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1.0 EXECUTIVE SUMMARY

This Structural Assessment is to be used solely to obtain grant funding and to prioritize use of available monies for future design fees, owner's soft costs, and construction costs. A structural assessment is a *first step* toward a larger preservation strategy that includes Existing Conditions Documentation, Schematic Design, Design Development, Construction Documents, Specifications, and Construction Administration. Resurgence Engineering & Preservation, Inc. cannot be responsible for consequences arising from construction work or funding gaps that occur before complete plans and specifications are produced. Recommendations listed in this report are not detailed enough to be used as Construction Documents.

The supporting structure of the Cumberland Historical Society Building (CHSB) is in good to fair condition, considering age and construction type. However, some structural work needs to be performed in the attic, gable end framing, foundation, and main roof structure, to strengthen the building. Primary structural concerns about the building are:

A. ***First-floor framing and crawl space conditions in the original building; evidenced by sloped floor and rotted girder ends (Photos #27 through #30);***

B. ***Roof framing condition in the original building, evidenced by sagging sheathing and a twisted rafter (Photo #38 and Photo #9);***

C. ***Insufficient drainage pitch around the building, especially along the east side of the building. The drainage from upslope seeps into the crawl space, fostering rot, and promoting the growth of mildew in and on the museum room walls;***

D. ***Masonry cracking in the building addition (Photos #15 through #18), and isolated masonry cracking at the front right corner of the main building (Photo #36);***

E. ***Heavy floor loads at several locations throughout the building, which are likely causing excessive floor deflection. Sill rot at the east (upslope) side of the building contributes to the greatest amount of floor deflection measured.***

F. ***Rot at the base of the back entrance door to the back addition (Photo #23).***

As is often the case with building preservation projects, many factors need to be considered. Planning issues, economic justification, site safety, usage patterns, and environmental issues all factor into the final decision about the best way to preserve the property in question. Some preservation items, although not immediately necessary to restore, repair, or replace, may need to be addressed earlier to avoid repeating or complicating future work.

Please read the report in its entirety to fully integrate material contained in the Appendices that may not be specifically discussed in the narrative. Appendix I of this report provides photographs relevant to the report. Appendix II of the final report includes information pertaining to cost opinions. Appendix III provides existing conditions plans and elevations of the building.

2.0 INTRODUCTION

At the request of Thomas Bennett of the Town of Cumberland, Resurgence Engineering and Preservation, Inc. (RE&P) performed a structural evaluation of the Cumberland Historical Society Building (CHSB). Alfred H. Hodson III, P.E. of REP inspected the building. The work scope did not include evaluation of any mechanical or electrical building systems, accessibility issues, or life safety code requirements.

Based upon available information the Cumberland Historical Society Building dates to 1853, with a rear addition constructed in or around 1956.

Photos 1 through 6 in Appendix I show the primary building elevations.

On February 19, March 8 and 25, and April 3, 2017, Alfred Hodson inspected the building. He returned to the site on February 23, 2018 to view conditions once again to compare with those observed previously. On March 1, 2018, we met with John Carpenter, of Cumberland Public Works, to discuss our more significant findings and discuss repairs that would need to be performed as part of a first rehabilitation phase.

The general scope and intent of the evaluation and of this report is to:

- Assess the visible structural framing in the attic, first floor, and crawl space;
- Describe current conditions of the building structure, including photos and drawings or sketches;
  a. Foundation material and footing structure; drainage design;
  b. First floor, attic, and roof framing;
  c. Roof surfacing
  d. Chimneys (as safety permits access to the exposed chimney)
  e. Masonry walls

Our Deliverable Work Product consists of:

