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REPORT

October 2022

TOWN OF
LONDONDERRY
New Hampshire

THE LIONS CLUB
Existing Conditions
and
Redevelopment Options



THE LIONS CLUB

256 Mammoth Rd, Londonderry, NH 03053



EXISTING CONDITIONS AND REDEVELOPMENT OPTIONS

October 2022

A. EXISTING BUILDING CONDITIONS - As observed July 20, 2022



GENERAL DESCRIPTION

The Lion's Club is a 2-story building with attic spaces dating back to 1769. The rear main Hall was originally Dr. Morrison's Meeting House. Over the years many additions and alterations have taken place to the overall structure. The first floor consists of a lobby, main function hall, kitchen, utility room, restrooms, and an ancillary storage space which appeared to have been added onto the north face of the existing structure some years after the initial construction. The second story features a single upstairs classroom with an adjacent meeting room. There is an access hatch leading to the two unfinished attic areas.

SUBSTRUCTURE

Foundations were not fully observable other than from the surrounding exterior, where granite, field stone, some brick and concrete are visible around the perimeter of the building. There is no basement, although there is some evidence that an access bulkhead may have existed near the current South stairway. The granite block foundations of the main hall and the original front portion of the building appear to be sound, but their depth and bottom bearing conditions could not be verified. However, the visible concrete foundations at added portions of the building, including the rear access ramp and storage room and the south side entry and stair, show some signs of cracking and should be further evaluated for signs of settlement or other distress. The foundation sill plate at the bottom of walls were not visible.

The floor in the main hall has an interior portion with significant deflection (in excess of 2”), suggesting local failure of the wood sub framing. Additional gaps around the perimeter base trim indicate differential movement of the floor.



Figure 1.0 foundation access at SE corner

INTERIOR CONSTRUCTION & FINISHES

All interior areas are fully finished, although visible framing in the attic indicates wood structural framing throughout. The “Lions Hall”, formerly known as Dr. Morrison’s Meeting House, floor consists of poured concrete footings, wood piers, I-joists, and floor joists throughout the hall covered with plywood subfloor and hard wood flooring. The main roof trusses over the Hall are hand-hewn, dating back to 1769 and are original to the building (although tool marks and joints suggest that some members may have already been recycled at that time). The ceiling in the main hall is bowed; it is not known if the joists above are also bowed or if the suspended ceiling structure itself has sagged over the years.

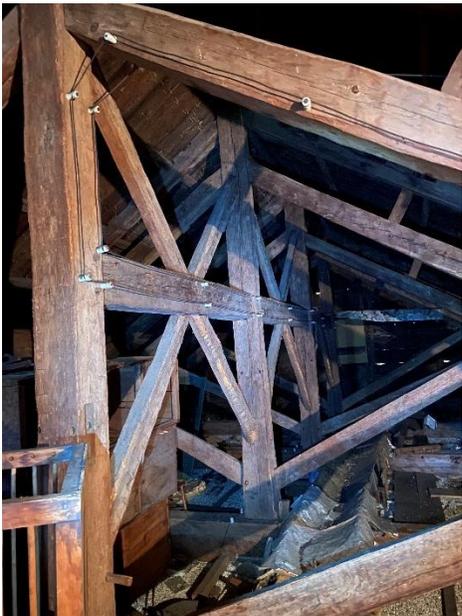


Figure 2.0 - Attic Structure



Figure 2.1 - Hall Floor Structure

EXTERIOR ENVELOPE

The roof is composed of several areas; primarily the main Hall, the front “house” portion, and several added sections including the side entry and stair, stage, ramp and storage area. All are covered in relatively new asphalt shingles which appear to be in sound condition. No leaks were observed or reported.

All exterior walls are covered with clapboard-style vinyl siding which is in generally good condition. The configuration and condition of the original wood siding and trim could not be observed, except at some windowsills, where visible deterioration of the underlying wood was noted.

Fiberglass batt insulation is present in the attic floor of the front portion of the building, and combination of fiberglass batt and vermiculite insulation is present in the attic floor above the main Hall. There is no insulation in the visible roof areas, so the attics are “cold”. The presence of insulation in the exterior walls could not be verified; the only exposed walls are in the rear storage area and are uninsulated. There is fiberglass batt insulation in at least some areas of the first-floor framing. However, in the visible crawlspace area (under the toilet rooms) this insulation has substantially fallen away, possibly due to excess moisture.



Figure 3.0 – Exterior siding



Figure 3.1 – Exterior siding

EXTERIOR OPENINGS

Exterior entry doors are in poor to fair condition. Corrosion of door bottoms and frames was observed. Thresholds do not meet ADA/MAAB accessibility standards. Frames are not thermally-broken.



