/ refinishing	$125	**SD**	**1**
3.5.A.2. Basement access lock	$25	**CD**	**1**
3.5.A.3. Repairs at east entry	$275	**SD**	**1**
3.5.B.1. Repair/ Refinish historic window in parlor	Covered 3.5.B.4	**CD**	**1**
3.5.B.2. Basement window mesh	$50	**SD**	**1**
3.5.B.3. Window sash stops	$800	**MD**	**2**
3.5.B.4. Repair/ Refinish windows	$72,800	**SD**	**2**
3.5.B.5. Replace missing storm windows	$44,800	**MD**	**2**
3.4 WINDOWS & DOORS SUBTOTAL:	**$118,875**		

3.6 INTERIOR FINISHES			
3.6.A.1. Repair plaster wall finishes	$800	**MD**	**2**
3.6.A.2. Remediate lead paint throughout interior	$4,500	**SD**	**2**
3.6.B.1. Repair plaster ceiling finishes	$1,760	**MD**	**1**
3.6.B.2. Paint ceilings	$2,300	**SD**	**1**
3.6.C.1. Basement floor	$2,800	**SD**	**1**
3.6.C.2. Refinish hall & parlor floors	$950	**CD**	**1**
3.6.C.3. Second floor linoleum removal	$380	**MD**	**1**
3.6.E.1. Regular periodic cleaning and pest control	-	**MD**	**1**
3.6.F.1. Air quality control in basement	$15,000-100,000	**CD**	**1**
3.6.F.2. Wood "wet rot" remediation - treatment of first floor framing	Covered 3.2.C.1	**CD**	**1**
3.6.F.3. Remediation inspection	$1,000	**CD**	**1**
3.6 INTERIOR FINISHES SUBTOTAL:	**$13,490**		
4.0 CODE-RELATED UPGRADE COSTS			
1. Van-accessible parking space	$10,000	**SD**	**3**
2. Accessible route to ground floor primary function spaces	$3,500	**SD**	**3**
3. Accessible toilet & drinking fountain	$12,500	**SD**	**3**
4. Ajustments to ground floor thresholds	$300	**SD**	**3**
5. Full sprinkler system (rural)	$15,000	**SD**	**2**
Code Related Upgrade Costs:	**$41,300**		
TOTAL:	**$584,660**		

Rehabilitation Standards and Guidelines

The Secretary of the Interior's Standards for Rehabilitation, codified as 36 CFR 67, are regulatory for the **Historic Preservation Tax Incentives program.** The Guidelines for Rehabilitating Historic Buildings and the Guidelines on Sustainability for Rehabilitating Historic Buildings, which assist in applying the Standards, are advisory.

Other Standards and Guidelines:

Secretary's Standards for Rehabilitation

The following Standards for Rehabilitation are the criteria used to determine if a rehabilitation project qualifies as a certified rehabilitation. The intent of the Standards is to assist the long-term preservation of a property's significance through the preservation of historic materials and features. The Standards pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and the interior of historic buildings. The Standards also encompass related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction. To be certified, a rehabilitation project must be determined by the Secretary to be consistent with the historic character of the structure(s) and, where applicable, the district in which it is located. The following Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility.

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

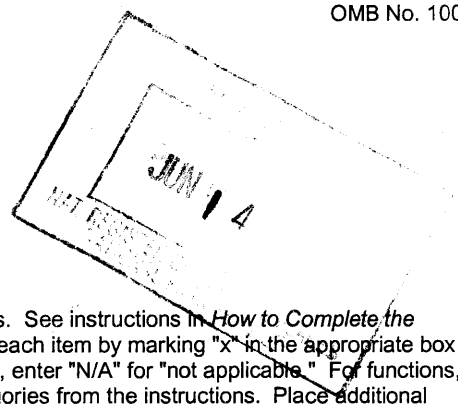
Guidelines for Rehabilitating Historic Buildings

The **Guidelines** assist in applying the Standards to rehabilitation projects in general; consequently, they are not meant to give case-specific advice or address exceptions or rare instances. For example, they cannot tell a building owner which features of an historic building are important in defining the historic character and must be preserved or which features could be altered, if necessary, for the new use. Careful case-by-case decision-making is best accomplished by seeking assistance from qualified historic preservation professionals in the planning stage of the project. Such professionals include architects, architectural historians, historians, archeologists, and others who are skilled in the preservation, rehabilitation, and restoration of the historic properties. These Guidelines are also available in **PDF format** .

The **Guidelines on Sustainability for Rehabilitating Historic Buildings** stress the inherent sustainability of historic buildings and offer specific guidance on "recommended" rehabilitation treatments and "not recommended" treatments, which could negatively impact a building's historic character. These Guidelines are also available as an **interactive web feature**.

NPS Form 10-900
(Oct. 1990)

OMB No. 10024-0018



United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Colburn House State Historic Site

other names/site number

2. Location

street & number Arnold Road, Old Route 27(.1 mi. south of northern intersection with Rt. 27) N/A not for publication

city or town Pittston N/A vicinity

state Maine code ME county Kennebec code 011 zip code 04435

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this ☒ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☒ meets ☐ does not meet the National Register criteria. I recommend that this property be considered significant ☐ nationally ☐ statewide ☒ locally. (☐ See continuation sheet for additional comments.)

Signature of certifying official/Title SHPO Date 6/11/04

Maine Historic Preservation Commission
State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. (☐ See continuation sheet for additional comments.)

Signature of certifying official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that this property is:

☒ entered in the National Register.
☐ See continuation sheet.
☐ determined eligible for the National Register.
☐ See continuation sheet.
☐ determined not eligible for the National Register.
☐ removed from the National Register.
☐ other, (explain):

Signature of the Keeper Edson H. Beall Date of Action 7/28/04

5. Classification

Ownership of Property
(Check as many boxes as apply)
- ☐ private
- ☐ public-local
- ☒ public-State
- ☐ public-Federal

Category of Property
(Check only one box)
- ☒ building(s)
- ☐ district
- ☐ site
- ☐ structure
- ☐ object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
		buildings
		sites
		structures
		objects
		Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of contributing resources previously listed in the National Register

1

6. Function or Use

Historic Functions
(Enter categories from instructions)

DOMESTIC /Single dwelling
AGRICULTURE / Agricultural outbuilding

Current Functions
(Enter categories from instructions)

RECREATION / Other: Historic Site

7. Description

Architectural Classification
(Enter categories from instructions)

EARLY REPUBLIC / Federal
COLONIAL/ Georgian

Materials
(Enter categories from instructions)

foundation GRANITE
walls WEATHERBOARD
roof ASPHALT
other BRICK

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets.)

DESCRIPTION

Built in 1765 by Pittston settler Reuben Colburn, the structure that bears his family name is a two-story center-chimney, timber frame house built on a granite foundation that sits on a high hill facing south towards a broad turn in the Kennebec River. Attached to the rear, or northern side of the house, is a one story ell, that was originally added in the early 19th century, but extensively rebuilt during the 20th century. Across the dooryard, to the north of the ell, is a small, one-story, late 19th century carriage shed, and to its west is a high posted New England barn (c. 1830). Both the barn and the carriage shed sit on low field-stone foundations, and, as with the house are covered in clapboards, many of which are skived and attached with cut nails. The remnants of a small orchard are found to the north of the barn and carriage shed, and several mature hardwood trees line Arnold Road to the east. Several hundred feet to the west, the topography descends steeply to the alluvial plain of the Kennebec River.

On the main house, the five bay southern facade features symmetrically distributed nine-over-nine wooden sash (with Federal era ovolo molded muntins) on the first floor, and similar nine-over-six sash on the second floor. The front door surround has been removed (pending documented restoration) leaving only the six panel door set in its frame beside three-light side-lights on a paneled base[1]. Interestingly, while the chimney and the front door are centered across the facade, the second story window above the door is placed off center to the west. The upper story windows are tucked just under the eaves, which have a boxed cornice upon which gutters have been fastened. The cornice returns briefly on the structure' side elevations. Both sides contain two windows on each floor and a third in the attic story under the gable. The asphalt roof is cropped very close to the narrow rake trim on the sides, and barely extends over the side walls. A secondary entrance is located on the east side of the house. Here, the six panel door is topped with a four-light transom, and flanked by wide Greek Revival pilasters that support a slightly narrower entablature. The northern elevation of the main house is truncated by the attached ell to the west The eastern sections of this wall contain one window on the first floor, and two on the second floor. Correspondence with previous owners indicate that two original first floor windows were removed, one of which was reinstalled in the current, but not original, location.

The interior of the house contains rooms finished in differing time periods. In the southeast corner of the structure, on both the first and second floors, are the earliest period rooms, which contain 18th century Georgian paneling on the fire place walls, and paneled wainscot and crown moulding over plaster on the remaining three walls. The exposed corner posts are cased, and on the first floor a shadow along their upper sides show where a dentil molding was previously incorporated into the crown molding. (The dentil molding is stored in the attic). Also in the parlor an original paneled cupboard door set against the

[1] The largely conjectural c. 1950s Federal style door surround replica was removed in 1999. Current plans call for the entry way to be restored to its late 19th century form, including replacing the bracketed Italiante hood seen in several period photogrphs.

fireplace wall was replaced in the 1950s with a fixed panel. During this decade the fire box was also modified with the addition of a baffle and smoke shelf, and both the hearth and the flooring replaced.

On the western side of the house both the downstairs and upstairs front rooms have finishes that are stylistically Greek Revival but are documented to date to the 1870s. There is no wainscot nor paneling in these rooms, and the doors and windows are trimmed with stock moldings and corner blocks. The fireplace surround on the first floor features widely fluted pilasters (similar to those on the eastern exterior door surround) which extend through the frieze to support the visually heavy mantlepiece; the upstairs version is a simpler but still Grecian in expression. In the southwest corner of the room is an 18th century corner cupboard with floor to ceiling fluted pilasters which flank raised panels in the frieze and under the clamshell shelves. Between the two front rooms on the first floor is the entrance stair hall, which contains a winder stair set against a curved wall, and trimmed with low relief, veneer-stripped baseboard that follows the curve of the stair. This staircase was also modified in the 1870s from its earlier, rectilinear form.

Board partition walls separate the front rooms from the kitchen, (or keeping room), and a small room in the northwest corner. The original kitchen has undergone a number of remodeling episodes, mostly during the 1950s and 1970s, and very little of the original fabric remains. Some original boarding remains around the fireplace wall, while the north wall has been 'restored' with an application of horizontal feather-edge board paneling. The hearth features newer square pavers, and both the fire box and oven have been rebuilt and capped with a 'rustic' square cut log mantle. Evidence remains on the floor for an ell shaped partition in the northeast corner, which may have housed the back staircase to the second floor. The ceiling is covered in sheet rock, however the wide pine flooring appears original. The small room in the northwest corner retains some original woodwork, however the partition wall on the south side was badly gouged when layers of late 19th century plaster were removed. Throughout the house the four panel doors are a mixture of Colonial, Greek Revival and Victorian examples, most of which feature replacement, restoration hardware. The attached ell has been reconstructed several times in the twentieth century and has very littl historic fabric. It currently serves as a caretakers apartment.

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- ☒ **A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- ☐ **B** Property is associated with the lives of persons significant in our past.
- ☐ **C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☐ **D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply.)

Property is:

- ☐ **A** owned by a religious institution or used for religious purposes.
- ☐ **B** removed from its original location.
- ☐ **C** a birthplace or a grave.
- ☐ **D** a cemetery.
- ☐ **E** a reconstructed building, object, or structure.
- ☐ **F** a commemorative property.
- ☐ **G** less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets.)

Areas of Significance
(Enter categories from instructions)

EXPLORATION / SETTLEMENT
MILITARY
INDUSTRY
SOCIAL HISTORY

Period of Significance

1765 - 1954

Significant Dates

1765, 1775, 1870, 1913

Significant Person
(Complete if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

9. Major Bibliographical References

Bibliography
(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
- ☐ previously listed in the National Register
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey # _____
- ☐ recorded by Historic American Engineering Record # _____

Primary location of additional data:

- ☒ State Historic Preservation Office
- ☐ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☐ Other

Name of repository:

STATEMENT OF SIGNIFICANCE

"Further upstream, near pittston, (sic) stands the home of Major Colburn, the man who constructed the batteaux and gathered supplies for the army."

Arnold Trail to Quebec Historic District. (NR: 69000018).

In 1969, the house that Reuben Colburn built in 1765 was placed in the National Register of Historic Places as a contributing resource within the Arnold Trail to Quebec Historic District. The oft told story of Benedict Arnold's trek to capture Quebec reflects the only land and river based military action in central Maine during the American Revolution, and its collective participants are held in high esteem by purveyors of military history. The details of Major Reuben Colburn's involvement are found in the letters of George Washington, journals kept by Arnold and his troops, and Congressional records; the stories have also been repeated through generations of Colburn family lore. It is not necessary to excavate every sentence ever written about Colburn in order to justify ascribing a greater significance to him than was done in the 1969 nomination: his contributions have been validated in many sources. The following four paragraphs, written by one of his descendants, Mark York, provide a brief account of his renown.[2]

> "Part of the Gardiner purchase, and first known as Gardinerston (sic), Colburn House was one o(of) the first houses built on the east side of the Kennebec River, known locally as "Colburntown" later changed to Pittston.[3] In 1761, four brothers Jeremiah Jr., Oliver, Reuben, and Benjamin, along with their parents and four sisters, moved to the area by ship from Dracut, Massachusetts... Colburn was one of the first shipbuilder's (sic) north of Bath at that time and as the colonies progressed toward the Revolution, Reuben Colburn, a natural born leader and businessman, was a prominent figure in the national effort that rapidly escalated in, and around the Boston area.[4] Reuben Colburn made three trips to Cambridge in the summer of 1775.
>
> At that time Colburn was commissioned by General Washington to supply boats, supplies and services for an attempt to capture Quebec City from the British. Colburn gathered up Chiefs from the Indian tribes of St. Francis, brought them to Cambridge and

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[2] Excepts taken from draft Statement of Significance for a draft National Historic Landmark Nomination, 2002. Copy on file at the Maine Historic Preservation Commission, Augusta, Maine.

[3] Coburn, Silas Roger, p. 29.

[4] Baker, Vol. 1, p. 94.

presented them to Washington who enlisted their services in the American effort. [5] Washington was pleased with his contribution and paid him for his services as he told General Philip Schuyler in a letter immediately after Colburn's first visit....

Based (on) this leadership effort...Reuben Colburn was given the responsibility to supply an army of 1000 men. His time frame was short and work on 200 'bateaux' began three weeks before the proposed date of departure for the expedition.[6] The army arrived on board the "Broad Bay" anchoring at Colburn's on Sept. 20th, 1775 led by Col. Benedict Arnold who was in the company of 19 year-old Aaron Burr.[7] They spent the night in the Colburn House before moving on in the bateaux and by wagon to Fort Western ten miles to the north.

Colburn went on the mission with a company of artificers to repair the bateau on the ill-fated failed mission as ordered by Washington. They went as far as the "chain of ponds" section of the historic district trail before returning home to Pittston. Colburn was never paid for his expenses as noted above and fought the Congress unsuccessfully until his death in 1818. The family carried on this fight until 1856."

The structure that Reuben Colburn built in 1765 was purchased by the State of Maine Bureau of Parks and Lands in 1971 and subsequently has been known as the Colburn House State Historic Site. Efforts have been underway since that time to restore the structure to its circa 1775 appearance. In 1974 the building was first leased to the Arnold Expedition Society, a group dedicated to researching and interpreting the history of Arnold's military trek. The Arnold Society enables the State Historic Site to function as a house museum in which both Arnold's march and Reuben Colburn's participation are rendered tangible through displays of bateaux, maps and military antiquities, as well as home furnishings and family portraits.

The desire to preserve the material culture of Reuben Colburn's mortal contributions did not commence with the State of Maine or the Arnold Society. In 1913 the local chapter of the DAR placed a plaque commemorating the encampment on a boulder just to the southeast of the Colburn front door. [8] Between 1935 and 1938 Bertha Colburn, the great-granddaughter of Reuben Colburn engaged in

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[5] Fitzpatrick, p. 492-96.

[6] Smith, p 69.

[7] Roberts, p 96.

