

**Ludlow United Church
48 Pleasant Street
Ludlow, VT**

**Capital Needs Assessment
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Executive Summary

This lovely church was constructed in 1892. It remains in sound condition, but requires attention to several work items that have been postponed over the years. These include drainage problems around the building, inadequate storm windows, no handicap access, poor bathrooms also without access, damaged foundation mortar, weak insulation and aging wiring.

A catch up program of repairs and improvements is proposed to last about three years. The issues described above will be addressed and additional repairs are proposed throughout the report period.

The funding for these repairs would come from \$18,000 in existing reserves, \$125,000 from a bequest and proposes to establish an annual deposit to the capital reserve of \$5,000 that increases with price inflation.

Preface

A capital needs assessment can be an excellent tool to understand the current condition of a building and anticipate its future needs. It can be used as a planning tool both for project scheduling and budgeting. It can also be a real wake up call when a building is facing many repairs immediately or in the near future.

The capital needs assessment does have its limitations. The chief limitation is that it is a broad overview of the building without any great depth. While it does pick up red flags of environmental, structural and life safety problems it is not a comprehensive review and should not be considered a “passing” inspection in those areas. Testing is not done for lead, asbestos or other environmental hazards. Loads are not calculated for each structural member, it relies on a visual inspection and broad rules of thumb for whether current problems exist or future problems are likely.

The inspection is, by definition, visual. This inspection does not open up sill areas to check for rot or wall cavities to look for concealed wiring problems. Sometimes the owner does not provide access to some areas of the building because this would involve removing ceilings or vents or because they choose not to allow me to enter a unit. This limits the scope of inspection accordingly. I have tried to note where this has occurred.



The inspection of older buildings does not utilize current building codes. Almost no older buildings meet current new construction codes. The violations would run pages and their correction would exceed the value of the building in many cases. Code officials generally do not require existing buildings to meet these requirements unless they are undergoing renovations or they are unsafe. The

exception to this pattern of “grandfathering” is the life safety code that can be applied to require older buildings to be brought up to current codes for egress and fire safety issues. This enforcement is spotty and unpredictable at the present time. Where there are violations of the code as currently enforced they are cited, but a full life safety upgrade would be far more substantial in scope.

Lifespans of building elements and equipment are based on normal usage and maintenance. Patterns of heavy usage or poor maintenance can radically alter the lifespan of building components. Conversely, a church may see longer lifespans for items used only weekly.

Introduction

This shingle style church was originally constructed in 1892 and is on the National Register of Historic Places. It has a stone foundation, wood frame construction, slate roof and wood shingle exterior. It has a mixture of double hung wood windows, with and without aluminum storm windows, and fixed windows with a combination of clear and stained glass, with and without storm panels. The original wood and glass doors are present. The building is heated with a combination of two oil fired hot air furnaces and a gas space heater.

The building is generally in good condition and sound, but many elements are dated and need modernization or other improvements. The building has recently been painted and has a sound exterior. Site issues include poor drainage, particularly at the back of the site, and a lack of a handicap accessible entrance. The exterior has minor damage to the front porch and other problems with handrails and guards on entry stairs. The windows are mostly original and will require attention to improve energy efficiency and to remain structurally sound. There is some damage to the foundation mortar that requires attention. The slate roof requires regular maintenance by a specialist to secure loose slates and replace the missing ones.



The interior finishes are dated in many rooms and could use updating. These can be addressed one room at a time, as budgets allow. The exception is the need to update the bathrooms and make at least one handicap accessible. This will require floor plan changes and the old plumbing in the building is likely to require major updating to allow new connections to water and drains.

The kitchen has not been updated in many years. The cabinets are older and don't meet current standards for commercial kitchens. There is no fire suppression system or hood at the range. The floors are older. As a facility that is used sporadically and not subject to health department regulations, you may choose not to make major improvements right away.

Of greater concern are areas that show signs of structural movement indicating possible weakness or damage to the building. These are present at the first floor fireplace floor and walls at the upstairs front. Long spans for structural framing in the attic are another indicator of likely weakness. These problems have limited scopes and can be addressed with reasonable repairs.

Another significant concern is the poor drainage in the back yard and water in the basement. The wet basement is raising the humidity level throughout the building and can lead to mold in the building and structural damage from wood rot. The yard drainage has caused pooling in the yard that forms ice in the winter at an entrance to the building, an obvious safety hazard.

The building has relatively poor energy performance by modern standards. There is insulation, but in modest quantities and sometimes poor condition. This report is not an energy audit and will not develop a plan for where and how to insulate, but a program of increasing insulation and sealing drafts is necessary.