Figure 4.0 – Exterior side door



Figure 4.1 – Exterior front door



Figure 4.2 – Exterior side door

Windows are in fair condition; exposed wood sills show signs of rot throughout the exterior. It is not known if the window frames and/or sash are thermally broken, but their overall performance should be considered marginal.



Figure 5.0 – Exterior window and sill

BUILDING SYSTEMS

Fire Protection

This building does not have a sprinkler system. There is a central fire alarm panel along with smoke detectors observed throughout the building, with emergency lighting and alarm pull boxes at exterior doors.



Figure 6.0 – Fire Control Communicator Box

Plumbing

No deficiencies in the plumbing system were noted or reported. However, toilet rooms and kitchen area fixtures and space layouts do not generally conform to ADA accessibility requirements.

Mechanical Systems

The building has a pair of forced-air direct-vent furnaces heating along with a two-stage non-ducted air conditioning unit that serves the main Hall. No comprehensive fresh-air makeup or exhaust equipment was noted, although ventilation fans at toilet rooms may be present. There is a small exhaust fan at the ceiling of the second-floor meeting room that discharges into the attic space above the main Hall.



Figure 7.0 – Direct-vent Furnace



Figure 7.1 – Main Hall Air Conditioning Unit

Electrical

The building has a 200-amp service with multiple sub-panels throughout the building. Abandoned knob and tube wiring is visible throughout the attic space. There are exposed wires connected to devices in the mechanical room and closet spaces, along with open electrical boxes. There are several generations of wiring and device types throughout the building. The condition of conductors and insulation in concealed locations could not be verified.



Figure 8.0 – Exposed wiring Mech. Room



Figure 8.1- Electrical Panel



Figure 8.2- Sub Panel

ACCESSIBILITY

The main entrance is not accessible to persons with disabilities; however, the rear entrance (behind the stage) is at-grade with an interior ramp leading to the main hall. Side doors are not accessible. There is no elevator or chair lift for access to the upper floor. The main Hall stage is stair-access only.

There are multiple locations where the ADA-required latch/pull and latch/push clearances at doorways were not present.



Figure 9.0 – Rear Accessible Entry Ramp, Interior



Figure 9.1 – Rear Accessible Entry Ramp, Exterior

HAZARDOUS BUILDING MATERIALS – GENERAL CONSIDERATIONS

Due to the age of the building and the multiple additions and modifications that have been made over the years, it is likely that hazardous building materials (HBM) are present, and will need to be removed or encapsulated as part of any significant repairs, renovations or demolition. Prior to the development of final design documents, a thorough survey should be conducted, outlined as follows:

The initial survey will consist of a full building walkthrough to note general conditions and develop a list of sections/areas that will require additional focus and/or investigation. A licensed asbestos and hazardous materials inspector will survey building elements for accessible, suspect asbestos-containing building materials (ACBM) and lead-based paint. We will also inventory building materials requiring special handling or disposal including Universal Waste (fluorescent light bulbs and ballasts) and Other Hazardous Materials, (OHM). At this time, suspect PCB (Polychlorinated Biphenyls) containing materials (caulk, paint, sealants, and mastics) will be evaluated by visual inspection only. No samples will be collected or analyzed for PCBs.

We then recommend performing a full asbestos containing materials (ACM) and hazardous materials survey of the building site. A licensed asbestos inspector will survey both visible and hidden building elements for suspect ACM, and lead-based paint. For budgeting purposes, we have assumed two site personnel for one day and the collection of up to 120 samples to assess for ACM and 12 samples to assess for lead paint. Prior to sampling, we will review existing available architectural drawings and details to identify potential hazardous building materials and their locations indicated therein.

Where possible, samples will be collected from discrete locations, i.e., from closets, mechanical spaces, unused rooms, behind movable furniture, etc., using normal hand sampling tools or small power tools. We assume that destructive-type investigations requiring larger power tools (e.g., concrete saw, pneumatic jackhammer, etc.) are not anticipated. Priority will be placed on sample collection from previously damaged and/or degraded building materials. Ceiling tiles moved to access suspect materials for sampling will be replaced, and openings made in roof elements will be re-sealed by a professional roofing subcontractor. As the building may be occupied during the Survey, not all areas may be accessible, and any field sampling will be coordinated and confirmed with the project team prior to commencement.

A final report of the investigation's findings, including laboratory results, as well as the material, location, and quantity of HBM identified, will be provided following the investigation. Weston & Sampson will then provide preliminary, pre-design cost estimates for the abatement and disposal of hazardous building materials.

The information developed in this proposed investigation and report will be applicable to any likely scenario for the future of the Lions Club building, including all levels of repair and renovation as well as demolition and replacement with new construction.

B. ANTICIPATED SCOPE OF WORK

SCENARIO 1 - COMPREHENSIVE REPAIRS AND RENOVATIONS

This section describes a complete “gut-rehab” of the existing building, with the goal of bringing it into first-class condition throughout. All interior and exterior finishes will be replaced, new building systems installed, and all current building code and accessibility requirements will be met.