[8] "Historic Homestead," Sept. 5,1913.

negotiations with William S. Appleton of the Society for the Preservation of New England Antiquities regarding donating the property to that organization; however, Ms. Colburn ultimately bequeathed it to a cousin. Records at the Bureau of Parks reference at least 19 newspaper articles about the house between 1900 and 1968 with names such as '*Historic Maj. Reuben Colburn House,*' or '*Where Benedict Arnold Rested,*' which indicate a continued public curiosity regarding one of the town's oldest homes . When the house finally passed out of the Colburn family in 1953 the new owners "restored it authentically and with a true antiquarian's appreciation of the architectural beauty of the colonial period," a process that included removing later eras of plaster and lath (and some trim), and the reconstruction of the central chimney (Maxwell, 1956). Indeed, the effort to capture the presence of Arnold and to resurrect the loyalty of Reuben Colburn, continues to manifest itself today.

If the *only* significance imbedded in the wooden structure on the bluff above the Kennebec River revolved around the activities that occurred in the fall of 1775, the effort to place this structure on the National Register as an individual listing (above and beyond its accepted contribution within the Arnold Trail Historic District) would more difficult. Considering all of the effort and interest, there is, relatively little of the property left that witnessed these events. The footprint of the house survives and it's walls are still protected by some early skived clapboards. The window sash, (themselves a Federal era replacement) still offer views of the broad Kennebec River, but both the front and side portals have been altered. On the interior, the floor plan would allow Colburn to negotiate the rooms without pause, but he would not recognize the trim in the southwest parlor, the horizontal paneling in the keeping room, or the rounded stair well in the front hall as work of his own hand. The barn that he had built by 1798 is gone, and in its place is a newer structure with a different orientation, near an ell that did not witness Arnold's march either. Most o these changes were made by members of the next three generations of Colburns who adapted the structure to their needs as they lived and worked in the house. Although the house still provocatively evokes Arnold's era, each of the succeeding generations left their mark on the buildings just as many of the family members left their mark on the land and water of Pittston.

When Reuben Colburn and his brothers and sisters came to Pittston they were among the earliest settlers in the area. In 1763, Reuben purchased lot No. 15, which was approximately one mile wide by five miles long and contained 800 acres. Located to the north of the homestead, Colburn speculated on this property selling much of it off by the 1780s. In 1765 he purchased an additional 107 acres from his brother Jeremiah. This became the basis of his homestead, which he erected shortly thereafter. Over the next forty years the family would be intimately responsible both for the peopling of the area, and for its economic development as well. Most of the ten children of Reuben and his wife Elizabeth settled in the immediate area after marrying. As a result the names that populate the neighborhood throughout the 19th century, including Winslow, Smith, Noyes, Loud, Jewett, Cutts and Flitner are related to the Colburns through marriage. In 1789 the family built a meeting house for the community on land just to the north of th Colburn House. Although the gift of the unfinished building was initially rejected by the town, it later accepted the building. (Hanson, p. 150.) Reuben Colburn was later involved in the organization of the

Congregational Church in Pittston in 1812, which was built several miles up the road.

After the initial activities of settling the land had been accomplished Colburn started to build ships on his property at the edge of the Kennebec River. The earliest references to shipbuilding here are found in the accounts of his activities in the early Revolution when he and his neighbor, Thomas Agry, were responsible for providing Benedict Arnold with the infamous batteau. In 1779 a deed to Samuel Oakman refers to buildings and a wharf on the river, and in 1791 Colburn and his neighbor Samuel Springer are known to have built the Brig Hannah on the edge of the Kennebec. (Hanson, p. 319). A series of deeds in 1794 suggest that this activity both continued and matured over the years. For example, Colburn sold several waterfront lots, (with un-described buildings thereon), reserving in each case the following clause: "the said Colburn reserving to himself his heirs and assigns with the said Winslow [or other named Grantee] the priviledge to pass and repass...with any lumber for shipbuilding (so said Colburn shall not damnify said Winslow) six poles wide from said River. " (Book Lincoln 5, p. 349, Lincoln County Registry of Deeds, Wiscasset, Maine). The family's involvement with maritime activities grew as his children matured. His son Ebenezer died at sea in 1799,and another son David, who purchased one of the riverside lots from his father in 1794, was a shipbuilder in both Maine and Nantucket. According to one source, it was David who rescued his father from financial ruin after the War of 1812 caused him to abandon a ship under construction. (B. Colburn, p. 13). At least one of David's sons, Reuben Colburn II, and his cousins Oliver and John Colburn, were also either builders or sailors of Pittston vessels. At one time or another each of these men, with the exception of Oliver Colburn, owned, if not occupied the Colburn House.

Ship building may have been one of the family's primary economic activities, but they were involved with other undertakings as well, including land speculation in Farmington, and lumber harvesting. As with all of the eighteenth and early 19th century settlers along the Kennebec farming played a necessary part of all economic activities. In the 1798 Federal tax census, Reuben Colburn's real property holdings were enumerated as a farm of 140 acres upon which sat his house and his barn, which measured 50 feet by 30 feet. The barn currently on the property was constructed later, and stylistically appears to date to the 1830s. In 1818 Reuben Colburn died, and the house and land became the property of David Colburn.[9] Two years later David sold the property to his cousin/brother-in-law John Colburn, but his wife Hannah did not sign a release of her dower, or widow' thirds. In 1824 David Colburn died, and John Colburn sold the property back to David's family. Between 1824 and her death in 1870, Widow Hannah Colburn was the head of the household regardless of which of her sons actually held the deed. David and Hannah produced nine children, who ranged between 21 and 2 years of age at the time of David's death. As the family matured over the next thirty years they relied less on ship building and more on other economic

[9]A recorded deed indicates that Reuben sold the property to his son in 1794, (Book 5, p. 352, Lincoln), and another indicates that Reuben sold the same property to Jedediah Jewett in 1802.(Book 3, p. 370, Kennebec). There is no indication that Jewett ever occupied the structure nor that the Colburns ever actually relinquished possession.

pursuits to meet their needs. At one point prior to his death in 1835, John A. Colburn, a son of David and Hannah, planted mulberry bushes that provided food for a collection of silkworms that he raised in an upstairs back room in the house. (B. Colburn, p. 1). In the 1850 population census Reuben Colburn II wa referred to as a ship maker, and his youngest brother Gustavus was identified as a log driver on the River. However, both were listed as farmers in that year's agricultural census, having produced oats and hay from their fields, apples from the orchard and butter from their three cows. Indeed, agricultural activities continued at the Colburn homestead to some extent until the last year-round resident moved out in 1902. , According to his obituary, Gustavus eschewed ship building in favor of logging and lumber businesses centered on the River, and was connected with the Kennebec Log Driving Company (probably the Kennebec Land and Lumber Company), up until 1870. Twenty years earlier, Gustavus Colburn started repurchasing all of the small lots his grandfather had sold at the river's edge at the end of the 18th century. Ship building had become a much less profitable business on the Kennebec River by this time and the valuable land could be put to other uses.

In 1852 Gustavus married Alzina Knight, and with their children, they shared the Colburn house with his mother. Although a new barn had been constructed, the house itself had changed little since the early 19th century when new windows were installed and a rear ell added. In a recently published memoir written by Bertha Colburn, she recalls that when Hannah died it finally offered the chance for the next generation t update the house. "After my grandmother died, my mother had the west room entirely torn out with the exception of the corner closet that remains the same, as when great grandmother kept her wines in it. Even the plaster and laths were renewed." (B. Colburn p. 3). Both the southwest parlor and the southwest chamber were renovated at this time, with new moldings, baseboards, chair rail and fireplace surrounds installed. The new trim was factory produced, and was loosely based on Grecian precedents. The front hall was also rebuilt and the stair case was reconstructed with a new curved north wall. The Italianate hoo that resided over the front door into the 1950s was probably installed at this time as well.

The renovations at the Colburn house may have been linked to a second event that occurred just prior to Hannah's death. In December of 1869 Gustavus and his neighbor (and relative) to the south, Samuel O. Flitner agreed to lease the riverside portion of their homestead lots to the Kennebec Ice Company for the next 10 years. Both Colburn and Flitner were partners in the venture (1/8 portion each). The deed references several existing ice houses and plans for the location of a fifth. From this point until his death in 1886 Gustavus Colburn was engaged in the highly profitable Kennebec Ice industry. Due to rapid consolidation of the various ice companies on the Kennebec it is difficult to track the specific activity on Colburn's property[10]. However, the industry had a tremendous impact on the economy of the region.

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[10]The 1879 County atlas places Fabans' Ice House at the foot of the Colburn property. According to a map reproduced in Everson, in 1882 that location appears to be home of Powers and Co, and by 1892 the Kennebec Ice Company has moved to Hallowell. (Everson, p. 174, and 143).

> "The economic effect of the ice industry on the Kennebec Valley was enormous. Building icehouses used large quantities of lumber, and the effects on ship building and shipping were also very great. In the boom year of 1890, 1,000 teams and 3,000 men were said to be working on the ice near Gardiner alone." (Bunting, 1997, p.302).

The profit margin in harvesting ice was large: according to Bunting ice could be harvested for thirty cents a ton and sold for fifty-cents per hundred pounds. Much of the product was shipped to the West Indies, although it was also used extensively by brewers, meat packers and grocers in the United States. The ice business prospered in Maine, both along the waters of the Kennebec, Penobscot and Cathance Rivers, and at numerous sites along the mid-coast.

> "Maine's ice industry was a component of the East Coast natural ice industry, which, over the course of about forty years, grew to immense proportions before suffering a rapid meltdown. At its prime the colorful industry exhibited enormous powers of enterprise, inventiveness, and organization. Although certain ancillary factors sped its demise, its collapse was a classic example of a great industry undercut, at the height of its fortunes, by technological obsolescence." (Bunting, 2000, p. 206).

The technological advance, was, of course, electric refrigeration. Gustavus Colburn remained involved with the ice industry for the remainder of his life. He ended his professional career as a superintendent at the Smithtown ice houses, just up river from where he lived.

The Colburn House sheltered among its occupants four generations of the Colburn family ending with Gustavus' son Richard H. Colburn, who moved to California in 1902 and left the homestead to his sister Bertha, who used it only seasonally thereafter. Certainly the most famous event to occur at the structure was the outfitting of Benedict Arnold's men for the attack on Quebec. But yet the local significance of this house, and the family that it sheltered is much broader than that event alone. It is one c a very few existing houses in the region built in the 1760s, and its timber has provided the framework for a family that constructed the areas first homes and churches, cleared its land and harvested its fields, and utilized the river for an evolving series of economic activities including ship building, lumbering, log drives and ice harvesting. It is a homestead that evolved physically as it was lived in by its occupants.

In its retirement, the Colburn house has significance as an example of a structure whose early history was highlighted by a perspective that valued the colonial era history of the building to the exclusion of its nineteenth-century associations. The Colonial Revival-ization of the Colburn House is in itself a noteworthy expression of community values and associations, and one that had a major physical impact or the structure. Inherent in our contemporary interpretation of the Colonial Revival movements is the understanding that the early practitioners of this philosophy were not as concerned with accuracy as they were with sentiment. Historian Kenneth L. Ames neatly summarizes how this philosophy occasionally

handled the physical realities of the built environment it celebrated.

> Since the process of reinterpreting, revising, rethinking, or reevaluating the past may go on continuously, propelled by newer information or exigencies, it sometimes happens that whatever actually occurred, whatever an object or an environment originally looked like may not be important for a given group at a given moment. The requirement to possess a past as we need it is more pressing than any motive of historical accuracy. What one age deems as historical accuracy a later one sees as naivete or self-deception. The transformation of images to meet historical needs takes place not only in the mind but in the material world as well. The physical past can be shaped or reshaped to fit a society's requirements. It is therefore true that even manifestly authentic materials are hardly immune to alteration or destruction solely by virtue of their design or structural integrity. If they fail to fit current needs, the most pristine remnants of the past may fall prey to demolition." (Ames, p. 5-6).

Interestingly, even the earliest known image to be published of the Colburn house feel prey to the desire to return the structure to its earliest incarnation. In 1886 Edwin Whitefield published a sketch of the Colburn House in The Homes of our Forefathers, and labeled it as follows: 'built by Reuben Colburn, grandfather o the present owner, about 1760. He built the bateaux for Arnold when he was preparing for the invasion of Canada. It stands near the bank of the Kennebec River and is in a good state of repair." Surrounding the front door is a simple Georgian -era entablature similar to that found one the east elevation. However, in Whitefield's field sketchbook, the door is very clearly topped by the Italianate hood that remained on the house into the 20th century[11]. This updated doorway did not correspond with the artists notion of why the house was significant, and thus was reinvented for his publication. Taken together, the Colburn House provides an important touchstone to a two hundred year evolution of both local history, and local historical thought. In this context, the Colburn House Historic Site is nominated to the National Register of Historic Places under Criterion A, for its significance in conjunction with early settlement and exploration, military history, industry, and finally, social history.

[11]The Edwin Whitefield sketchbook is in the archives of the Society for the Preservation of New England Antiquities, in Boston, Massachusetts.

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10. Geographical Data

Acreage of Property 6

UTM References
(Place additional UTM references on a continuation sheet.)

	Zone	Easting	Northing		Zone	Easting	Northing
1	19	439710	4893904	3	19		
2	19			4	19		

☐ See continuation sheet

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title CHRISTI A. MITCHELL, ARCHITECTURAL HISTORIAN

organization MAINE HISTORIC PRESERVATION COMMISSION date 15 April 2004

street & number 55 CAPITOL STREET, STATION 65 telephone (207) 287-2132

city or town AUGUSTA state ME zip code 04333 -0065

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items
(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name

street & number telephone

city or town state zip code

VERBAL BOUNDARY DESCRIPTION

The nominated property is fully described by the Town of Pittston tax map number U 13 lot 9.

BOUNDARY JUSTIFICATION

The boundaries of the nominated property reflect the portion of the Reuben Colburn Homestead located on the west side of River Road. These boundaries were essentially established by 1820, and include both the homestead and the alluvial plain on which the family built ships.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

PHOTOGRAPHS

Photograph 1 of 8
Christi A. Mitchell
Maine Historic Preservation Commission
5 May 2004
South facade; facing northwest.

Photograph 2 of 8
Christi A. Mitchell
Maine Historic Preservation Commission
5 May 2004
North elevation; facing southwest.

Photograph 3 of 8
Christi A. Mitchell
Maine Historic Preservation Commission
5 May 2004
Barn, east elevation and carriage house, south and east elevations; facing west.

Photograph 4 of 8
Christi A. Mitchell
Maine Historic Preservation Commission
5 May 2004
Interior, southeast parlor; facing north.

Photograph 5 of 8
Christi A. Mitchell
Maine Historic Preservation Commission
5 May 2004
Interior, entrance hall; facing east.

Photograph 6 of 8
Christi A. Mitchell
Maine Historic Preservation Commission
5 May 2004
Interior, southwest parlor; facing southwest.

Photograph 7 of 8
Christi A. Mitchell
Maine Historic Preservation Commission
5 May 2004
Kitchen; facing southeast.

Photograph 8 of 8
Christi A. Mitchell
Maine Historic Preservation Commission
5 May 2004
Southwest chamber; facing northeast..

COLBURN HOUSE STATE HISTORIC SITE; KENNEBEC CO., ME 1 OF 8

COLBURN HOUSE STATE HISTORIC SITE; KENNEBEC CO., ME

COLBURN HOUSE STATE HISTORIC SITE : KENNEBEC CO., ME 3 OF 8

COLBURN HOUSE STATE HISTORIC SITE: KENNEBEC CO., ME 4 OF 8

COLBURN HOUSE STATE HISTORIC SITE; KENNEBEC CO., ME 5 OF 5

COLBURN HOUSE STATE HISTORIC SITE; KENNEBEC CO., ME 6 OF 8

COLBURN HOUSE STATE HISTORIC SITE; KENNEBEC CO., ME

COLBURN HOUSE STATE HISTORIC SITE ; KENNEBEC CO., ME BOFB

- Indoor Environmental Testing and Consulting
- Industrial Hygiene Consulting
- OSHA Compliance
- Expert Witness
- Training

INDOOR AIR QUALITY/MOLD ASSESSMENT

COL. REUBEN COLBURN HOUSE

33 ARNOLD ROAD, PITTSTON, MAINE

Prepared for

MS. ELLEN ANGEL

ARTIFEX Architects & Engineers

175 Exchange Street

Bangor, Maine 04401

April 13, 2022

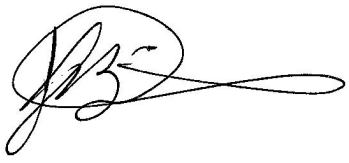

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TABLE OF CONTENTS

LIST OF APPENDICES

INDOOR AIR QUALITY/MOLD ASSESSMENT
COL. REUBEN COLBURN HOUSE
33 ARNOLD ROAD, PITTSTON, MAINE

1.0 EXECUTIVE SUMMARY

Sevee & Maher Engineers, Inc./Environmental Safety & Hygiene Associates, LLC (SME/ESHA) was retained by Artifex Architects & Engineers to conduct an Indoor Air Quality/Mold Assessment study for renovations/restoration considerations at the Col. Reuben Colburn House situated at 33 Arnold Road in Pittston, Maine.