Site

This property is located at the corner of Pleasant and Elm Streets in the village of Ludlow. Nearby buildings include housing and a health center. The site has a slight slope



from front to back. There is very limited parking at the back of the site and between the church and parsonage.

Drainage has been a problem at the back of the site. There are lawns around the building and some trees at the back of the site.

Hardscape

Vehicle access to the site is on a paved road. There is limited parking in front of the two car garage and between the church and parsonage. Both areas are paved with asphalt. There are also walks to the entrances with asphalt paving.

The paving is generally in fair to good condition. There are some modest cracks and the area at the back walk has some damage from being under water. There is no indication of the location of a handicap space.

The pavement for the walks is cracking. This is probably due to poor drainage under the walks and poorly draining base material. Most similar facilities use concrete for walkways. It is less prone to cracking and uneven surfaces. It is more expensive to install, but lasts much longer and requires less maintenance. You should consider using concrete for walks when they need replacement.

The back walk goes under water every spring. If this area is repaired, it will need to be repaved or a concrete walk installed. This is budgeted in year 1.

The rest of the pavement is budgeted for replacement in year 14.

Drainage and Grading

The site slopes away from the building at the front but the drainage at the back of the site is problematic. There are issues around the base of the building where roof run off is not getting away from the foundation wall effectively and in the yard areas where water is pooling.



There is asphalt at the perimeter of the building in an effort to prevent water from going into the ground near the foundation. The paving has decayed and it should be replaced. It should have a better drainage system installed around the base of the building that includes repairs to the foundation wall mortar, footing drains, better draining back fill and drainage stone at the surface. The existing

grades seem to drain away from the building reasonably well. This should be maintained and the roof drainage directed off the site.

The pooling at the back walk is more problematic. The yard and driveway drainage appears to converge on this spot and raising the grade will need to be done carefully to avoid merely shifting the puddle to another location.

Drainage improvements are budgeted in year 1 to prevent further water damage to the basement.

Landscaping

The building has attractive lawns, trees and landscaping. This is not likely to require capital expenses during the report period.

Garage

The site includes an older two car garage. It has a concrete floor, overhead doors, wood shingle siding and an asphalt shingle roof. It is generally in fair condition. It has been painted recently and the siding is in good condition. The roof is worn and there is some damage to the overhead doors.

Roof replacement and other repairs are budgeted in year 3. Door replacement is budgeted in year 13. Painting is included with the main building.

Other Site Features

Site lighting includes building mounted spot lights at the entries and shining on the stained glass. The entry spots are shining in the eyes of people entering the building and could be changed to a more efficient LED system that illuminates the steps and entry



rather blinding users. These will be much more efficient and could be left on as security lighting without a large energy bill. This is included in the electrical upgrades.

The halogen fixture used to illuminate the stained glass probably is not used frequently and can not justify a more efficient fixture.

The property has a building mounted sign with the name and worship schedule. It appears to be lighted at the top. It has been painted and remains in good condition. You may want to convert the lamp to an LED to eliminate maintenance. This style of display was widely used for churches several decades ago and can now be considered part of the historic appearance of the church. It should be maintained through the report period. This may require rewiring the interior light or repainting the upper lettering.

Architectural

Exterior

The exterior of the building is wood shingles with wood trim. The siding was repaired and painted recently and is in very good condition. At this point, there are sections that are recently replaced and other areas, like the gable on the left hand side of the building that are old, but serviceable. Over the term of the report you can expect the older areas to require replacement.

The building will require painting about every 7 years. This is budgeted in years 6, 13 and 20. Repairs to the siding and trim will accompany it each time.

Porches

The building has concrete front steps with a recessed entry porch, a stoop to the side office and back steps and stoop.

The front steps are in fair condition. They have carpet on the stairs and deck that should be removed. This may reveal problems with these areas and with the columns supporting the pediment. Repairs are budgeted in year 4.



The side stoop has concrete pre-fab stairs. They do not have a handrail or a landing outside the door. They should have both these features and you should consider replacing or modifying them if the ramp does not utilize this entrance.

There are wooden stairs and a stoop at the back of the building that also incorporates the bulkhead entrance to the basement.

These stairs and the bulkhead do not appear to have been painted with the rest of the building. They don't have a graspable handrail, the sides are open and there are open risers. It appears the bottom step is much higher than the others, also a code violation. The bulkhead appears sound, but will need to be kept painted, inside and out, to prevent rot. This area is proposed for a new handicap entrance and replacing these stairs is a likely outcome.