It is assumed that the general configuration of the building will remain as-is, with comprehensive alterations and improvements for code compliance, accessibility, and improved functionality. This will include reconfigured toilet rooms, entrance area and kitchen, and the addition of a new stair/elevator at the South side of the building for full accessibility and egress code compliance. However, no change of use or occupancy is expected; the work as currently understood is generic in nature and not intended to address the specific needs of any particular Town department or other user group.

Subject to adjustments in a final design phase, the recommended scope of work includes the following:

Site & Utilities

- Extend municipal water service for fire protection
- Evaluate on-site septic system for code compliance and capacity
- Upgrade Electric service
- Perform structural assessment of picnic shed
- Consider re-location of Xmas tree yard and kiosk
- Hazmat identification and remediation:
 - Guano
 - Asbestos
 - Lead
 - Universal Waste
 - Mold

Hazardous Building Materials

At the inception of final design, a comprehensive survey of the building to identify any HBM shall be performed.

As discussed above, the information developed in this investigation and report will be applicable to any likely scenario for the future of the Lions Club building, including all levels of repair and renovation as well as demolition and replacement with new construction.

Substructure

The granite block foundations of the main hall and the original front portion of the building appear to be sound, but their depth and bottom bearing conditions could not be verified. The visible concrete foundations at added portions of the building, including the rear access ramp and storage room and the south side entry and stair, show some signs of cracking and should be further evaluated for signs of settlement or other distress. The sill plate at the wall and foundation interface is likely deteriorated and may require repairs.

The feasibility of replacing the wood-framed main Hall floor with insulated slab-on-grade and floating engineered hardwood finish floor should be investigated. The replacement of this floor structure is included in the preliminary estimate of construction cost and development budget.

Superstructure

No major structural modifications are anticipated; however new or modified elements may be needed to accommodate an ADA-compliant elevator or chair lift, a new or reconfigured egress stair, etc.

The configuration and capacity of floor and roof framing in all areas, including the main hall, should be verified for compliance with IEBC structural requirements. An investigation into the source of the bowing in the main hall ceiling should be conducted. The exterior walls of the main Hall should be exposed to identify the cause of the observed bowing in the siding, and repairs performed as needed.

Exterior Envelope

Roof: Remove all existing attic floor insulation (which will be necessary in any case to address HBM) and install new nailable vented roof panels with rigid foam insulation. The roofing system can be asphalt shingles, metal, or other suitable surfacing.

This will create “warm” attic spaces above all areas of the building, which will permit the installation of new mechanical equipment and fire protection systems in the attics without danger of freezing.

Insulation in the plane of the roof will generally permit better integration with exterior wall insulation and continuity of air and moisture barriers.

Walls: Remove the existing vinyl siding and evaluate the condition of the underlying wood siding and trim. Perform structural repairs as needed. Depending on condition, repair and refinish the existing siding and trim; alternatively replace siding and trim with painted fiber-cement (Hardie Board) or similarly durable, low-maintenance alternative. With siding replacement, add continuous insulation layer for code compliance and integration with roof insulation/air barrier system.

Doors and Windows: Replace all with new weathertight, energy efficient units. Windows to have appropriate divided-lite configuration for historical accuracy. All glazing to have low-E coating.

Interior Construction and Finishes

Reconfigure internal layout at front portion of building to accommodate ADA-compliant restrooms, administrative/office space, 3-stop chair lift or elevator, etc.

Consider relocation of Kitchen to the storage area at the rear of the building. This will free up space at the front and allow easier kitchen access from the parking lot and picnic canopy.

Removal and replace most interior finishes, including all secondary (suspended or furred out) ceilings where original plaster or other decorative ceilings may be suitable for restoration.

Stairs

Add code-compliant handrail at left-hand side of main stair.

Add new code-compliant enclosed stair in conjunction with new elevator or chair lift.

Fire Protection

The building will require a new NFPA compliant sprinkler system. A new water service from the street will need to be provided for a water supply and the existing well will not meet NFPA standard as a source of sprinkler water. It is assumed the Town water supply will be of sufficient capacity to meet NFPA pressure and flow requirements.

Plumbing

The existing plumbing fixtures shall be replaced with ADA compliant vitreous China. Lavatory faucets and flushometers shall be battery automatic. A new high-efficiency gas-fired domestic hot water heater shall serve the building's hot water needs. It is assumed the existing natural gas service is of sufficient capacity to serve the new gas DHW, kitchen and HVAC loads.

HVAC

Remove and replace all Heating, Cooling and Ventilating equipment, distribution, controls, etc.

New heating shall be by a gas-fired, high-efficiency, condensing hot water boiler.