- A written report listing deficiencies, with rehabilitation recommendations (list section by section per above, repairs in accordance with the Secretary of the Interior's Standards, explaining any deviations);
- Photographs showing critical areas of deficiencies;
- Prioritized Cost Opinions: Detail each component of the proposed work; indicate possible phases of work. Divide Work Phases into:
  Priority 1: Immediate to Year 1; Future design, critical safety items, low-budget big-impact repairs;
  Priority 2: Years 2-5; Prioritized in accordance with funding, need or remaining materials life;
  Priority 3: Years 6-10; Prioritized in accordance with funding, need or remaining materials life;
- Schematic Plans and Elevations showing critical deficiencies;
- A return site visit to meet with you after preparing a report draft, so that we can answer any questions that you (or we) generate after the first site visit;

Appendix I of this report provides photographs relevant to the report. The report and appendices should be read in their entirety. Some photos shown in the appendices may indicate damage not specifically mentioned in the report. Appendix II of the final report will provide preliminary cost

opinions for necessary repairs. Appendix III includes structural framing plans, architectural floor plans, and exterior elevations.

Although we did not perform significant invasive testing of the structure, we were able to closely observe the structure to locate damaged areas. However, rot, insect damage, rodent damage, corrosion, or subgrade undermining may exist beneath concealed surfaces that appeared sound or in areas that were not visible during the inspection. This is typical of any older building. While this report may discuss the presence of potentially hazardous materials, it is not an assessment for these materials. Prior to any rehabilitation work, we recommend that you make yourselves aware of hazardous materials, including testing for lead, asbestos, other known hazardous materials.

For purposes of this report, the north (front) elevation of the CHSB faces Blanchard Road. The east side faces Sevee and Maher Engineers, the south (back) side faces a parking area, and the west elevation faces the driveway.

For purposes of this report, a building element or component in *good* condition is performing its intended purpose, needs no repair, or has only a few minor cosmetic imperfections. A building element in *fair* condition shows anticipated signs of wear, but is still sound, or when up to 25 percent of the element needs to be replaced. An element is considered in *poor* condition when the element no longer performs its intended function, needs major repair or greater than 25 percent replacement, or appears to be on the verge of failure. This report considers preservation for the existing structure of the National Register – Listed Cumberland Historical Society Building in strict conformance with the Secretary of the Interior's Guidelines for the Treatment of Historic Buildings, which includes the Rehabilitation standard. Under *Rehabilitation* Standards, there is more leeway to perform replacement, rather than conservation, of deteriorated structural framing elements. This will result in a more practical approach to repairing this deteriorated structure, which has some individual failed beams, posts, joists, and framing connections.

Not all the structural framing was visible at the time of the inspection. Wood sheathing and insulation covered first floor joists in the crawl space, and insulation concealed ceiling framing in the main attic.

Some items detailed in the report describe additional preconstruction services and assessments for this structure. These items should be performed as part of additional engineering, architectural, or preservation services preferably before, or in some cases concurrent with, Priority One Stabilization Items. Engineering costs are provided in the Cost Opinion.

Priority One Stabilization and Repair items detailed in the report are necessary to ensure the short-term stability of the building, and to ensure public safety. They may also be high-impact changes that can be performed quickly and at relatively low cost. Priority One items should be addressed as soon as possible, if indicated, or within two years at the latest. Priority One deficiencies include critical structural safety hazards, repairs necessary to eliminate significant water infiltration, and repairs to prevent structural failure of building components. They also address items that should be performed in the first phase of work, to ensure success of later Priority Two and Three Repairs.

3.0 DOCUMENT REVIEW

3.1 ORIGINAL CONSTRUCTION DOCUMENTS

No original construction documents of the Cumberland Historical Society Building were available to review.

3.2 REPAIR DOCUMENTS, PREVIOUS STUDIES, STAFF INTERVIEWS

Resurgence Engineering met with the CHS members Linda Fulda, Brian Jensen, Lynda Jensen, Carolyn Small, and Tom Gruber to learn about the history of the building and some of its more recent observed deficiencies and necessary repairs. We also spoke with John Carpenter of Cumberland Public Works, whose department may perform some of the more straightforward repairs such as re-setting the front granite steps and adding extensions to the existing iron handrails into the front entrance.