This assessment was only conducted on the original federalist-style structure and not for the added-on wing section connected on the northern side.

This assessment was conducted by Mr. John M. Boilard, a registered Industrial Hygiene Technologist (RIHT) and a Council-certified Microbial Consultant (CMC) on April 7, 2022.

The IAQ-Mold Assessment was comprised of physical observations as to site conditions relating to the attic, second floor, first floor and basement areas. Additional actions were comprised of the collection of air samples to establish baseline air quality data specific to fungal spores to determine potential health impact to visitors of the site.

No distinct fugal odors were discernable for any of the spaces entered.

Indoor elevated moisture influences were observed in the form of peeling/flaking ceiling paints in various areas of the finished living areas. No active/current water intrusion issues were observed for the attic, however the vertical plane of the first and second floors are at significant risk for water intrusion due to the deteriorated state of the building shell.

Overall, no visible mold growth reservoirs were observed to be present in the attic, second floor, or first floor areas.

There was historical evidence of rodent activity in the form of fecal pellets, rodent runs in insulations and wall/ceiling areas, as well as, chewed pathways for floor joists in the attic space. Other observations revealed evidence of Powderpost Beetle activity for floor planking.

The basement space had very wet soils/clay which appears to be due to rainwater/snow melt intrusion via the up-slope areas of the basement space at the northwestern side of the structure. This excessive basement moisture has led to sporadic surficial mold growth comprised of *Aspergillus/Penicillium-like* activity, as well as the presence of “wet rot” fungi activity for structure wood beams and floor joists.

Mold air sampling did not indicate any significantly elevated activity for the attic and second floor areas, however elevated spore activity is present for the first floor areas and appears to be influenced from the very high activity occurring in the basement space.

2.0 GENERAL FINDINGS

The following summary of general findings outlines the conditions observed during the visual and testing event.

2.1 Visual Inspection

No distinctive fugal odors were discernable for any of the spaces entered comprised of the attic, second floor, first floor, and basement areas.

Indoor elevated moisture influences were observed in the form of peeling/flaking ceiling paints in various areas of the finished living areas.

No active/current water intrusion issues were observed for the attic, however the vertical plane of the first and second floors are at significant risk for water intrusion due to the deteriorated state of the building shell, including window degradation.

Overall, no visible mold growth reservoirs were observed to be present in the attic, second floor or first floor areas; however, the basement space is a source of surficial mold growth and “wet rot” fungi activity for wood beams and floor joists.

There was historical evidence of rodent activity in the form of fecal pellets, rodent runs in insulations and wall/ceiling areas, as well as, chewed pathways for floor joists in the attic space.

Other observations revealed the physical evidence of Powderpost Beetle activity for floor planking.

The basement space had very wet soils/clay and appears to be due to rainwater/snow melt intrusion via the up-slope areas of the basement space at the northwestern side of the structure.

This excessive basement moisture has led to sporadic surficial mold growth comprised of *Aspergillus/Penicillium-like* activity, as well as the presence of “wet rot” fungi activity for structural wood beams and floor joists.

Mold air sampling did not indicate any significantly elevated activity for the attic and second floor areas, however elevated spore activity is present for the first floor areas and appears to be influenced from the very high activity occurring in the basement space.

Refer to the Photograph Log in Appendix B for depiction of the observations as described above.

2.2 Airborne Fungal Spore Testing

The Outdoor Control sample (ST-1) had a total mold spore count of 960 ct/m^3 at the time of sampling and comprised of common ubiquitous species of *Ascospores* and *Basidiospores*, however the levels and species activity may be biased low due to the elevated ambient moisture level and intermittent drizzle conditions at the time of sampling.

The attic sample (ST-2) had a total mold spore count of 3,500 ct/m^3 at the time of sampling and comprised of common ubiquitous species of *Ascospores* and *Basidiospores*, as well as *Aspergillus/Penicillium-like* and *Cladosporium,* and some lesser activity for *Hyphal fragments* and *Myxomycetes/Smuts/Periconia.*

The second floor samples (ST-3 & ST-4) had total mold spore counts ranging from 3,400 - 8,400 ct/m^3 at the time of sampling and comprised of common ubiquitous species of *Ascospores* and *Basidiospores*, as well as *Aspergillus/Penicillium-like* and *Cladosporium,* and some lesser activity for *Curvularia, Epicoccum, Hyphal fragments,* and *Myxomycetes/Smuts/Periconia.*

The first floor samples (ST-5, ST-6, & ST-7) had total mold spore counts ranging from 12,000 - 23,000 ct/m^3 at the time of sampling and comprised of common ubiquitous species of *Ascospores* and *Basidiospores*, as well as *Aspergillus/Penicillium-like* and *Cladosporium,* and some lesser activity for *Hyphal fragments, Myxomycetes/Smuts/Periconia,* and one sample with some minor *Pithomyces.*

The basement sample (ST-8) had a total mold spore count of 25,000 ct/m^3 at the time of sampling and was comprised of almost entirely of *Aspergillus/Penicillium-like* activity. Other activity was comprised of of common ubiquitous species of *Ascospores* and *Basidiospores*, as well as C*ladosporium, Hyphal fragments,* and *Myxomycetes/Smuts/Periconia.*

Currently there are no regulatory levels for mold spore activity, but most persons typically do not have any adverse reactions to general environmental mold spore levels <5,000 ct/m^3.

Airborne Fungal Spores – Recommended Levels
(Worldwide Exposure Standards for Mold and Bacteria, 10th edition, 2017)

Airborne fungal spore concentrations between 1,000 and 10,000 counts per cubic meter of air (Ct./m^3) may be acceptable to the average healthy person indoors, but extremely sensitive individuals may experience symptoms at concentrations below 4,225 Ct./m^3. Spore counts from 4,225-7,779 Ct./m^3 are moderate where many individuals sensitive to mold spores will experience symptoms; counts from 7,800-24,999 Ct./m^3 are high where most individuals with any sensitivity to mold spores will experience symptoms and concentrations >25,000 Ct./m^3 are very high where almost all individuals with any sensitivity will experience symptoms and extremely sensitive people could have severe symptoms.

Of note is that no levels of *Chaetomium*, *Fusarium*, *Memnoniella, Stachybotrys,* or *Trichoderma* species were detected for indoor samples collected. These species are indicator organisms of long-term and ongoing moisture issues and/or water intrusion problems. **These organisms are of concern when large**

areas of active fungal growth reservoirs exist in wet building materials. They have the capability, **but do not always**, produce mycotoxins and mVOCs and their potential effects can seriously compromise a building and/or the health of occupants. These effects for human health can be worse for immune compromised persons such as those with HIV, the elderly, terminally or seriously ill patients (cancer patients), persons with pre-existing breathing conditions or asthma and the very young.

Refer to attached analytical data sheets for reference as to the type and frequency of mold spore species detected during this sampling event.

Airborne mold spore activity can be found in Appendix A, Table 1.

3.0 SUMMARY OF FINDINGS

Aspergillus/Penicillium-like mold is an opportunistic mold:

Aspergillus/Penicillium-like species is a key indicator for mold growth issues indoors as it can grow in as little as 24 to 48 hours in the presence of moisture and can even thrive in elevated ambient moisture levels, typically above 50 percent Relative Humidity. It commonly produces a strong musty odor when actively growing in the presence of moisture.

Aspergillus/Penicillium-like species affects people in different ways; some people may develop an allergic reaction or may trigger an asthma response, while others may not have any noticeable effects. In very rare cases *Aspergillus/Penicillium-like* species can cause infections.

Aspergillus and *Penicillium* spores are indistinguishable via direct microscopic examination. *Aspergillus* tends to colonize in continuously damp materials such as damp wallboard and fabrics. *Penicillium* is commonly found in house dust, on water-damaged wallpaper, behind paint and in decaying fabrics.

Aspergillus is a common Type I and III Allergen. There are more than 160 different species of *Aspergillus*, 16 of which have been documented as etiological agents of human disease, but rarely occur in individuals with normally functioning immune systems.

Cladosporium species are another opportunistic mold type:

Cladosporium, with the ability to sporulate heavily, ease of dispersal and buoyant spores makes this fungus the most important fungal airway allergen; and together with Alternaria, it commonly causes asthma and hay fever in the Western hemisphere.

Cladosporium mold species are common molds that may or may not affect a person's health. Exposure to *Cladosporium* affects people in different ways; some people may develop an allergic reaction, while others may not.

Cladosporium can cause allergies and asthma responses in some people as it is a Type I Allergen. In very rare cases, they can cause infections. Most species of *Cladosporium* are not dangerous to humans.

Cladosporium can grow both indoors and outdoors, even at lower temperatures. Spores from mold growth reservoirs can be airborne, which is also how the mold spreads/colonizes materials. These types of molds are more common in areas with humidity, moisture, and water damage.

ALLERGENS

Allergens are any substance that can trigger an inappropriate immune response or can cause an allergic reaction in susceptible people.

There are four (4) types of hypersensitivity responses:

Type I: Anaphylactic, allergic
Type II: Cytotoxic
Type III: Immune Complex Induced
Type IV: Cell Mediated

"Wet Rot" Fungi

"Wet rot" is caused by a fungal activity that is attracted to very damp/wet wood materials, like framing and joists, and feeds off the timber as a nutrient source, destroying it in the process. There are many different types of fungus, but *Coniophora puteana*, also called cellar fungus, is the most common. The observed fungal activity for the carrier beams and floor joists in the basement area was identified visually as this fungus.

Dry rot is the more serious form of fungal decay to wood framing and structural components, in that it can cause the most damage and can spread and destroy a large majority of the timber. Wet rot" on the other hand is more common form of wood rot fungal decay but it is confined to the areas where timber materials are damp and does not spread beyond these damp/wet areas. In either case, wood rot needs to be fixed and the conditions causing the issue in the first place must be corrected.

4.0 RECOMMENDATIONS

Management and maintenance of buildings is important to prevent conditions that could possibly compromise the overall indoor air quality. Based on the findings of this study and our professional experience, SME/ESHA offers the following measures to assure good indoor air quality:

- The source of water intrusion impacting the basement area must be corrected to control any water run-oof from entering the space;
- The exterior shell of the structure, including windows and doors, needs to be fixed in order to eliminate water intrusion from wind driven rain events;

- The earthen floor areas in the basement need to be covered either by use of seam-sealed poly sheeting or have a cement floor cover poured. In addition, installation of an air-to-air exchanger and/or dehumidification system may also be required to control moisture in this space;
- The "wet rot" areas for wood framing and floor joists in the basement area need to be cut-out and replaced. Adjacent non-removed wood material areas need to be treated with a wood hardener and preservative.

  The "wet rot" fungus tends to grow on porous surfaces, so after removal and treatment of remaining wood areas, all wood materials exposed in the basement space should be treated with a penetrating sealant.

  Mold remediation actions should only be performed by properly trained and equipped personnel, such as a trained/certified mold remediator with American Council for Accredited Certification (ACAC) or Institute of Inspection, Cleaning & Restoration Certification (IICRC) credentials, so that impacted spaces are properly isolated and there is no spread of contamination to other occupied building areas.

  All impacted areas/surfaces need to be returned to IICRC S520 Condition 1 as outlined by the IICRC document: ANSI/IICRC S520 Standard and Reference Guide for Professional Mold Remediation.

  SME/ESHA *s*trongly recommends that all biological remediation be conducted following guidelines established by the New York City Department of Health. The document produced by the New York City Department of Health Bureau of Environmental and Occupational Disease Epidemiology entitled Guidelines on Assessment and Remediation of Fungi in Indoor Environments outlines work practices and equipment to be utilized during the remediation procedure and recommendations outlined in U.S.EPA: Mold Remediation in Schools and Commercial Buildings, Publication EPA 402-K-01-001.

  When hiring contractors that will perform cleaning/sanitizing of materials/surfaces in which biocides or sanitizing agents are utilized to kill, clean or otherwise control mold growth, such actions must be performed by a licensed Master Applicator certified by the *State of Maine Pesticides Bureau*; and
- Following mold remediation actions, a third-party visual evaluation should be conducted, and possibly include surface and air sampling for mold activity determination, for verifying completeness of the remedial actions.

5.0 METHODOLOGY

The sampling conducted was performed in accordance with the *Environmental Criteria and Assessment Guidelines*, recommended by the U.S.EPA Environmental Criteria and Assessment Office, Office of Health and Environmental Assessment, U.S.EPA 600/8-91/202 (ECAO-R-0315); American Conference of Governmental Industrial Hygienists (ACGIH); and the National Institute of Occupational Safety and Health (NIOSH).

The testing and analytical protocols for this assessment were also based on information and methodologies prescribed by American Society of Heating, Refrigeration, and Air conditioning Engineers (ASHRAE), IICRC's S520 Standard and Reference Guide for Professional Mold Remediation, and the Worldwide Standards for Exposures to Bacteria and Mold, and our professional experience.

5.1 Mold Spore Air Sampling

Air samples were collected to determine indoor air quality relating to mold spores utilizing Allergenco-D™ air sampling cassettes collected for a five-minute period at a flow rate of 15 liters per minute for a total volume of 75 liters per sample.

The Allergenco-D*™* Air Sampling style cassette is a sampling device designed for the rapid collection and analysis of a wide range of airborne aerosols. These include fungal spores, pollen, insect parts, skin cell fragments, fibers, and inorganic particulates.

6.0 LIMITING CONDITIONS

The observations, conclusions, and recommendations described in this inspection report were made under the conditions stated herein and were arrived at in accordance with generally accepted standards related to indoor air quality inspections and good industrial hygiene practice. The conclusions presented in the report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the scope of described services.

Hidden or changed conditions, activities that may have occurred after the time of the inspection, and possible inaccuracies of information supplied to SME/ESHA by others might have a material bearing on the findings, conclusions, and recommendations. SME/ESHA reserves the right to amend its opinion(s) if additional information becomes available, but SME/ESHA assumes no obligation to do so.

No warranty or guarantee, expressed or implied, is made regarding the findings, conclusions, or recommendations contained in this report. The limitations presented above supersede the requirements or provisions of all other contracts or scopes of work, implied or otherwise, except as expressly stated or acknowledged herein. SME/ESHA is not responsible for the actions of other parties involved in this project.

It is expressly agreed that SME/ESHA will have no liability to any party for reliance upon any of the findings or recommendations contained in this report. To the extent that this provision is found unenforceable by any court, any liability SME/ESHA may have arising out of its agreement with the contracting party is expressly agreed to be limited to the amount paid to SME/ESHA.