Provide a new attic mounted, approximately 7500 CFM variable air volume (VAV) air handler to serve the building's heating, ventilating, and cooling needs. The unit shall have hot water heat and the VAV boxes shall have hot water reheat coils. Cooling shall be by remote direct expansion condenser unit mounted on the ground outside.

HVAC controls shall be web based DDC.

Consider provisions for future conversion to heat pump-based heating and cooling to eliminate dependence on fossil fuel-fired equipment.

Electrical

Remove and replace all electrical service, systems, and distribution,, including lighting, alarms, communications, IT, etc.

Depending on the intended use of the facility, consider including a standby generator to allow the use of the building in the event of power grid failure. Load shedding may also be possible if supported by the electric utility.

Anticipated Cost

The following table shows the probable raw construction cost for the elements of work described above. These costs include General Contractor and subcontractor values only and are intended for comparison purposes only.

| CONSTRUCTION BUDGET | Comprehensive Repairs and Renovations | | | |
|--|---------------------------------------|-----------|--------------------|--------------|
| | basis | qty | per | total |
| Hazardous Materials Abatement | LS | 1 | \$ 50,000 | \$ 50,000 |
| Site Improvements | | | | |
| Water Service extension | LF | 300 | \$ 75 | \$ 22,500 |
| Grading, Surfacing | LS | 1 | \$ 25,000 | \$ 25,000 |
| Substructure - allowance for upgrades | LS | 1 | \$ 150,000 | \$ 150,000 |
| Substructure - new foundations and slabs | | | | |
| Superstructure | | | | |
| Main Hall Floor repair/replacement | SF | 1750 | \$ 100 | \$ 175,000 |
| Exterior wall repair allowance | LS | 1 | \$ 25,000 | \$ 25,000 |
| Floor repairs/reinforcement | SF | 1500 | \$ 50 | \$ 75,000 |
| General adaptations and upgrades | LS | 1 | \$ 50,000 | \$ 50,000 |
| Exterior Envelope | | | | |
| Roof | SF | 5000 | \$ 25 | \$ 125,000 |
| Walls | SF | 5725 | \$ 25 | \$ 143,125 |
| Windows | EA | 22 | \$ 3,000 | \$ 66,000 |
| Doors | EA | 5 | \$ 3,500 | \$ 17,500 |
| Interior Construction and Finishes | | | | |
| Selective demolition, incl MEP | SF | 6355 | \$ 10 | \$ 63,550 |
| General Interior framing & finishes | SF | 6355 | \$ 45 | \$ 285,975 |
| New stairwell, elevator shaft & lobby | SF | 256 | \$ 175 | \$ 44,800 |
| 3-stop elevator | LS | 1 | \$ 125,000 | \$ 125,000 |
| Building Systems | | | | |
| Fire Protection | SF | 6355 | \$ 12 | \$ 76,260 |
| Plumbing | SF | 6355 | \$ 20 | \$ 127,100 |
| Mechanical | SF | 6355 | \$ 75 | \$ 476,625 |
| Electrical | SF | 6355 | \$ 55 | \$ 349,525 |
| | | | | |
| | | | Construction Value | \$ 2,472,960 |
| | | 6,355 GSF | cost per SF | \$ 389 |

These are direct construction costs only, in current 2022 dollars. A more comprehensive statement of total project costs, including fees, contingencies, markups, and direct Owner’s costs are captured in the Development Budgets in Appendix A.

C. ALTERNATE SCOPE OF WORK

SCENARIO 2 - LIMITED REPAIRS AND ALTERATIONS

This section describes a program of limited repairs and upgrades of the existing building, with the goal of bringing it into good operational condition throughout. Interior and exterior finishes will be repaired or refurbished, building systems serviced, new ventilation installed, and applicable current building code and accessibility requirements will be addressed. Accessibility to the second floor will not be provided.

It is assumed that the general configuration of the building will remain as-is, with limited alterations and improvements for code compliance, accessibility, and improved functionality. This will include reconfigured toilet rooms for ADA compliance and the possible relocation of the kitchen to the rear of the building. However, no change of use or occupancy is expected; the work as currently understood is generic in nature and not intended to address the specific needs of any particular Town department or other user group.

Subject to adjustments in a final design phase, the recommended scope of work includes the following:

Site and Utilities

Extended water service for FP

Grading and paving adjustments for ADA access (existing rear or new front ramp)

ADA improvements at existing rear ramp or add new front ramp

Substructure

Superstructure

Repairs to Main Hall floor

Miscellaneous structural repairs

Exterior Envelope

Inspection and normal maintenance of roof, gutters, and flashing

Selective structural repair of exterior walls

Exterior siding and trim repair/replacement

Window and door repairs/replacements

Replace/upgrade roof/attic and wall insulation – locations and types to be determined in final design.