Of the many events and modification in the buildings long life, we some notable incidents below:

- A new furnace, and switch to natural gas fuel occurred approximately three years ago;
- A heat pump was installed approximately five years ago. Blown-in insulation was installed at that time.
- Clayton Copp replaced two of the first-floor support girders approximately 16 years ago.
- Sevee and Maher allowed the Cumberland Historical Society Building to tie into its septic system;
- The building had new windows installed sometime around 1989.
- The Cumberland Historical Society acquired the building from the town sometime in 1988 or 1989.
- The building became town offices sometime around 1952, and the town installed a back addition sometime around 1956. Currently the building addition contains a boiler room, bathroom, kitchenette, back vault, and storage space.
- The building served as a school house in the 1940s.

4.0 OBSERVATION, EVALUATION, RECOMMENDATIONS

4.1 ROOF FRAMING

Observations and Evaluations:

Twelve pairs of rafters, including the ceiling trusses, support the main building roof, including the pairs at each gable end of the building. Typical rafters measure three inches by six inches, while the truss chords measure approximately six by seven inches. The main roof rafter spacing varies between 36 and 40 inches on center. The rafters are undersized by today's standards, but they appear to have supported the roof adequately for the past 160 years. The undersized framing has created localized areas of noticeable roof deflection. However, the deflection does not appear to be serious.

Fourteen 2x8 rafter pairs, spaced at approximately 16 inches on center, support the building addition roof. These rafters are generally in good condition, but we observed one rafter weakened by a lumber knot, and another damaged by an improperly-placed birds mouth.

Three primary kingpost timber trusses support the main building ceiling framing. These ceiling trusses were also intended to serve as roof rafters. Refer to Section 4.6 for further discussion about the ceiling support trusses.

While we did not perform any analysis on the roof framing, it is likely that the rafters and truss bottom chords are undersized by today's standards. Strengthening of the existing connections and roof should be a fairly straightforward process for skilled carpenters, provided that further investigation does not reveal significant truss sag or failure.

Observed Deficiencies and Prioritized Repairs:

Item No.	Priority	Condition (good, fair, poor)	Deficiency	Recommended Repair
4.1.2.1	2	Poor	Significant Sheathing sag	Consider supplemental rafters between existing rafters.
4.1.2.2	2	Poor	Notched and damaged roof rafters in building addition	Glue and screw "sisters" onto damaged areas.

4.2 Roof Surfacing and Sheathing

Observations and Evaluations:

Three-tab asphalt shingles, installed approximately 35 years ago, cover the main building and addition roof (Photo #2, Photo #6). Lighter-colored shingles are replacement shingles installed after one of the large tree limbs fell on that part of the roof. The remaining original shingles appear to be in fair condition, but they are likely near the end of their anticipated life.

On the west side of the building, the roof sheathing is visibly "wavy" due to the three-foot spacing between adjacent roof rafters (Photo #38). Installing supplemental rafters may be difficult, because the added rafters would be straight pieces of lumber placed along a curved plane.

We were unable to clearly view the shingles on the west side of the building due to the site conditions.

The main building has a ridge cap, but there does not appear to be an actual vented ridge cut into the top of the roof sheathing (Photo #9). Ridge and soffit vents are present at the building addition. Given the brick corbelling out at the main building eaves (Photo #19) the only way to provide a ventilated roof would be to install a "cold roof" on top of strapping and sheathing placed over the existing roof sheathing. This would somewhat change the appearance of the roof plane and the building trim, so forced ventilation through the main attic and out the building addition may be a better option.

Even with proper clearing of tree limbs at sides of the building, we believe that the roof surfacing should be adequate to last at most five years.

Roof sheathing consists of approximately 1" thick boards (Photo #8). While evidence of prior staining exists, we did not observe any dampness on the underside of roof sheathing or dripping in the attic during our visits. Areas of sheathing had been replaced during the last roof resurfacing project. We also observed areas of damaged sheathing, which likely occurred during previous re-roofing efforts. Single-span roof sheathing has lower structural capacity than long boards spanning over several rafters. Repair local sheathing damages by installing supplemental pieces of 1x sheathing below, blocked up to the adjacent rafters. This can prevent further roof damage should someone need to access the roof before it is re-surfaced. You should also plan to repair this damaged sheathing during the next re-roofing cycle.