APPENDIX A

ANALYTICAL SUMMARY TABLE AND LABORATORY DATA

SME
SEVEE & MAHER
ENGINEERS

ESHA
ENVIRONMENTAL SAFETY
& HYGIENE ASSOCIATES
A Sevee & Maher Engineers company

TABLE 1

AIRBORNE MOLD SPORE ANALYTICAL SUMMARY

CLIENT:
ARTIFEX
175 Exchange Street
Bangor, Maine 04401

TESTING LOCATION:
The Reuben Colburn House
33 Arnold Road
Pittston, Maine 04345

SAMPLING DATE:
April 7, 2022

PROJECT NO.:
220350.00

LAB ID:
NEL: 102201088-095

SAMPLE ID:	**ST-1**	**ST-2**	**ST-3**	**ST-4**
SAMPLE LOCATION:	Outside (control sample)	Attic	2nd Floor Bedroom	2nd Floor Bedroom
TOTAL MOLD SPORES Count/m3:	**960**	**3,500**	**3,400**	**8,400**
MOLD GENERA IDENTIFIED:	Count/m3	Count/m3	Count/m3	Count/m3
Ascospores	270	1,200	1,400	3,600
Aspergillus/Penicillium-like	-	530	110	640
Basidiospores	690	800	1,100	2,500
Cladosporium	-	690	480	910
Curvularia	-	-	-	53
Epicoccum	-	-	-	110
Hyphal Fragments	-	270	53	210
Myxomycetes/Smuts/Periconia	-	53	210	370
Pithomyces	-	-	-	-

SAMPLE ID:	**ST-5**	**ST-6**	**ST-7**	**ST-8**
SAMPLE LOCATION:	1st Floor Dining Room	1st Floor Kitchen	1st Floor Parlor	Basement
TOTAL MOLD SPORES Count/m3:	**12,000**	**12,000**	**23,000**	**25,000**
MOLD GENERA IDENTIFIED:	Count/m3	Count/m3	Count/m3	Count/m3
Ascospores	4,700	5,500	12,000	1,500
Aspergillus/Penicillium-like	2,200	3,600	5,400	22,000
Basidiospores	4,000	2,200	4,900	1,100
Cladosporium	690	640	960	110
Curvularia	-	-	-	-
Epicoccum	-	-	-	-
Hyphal Fragments	480	270	370	53
Myxomycetes/Smuts/Periconia	-	160	-	53
Pithomyces	-	-	53	-

SME SEVEE & MAHER ENGINEERS

ESHA ENVIRONMENTAL SAFETY & HYGIENE ASSOCIATES
A Sevee & Maher Engineers company

Northeast Laboratory Services
www.nelabservices.com

North Location:
227 China Rd.
Winslow, ME 04901

South Location:
120 Main St.
Westbrook, ME 04092

Phone: 855-731-9161
Fax: 207-873-7022
Email: info@nelabservices.com

Answers for a Healthier Environment

Lab ID # 102960

Client: SME/ESH

Address: PO Box 85A
Cumberland, ME 04021

Date Sampled: 4/7/2022
Date Received: 4/7/2022
Date Reported: 4/11/2022

NEL Project ID: 102201088-095
Project Number: 220350
Project Name: Artifex - Pittston ME

Analysis Report - Spore Trap Direct Exam

Sample Description	ST-1 Outdoor Control		ST-2 Attic		ST-3 2nd Flr Bedroom	
Lab ID Number	102201088		102201089		102201090	
Volume Sampled (Liters)	75		75		75	
Background Debris*	2		5		4	
	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3
Total Mold Spores & Fragments	**18**	**960**	**66**	**3,500**	**64**	**3,400**
Alternaria						
Ascospores	5	270	22	1,200	27	1,400
Aspergillus/Penicillium-like			10	530	2	110
Basidiospores	13	690	15	800	21	1,100
Bipolaris Group						
Chaetomium						
Chlamydospores						
Cladosporium			13	690	9	480
Curvularia						
Epicoccum						
Fusarium						
Hyphal Fragments			5	270	1	53
Myxomycetes/Smuts/Periconia			1	53	4	210
Other Spores						
Pithomyces						
Poria/Meruliporia						
Rusts						
Stachybotrys						
Trichoderma						
Ulocladium						
Unknown Spores						
Zygomycetes						

* Debris Rating Scale: 0 = no debris visible; 5 = very high debris abundance. Background debris levels of 4 and above indicate poor visibility which can result in under-counting of small spores such as those from members of the Aspergillus/Penicillium-like group.

The analytical sensitivity is calculated by dividing (Ct./m3) by the (Raw ct.). The limit of detection is calculated by multiplying the analytical sensitivity by the volume of air collected and dividing that number by 1000.

Values may not appear to be additive due to rounding of numbers. Spore/m3 values are rounded to 2 significant figures.

Unless otherwise noted no discernable field blank was submitted with these samples.

Comments for spore trap results are located on the final page of this report.

Northeast Laboratory Services
www.nelabservices.com

North Location:
227 China Rd.
Winslow, ME 04901

South Location:
120 Main St.
Westbrook, ME 04092

Phone: 855-731-9161
Fax: 207-873-7022
Email: info@nelabservices.com

Answers for a Healthier Environment

Lab ID # 102960

Client: SME/ESH

Address: PO Box 85A
Cumberland, ME 04021

Date Sampled: 4/7/2022
Date Received: 4/7/2022
Date Reported: 4/11/2022

NEL Project ID: 102201088-095
Project Number: 220350
Project Name: Artifex - Pittston ME

Analysis Report - Spore Trap Direct Exam

Sample Description	ST-4 2nd Flr Bedroom		ST-5 1st Dining Room		ST-6 1st Flr Kitchen	
Lab ID Number	102201091		102201092		102201093	
Volume Sampled (Liters)	75		75		75	
Background Debris*	5		4		5	
	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3
Total Mold Spores & Fragments	**158**	**8,400**	**227**	**12,000**	**234**	**12,000**
Alternaria						
Ascospores	68	3,600	89	4,700	104	5,500
Aspergillus/Penicillium-like	12	640	41	2,200	68	3,600
Basidiospores	47	2,500	75	4,000	42	2,200
Bipolaris Group						
Chaetomium						
Chlamydospores						
Cladosporium	17	910	13	690	12	640
Curvularia	1	53				
Epicoccum	2	110				
Fusarium						
Hyphal Fragments	4	210	9	480	5	270
Myxomycetes/Smuts/Periconia	7	370			3	160
Other Spores						
Pithomyces						
Poria/Meruliporia						
Rusts						
Stachybotrys						
Trichoderma						
Ulocladium						
Unknown Spores						
Zygomycetes						

* Debris Rating Scale: 0 = no debris visible; 5 = very high debris abundance. Background debris levels of 4 and above indicate poor visibility which can result in under-counting of small spores such as those from members of the Aspergillus/Penicillium-like group.

The analytical sensitivity is calculated by dividing (Ct./m3) by the (Raw ct.). The limit of detection is calculated by multiplying the analytical sensitivity by the volume of air collected and dividing that number by 1000.

Values may not appear to be additive due to rounding of numbers. Spore/m3 values are rounded to 2 significant figures.
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Fax: 207-873-7022
Email: info@nelabservices.com

Answers for a Healthier Environment

Client: SME/ESH

Address: PO Box 85A
Cumberland, ME 04021

Date Sampled: 4/7/2022
Date Received: 4/7/2022
Date Reported: 4/11/2022

NEL Project ID: 102201088-095
Project Number: 220350
Project Name: Artifex - Pittston ME

Analysis Report - Spore Trap Direct Exam

Sample Description	ST-7 1st Flr Parlor		ST-8 Basement	
Lab ID Number	102201094		102201095	
Volume Sampled (Liters)	75		75	
Background Debris*	5		3	
	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3
Total Mold Spores & Fragments	**435**	**23,000**	**472**	**25,000**
Alternaria				
Ascospores	217	12,000	28	1,500
Aspergillus/Penicillium-like	101	5,400	419	22,000
Basidiospores	91	4,900	21	1,100
Bipolaris Group				
Chaetomium				
Chlamydospores				
Cladosporium	18	960	2	110
Curvularia				
Epicoccum				
Fusarium				
Hyphal Fragments	7	370	1	53
Myxomycetes/Smuts/Periconia			1	53
Other Spores				
Pithomyces	1	53		
Poria/Meruliporia				
Rusts				
Stachybotrys				
Trichoderma				
Ulocladium				
Unknown Spores				
Zygomycetes				

* Debris Rating Scale: 0 = no debris visible; 5 = very high debris abundance. Background debris levels of 4 and above indicate poor visibility which can result in under-counting of small spores such as those from members of the Aspergillus/Penicillium-like group.

The analytical sensitivity is calculated by dividing (Ct./m3) by the (Raw ct.). The limit of detection is calculated by multiplying the analytical sensitivity by the volume of air collected and dividing that number by 1000.

Values may not appear to be additive due to rounding of numbers. Spore/m3 values are rounded to 2 significant figures.
Unless otherwise noted no discernable field blank was submitted with these samples.
Comments for spore trap results are located on the final page of this report.

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Phone: 855-731-9161
Fax: 207-873-7022
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Answers for a Healthier Environment

Client: SME/ESH

Address: PO Box 85A
Cumberland, ME 04021

Date Sampled: 4/7/2022
Date Received: 4/7/2022
Date Reported: 4/11/2022

NEL Project ID: 102201088-095
Project Number: 220350
Project Name: Artifex - Pittston ME

Sample & Project Comments

No comments were recorded for this project.

Report Authorized By:

Erin Bouttenot, Technical Manager,
Indoor Air Quality

NEL Method #: 4.3.24 & 4.3.25

Northeast Laboratory Services

Chain Of Custody
Indoor Air Quality Analysis

Ship Samples To:
120 Main Street, Unit B
Westbrook, ME 04092

Phone: 800-244-8378
Email: info@nelabservices.com
Website: www.nelabservices.com

102201088

Report ID:	102201088 - 095 Only)
Page(s):	1 of 1

Contact Information		Sample Type Codes
Company:	ESHA, LLC SME/ESHA	AC = Air Culture Plate
Address:	PO Box 85A	BM = Bulk Materials
City, State Zip:	Cumberland, ME 04021	D = Dust
Contact:	~~Mark Coleman~~ JOHN BOLAND	RCS = RCS Air Strip
Phone:	207-854-2711	S = Surface Swab
Email:	~~mark@, kspears@, doreen@eshiaq.com.~~	ST = Spore Trap (AOC)
Project Information		T = Tape Lift
Project #:	220350	W = Water
Project Name:	ARTIFEX - PITTSTON, ME	WP = Wipe
Sampled By:	JBG	O = Other

Turn Around
Standard: ☒
Next Day: ☐
RUSH: ☐

Lab ID #	Collection Date	Sample Type	Sample Description	ST Total Volume (L)	Requested Analysis: Non-Culture: Spore Trap Analysis - Fungi Only	Spore Trap Analysis - Fungi & Particles	Direct Exam - Qualitative Assessment	Culture: 1 Plate Media Fungi (MEA)	1 Plate Media Bacteria (TSA)	2 Plate Media Fungi & Bacteria (MEA, TSA)	
1: per client via phone 4.8.22 14:55	⑤ MR 04.8.22										
102201088	3-7-22	ST	ST-1 OUTDOOR CONTROL	75	✓						
089	4		ST-2 ~~2nd FLR BEDROOM~~ ATTIC		✓						
090			ST-3 2nd FLR BEDROOM		✓						
091			ST-4 2nd FLR BEDROOM		✓						
092			ST-5 1ST FLR DINING ROOM		✓						
093			ST-6 1ST FLR KITCHEN		✓						
094	4		ST-7 1ST FLR PARLOR		✓						
095	3-7-22	ST	ST-8 BASEMENT	75	✓						
	⑤ MR 4.8.22 per client via phone 14:55 4.8.22										

Internal use only

Non-Culture Method TAT: Rush TAT reported day of receipt, Standard TAT reported 1-3 business days after receipt.
Culture Method TAT: 1 or 2 Plate Media Surface/Air TAT reported 1-2 weeks after receipt.

Samples Relinquished:		Samples Accepted:		Acceptance Criteria
Date/Time:	3-7-2022 1525	Date/Time:		Samples are deemed acceptable (unbroken and labeled) unless otherwise noted below.
Name:	JBG	Name:		
Samples Relinquished:		**Samples Accepted:**		**Comments**
Date/Time:		Date/Time:	04.07.22 16.04	email analytical.esh data @sme-engineers.com
Name:		Name:	ML	

APPENDIX B

PHOTOGRAPH LOG

SME
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ENGINEERS

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ENVIRONMENTAL SAFETY
& HYGIENE ASSOCIATES
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PHOTOGRAPH LOG

Col. Rueben Colburn House
33 Arnold Road, Pittston, Maine

Air sample ST-1, outdoor control.

Air sample ST-2 collected from walk-up attic space, outdoor control.

PHOTOGRAPH LOG

Col. Rueben Colburn House
33 Arnold Road, Pittston, Maine

Air sample ST-3 collected from small side bedroom on second floor.

Air sample ST-4 collected from larger side bedroom on second floor.

PHOTOGRAPH LOG

Col. Rueben Colburn House
33 Arnold Road, Pittston, Maine

Air sample ST-5 collected from dining room on first floor.

Air sample ST-6 collected from kitchen on first floor.

PHOTOGRAPH LOG

Col. Rueben Colburn House
33 Arnold Road, Pittston, Maine

Air sample ST-7 collected from parlor on first floor.

Air sample ST-9 collected from basement area.

PHOTOGRAPH LOG

Col. Rueben Colburn House
33 Arnold Road, Pittston, Maine

View of “wet rot” fungi for wood framing in basement area.

View of “wet rot” fungi for wood framing in basement area.

PHOTOGRAPH LOG

Col. Rueben Colburn House
33 Arnold Road, Pittston, Maine

View of “wet rot” fungi for wood framing in basement area.

View of “wet rot” fungi for wood framing in basement area.

PHOTOGRAPH LOG

Col. Rueben Colburn House
33 Arnold Road, Pittston, Maine

View of “wet rot” fungi for wood framing in basement area.

View of “wet rot” fungi for wood framing in basement area.

PHOTOGRAPH LOG

Col. Rueben Colburn House
33 Arnold Road, Pittston, Maine

View of “wet rot” fungi for wood framing in basement area.

APPENDIX C

CERTIFICATIONS AND LICENSES

SME
SEVEE & MAHER
ENGINEERS

ESHA
ENVIRONMENTAL SAFETY
& HYGIENE ASSOCIATES
A Sevee & Maher Engineers company

American Council for Accredited Certification

hereby certifies that

John Boilard

has met all the specific standards and qualifications of the re-certification process, including continued professional development, and is hereby re-certified as a

CMC

Council-certified Microbial Consultant

This certificate expires on May 31, 2022

Charles F. Wiles, Executive Director

1605028

Certificate Number

COLBURN HOUSE STATE HISTORIC SITE
PITTSTON MAINE
Construction / Alterations Timeline

DATE	STRUCTURE	CONSTRUCTION / ALTERATION / EVENT	WHO DID IT	INFORMATION SOURCE
c. 1765	house	constructed	Reuben Colburn	
c. 1800-1840	house exterior	front door altered from door w/ transom to door w/ sidelights	Reuben? or his son-in-law John after 1817?	2001 south wall repair work
	house front hall	front hall stair altered to have curved back wall, 2nd floor landing enlarged was center chimney re-worked?		2001 south wall repair work
	house front hall	interior board partition wall plastered, door trim changed		2001 south wall repair work
c.1800	house kitchen	cooking fireplace updated with Franklin insert walls and ceiling plastered?		KJ article July 6, 1936
	house SE parlor	dentil molding installed? (I think it was original) window/door trim and windows updated?		
	house SE chamber	window/door trim and windows updated? field paneling plastered over		
	house SW chamber	Greek revival window, door trim and fireplace surround and hearth		
c.1820? -1860	barn	constructed - before 1860 because Bertha Colburn refs to it in her memoir	Gustavus Colburn?	
	carriage house	constructed c. 1850	Gustavus Colburn?	KJ 1965 "Open Hse on Bicentenary..."
c.1850	house ell	constructed c. 1850 for kitchen & woodshed? was back stair in house removed when ell constructed?	Gustavus Colburn?	Claire Plumer ltr to J Briggs 1975
c. 1850	house ell	"when the ell was put on, about 1850, a window was covered over to make a closed in stair way on the side porch for access to the cellar"		Claire Plumer notes on 1974 drawing
between 1870-1876	house SW parlor	"After my grandmother died, my mother had the west room entirely torn out with the exception of the corner closet that remains the same, as when great-grandmother kept her wines in it. Even the plaster and laths were renewed."	Alzina Colburn	Bertha Colburn's Memoir