Interior Construction and Finishes

Renovations to ground floor for ADA toilets, office? Kitchen relocation? Stairway upgrades (railings, etc.)

ADA-compliant signage

Fire Protection

For full code compliance, the building should receive a new NFPA compliant sprinkler system. A new water service from the street will need to be provided for a water supply as the existing well will not meet NFPA standard as a source of sprinkler water. It is assumed the Town water supply will be of sufficient capacity to meet NFPA pressure and flow requirements.

A dry-type system is recommended to allow sprinkler piping to be run in unheated attic areas to minimize the visual impact at interior spaces.

If a commercial-grade kitchen is provided, install 2-hr rated exhaust hood, ductwork, and automatic fire suppression system at hood.

Plumbing

Provide new ADA-compliant fixtures at renovated toilet room areas

HVAC

Add energy-recovery ventilation for all areas, with fresh-air makeup capability.

Service existing HVAC equipment, clean ducts, registers, etc.

Service and adjust controls

Electrical

Clean up electrical system- remove outdated wiring and devices, make safe

Expand alarm system to code

Anticipated Cost

The following table shows the probable raw construction cost for the elements of work described above.

These costs include General Contractor and subcontractor values only and are intended for comparison purposes only.

| CONSTRUCTION BUDGET | Limited Repairs and Renovations | | | |
|--|---------------------------------|------|--------------------|------------|
| | basis | qty | per | total |
| Hazardous Materials Abatement | LS | 1 | \$ 50,000 | \$ 50,000 |
| Site Improvements | | | | |
| Water Service extension | LF | 300 | \$ 75 | \$ 22,500 |
| Grading, Surfacing | LS | 1 | \$ 25,000 | \$ 25,000 |
| Substructure - allowance for upgrades | LS | 1 | \$ 75,000 | \$ 75,000 |
| Substructure - new foundations and slabs | | | | |
| Superstructure | | | | |
| Main Hall Floor repair/replacement | SF | 1750 | \$ 100 | \$ 175,000 |
| Exterior wall repair allowance | LS | 1 | \$ 25,000 | \$ 25,000 |
| Floor repairs/reinforcement | SF | 750 | \$ 50 | \$ 37,500 |
| General adaptations and upgrades | LS | 1 | \$ 25,000 | \$ 25,000 |
| Exterior Envelope | | | | |
| Roof | SF | 5000 | \$ 1 | \$ 5,000 |
| Walls | SF | 5725 | \$ 10 | \$ 57,250 |
| Windows | EA | 22 | \$ 1,500 | \$ 33,000 |
| Doors | EA | 5 | \$ 3,500 | \$ 17,500 |
| Interior Construction and Finishes | | | | |
| Selective demolition, incl MEP | SF | 1500 | \$ 10 | \$ 15,000 |
| General Interior framing & finishes | SF | 1500 | \$ 50 | \$ 75,000 |
| New stairwell, elevator shaft & lobby | | | | |
| 3-stop elevator | | | | |
| Building Systems | | | | |
| Fire Protection | SF | 6355 | \$ 12 | \$ 76,260 |
| Plumbing | SF | 1500 | \$ 25 | \$ 37,500 |
| Mechanical | SF | 6355 | \$ 10 | \$ 63,550 |
| Electrical | SF | 6355 | \$ 5 | \$ 31,775 |
| | | | | |
| | | | Construction Value | \$ 846,835 |
| 6,355 GSF | | | cost per SF | \$ 133 |

These are direct construction costs only, in current 2022 dollars. A more comprehensive statement of total project costs, including fees, contingencies, markups and direct Owner's costs are captured in the Development Budgets in Appendix A.

D. ALTERNATE SCOPE OF WORK

SCENARIO 3 - DEMOLITION AND REPLACEMENT

For comparative purposes we have developed a scenario which involves the demolition of the existing Lions Club structure and its replacement on the existing Mammoth Road site. The proposed new

building will therefore contain approximately the same usable interior area as the existing one but will be limited to a single story for greater space flexibility and to eliminate the need for stairs and an elevator. Direct ADA access to all areas of the building will be provided. The functional interior spaces will generally parallel those currently available, with certain changes and improvements, as follows:

- Insulated slab-on-grade floors, with engineered wood or other appropriate finishes
- Superinsulated roof and wall assemblies
- High-performance glazing at windows and doors
- Appropriate architectural design to complement adjacent historic structures
- Dedicated Fire Protection, Mechanical and Electrical spaces
- New code-compliant Plumbing, Mechanical and Electrical systems
- Demand-controlled heat-recovery ventilation
- Fully sprinklered
- Main hall
- Reconfigured program spaces for flexible community use
- Durable and appropriate interior finishes and colors
- Relocated kitchen to free up space at front of building
- All areas fully ADA-accessible

We assume that soil conditions will allow the use of conventional shallow foundations. The exact construction type (steel, masonry, wood-framed, etc.) will be established in final design, but several different approaches are possible within the size and use category of the building. This will also flexibility in design and will allow the Town to best adapt to changing construction market conditions, availability of materials and the capacity of the local building market.