In some areas, roofing nails did not penetrate boards, but instead penetrated underlayment. If plywood was not installed on the roof over the existing sheathing boards, this could lead to localized roof leaks in the future. You should monitor for these conditions, particularly during times of snowmelt.

We typically do not encourage widespread use of gutters and downspouts to keep water away from the foundation, because of the continued maintenance and gutter cleaning that is involved. We believe that proper site grading and perimeter exterior drainage to daylight are better

alternatives to eliminate roof runoff. If perimeter drainage is not possible, it may be necessary to install gutters and downspouts directing water away from the sides of the building.

Observed Deficiencies and Prioritized Repairs:

Item No.	Priority	Condition (good, fair, poor)	Deficiency	Recommended Repair
4.2.2.1	2	Fair	Tree limbs overhanging roof	Cut trees and tree limbs as necessary to minimize roof overhang. Limb, but do not cut trees that protect the adjacent slope on the north side of the building.
4.2.2.2	2	Poor	Damaged roof shingles, due to previous falling limbs; shingles near end of expected lifespan.	Strip and re-roof building.

4.3 Building Envelope; Interior Ceilings and Walls

Observations and Evaluations:

Loadbearing masonry walls clad the building and the addition. The main building walls are two-wythe brick, while the addition walls consist of concrete masonry block clad with brick. Painted wood door, eave, and soffit trim clad much of the building,

Building windows on the west elevation of the main building were likely installed in the 1940s or 1950s. They have been provided with exterior storm windows. Although they will need to be re-glazed, they do not need to be re-glazed immediately. Windows on the east side of the building are in worse condition. Despite the presence of storm windows, they may need to be re-glazed sooner. Curtains drawn nearly full-time in the exhibit room do not make the windows a top priority. Window sills are in fair condition, with peeling paint in many areas, including a significantly rotted sill on the east side of the original building. Peeling paint allows standing water to saturate the wood, further promoting rot and deterioration. Window glazing is in fair to poor condition. Reglazing all the window sash is a high priority for this building.

The accessibility ramp, installed approximately 10 years ago at the south end of the building addition, is in fair condition (Photo #2). It will likely need to be replaced within the next five years. We suggest that you slightly enlarge the rear porch to allow better accessibility and space on the porch. This design detail should be reviewed by the Maine Historic Preservation Commission prior to construction.

Observed Deficiencies and Prioritized Repairs:

Item No.	Priority	Condition (good, fair, poor)	Deficiency	Recommended Repair
4.3.1.1	1	Poor	Several areas of trim are damaged and require spot maintenance and repair (Photo #17, Photo #18)	*Provide a lump-sum repair budget for temporary exterior repairs.*
4.3.2.1	1	Fair to Poor	Continued deterioration of façade elements, including window glazing and window sills	*Continued maintenance of wood surfaces, window reglazing, and sill repair.*
4.3.2.2	2	Fair to Poor	Deterioration of wood siding behind and adjacent to the accessibility ramp. Ramp is near the end of its useful life.	*Remove and replace ramp, slightly enlarging Miscellaneous façade repairs as determined by overall repair scope, including staging costs and costs to strip and repaint clapboards and trim.*
4.3.2.3	2	Fair	Column bases are separating and have failed paint (Photo 19).	Re-set columns on ventilated bases; provide ventilation port in top of

				columns.
4.3.3.1	3	Fair	Façade deterioration and paint peeling	Strip, scrape, sand, prime, and paint façade.

4.4 Foundation and Crawl space

General Description:

Sheet S- in Appendix III provides a scaled floor plan of the crawl space area and visible foundation. Granite and rubble walls support the main building perimeter walls, while concrete foundations support the addition. The upslope side of the foundation has experienced some erosion, lateral pressure, and, possibly frost heave during its lifetime. If site grading and stormwater disposal allows, we suggest installing a two-tiered sidewall drainage system that can eliminate surface water and drain subsurface water away from the foundation. If this is not possible, we suggest that you create a berm and swale to divert water away from the building's east wall.