COLBURN HOUSE STATE HISTORIC SITE
PITTSTON MAINE
Construction / Alterations Timeline

by 1886	house front door	front door surround replaced with Italianate raised panels, scroll brackets and hipped roof - "The front door, or rather the cap over it is modern."	Gustavus Colburn?	E. Whitefield sketchbook 1886
1886-1901	house chimney top	chimney top appears to be same in 1901 photo as illustrated in E. Whitefield's sketchbook of 1886		1901 photo & 1886 sketchbook
c.1900	house/ell East porch	porch stops short of slider door on north end of shed		1901 Prof. Smith photo
c. 1900 - 1920	house ell	first floor contained kitchen adjacent to house, back stair and chimney in center, wood shed at far end		Helen C Pomeroy 1979 ltr & sketch
	house first floor	NE corner small room, Dining Room (as named by Aunt Bertha), NW corner Borning Room		Helen C Pomeroy 1979 ltr & sketch
	house second floor	five bed rooms and additional bedroom in attic of shed		Helen C Pomeroy 1979 ltr & sketch
1901	family history	The last member of the Colburn family to occupy the house as a family residence was Richard Colburn, who moved to San Francisco in 1901. Richard Colburn was last of the family to use the place as a working farm in 1901		KJ article "Plumers Entertain at Bicentenary of Colburn House" KJ article 1972
1913	yard	DAR Maine chapter installed boulder with commemorative plaque		KJ articles, BPL files
1913	house front door	trellis on sides of front door entrance installed after 1903 and by 1913	Bertha Colburn?	1901 photo vs 1913 photo
c. 1921	house chimney	"the big chimney, made of bricks with clay, was reinforced at its base with cement to prevent its sinking. The arches in the cellar were filled with cement and the chimney retopped. Also new timbers placed under the floors. In doing this, it was necessary to take away a portion of the wainscot on the east side of the room, north of the door, for the trim."	Bertha Colburn?	Bertha Colburn Memoir
1935-1938	family history	Bertha Colburn corresponds with Wm S. Appleton at SPNEA re: leaving them her house		SPNEA archives
1936	house East entrance	two benches flanking east entrance door constructed by 1936	Bertha Colburn?	1936 KJ articles
1941	family history	Harry C. Knight accepts Bertha Colburn's bequest of Colburn house		Sept. 1941 ltr Knight to Appleton SPNEA

COLBURN HOUSE STATE HISTORIC SITE
PITTSTON MAINE
Construction / Alterations Timeline

1953	property transfer	M/M Paul S. Plumer purchase property and moved in Aug -no running water in the house	M/M Plumer	PST 3/25/56
1953-1956	house kitchen (keeping rm)	-opened fireplace (removed Franklin insert) -installed hand hewn beam from a barn as mantel -removed plaster @ walls - walls paneled, whitewashed -removed plaster off ceiling	M/M Plumer	PST 3/25/56
1950s	kitchen	modern window and kitchen installed in NW corner, former borning room	M/M Plumer	Plumer aerial photo
1950s	kitchen	NE corner removed small room	M/M Plumer	Plumer 2001 drwng
1950s	kitchen back stair	Paul Plumer notes his mother said she found evidence of a back stair on east end of north wall - previously removed		Plumer 2001 drwng
1953-1956	house SW chamber	removed plaster on chimney wall to reveal paneling	M/M Plumer	PST 3/25/56
1953-1956	house chimney	chimney encased in cement, using circular staircase wall as a form for the cement - front face of fireplace rebuilt	M/M Plumer	PST 3/25/56 Plumer photo
	house chimney	"Ben Blake of Hallowell restored the great chimney. He started in at the base shoring up tow sides of the chimney foundation with concrete walls. He then wrapped the entire chimney in hardware cloth which he used for a binder to encase it in cement from cellar to rooftop. The house ended up with 5 usable fireplaces and a furnace flue."		KJ 11/29/72
1950s	house NW chamber	turned into bathroom	M/M Plumer	Plumer 2001 drawing
1950s	house attic	1/3+ attic floor boards removed and sold when insulated P.Plumer notes attic stairs may have changed over years	M/M Plumer	Plumer 2001 drawing
1950s	ell kitchen	removed cupboard & pump sink on W wall, removed cupbrd and pantry shelves in NW corner, removed blk iron stove at chimney, Installed bathroom and washing machine	M/M Plumer	Claire Plumer notes on 1974 drawing
1950s	ell kitchen inter / exter	converted NW corner of kitchen ell into indoor/outdoor BBQ		5/24/1974 existing conds drawing
1950s	ell shed	converted dirt floor wood shed into garage		Claire Plumer notes on 1974 drawing
1950s	ell exterior	constructed shed roof sunroom on west side of ell, also added dormer window W side ell bedroom	M/M Plumer	5/24/1974 existing conds drawing

COLBURN HOUSE STATE HISTORIC SITE
PITTSTON MAINE
Construction / Alterations Timeline

late 1950s	house exterior	removed late 19th c. front door surround and east ell porch, removed eave trim & return, also gutters/downspouts and benches by east side door to house	M/M Plumer	Plumer sleigh photo gives good detail of east ell porch
1964	house exterior	Plumer restoration front door surround, restoration eave trim and return		1964 Maine Dept. Econ. Dev. photo
1970	property transfer	M/M Plumer sold property to Dr. & Mrs. Donald W. Klopp in May 1970		KJ 11/29/1972
1972	property transfer	D/M Klopp sold property to State of Maine, Bureau of Parks & Recreation 11/22/72		
1973	lease	property leased to Arnold Expedition Historical Society 2/10/1973		
1973	Allen parcel	Allen property purchased, added to Colburn property 12/21/1973		
1974-75	Nat'l Reg grant	Scope of work: -repair/replace barn sub-timbering and foundation and rebuild floor -stabilize carriage house -remove asphalt shingles from roof of house, ell, barn and carriage house; replace with cedar shingles & remove metal gutters -remove patio and shed roof addition W side of ell -repair sash and paint house, barn, ell & carriage house -remove garage door and rebuild ell gable wall -installation of burglar-fire alarm system -paint analysis to determine original color of house & ell	Parks	Parks & MHPC memos
	Rider A specs for grant work	Barn: -replace broken, rotted, and collapsed sub floor timbers and stabilize roof support timbers -fill in old well, under barn floor, with gravel -level the building and improve the foundation		Parks memo

COLBURN HOUSE STATE HISTORIC SITE
PITTSTON MAINE
Construction / Alterations Timeline

		-replace rotted flooring -repair double doors - both ends of barn -secure loose clapboards and replace as necessary -perform other minor repairs to prepare facade for late spring painting project Carriage House: -level this building and improve foundation support system -secure loose clapboards and replace as necessary -build in are of double sliding door with wall and center a double window -perform other minor repairs to prepare facade for late spring painting House and Ell: -remove shed roof over patio area of ell and wood shed (modern additions) -restore and rebuild outside wall of ell to original design -remove dormer from ell's gable roof and build back roof to original slope -remove overhead garage door and build back original rear wall, with a 9/9 window midway -secure clapboards of house and ell and replace clapboards as necessary -replace rotted side boards and repair wooden gutters -minor repairs in prep for late spring painting		
1974	grant summary	1. Stabilization of what remains 2. Repair of sub-standard structural features 3. New cedar shingled roof (3 blds) 4. Removal of modern additions 5. Installation of alarm system 6. Overall painting	JWBriggs	memo to director, Bureau of Parks
1975-77	chimney	chimney top rebuilt	Parks	drawing 5/27/75
1977	house south parlor	I. Colburn memo re: restoration of south parlor work outlined included: floor, walls, ceiling, fireplace, doors, hardware		
1977	house	"The restoration project at Colburn House is progressing well. Thanks to Ike Colburn and his restoration crew the former AEHS office has become an 18th century parlor with the **floor restoration to its former level**, **new doors faithfully crafted to the design of others in the house, and**		AEHS newsletter No. 33 7/26/77

COLBURN HOUSE STATE HISTORIC SITE
PITTSTON MAINE
Construction / Alterations Timeline

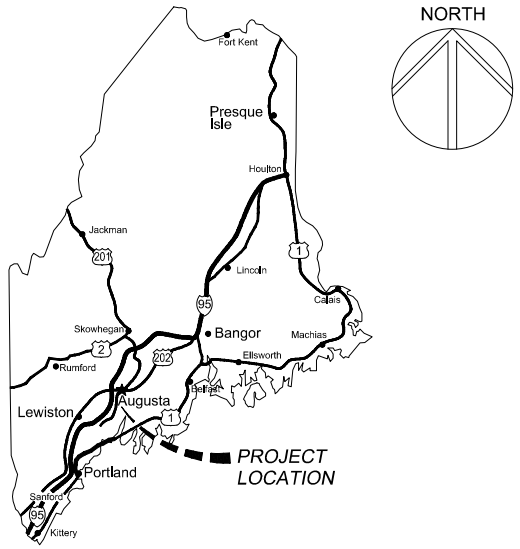
		mouldings, paneling and hardware in place. Meanwhile, John Briggs, of State Bureau of Parks/Re, has had work done on the masonry of the room's fireplace to **restore the hearth to its period condition**."		
1979	ell	"Cecil Pierce reported on the progress of work being done in the ell of the Colburn House, with the assistance of CETA employees, which will provide living quarters for an in-residence curator/caretaker of the property."	AEHS	AEHS newsletter No. 40 5/23/79
1979	barn house	"In spite of the very early snowfall and raw weather, Cecil's crew is determined to finish the **installation of the second floor and the two stairways in the barn**. We are also having a roofed-over rack made for out batteaux. The painting of the exteriors of all the buildings by the State continues as the weather permits. Shortly, the crew will move inside the Colburn House to restore the keeping room, including the plaster ceiling, the west end, and the **removal of the modern 35 pane picture window in the north wall**."	AEHS	Curator's report 10/18/79
1980	house	"Meanwhile, in Pittston, the Society's headquarters is rapidly evolving into that 1765 dream we all have been looking for. Cecil Pierce and his craftsmen are doing great things inside the Colburn House. Director Ned Schroeder provided a source for some interesting wide boards; **the modern kitchen which occupied the "borning room" has disappeared**; the "keeping room" is being restored to its colonial state, and we are rapidly progressing toward opening day..."	AEHS	AEHS newsletter No. 43 2/2/80
1980	house	"Cecil Pierce and his capable crew have completed the major renovation of the ground floor. Wide, colonial style pine boards, fitted with hand tools (many hand made by Cecil) add authenticity to the walls. **The original "keeping room" has been restored**, modern windows have been replaced with the style of the period, and other fine touches of craftsmanship complete the colonial setting." "**The wide pine boards (some 18" wide) used in the panelling of the "keeping room**" were obtained in Searsmont by John Briggs of the Maine Parks & Rec Bureau. This contribution is much appreciated by the Society. The wide boards used for a partition between the "keeping room" and the "borning room" were furnished by Bob Cunningham from his barn at Phippsburg, Maine, a willing offering."	AEHS	AEHS president's letter 5/26/80

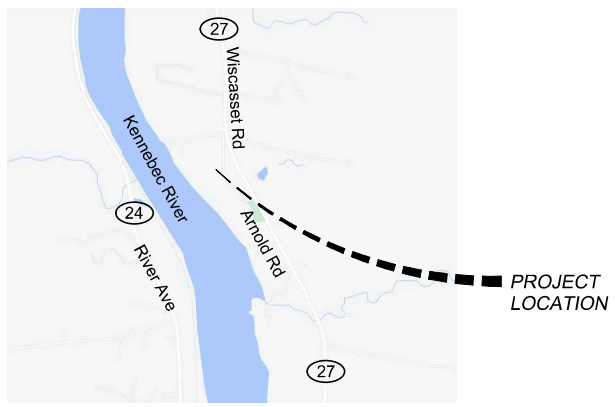
Year	Description	Undertaken by	Documentation	Grant Funded?	Amount
?	Front door surround recreated	Pownalboro Restoration for BPL	c. 2010		
2009	Carriage House and Barn sills	BPL, Jewett Builders	Memo Tom Desjardin, March 25, 2009		
2009	Fireplace surround restoration - intepretation, not a replica	BPL, Pownalborough Restoration	Letter MHPC to BPL.		
2002	North wall structural repairs	BPL/ Preservation Timber Framing	folder	yes	$ 19,000.00
2001	Front door surround removed, BCA evaluation of evidence for front door recreation	Brian Powell, BCA	Report December 2000		
2001	door; south wall; new sills and post feet replacement	Preservation timber framing	bills, letters, MHPC notes and drawings	Yes, New Century	$ 10,000.00
2000	differntial settlement of te chimney structure and related timbe fram strucal weakness.			Yes New Century	
1997-1999	Assessment of structure	Suzanne Carlson and Les Fossil	Report, to AEHS?	no	
1991	Identification of structural deficiencies and work program	Sylvanus Doughty, Architect	Report to AEHS	no	
1980	"restoration of the Colburn House"	?	Letter of Agreemtn	Conservation and Recreation	$ 11,693.33
1979	Barn sill repair	State	Memo Tom Desjardin, March 25, 2009		
1974-1978	"restoration" multiple projects	State	file	yes	$ 12,000.00
1960	foundation stabilization, hot air oil furnace, concrete cellar floor	private owner			
1953	Fireplace restoration with concrete,\.	Onwers	Letter Tom Desjardin to Mike Johnson, MHI	no	

MAJOR REUBEN COLBURN HISTORIC HOUSE

HISTORIC STRUCTURE ASSESSMENT
ARNOLD ROAD, PITTSTON, ME 04345

PROJECT NO. 2022115
April 21, 2022





INDEX OF DRAWINGS :

CIVIL

C100 - SITE PLAN

ARCHITECTURAL

A100 - BASEMENT & GROUND FLOOR PLANS
A101 - SECOND & ATTIC FLOOR PLANS
A102 - ROOF PLAN
A200 - ELEVATIONS

"STATEMENT AND NOTICE OF COOPERATION"

RELEASE OF THESE PLANS CONTEMPLATES FURTHER COOPERATION AMONG THE OWNER, HIS CONTRACTOR AND THE ARCHITECT. DESIGN AND CONSTRUCTION ARE COMPLEX. ALTHOUGH THE ARCHITECT AND HIS CONSULTANTS HAVE PERFORMED THEIR SERVICES WITH DUE CARE AND DILIGENCE, THEY CANNOT GUARANTEE PERFECTION. COMMUNICATION IS IMPERFECT, AND EVERY CONTINGENCY CANNOT BE ANTICIPATED, ANY AMBIGUITY OR DISCREPANCY DISCOVERED BY THE USE OF THESE PLANS NEED BE REPORTED IMMEDIATELY TO THE ARCHITECT. FAILURE TO NOTIFY THE ARCHITECT COMPOUNDS MISUNDERSTANDING AND INCREASES CONSTRUCTION COSTS. A FAILURE TO COOPERATE BY A SIMPLE NOTICE TO THE ARCHITECT RELIEVES THE ARCHITECT FROM RESPONSIBILITY FOR ALL CONSEQUENCES. CHANGES MADE FROM THE PLANS WITHOUT CONSENT OF THE ARCHITECT ARE UNAUTHORIZED, AND RELIEVE THE ARCHITECT OF RESPONSIBILITY FOR ALL CONSEQUENCES ARRIVING OUT OF SUCH CHANGES. IN MANY CASES SUCH RELIEF OF RESPONSIBILITY INCLUDES RELIEF OF OWNER RESPONSIBILITY. THE CONTRACTOR AND HIS SUBCONTRACTORS NEED BE DILIGENT IN THESE MATTERS AT ALL TIMES PRIOR TO AND DURING CONSTRUCTION. REFER TO CONTRACT GENERAL AND SUPPLEMENTAL CONDITION AND SPECIFICATIONS (PROJECT MANUAL) FOR ADDITIONAL DETAILS AND CONDITIONS.