Anticipated Cost

The following table shows the probable raw construction cost for the elements of work described above. These costs include General Contractor and subcontractor values only and are intended for comparison purposes only.

| CONSTRUCTION BUDGET | New Construction (single-story) | | | |
|--|-----------------------------------|------|----------|--------------|
| | basis | qty | per | total |
| Hazardous Materials Abatement | | | | |
| Site Improvements | | | | |
| Water Service extension | | | | |
| Grading, Surfacing | | | | |
| Substructure - allowance for upgrades | | | | |
| Substructure - new foundations and slabs | SF | 6355 | \$ 45 | \$ 285,975 |
| Superstructure | SF | 6355 | 100 | \$ 635,500 |
| Main Hall Floor repair/replacement | complete weathertight assembly | | | |
| Exterior wall repair allowance | construction type TBD | | | |
| Floor repairs/reinforcement | | | | |
| General adaptations and upgrades | | | | |
| Exterior Envelope | | | | |
| Roof | included in Superstructure, above | | | |
| Walls | | | | |
| Windows | EA | 18 | \$ 2,500 | \$ 45,000 |
| Doors | EA | 5 | \$ 3,500 | \$ 17,500 |
| Interior Construction and Finishes | | | | |
| Selective demolition, incl MEP | | | | |
| General Interior framing & finishes | SF | 6355 | \$ 38 | \$ 241,490 |
| New stairwell, elevator shaft & lobby | | | | |
| 3-stop elevator | | | | |
| Building Systems | | | | |
| Fire Protection | SF | 6355 | \$ 10 | \$ 63,550 |
| Plumbing | SF | 6355 | \$ 25 | \$ 158,875 |
| Mechanical | SF | 6355 | \$ 60 | \$ 381,300 |
| Electrical | SF | 6355 | \$ 45 | \$ 285,975 |
| | Construction Value | | | \$ 2,115,165 |
| 6,355 GSF | cost per SF | | | \$ 333 |

These are direct construction costs only, in current 2022 dollars. A more comprehensive statement of total project costs, including fees, contingencies, markups, and direct Owner's costs are captured in the Development Budgets in Appendix A.

E. CODE COMPLIANCE

Any construction work on the site will be subject to the requirements of the following building and accessibility codes, subject to the review and approval of the local Authority Having Jurisdiction (AHJ):

- NH RSA 155A-2017 (New Hampshire State Building Code), incorporating:
- International Building Code (IBC) 2018
- International Existing Building Code (IEBC) 2018 (existing building only)
- International Energy Conservation Code (IECC) 2018
- ANSI A117.1-2017 / ADA

General Classification:

- Use Group – A-3 (Assembly) and B (Business)
- Unseparated, mixed-use.

Existing Building Classification and Limitations:

- Construction Type – 5B, Combustible, Unprotected (existing structure only)
- 504.3 Allowable Height – Unsprinklered 40', Sprinklered 60' (existing building)
- 504.4 No. of Stories - Unsprinklered (1), Sprinklered (2)
- 506.2 Allowable area – Unsprinklered 6,000 SF, Sprinklered 18,000SF
- 506.3 Frontage Area Increase – Maximum of 75% increase over 506.2 tabular area
- 903.2.1.3. Fire Protection – required under conditions 2 and 3. Also required under 504.4, above.
- IEBC Chapter 9 - Alterations

SCENARIO 1 – CODE COMPLIANCE - COMPREHENSIVE REPAIRS AND RENOVATIONS

The extent of anticipated work under this scenario will involve more than 50% of the building area, and thus will fall under IEBC Chapter 9 - Alterations – Level 3. This will generally require that the entire building be brought up to current 2018 IBC standards for new construction.

The AHJ has discretion over the degree to which specific Code requirements must be met and can approve alternate means of compliance where the strict requirements of the Code cannot be practically achieved. This may include:

- Existing wood floor and roof framing – may not meet load and/or deflection criteria
- Exterior building envelope – insulation and air barriers
- Existing stairs: non-compliant rise and run.
- Fire separation of stairs and exit ways

SCENARIO 2 – CODE COMPLIANCE - LIMITED REPAIRS AND ALTERATIONS

Within certain limits (generally under 50% of the building area), this program of work may fall under IEBC Chapter 9 – Alterations – Level 2 and may be undertaken without the need to bring the entire building into conformance with current Code requirements. Any individual elements of new work would need to conform to current Code and accessibility standards.