A hatch at the southwest corner of the entry room provides the only crawl space access. The crawl space varies between two and four feet in height and is an earth floor. Substantial amounts of wood waste, broken glass, and debris exist in the crawl space. Wood-containing organic debris decays in soil and can draw excessive moisture into the crawl space. As you begin to clean debris from the site, you should have someone from the historical society review the material that has been pulled out to determine if it is of historical importance or a portion of the existing building.

A combination of round precast concrete footings or sonotubes, and loose stone piers support the interior crawl space posts (Photo #27, Photo #31). As we understand it, Clayton Copp replaced two rotted floor girders about 15 years ago. This work is indicated on the foundation plan by the round footings.

We observed damp soils near the upslope crawl space wall, which further suggests that runoff drains toward that side of the building. In addition to the two-tiered sidewall drainage system, it may be helpful to install a heavy impervious vapor retarder to keep moisture from rising up through the earthen floor into the crawl space.

A concrete slab-on-grade supports the building addition and creates the floors. We observed cracks in the slab in the back mechanical room.

Observed Deficiencies and Prioritized Repairs:

Item No.	Priority	Condition (good, fair, poor)	Deficiency	Recommended Repair
4.4.1.1	1	Fair	Accumulated organic and dangerous (glass and metal) debris under crawl space.	Remove, after verifying that no historically important materials are present.
4.4.1.2	1	Fair	Loose Rock Piers below building.	Replace with precast footings.
4.4.3.1	2	Fair	Concrete along the rear addition of the building is spalling. (Photo #20).	Restore Concrete after chipping away unsound material.

4.5 First Floor Framing

General Description:

First-floor framing consists of joists running north-south and flush-framing into larger girders. Board sheathing and insulation concealed the joists, and only the bottom surface of the girders remained visible (Photo #27).

Several individually heavy items are stored in the building. These items include bookshelves, a piano, and display cases in the main room, and display cases in the front room. Using a laser level, we took measurements of the floor deflection at many points in the building, as indicated on Sketch S-1 in Appendix III. Floor deflection varied between ___ and ___ inches. The worst area of deflection occurred at _____. It (did or did not correspond with....) (Photo #__).

Observed Deficiencies and Prioritized Repairs:

Item No.	Priority	Condition (good, fair, poor)	Deficiency	Recommended Repair
4.5.1.1	1	Unknown	Board sheathing and insulation covers first-floor framing, obscuring it from view.	After cleaning basement debris, remove sheathing and insulation to inspect first floor framing.
4.5.1.2	1	Poor	Rotted girder end on east side of building.	Repair girder; splice in new piece that ties into sidewall of the building.
4.5.3.1	2	Fair	Building Sills and First Floor framing are no longer level	Level floor around the building.

4.6 Ceiling and Attic Framing

Observations and Evaluation:

We were able to view some of the ceiling framing, in both ceiling sections (new building and addition) but blown-in insulation and debris obscured the main attic ceilings and floorboards covered the addition ceiling. As we understand it, contractors blew insulation into the attics when mechanical contractors installed the heat pump, approximately five years ago.

We did not analyze any of the ceiling connections as part of our inspection.

Three kingpost trusses carry the ceiling over the entrance and the museum room (Photo #7). These trusses also support part of the roof framing, with the truss top chords acting like the adjacent, widely-spaced rafters. Top chords consist of six-inch wide timbers measuring approximately 6 ½" deep. Bottom chords on each truss measure 7 1/2" deep x 6" wide. Vertical web members (kingposts) have iron straps, called "dogs" at the base, and sloped, shouldered tenons to receive rafters and braces. The trusses are likely overstressed when reviewed against contemporary code requirements, but they do not appear to be a structural concern.

There has been no provision to provide lateral bracing between the trusses. However, the bracing is not as important because of the brick gable walls.