ARTIFEX
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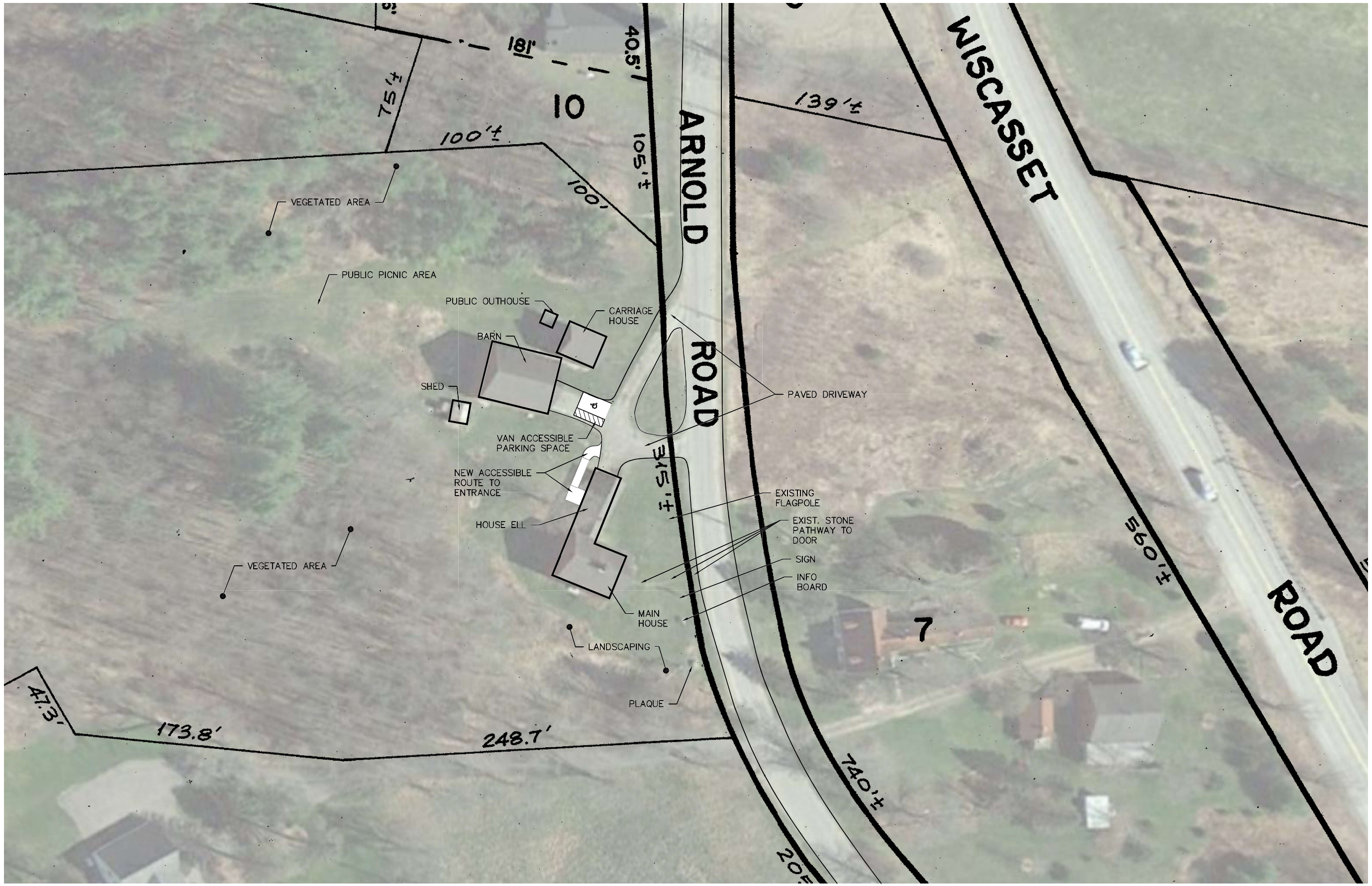

SITE PLAN
1" = 60'-0"
1 / C100

NOTE:
LOT 9 ON TOWN MAP U-13

30' 0' 60' 120'

NORTH

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SITE PLAN

PROJ. NUMBER: 2022115 DRAWN BY: EDJ

REV. DATE DESCRIPTION

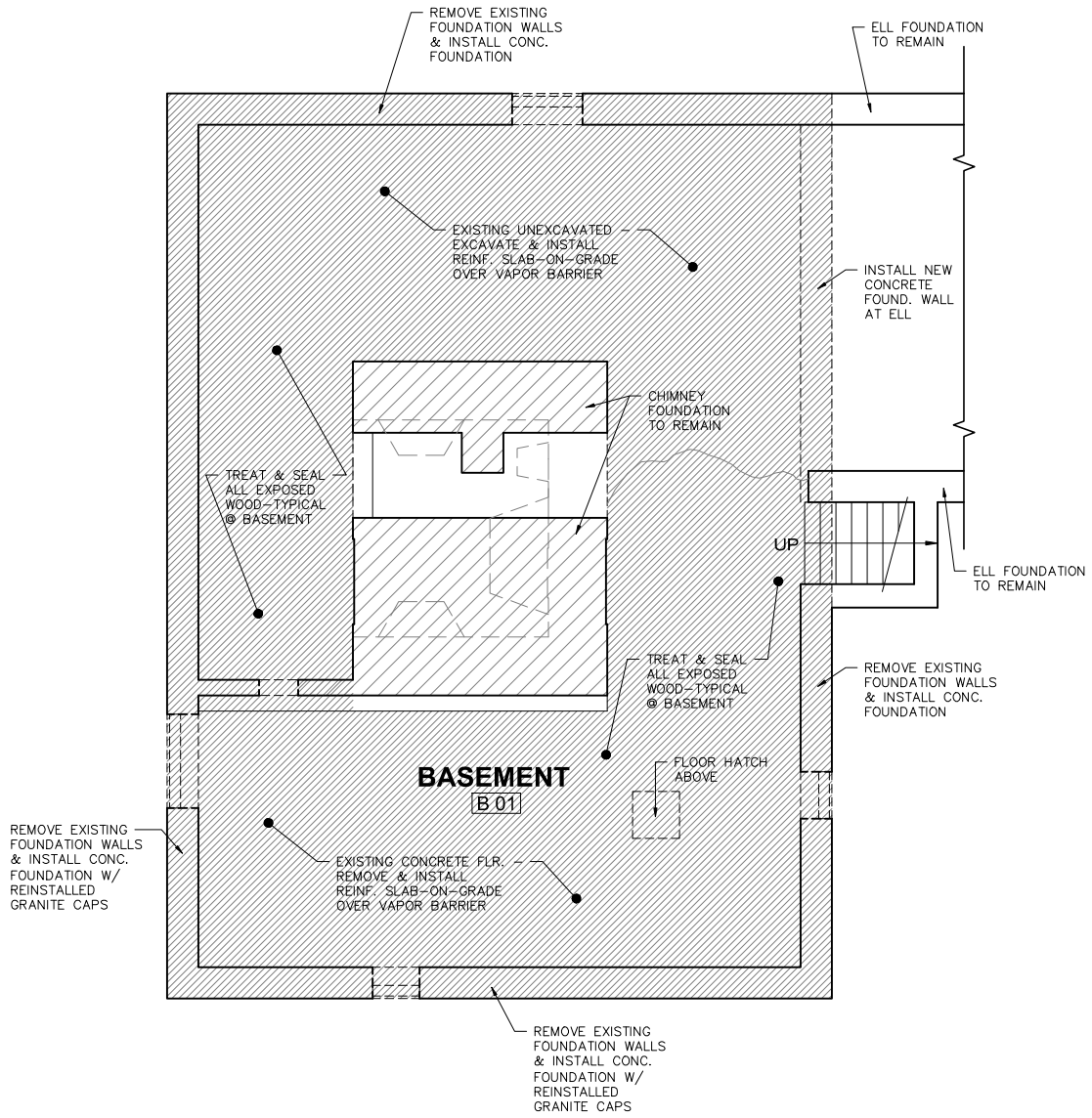
MAINE PARKS & LANDS
MAJOR COLBURN HOUSE
ARNOLD RD. PITTSTON, ME

DATE:
APR. 21, 2022

C100

LEGEND

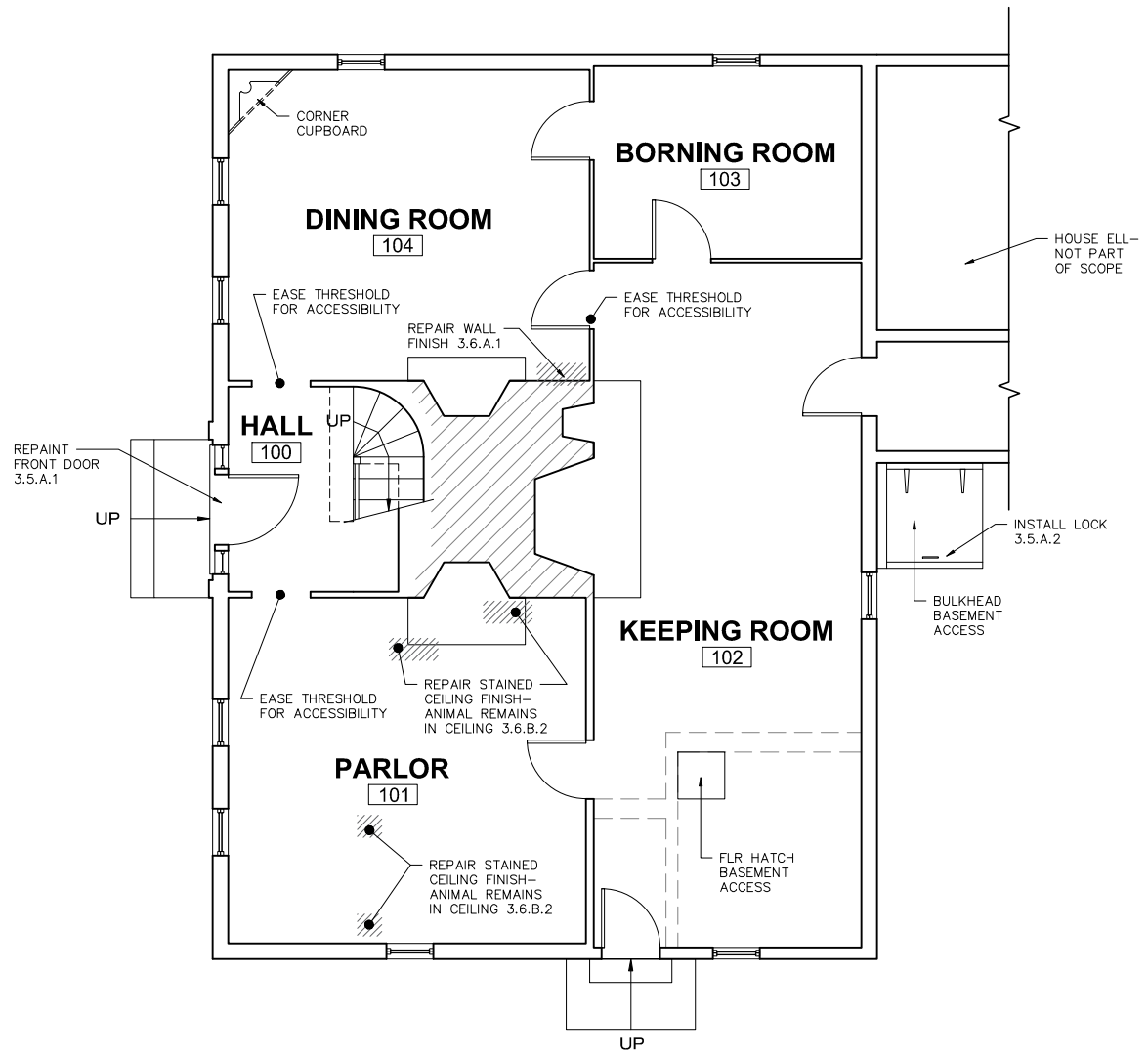
AREA OF CONCERN



BASEMENT PLAN
1/8" = 1'-0"
1 A100

NOTE:

1. REMOVE EXIST. EXT. FOUNDATION WALLS & SLAB UNDER MAIN HOUSE AND EXCAVATE CRAWLSPACE TO BASEMENT FLOOR LEVEL. INSTALL NEW CONC. FOUNDATION W/ RESET GRANITE SLABS AT SOUTH & EAST FACADES. NEW REINFORCED CONCRETE SLAB-ON-GRADE OVER VAPOR BARRIER.
2. REPLACE TIMBER EFFECTED BY WET ROT. TREAT AND SEAL ALL EXPOSED WOOD AT BASEMENT [FIRST FLOOR FRAMING].



GROUND FLOOR PLAN
1/8" = 1'-0"
2 A100

4' 0' 10' 20'

NORTH

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BASEMENT & GROUND FLOOR PLANS

PROJ. NUMBER: 2022115 DRAWN BY: EDJ

REV. DATE DESCRIPTION

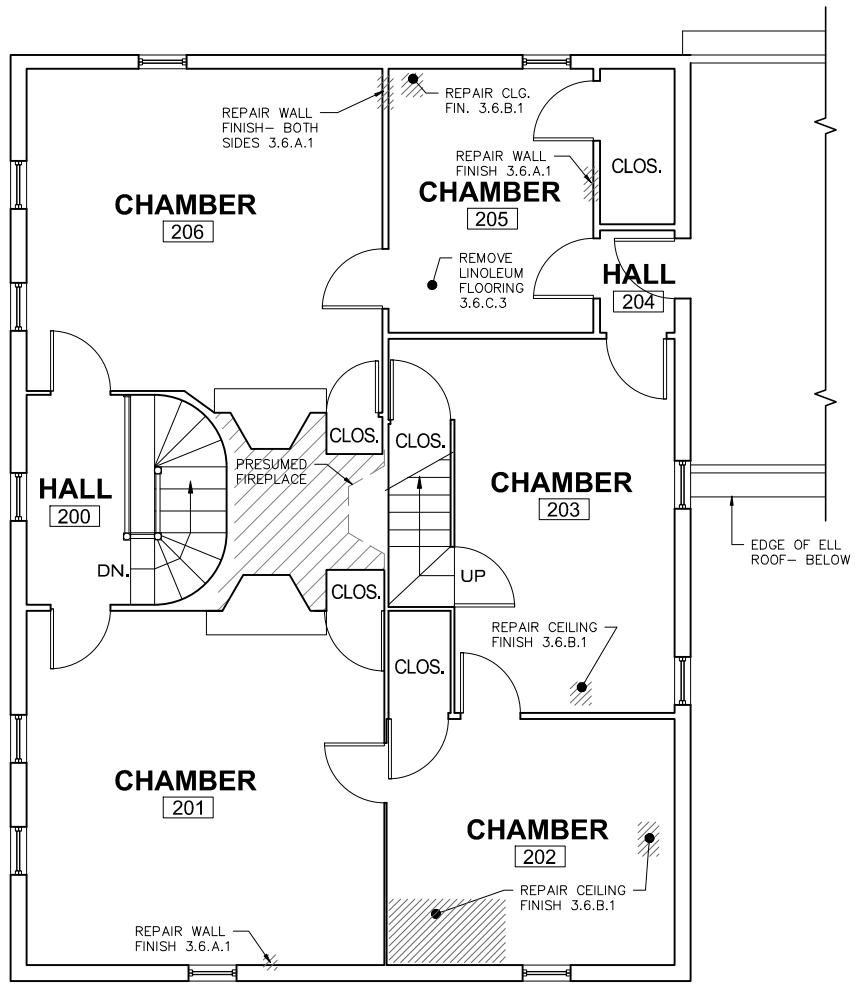
MAINE PARKS & LANDS
MAJOR COLBURN HOUSE
ARNOLD RD. PITTSTON, ME

DATE:
APR. 21, 2022

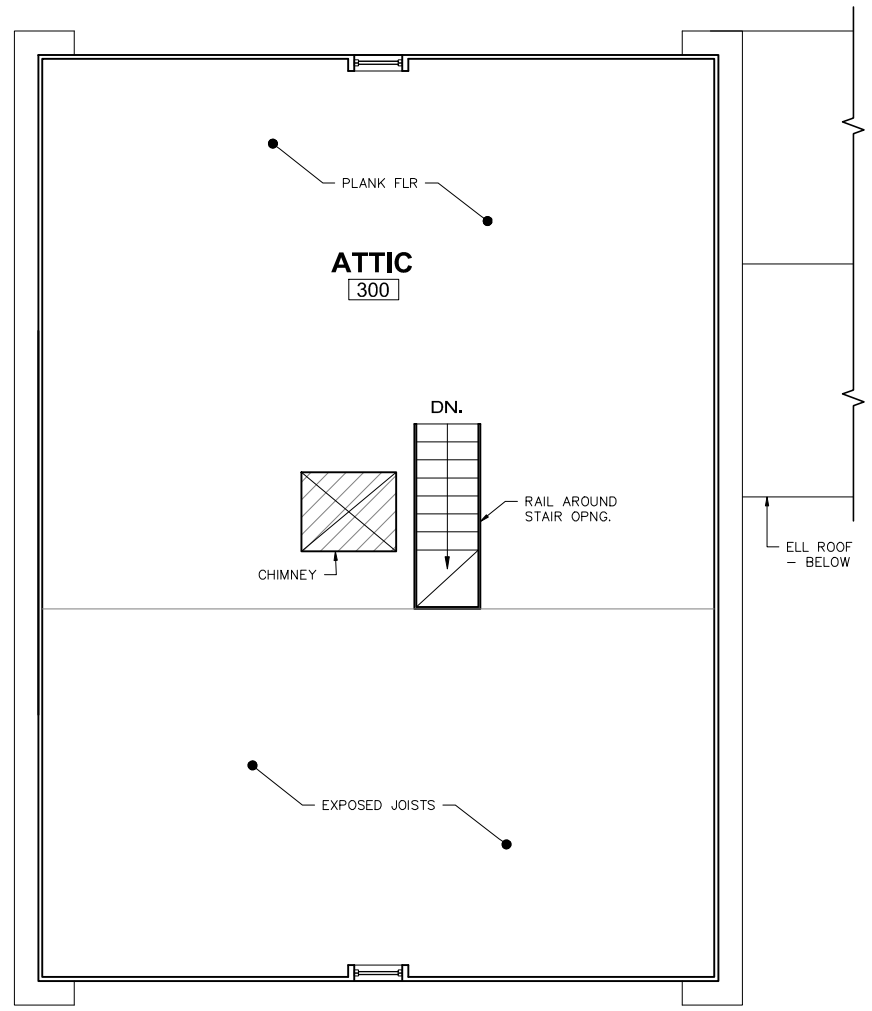
A100

LEGEND

AREA OF CONCERN



SECOND FLOOR PLAN
1/8" = 1'-0"
1 A101



ATTIC PLAN
1/8" = 1'-0"
2 A101

4' 0' 10' 20'