As noted above, the AHJ has discretion over the degree to which specific Code requirements must be met and can approve alternate means of compliance where the strict requirements of the Code cannot be practically achieved. This may include:

- Existing wood floor and roof framing – may not meet load and/or deflection criteria
- Exterior building envelope – insulation and air barriers
- Existing stairs: non-compliant rise and run.
- Fire separation of stairs and exitways
- Fire Protection (sprinkler) system

Accessibility to all building areas is preferred but cannot be achieved in the existing building without the addition of a chair lift or elevator, at considerable expense. The current configuration may be “grandfathered in” but will generally mean that any public functions of the facility must be accommodated at the first floor only. The second-floor spaces would be limited to staff or storage use only.

Fire Protection (sprinkler system) is not currently present. With limited renovations this would probably not be required but is nonetheless recommended. As noted above, a full renovation of the building would require a fire protection system due to its two-story height and unprotected wood-frame construction.

SCENARIO 3– CODE COMPLIANCE - DEMOLITION AND REPLACEMENT

New Construction will be fully subject to the provisions of the codes and standards noted above. In addition, there may be elements of the building for which good practice suggests exceeding the minimum requirements of the codes. These may include but are not limited to:

- Fire Protection: A new single-story structure, as described previously, will not require a fire suppression system unless it is much larger than the existing one; however, it is strongly recommended.
- Enhanced building envelope and energy performance.

F. ZONING

The provisions of the Town of Londonderry, NH, Zoning Ordinance, as amended through November 30, 2020, will apply to work on the Mammoth Road site and building. This will primarily affect any planned new construction unless a change of use for the existing structure is involved.

Demolition Delay - due to the location, size and age of the existing Lions Club, demolition of the existing structure will fall under Section 9.3 Building Code Amendments – Part III, Demolition Delay.

Dimensional Requirements: The existing building is considered to be “grandfathered in” with regard to lot area, building height, coverage and yard setbacks, so alterations which do not materially affect those requirements will typically be permitted as-of-right.

New construction on the site may be subject to dimensional restrictions but may also be eligible for variances which do not exceed the current as-built conditions. In particular, the side yard setback at the North side of the property appears to be minimal, while Section 4.3.3 of the Ordinance requires a minimum of 30 ft.

A comprehensive zoning and permitting analysis are recommended for subsequent phases of the redevelopment of the facility.

G. APPENDIX A – DEVELOPMENT BUDGETS

(attached)

COMPREHENSIVE RENOVATIONS

Costs per SF base on Year: 2021

| Existing Building Renovation - IEBC Level 3 Alterations | | Size (SF) or LS | Cost/SF | Cost |
|--|--|---------------------------------------|----------------|---------------------|
| Substructure - foundation repairs & upgrades | | LS | \$ 150,000 | \$ 150,000 |
| Superstructure - repairs and upgrades | | LS | \$ 325,000 | \$ 325,000 |
| Exterior Envelope - Roof and Walls | | LS | \$ 268,125 | \$ 268,125 |
| Exterior Envelope - Windows & Doors | | LS | \$ 83,500 | \$ 83,500 |
| Interior Construction and Finishes | | 6355 | \$ 45 | \$ 285,975 |
| Fire Protection | | 6355 | \$ 12 | \$ 76,260 |
| Plumbing | | 6355 | \$ 20 | \$ 127,100 |
| HVAC | | 6355 | \$ 75 | \$ 476,625 |
| Electrical | | 6355 | \$ 55 | \$ 349,525 |
| Elevator / Egress Stair | | (Insert "X" below if applicable) x | \$ 169,800 | \$ 169,800 |
| New Construction Building Size and Cost Subtotals: | | 6,355 | | \$ 2,311,910 |
| Building Cost per SF: | | \$ 364 | | |
| Demolition and Abatement | | Size (SF) or LS | Cost/SF | Cost |
| Hazardous Materials Abatement | | LS | \$ 50,000 | \$ 50,000 |
| General Interior & Exterior Demolition | | 6355 | \$ 10 | \$ 63,550 |
| | | | | \$ - |
| | | | | \$ - |
| | | | | \$ - |
| | | | | \$ - |
| Demolition and Abatement Subtotal: | | 6,355 | | \$ 113,550 |
| Building Cost per SF (Demolition and Abatement): | | \$ 18 | | |
| Site Development | | Size (SF) or LS | Cost/SF | Cost |
| Water Service Extension for FP | | 300 | \$ 75 | \$ 22,500 |
| Miscellaneous Grading & Surfacing | | LS | \$ 25,000 | \$ 25,000 |
| | | | | |
| Total Site Work: | | | | \$ 47,500 |
| Escalation and Design Contingency | | | | |
| Subtotal Bldg, Abatement, Demolition & Site: | | | \$ | 2,472,960 |
| Design Contingency (8%): | | | \$ | 197,837 |
| Escalation (5%) to: 2022 | | | \$ | 133,540 |
| Total Escalation & Design Contingency: | | | \$ | 331,377 |
| Total Construction: | | | \$ | 2,804,337 |
| Total Construction Cost/SF: | | | \$ | 441 |
| Owner's Soft Costs | | | | |
| A&E Fees (design, bid, const.) | | (Assume 10% of Const. Value) | | \$ 280,434 |
| A&E Special Services | | (Assume 1.5% of Const. Value) | | \$ 42,065 |
| Owner's Project Manager Fees | | (Assume 4% of Const. Value) | | \$ 112,173 |
| Furnishings (FFE) | | Allowance | | \$ - |
| Communication. / Low Voltage System | | Allowance | | \$ 25,000 |
| Temporary Facilities | | | | |
| Printing Cost - Advertisement | | Allowance | | \$ 1,000 |
| Legal Costs | | Allowance | | |
| Utility Backcharges | | Allowance | | |
| Commissioning | | Allowance | | \$ 25,000 |
| Moving Costs | | Allowance | | |
| Construction Tests & Inspections | | Allowance | | \$ 15,000 |
| Owner's Contingency (5%) | | Allowance | | \$ 140,217 |
| Construction Contingency (6%) | | Allowance | | \$ 168,260 |
| Total Soft Costs: | | | \$ | 809,149 |
| TOTAL PROJECT COST | | | | \$ 3,613,486 |