Deep blown-in insulation and vermiculite insulation kept us from closely observing the attic joists. They appeared to be approximately 8" deep, but we did not measure exact spacing.

The ceiling itself in the meeting room consists of drywall or plaster attached to the underside of the ceiling joists. In the front hall, wood beadboard, attached to the underside of the original plaster and lath, covers the ceiling (Photo #11, Photo #12).

Observed Deficiencies and Prioritized Repairs:

Item No.	Priority	Condition (good, fair, poor)	Deficiency	Recommended Repair
4.6.1.1	1	Poor	Attic Debris	Clean and remove debris

4.7 Site Conditions

Observations and Evaluation:

As we understand it, the CHS owns only the building and footprint itself, not any of the adjacent land. For purposes of this report, we will consider that the front of the building faces north toward Blanchard Road. The building sits on a level area on the south side of Blanchard Road, but downslope from the offices of Sevee and Maher to the east. A driveway runs along the west side of the building, providing additional parking for Sevee and Maher. The property itself is flat, but it slopes uphill toward Sevee and Maher, and slopes steeply downhill adjacent to the driveway.

The grading appears to be limited, and, overall, surface water and groundwater is able to run downhill from the east toward the east foundation and crawl space, creating damp conditions in the crawl space. This condition needs to be mitigated, but there do not appear to be many options to do so, aside from possibly digging a trench along the east wall, under the parking area and driveway, toward the wooded area to the south.

According to the CHS members, no significant plantings of local historic significance exist on site. Before any site improvements are made, preservation of adjacent trees should be taken into account. For instance, the sugar maples should be sensitively pruned by a licensed arborist, to reduce their shade impact on the roof and to allow them to continue to prosper.

An existing sign and bench should be removed and stored if necessary during any sitework.

Observed Deficiencies and Prioritized Repairs:

Item No.	Priority	Condition (good, fair, poor)	Deficiency	Recommended Repair
4.7.1.1	1	Fair	Site slope from east drains groundwater and surface water toward CHS building	Consider dual drain (surface and subsurface) dug to the east of the building, diverting groundwater and surface water to the south beyond the parking area. This should be reviewed with neighboring property owners..
4.7.1.2	1	Fair	Maple limbs close to building.	Trim limbs by Public Works or by a licensed arborist.

4.8 HAZARDOUS MATERIALS

Observations and Evaluation:

We did not perform a Phase I Environmental Site Assessment or hazardous materials evaluation on this property. However, a few specific issues remain worth mentioning regarding the potential presence of hazardous materials in this building.

We observed **what appeared to be a layer of vermiculite insulation in the attic, beneath the cellulose insulation (Photo #35). Repair work in the attic should be performed considering that the insulation contains asbestos. Refer to the following website for more information on vermiculite insulation: http://www.epa.gov/asbestos/pubs/verm.html The presence of vermiculite would likely require contractors to work with appropriate asbestos protection, and require isolation of the entrance to the attic to prevent the spread of this material throughout the house. You should also consider this fact when you remove finishes in the second floor around the ell chimney. Please review the website information at the link shown and check again in the main attic hatch to confirm if that insulation material is present beneath the gray cellulose material.**

Bird droppings sometimes contain viruses harmful to humans. Raccoon droppings and porcupine droppings, though not observed, also should be handled appropriately if they are found. Often, we have found that attic insulation covers older bird or bat droppings. You should be aware of this fact if you eventually prepare to rehabilitate or restore the attic framing, ceiling paint and plaster.

Older buildings commonly contain hazardous materials such as lead paint. Lead paint possibly exists on ceilings and wall partitions, and any other painted surfaces. You should assume its presence.

A thorough hazardous materials investigation should be performed prior to issuing construction documents, so that any hazardous materials can be dealt with properly during construction, and that they are known about and quantified in advance. This should include evaluation of the crawl space, first floor, stoves, chimneys, and attic. A hazardous materials inspection is also important because it can alert you to places where volunteers should not be working.