NORTH

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SECOND & ATTIC FLOOR PLANS

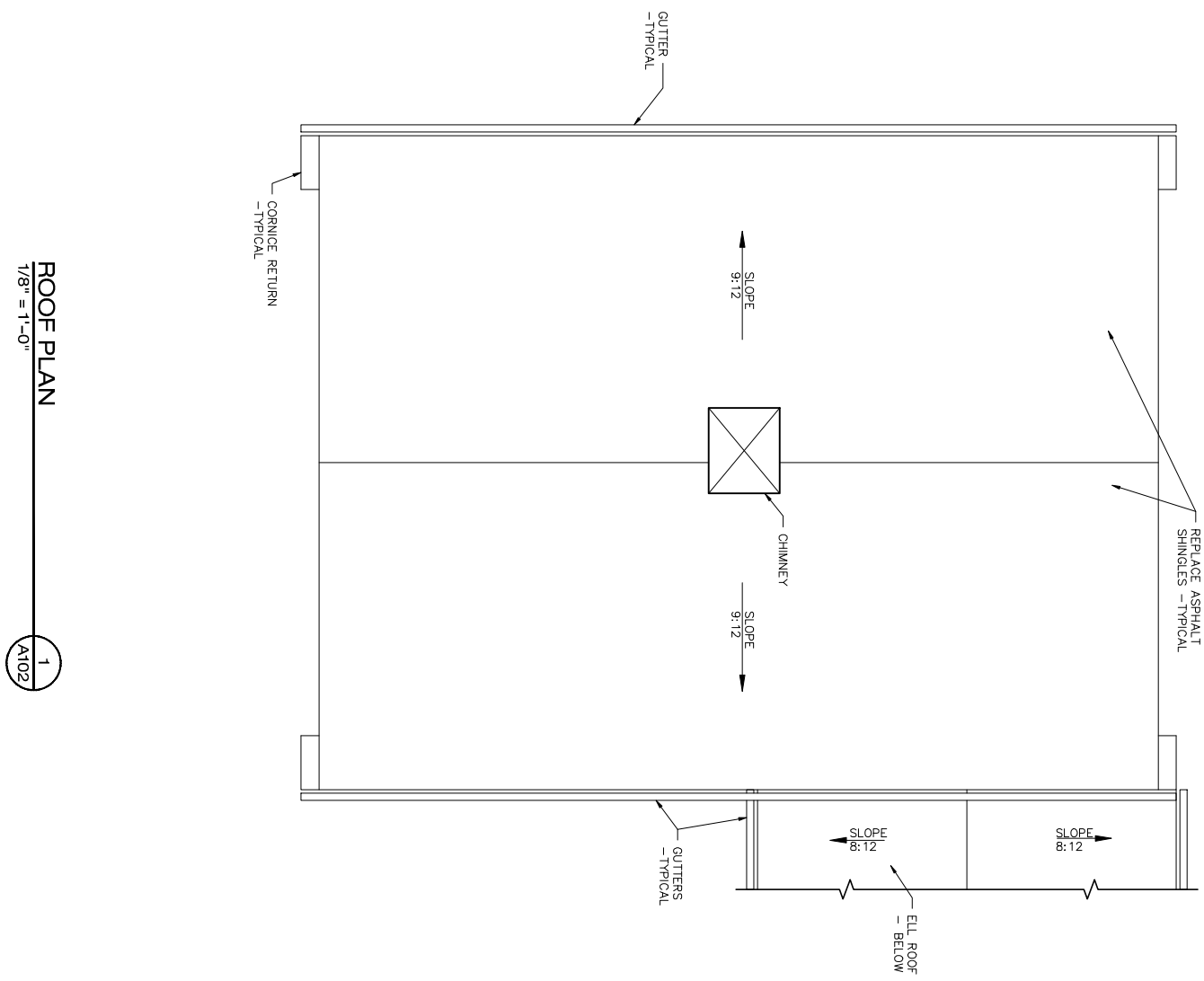
PROJ. NUMBER: 2022115 | DRAWN BY: EDJ

REV. | DATE | DESCRIPTION

MAINE PARKS & LANDS
MAJOR COLBURN HOUSE
ARNOLD RD. PITTSTON, ME

DATE:
APR. 21, 2022

A101



ROOF PLAN
1/8" = 1'-0"

MAINE PARKS & LANDS
MAJOR COLBURN HOUSE
ARNOLD RD. PITTSTON, ME

ROOF PLAN

PROJ. NUMBER: 2022115	DRAWN BY: EDJ
REV. DATE	DESCRIPTION

DATE: APR. 21, 2022

A102

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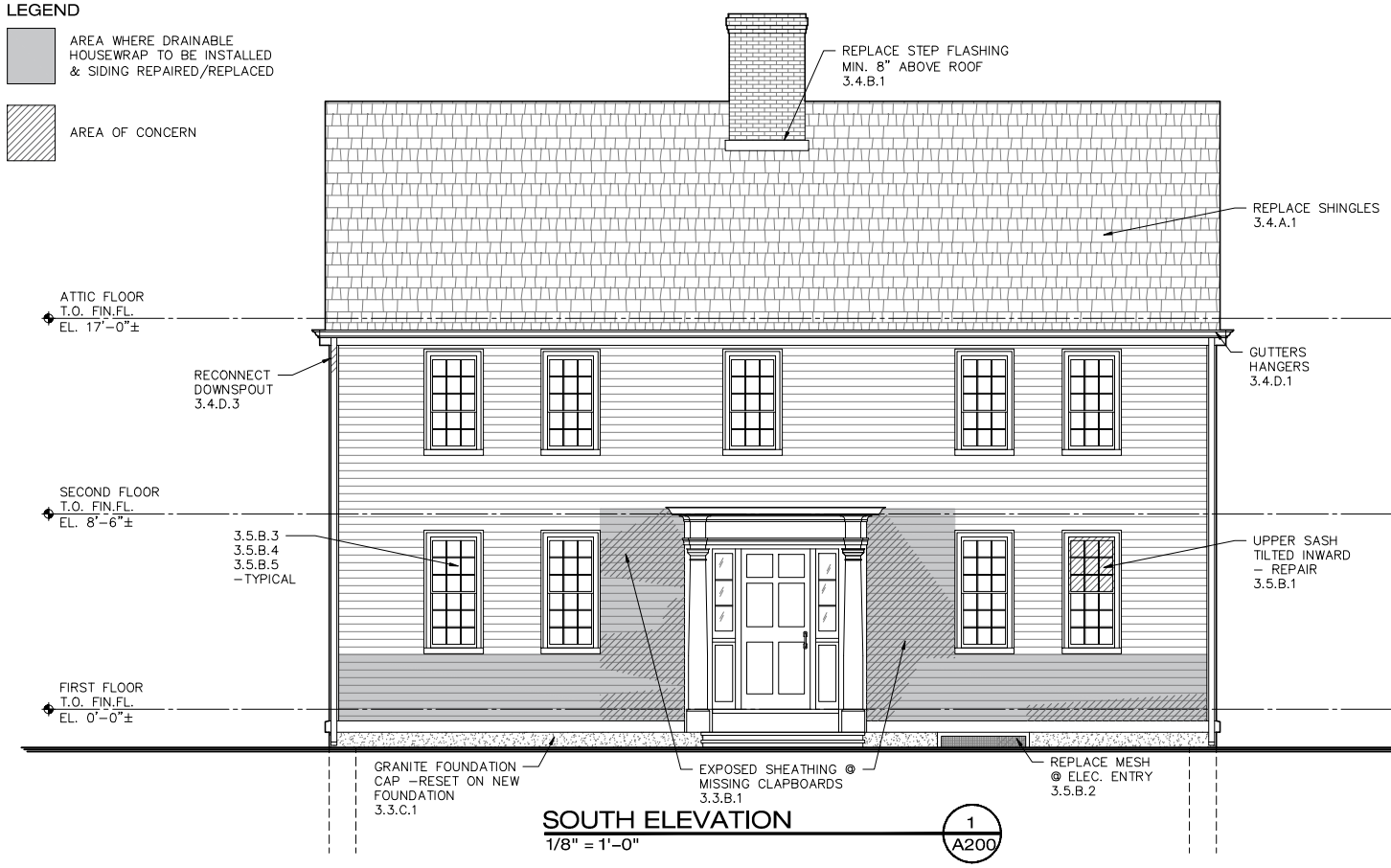
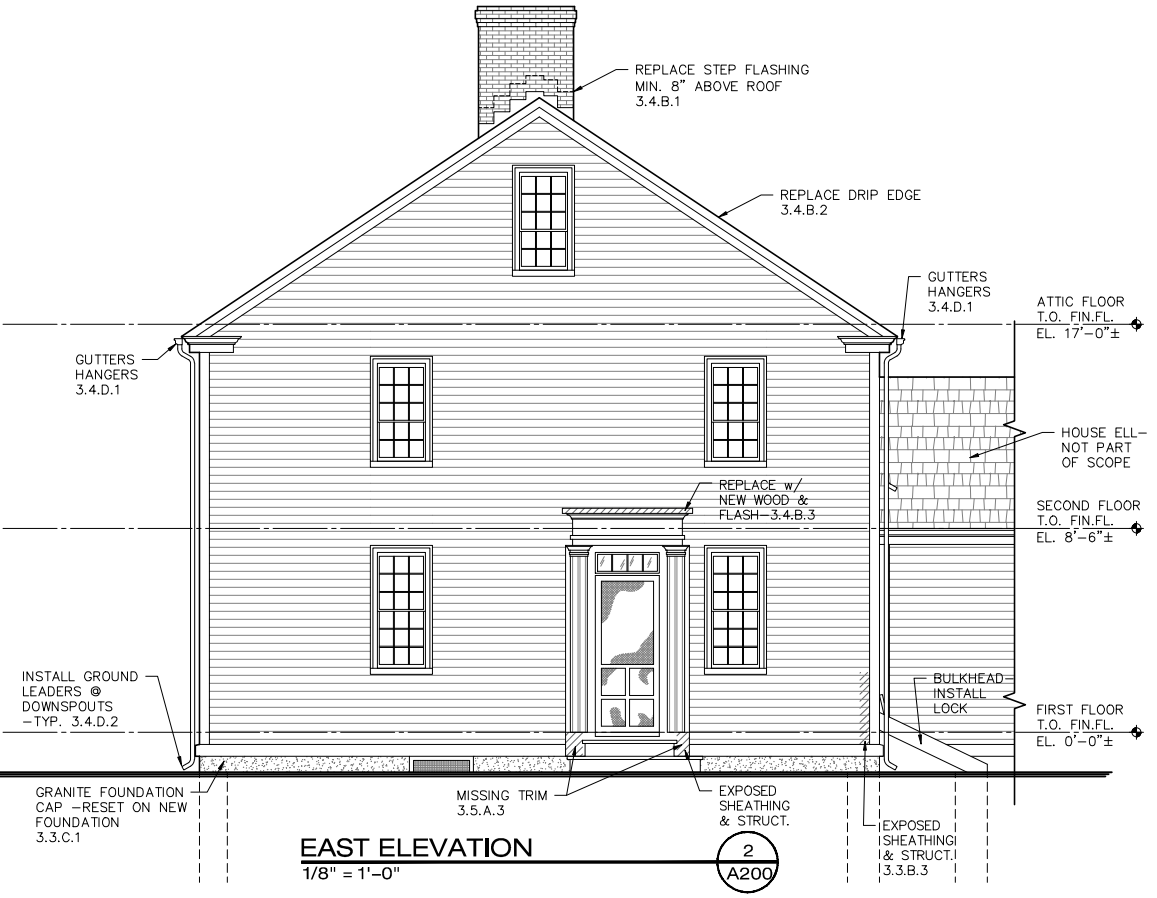
LEGEND