DEMOLITION AND NEW CONSTRUCTION

Costs per SF base on Year: 2021

| New Replacement Building Construction - 1-story | Size (SF) or LS | Cost/SF | Cost |
|---|------------------------|----------------|-------------|
| Substructure - concrete foundations and slab-on-grade | 6355 | \$ 45 | \$ 285,975 |
| Superstructure - complete weathertight shell (roof and walls) | 6355 | \$ 100 | \$ 635,500 |
| Exterior Windows & Doors | LS | \$ 62,500 | \$ 62,500 |
| Interior Construction and Finishes | 6355 | \$ 38 | \$ 241,490 |
| Fire Protection | 6355 | \$ 10 | \$ 63,550 |
| Plumbing | 6355 | \$ 25 | \$ 158,875 |
| HVAC | 6355 | \$ 60 | \$ 381,300 |
| Electrical | 6355 | \$ 45 | \$ 285,975 |
| (Insert "X" below if applicable) | | | |
| | | | |
| | | | |
| | | | |

| | | | |
|---|---------------|--|---------------------|
| New Construction Building Size and Cost Subtotals: | 6,355 | | \$ 2,115,165 |
| Building Cost per SF: | \$ 333 | | |

| Site Development | Size (SF) or LS | Cost/SF | Cost |
|--|------------------------|----------------|-------------|
| Water Service Extension for FP | 300 | \$ 75 | \$ 22,500 |
| <i>NOTE: Construction on the same site is assumed, so site development costs are minimal. Alternate sites may have differing conditions and development costs.</i> | | | |
| Miscellaneous Grading & Surfacing | LS | \$ 50,000 | \$ 50,000 |
| | | | |

| | | | |
|-------------------------|--|--|------------------|
| Total Site Work: | | | \$ 72,500 |
|-------------------------|--|--|------------------|

| Escalation and Design Contingency | | |
|---|--|---------------------|
| Subtotal Bldg & Site: | | \$ 2,187,665 |
| Design Contingency (8%): | | \$ 175,013 |
| Escalation (5%) to: 2022 | | \$ 118,134 |
| Total Escalation & Design Contingency: | | \$ 293,147 |
| Total Construction: | | \$ 2,480,812 |
| Total Construction Cost/SF: | | \$ 390 |

| Owner's Soft Costs | | |
|-------------------------------------|------------------------------|-------------------|
| A&E Fees (design, bid, const.) | (Assume 10% of Const. Value) | \$ 248,081 |
| A&E Special Services | (Assume 1% of Const. Value) | \$ 24,808 |
| Owner's Project Manager Fees | (Assume 4% of Const. Value) | \$ 99,232 |
| Furnishings (FFE) | Allowance | \$ - |
| Communication. / Low Voltage System | Allowance | \$ 25,000 |
| Temporary Facilities | | |
| Printing Cost - Advertisement | Allowance | \$ 1,000 |
| Legal Costs | Allowance | |
| Utility Backcharges | Allowance | |
| Commissioning | Allowance | \$ 25,000 |
| Moving Costs | Allowance | |
| Construction Tests & Inspections | Allowance | \$ 25,000 |
| Owner's Contingency (5%) | Allowance | \$ 124,041 |
| Construction Contingency (6%) | Allowance | \$ 148,849 |
| Total Soft Costs: | | \$ 721,011 |

| | | |
|---------------------------|--|---------------------|
| TOTAL PROJECT COST | | \$ 3,201,823 |
|---------------------------|--|---------------------|