The big question for building entrances is where to make the building handicap accessible. Putting a ramp on the front would alter the historic façade of the building. The Keefe-Wesner plan to add a ramp to the left side of the building and connect through the office does not work since the area in front of the building was sold. The back of the building falls away and makes it a much higher climb from the parking lot to the back entrance. Many feel that asking the handicapped to go to the back door sends a charged message. In this case, surface grading is a bigger factor. There is more on this in the Handicap Accessibility section.

Windows

The building has a mixture of wood window types. The windows outside the sanctuary are wood double hung windows with aluminum triple track storm windows. There are exceptions on the second floor that lack storm windows. The sanctuary has fixed stained glass windows with exterior storm panels, again one window appear to lack a storm panel.



The double hung wood windows are probably original to the building. They appear sound and those with storm windows have been protected from most damage. The glazing compound and frames inside the storms do not appear to have been repaired or painted in the recent repairs. This is a cost and labor savings that works for a while if the storms are kept closed consistently. There is

some putty damage that should be repaired before water works into the adjacent wood. This could be done as maintenance if there is a skilled painter available.

Storm windows were probably added as fuel prices increased in the 1970's. My count is that there are 9 windows in the heated area without storm windows and 9 more in the attic. The storm windows appear to have all the parts and still perform their functions. They are budgeted for replacement in year 13. Interior or exterior storm windows are budgeted for the 9 second floor windows in year 1.

The stained glass windows are believed to be in good condition. They do not appear to need work on the lead connections. The exterior storm windows have plastic glazing in some locations. It appears to be clouding and yellowing in some windows. These windows are still thermally effective and probably do not appear different from the inside. My count is there are 7 in this condition and one window does not appear to have a storm panel. A storm panel for the missing location is budgeted in year 1. The others are budgeted for replacement in year 6. The glass panels found in the central large stained glass windows should not require replacement.

Exposed glazing in old windows suffers rapid deterioration of the putty or glazing compound due to weather. Once the putty is compromised, the wood mullions deteriorate rapidly. This is a concern in the windows that do not have storms and a continuing issue if you use internal rather than external storms. If maintained consistently, this risk is reasonable.

Doors

The building has double front doors, a door to the side office and rear doors to the back stairway and meeting hall.



The front double doors are wood with glass and likely to be from 1892. They are an important part of the historic appearance of the building and should be preserved. A round of repairs is budgeted in year 12.

The side office door is wood with 9 small window panes. It is likely to be from the construction of this addition that enclosed the porte cochere and it is

now historic. It is in good condition but not very energy efficient. If this entrance is chosen for handicap access this door will probably need to be replaced, but it is worth trying to modify and retain it. Repairs or modifications are budgeted in year 4.

The two back doors are different. The door to the stairway is probably original and is a narrow door with 3 panels and 4 panes of glass. It was a cost effective choice for a door that would get little use. It swings out and does not have a lever handle. You should consider replacing it with a modern door with better insulating characteristics and a tighter fit. This area is proposed for the new handicap access and new doors are a likely requirement.

The rear door to the meeting hall is a modern replacement with a lever handle. It swings out per code. It is likely to be replaced when a rear access system is built.

There is also a wood bulkhead and wood interior door to the basement. These are older site built doors. The interior door shows signs of being constructed from recycled material. They appear sound, but the interior door is exposed to damp conditions at the bottom and the exterior door is exposed to the elements. They could benefit from repairs when the back entry is replaced. Drying out the basement will also preserve these doors.

Roofs

The main roof is slate with copper valleys, there is a membrane roof inside the bell tower, metal roofing on the east side projection and asphalt shingles on the garage.

The main roof is reportedly being maintained through repairs to the slate on a regular basis. This is appropriate and should continue with repairs about every 5 years (unless warranted sooner). This is budgeted in years 2, 7, 12 and 17.



The membrane roof in the tower was installed recently. It should last through the end of the report period. This is a tricky place to keep weather tight and should be inspected in the spring and fall with repairs as necessary.

The metal standing seam roofing is undetermined age and is probably copper. It will last longer than the reader. No costs are

budgeted.

The garage shingle roof is curling on the south side and will require replacement soon. You should consider ribbed metal roofing as well as asphalt shingles when choosing a replacement material. Ribbed metal has been more consistently reliable than asphalt and is not petroleum based, is recyclable and is more durable than asphalt shingles. This is budgeted in year 3.

Foundation

The building has a stone foundation with a concrete masonry unit section at the back staircase. The side office appears to be on posts and there is another area without walls by the back tower.