AREA WHERE DRAINABLE HOUSEWRAP TO BE INSTALLED & SIDING REPAIRED/REPLACED

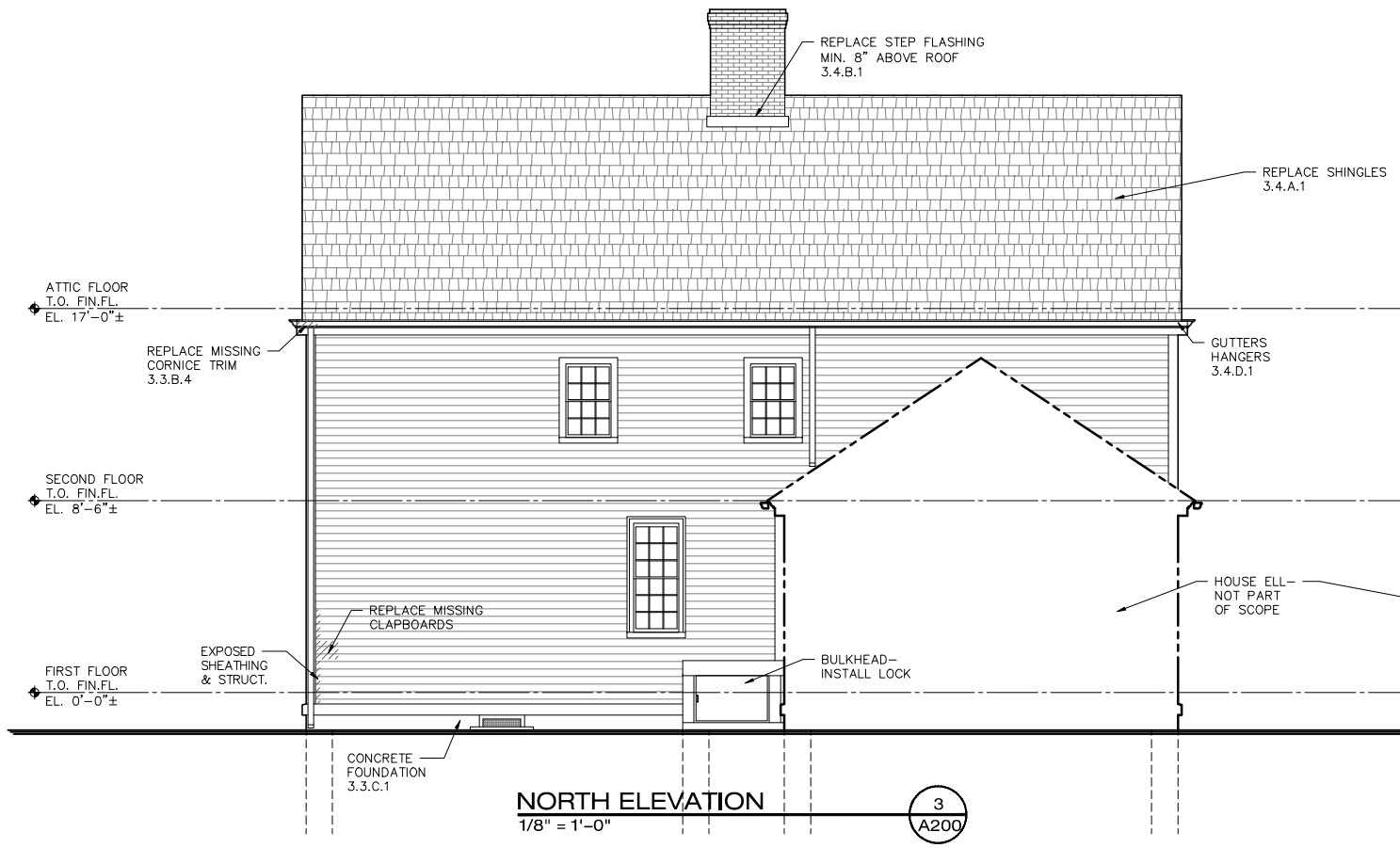
AREA OF CONCERN



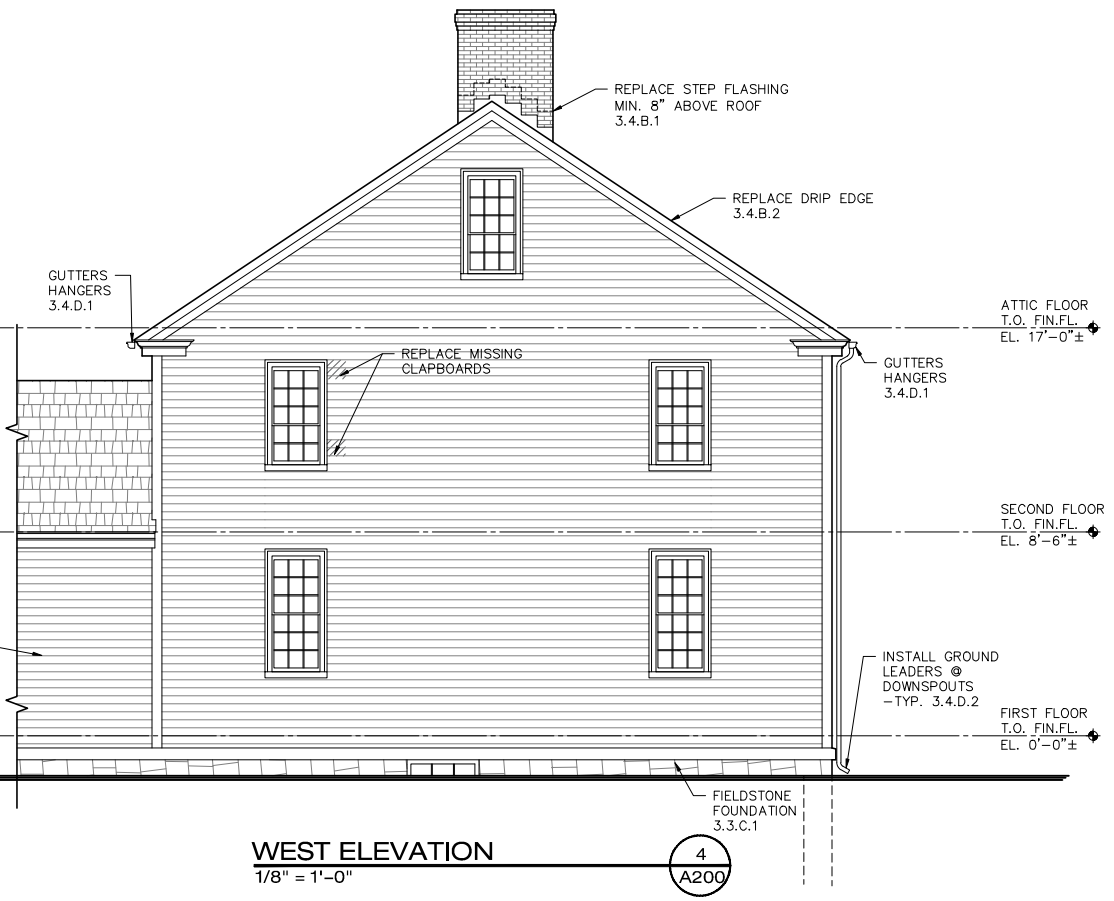
SOUTH ELEVATION
1/8" = 1'-0"
1 A200



EAST ELEVATION
1/8" = 1'-0"
2 A200



NORTH ELEVATION
1/8" = 1'-0"
3 A200



WEST ELEVATION
1/8" = 1'-0"
4 A200

4' 0' 10' 20'

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ELEVATIONS

REV.	DATE	DESCRIPTION	DRAWN BY: EDJ

PROJ. NUMBER: 2022115

MAINE PARKS & LANDS
MAJOR COLBURN HOUSE
ARNOLD RD. PITTSTON, ME

DATE:
APR. 21, 2022

A200

Lead Test Sheet

Place: Colburn house, Pittston, ME
Date: 4-19-16
Time:10:00am

Location	Component	Results (mg/cm2)	Paint Condition
Kitchen -1st floor	White window trim	-0.4	Good
Kitchen – 1st floor	White ceiling	-0.1	Good
Kitchen – 1st floor	White window sill	-0.0	Good
Kitchen – 1st floor	White ceiling	-0.2	Good
Kitchen – 1st floor	White door – west	0.1	Good
Kitchen – 1st floor	White door trim – west	0.2	Good
Kitchen – 1st floor	Brown floor	0.3	Good
Carriage room – 1st floor	Red window trim	1.1	Good
Carriage room	Red closet door	>9.9	Good
Dining room – 1st floor	White ceiling	-0.4	Poor
Dining room – 1st floor	White wall	-0.5	Poor
Dining room – 1st floor	Fireplace trim	>9.9	Fair

1.0 mg/cm2 or greater is considered lead based paint
Certified Tester: Larry Mare
Testing method: XRF gun

1st Pre-Calibration reading: 1.1 mg/cm2 (NIST)	0.0 mg/m2 (non NIST)
2nd Pre-Calibration reading: 1.1 mg/cm2 (NIST)	-0.1 mg/m2 (non NIST)
3rd Pre-Calibration reading: 1.1 mg/cm2 (NIST)	0.0 mg/cm2 (non NIST)
1st Post-Calibration reading: 1.0 mg/cm2 (NIST)	0.1 mg/cm2 (non NIST)
2nd Post-Calibration reading: 1.0 mg/cm2 (NIST)	0.0 mg/cm2 (non-NIST)
3rd Post-Calibration reading: 1.1 mg/cm2 (NIST)	0.0 mg/cm2 (non-NIST)

Lead Test Sheet

Place: Colburn House, Pittston, ME
Date: 4-19-16
Time: 10:00 am

Location	Component	Results (mg/cm2)	Paint Condition
South Hallway - 1st floor	White door	>9.9	Poor
South Hallway – 1st floor	White door trim	0.1	Fair
South Hallway – 1st floor	Yellow wall	0.1	Fair
South Hallway – 1st floor	White ceiling	-0.4	Fair
South Hallway – 1st floor	White stair tread	7.9	Fair
South Hallway – 1st floor	Brown stair tread	0.3	Fair
Living room – 1st floor	Wall above fireplace	>9.9	Fair
Living room – 1st floor	White ceiling	-0.6	Fair
Living room – 1st floor	White wall	-0.4	Fair
Utility room – 2nd floor	White ceiling	-0.3	Poor
Utility room – 2nd floor	White door – south	>9.9	Fair
Utility room – 2nd floor	White closet door	>9.9	Fair

Lead Test Sheet

Place: Colburn House, Pittston, ME
Date: 4-19-16
Time: 10:00 am

Location	Component	Results (mg/cm2)	Paint Condition
North Hallway – 2nd floor	White door – north	>9.9	Fair
Unfinished M.R. – 2nd floor	Red door – north	>9.9	Good
Bedroom – 2nd floor	Red wall	0.0	Good
Bedroom – 2nd floor	Red window	>9.9	Fair
Bedroom – 2nd floor	Yellow Closet wall	3.2	Fair
Bedroom – 2nd floor	Red closet shelf	4.1	Fair
Bedroom – 2nd floor	Red closet door	6.3	Fair
Common area – 2nd floor	Red attic door	7.4	Good
Common area – 2nd floor	White wall	-0.4	Good
Common area – 2nd floor	Red door – east	7.0	Good
Common area – 2nd floor	Red door – west	>9.9	Good
Common area – 2nd floor	Red window	>9.9	Good

Lead Test Sheet

Place: Colburn House, Pittston, ME
Date: 4-19-16
Time: 10:00 am

Location	Component	Results (mg/cm2)	Paint Condition
Utility Room – 2nd floor	White wall	-0.4	Poor
Utility Room – 2nd floor	White door – south	>9.9	Fair
Utility Room – 2nd floor	White closet door	>9.9	Fair
North hallway – 2nd floor	White door – north	>9.9	Fair
Unfinished M.R. – 2nd floor	Red door – north	>9.9	Fair
Front Hall – 1st floor	White door	>9.9	Good
Front Hall – 1st floor	White door to stairs	>9.9	Good
Front Hall – 1st floor	Green Closet wall	>9,9	Good
Front Hall – 1st floor	White closet door	1.4	Good
Caretakers Bed Room. – 1st floor	White closet wall	>9.9	Good
Caretakers Bath Room – 1st floor	White door	0.1	Good
Caretakers Bath Room – 1st floor	White wall	0.1	Good

Lead Test Sheet

Place: Colburn House, Pittston, ME
Date: 4-19-16
Time: 10:00 am

Location	Component	Results (mg/cm2)	Paint Condition
West Bedroom – 2nd floor	Green bed frame	-0.3	Good
West Bedroom – 2nd floor	White wall	-0.4	Fair
West Bedroom – 2nd floor	White window	>9.9	Poor
West Bedroom – 2nd floor	White ceiling	0.5	Poor
West Bedroom – 2nd floor	White door – east	>9.9	Fair
South hallway – 2nd floor	White Ceiling	-0.4	Fair
East Bedroom – 2nd floor	Green window & trim	1.4	Fair
East Bedroom – 2nd floor	Blue wall	3.7	Fair
East Bedroom – 2nd floor	White door – north	>9.9	Good
East Bedroom – 2nd floor	Pink closet wall	-0.2	Good
N. East Bedroom – 2nd floor	White ceiling	0.5	Fair
N. East Bedroom – 2nd floor	Yellow wall	-0.3	Fair

Department of Health and Human Services
Health and Environmental Testing Laboratory
221 State Street
#12 State House Station
Augusta, ME 04333-0012
Phone: (207)287-2727 Fax: (207)287-6832
TTY: 1-800-606-0215
EPA ID: ME00002

WILKINSON, RALPH
MDOC - COLBURN HOUSE HISTORIC SITE
BUREAU OF PARKS & LANDS
SOUTHERN REGIONAL HQ SHS 107
AUGUSTA ME 04333

Logged: 10/21/2019 1:41:10PM
Folder #: 1919189

Office Use Only:
line Item
MDOCCHHS

Released: 10/23/2019

No. of Samples in Folder:(1)

1919189-01 TGS

CERTIFICATION

The HETL hereby certifies that all test results for this sample were analyzed by the method listed, including preservation, preparation, and holding times, unless otherwise indicated.

Kenneth G. Pote, PhD., Director Richard French, Quality Assurance Officer

If we can be of further assistance to you, please call us at 287-1716.

Approved by: Christopher Montagna

Christopher Montagna
Inorganics Supervisor/Chemist III

MAINE HEALTH AND ENVIRONMENTAL TESTING LABORATORY - Visit our Web Site at: http://www.maine.gov/dhs/etl
221 State Street, Station #12 Department of Human Services Augusta, Maine 04333 Tel. No. 207-287-1716 Fax. No. 207-287-6832

Continued from Previous Page

Lab Sample#: *1919189-01* **Sample Address:**

Sample Matrix: DW-H20 **Sample Point:** **Surface:**

Description: 33 ARNOLD RD/BATHROOM SINK/COLBURN HOUSE STATE HIST(**Sample Date:** 10/21/2019 **Sample Time:** 12:20:00

Test (Method)/Analyte	Result	Unit	Qualifiers	MCL	Analysis Date	Analyst
E. coli (9223 B)	<1	MPN/100ml		<1	10/21/2019 16:39:00	J.C.
Coliform, Total (9223 B)	<1	MPN/100ml		<1	10/21/2019 16:39:00	J.C.

☑ **Your water is considered satisfactory for all tests analyzed and listed above.**

(Does not apply to unanalyzed or rejected samples - See results column and any comments)

The term 'Satisfactory' is based on the Maine Drinking Water Regulations, State Toxicologist's Guidelines and/or the Federal Safe Drinking Water Act

Continued from Previous Page

Units & Measurement

"**mg/L**" = Milligrams per liter; "**ug/L**" = Micrograms per Liter; "**mg/Kg**" = Milligrams per Kilogram;
"**ug/Kg**" = Micrograms per Kilogram; "**NTU**" = Nephelometric Turbidity Units; "**pCi/L**" = Picocuries per Liter;

The MCL, Maximum Contaminant Level is listed for comparing your results with recommended levels.
In the "**Qualifier**" column, **an** " ** " is placed to indicate any results that **exceed** this MCL.

If there are no " * " in the "Qualifier" column, your water is considered satisfactory for those tests.

All solid results are reported on a "**Dry Weight**" basis.

RL-Reporting Limit is the lowest concentration which can be reliably reported on a routine basis.
"<" = Less than ">" = Greater than

MCL - Maximum Contaminant Level is the highest level allowed by EPA for public water supplies. Also used here as the maximum advisory limit set by the Maine Centers for Disease Control and Prevention.

Note: Results below the advisory limit, including < and J are considered satisfactory for that parameter.

Disclaimer

Your report consists of the number of pages listed on the cover page. Any attachments after the last numbered page are for informational purposes only and are not part of the formal report.
The results in this report are for the submitted sample(s) only.
This report shall not be reproduced, except in full, without written permission from the Maine Health and Environmental Testing Laboratory.

Qualifiers Legend:

User selectable

Code	Description
*	> Secondary Limit
**	> MCL
~	Approximately
Ach	Above Calibration Curve
B	Blank Contamination
Hi	
J	<RL>MDL
Lo	
Nan	Not Analyzed
Nc	Not Confirmed
Nt	NonTarget Compound
R	Rejected
Rec	Recovery
T	Temperature does not meet criteria
U	Undetected

TO BE BILLED

Maine Center for Disease Control and Prevention
An Office of the Department of Health and Human Services

DEPARTMENT OF HEALTH & HUMAN SERVICES
HEALTH & ENVIRONMENTAL TESTING LABORATORY
TEL: (207) 287-1716 FAX: (207) 287-1884

Z

DATE REC'D @ LAB
Initials: EL OCT 21 2019 PM 1:37
Kit contains evidence of Thermal Preservation: Y (N)
TEMP UPON ARRIVAL @ LAB 17.1 C

, ME

TGS 1919189
WALK-IN_Z

This kit expires on: 10/2/2020 OHM

( ) NAME AND ADDRESS (IF NOT ON LABEL)
( ) CHANGE OF NAME OR ADDRESS
(✓) SEND ADDITIONAL COPY*
(**must be checked to receive additional copies or CC's)
CC NAME: Gary.Best@Maine.Gov
STREET: _____
TOWN: _____
ZIP CODE: _____
PHONE: _____

☑ Check if you prefer email report Email Address: Ralph.h.Wilkinson@Maine.Gov

☑ PLEASE CHECK HERE IF YOU WOULD LIKE A SIMPLIFIED FINAL REPORT

License Number (if applicable): _____

Date Collected: 10/21/2019 Collector's Name: Ralph Wilkinson

Time Collected: 12:20 pm A.M. or P.M. (circle one)

Test Address: 33 Arnold Rd City: Pittston Zip: 04345

Chlorine Treatment: (✓) None ( ) Bleach ( ) Chlorinator ( ) Other

Location: (Kitchen faucet, Outside Spigot, Pressure Tank, etc...) Bathroom Sink

Sample Source: (Circle one) Drilled Well Dug Well, Spring, Lake, Other

Comments: Colburn House State Historic Site

SEE BACK FOR COLLECTION INSTRUCTIONS AND WHEN TO EXPECT LABORATORY RESULTS

The HETL "Sample Acceptance Policy" can be found at:
www.maine.gov/dhhs/mecdc/public-health-systems/health-and-environmental-testing/standard.htm

PLEASE CUT OFF AND KEEP YOUR SAMPLE NUMBER FOR YOUR RECORDS

SAMPLE NUMBER _____

Revised September 2018