Observed Deficiencies and Prioritized Repairs:

Item No.	Priority	Condition (good, fair, poor)	Deficiency	Recommended Repair
4.1.1.1	1	N/A	Potential presence of hazardous materials, including vermiculite insulation in the main building attic.	Have preconstruction hazardous materials testing performed.

5.0 RECOMMENDATIONS AND CONCLUSION

Overall, the existing structure of the Cumberland Historical Society Building is in fair condition considering its age and construction type.

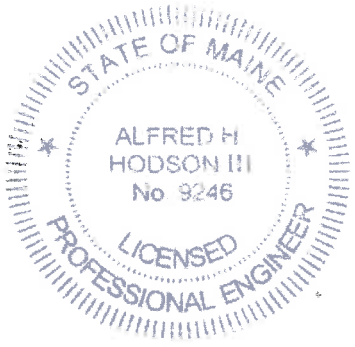
With proper planning, specification, and construction administration, the existing structure can be rehabilitated by contractors trained in preservation work. Appropriate planning, engineering, and site inspection will need to occur to ensure the proper execution of the repairs. The Executive Summary of this report details the most critical repairs necessary.

Some Priority One Items detailed in the report describe or require additional preconstruction services, assessments, and design for this structure. These items should be performed as part of additional engineering, architectural, or preservation services preferably before, or in some cases concurrent with, Priority One Stabilization Items.

Priority One Stabilization and Repair items detailed in the report are necessary to ensure the short-term stability of the building, and to ensure public safety. They may also be high-impact changes that can be performed quickly and at relatively low cost. Priority One items should be addressed as soon as possible, if indicated, or within one year at the latest. Priority One deficiencies include critical structural safety hazards, repairs necessary to eliminate significant water infiltration, and repairs to prevent structural failure of building components. They also address items that should be performed in the first phase of work, to ensure success of later Priority Two Repairs. Priority Two and Priority Three Items address work that can be performed as fundraising permits.

It has been a pleasure to assist you with this project. If you have any further questions about the content of this report, please feel free to contact me at your convenience.

Sincerely,



Alfred H. Hodson III, P.E.
Resurgence Engineering and Preservation, Inc.

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APPENDIX I

PHOTOGRAPHS

APPENDIX II

PRELIMINARY OPINION OF PROBABLE REHABILITATION COSTS

This Structural Assessment and Preliminary Opinion of Probable Costs is to be used solely to obtain grant funding and to prioritize use of available monies for future design fees, owner's soft costs, and construction costs. A structural assessment is a *first step* toward a larger preservation strategy that includes Existing Conditions Documentation, Schematic Design, Design Development, Construction Documents, Specifications, and Construction Administration. Resurgence Engineering & Preservation, Inc. cannot be responsible for consequences arising from construction work or funding gaps that occur before complete plans and specifications are produced.

As is often the case with building preservation projects, many factors need to be considered. Economic justification, planning issues, site safety, usage patterns, and environmental issues all factor into the final decision about the best way to preserve the property in question. Some preservation items, although not immediately necessary to restore, repair, or replace, may need to be addressed earlier to avoid repeating or complicating future work.

This report should be read and assessed with the understanding of the Town of Cumberland's economic development, master planning, and preservation issues specific to Cumberland Historical Society Building. Resurgence Engineering has not been involved in any such discussions to date, and our understanding of the site and financial considerations is limited to our structural assessment of the Cumberland Historical Society Building.

Just as one would not ask a builder to price a construction project without a complete set of plans, one should not expect the design professional to complete a thorough construction cost estimate based upon a preliminary assessment. The Opinions of Probable Rehabilitation Cost described in this report are order-of-magnitude costs that must be refined as assessment proceeds to final design. Materials costs, fuel prices, labor availability, and overall economic climate are all volatile variables that can quickly change construction costs.

APPENDIX III
PLANS AND STRUCTURAL DETAILS

APPENDIX IV

The North Yarmouth Historical Society's Old Town House: A History

Provided by Thomas Bennett