There are visible openings in the stone foundation. These are notable at the front tower, at the front left corner, in the back post for the side office (near the propane tank) and along the back wall outside the kitchen. The concrete block area has missing mortar, as well. The interior of the foundation is covered with insulation and was not available for inspection.

The ideal solution would be to remove the asphalt along the building walls at the back, excavate to access the walls and repoint the exposed stone or block. The walls could then be backfilled with appropriate material to ensure drainage and regraded at the surface to move water away from the building. This is budgeted in year 1.

This basement has significant water problems. The moisture has damaged stored items, is causing decay at the base of support columns and is likely to cause moisture problems throughout the building including peeling paint and, possibly, mold. You should not accept that all old buildings have wet basements and act aggressively to resolve the problems.



Structure

The building is wood frame. It is stick built through most of the building, but there is timber framing in the sanctuary.

There has been some reinforcement of the floor system in the basement. It is not clear whether additional reinforcement is still necessary. The floor in the front first floor

playroom is very uneven at the fireplace. It appears it is not supported properly in this one area and needs reinforcement.

The second floor front wall is visibly out of plumb. This indicates the wall has been pushed out in some way. The cause is difficult to diagnose and it should be investigated further.

A prior report from Keefe and Wesner had concerns about the framing for the roof, visible in the attic. It did not appear this had been fully addressed.

You may wish to employ a structural engineer with skills in analysis and improvement of older structures to fully analyze the building framing. This is budgeted in year 1.

Improvements to the building to reinforce the first floor and add collar ties to the attic are budgeted in year 2. The second floor wall issue is not included in this plan because a solution is not yet available.

Insulation and Draft sealing

The building has some attic insulation and wall insulation on the interior of the foundation walls. An energy audit from 2008 indicates the walls are not insulated.

That audit by Vermont Interfaith Power and Light is still useful and provides sound recommendations for improvements to draft sealing, temperature controls, lighting and insulation. It can be used as a guide to further improvements.

My only disagreement is with the importance of wall insulation. The report is correct that it will be relatively expensive, but it will save a significant amount of heat and properly installed dense pack cellulose also dramatically reduces drafts in the building. These improvements are budgeted to be implemented in year 3.



Mechanical and Electrical

Heating and Hot water

The building has two oil fired Thermo Pride furnaces. They were installed about 1999. They are controlled by thermostats on each floor. There is also a propane fired wall mounted heater in the side office. This was

installed in the last few years.

Fuel is stored in two steel tanks located in the basement. They are believed to be from 1999 and no replacements are budgeted.

The furnaces are vented to a brick chimney. No problems were noted.

The furnaces are likely to require some major repairs after 15 years of operations (about now) and are budgeted for replacement in year 10.

The wall heater has an expected life of 20 years and is budgeted for replacement in year 17.

There are concerns about controlling the heat to be able to warm only the areas of the facility that are in use. Hot air furnaces do a good job of heating the air in the building rapidly. It is not possible to zone them and heat only some parts of the building covered by a single furnace. That is why there were two furnaces, so that they could be controlled separately.

One suggestion has been to add supplemental propane heat to one or more area of the building so it could be heated without heating a much larger space. This should work, but there are considerable costs for piping fuel, venting and the heater itself. Direct venting adds a possibly unsightly protuberance on the exterior of an attractive building. An additional heater is budgeted in year 2.

Additional insulation will help with this problem, lessen the time it takes for the building to heat up and lower the heating bills somewhat and make using heat less troublesome.



The hot water is provided by a propane fired Bradford White hot water heater. It appears to be about 10 years old. No problems were reported. It is budgeted for replacement in year 6.

Ventilation

Other than bathroom fans, the building does not have mechanical ventilation. It does, however, have a 19th century ventilation system based on moving air through the sanctuary by chimney effects. Warm air can escape from upper vents and be replaced by cooler air entering at the floor. No capital costs are required for this simple system.

There are ceiling fans (which are circulation not ventilation, in my mind) in the sanctuary. These are reasonably priced

to operate and replace. In this installation they will go many years without replacement. No costs are budgeted.

In an age of extensive air conditioning, many people have become less tolerant of ordinary warm summer temperatures found in buildings. Some may wish to air condition all or part of the building. I suggest resisting forces and these capital and operating costs. Flushing out the building with early morning cool air on all but the warmest days can provide an acceptable temperature until late morning on most hot days. No air conditioning is budgeted.

Plumbing

The water supplies are copper. Copper pipe does not generally require repairs. The drains are a mixture of older hubbed iron and lead tubing. No problems were reported, but they are probably about 75 years old and will require modification to meet current codes for fixture venting when fixtures are replaced. The sewer line from the building to the street is probably the same age. These pipes are reaching the end of their useful lives and are likely to require repair or replacement during the report period. It is hard to say when.

A round of pipe replacement is budgeted with the bathroom upgrades, with the kitchen upgrades and in year 11 for the pipe from the building to the street main.

Electrical



The building electrical system has been maintained over the years and appears mostly adequate. There is a recent vintage breaker panel in the storage area off the kitchen and an older breaker panel in the upstairs meeting room.

There are concerns. The older light fixtures, particularly the hanging fixtures on the second floor

have their original wiring. This is cloth covered, beyond the end of its useful life and potentially dangerous. These fixtures should be rewired. The existing bulbs should be replaced with LED bulbs during the repairs.

The altar area does not have enough light and there are not enough receptacles in some parts of the building. Any improvements to the play room, bathrooms or other areas should include full rewiring of those areas.

There is cloth covered wiring in some locations. This is now over 50 years old and reaching the end of its useful life. Those of us who came of age worrying about the condition of knob and tube wiring have been around so long the next generation of wiring needs replacement!

There are exposed, insulated cables at the breaker panel in the storage room. These need to be in metal clad cable or protected in the wall.

This system is an accumulation of improvements made over almost a century. It will need updating to bring the older devices, shut offs and conductors up to present standards and replace worn out bits. This is budgeted before attic and wall insulation is added in year 3. This will require an extensive evaluation by a licensed electrician. The work could be done on a time and materials basis with the electrician replacing worn out bits as they go through the building.

An additional round of improvements is budgeted in year 18.

Alarms

The building has a fire detection and alarm system. The main panel was recently replaced and the devices were updated. The panel has an expected life of 20 years and is budgeted for replacement in year 20.



Kitchen

The kitchen has cabinets and counters from the 1950's or thereabouts. They appear functional and no problems were reported. The kitchen receives moderate use and meals are prepared there on a regular basis, but less than weekly. There are two double sinks, a ten burner stove with two ovens and refrigerators. It has a vinyl composition tile floor.

Kitchens in churches are an optional item. Sure, you need to serve coffee and tea, but full meal preparation is only occasional and not an essential function. Older cabinets, counters and sinks are acceptable. No dishwasher, no problem. Residential rather than commercial refrigerators, absolutely. You need to consider upcoming changes in this light.

The range appears to be in good condition. Commercial ranges can be repaired and used for decades. No replacement is budgeted.

The installation of the range is probably a code violation. It lacks a commercial grade exhaust hood. My understanding is these large commercial ranges require them. You should investigate and meet this requirement in year 1.

The refrigerators have an expected life of 15 years. Replacements are budgeted in year 8.

The cabinets are dated and less functional than current stainless steel shelving. The floor plan could be altered to have a dishwashing area, a cooking area and a serving area. Again, you need to decide whether serving large meals, say 25 or more people, is something you want to spend a lot of money on. If the answer is yes, you should consider renovating this area to have more sanitary and functional shelving, a better floor plan, a pot depth sink, a grease trap, commercial grade refrigeration and a commercial dishwasher. Meanwhile, the existing facility has held similar events for many years. I believe you will leave it alone as long as possible and I can't guess exactly when you will modify it. An allowance is budgeted in year 12.

The floor is budgeted for replacement in year 12.

Baths



There are two older bathrooms. Neither is accessible to the handicapped. This is a significant issue to a facility that wishes to serve members of all abilities and health. You should plan and implement an accessible bath project in year 1.

The existing bathrooms should not be saved. The

Keefe and Wesner plan leaves these bathrooms alone and adds a third bathroom nearby. It would be better to assume the existing bathrooms will be torn out and new bathroom(s) constructed in the same area with a different floor plan. The existing sinks and interiors are beyond continued use. The toilets are not handicap height, but are reusable in a conventional bathroom.

The piping to these bathrooms, particularly the drains, will need to be replaced and new waste venting added. The new fixtures will get a new configuration, venting will be improved and the finishes will be all new. It is important to note that these bathrooms are barely adequate for anyone and their replacement is necessary with or without access improvement.

Interiors

The interior includes an office, several meeting rooms, hallways, stairways and the sanctuary worship space. The interiors vary wildly in condition. The sanctuary is one of the more attractive places of worship I have visited. At the other extreme, the play room is badly worn and has damage to the floor and finishes.

Several areas of the facility have dated and sometimes makeshift interiors. These include the back stairwell, the horizontal bead board walls in the side office and the closet off the meeting hall that used to be an exterior wall. These areas will require improvements that go beyond paint and floor covering but offer opportunities to change use or enlist underutilized space. Changing one use may have an effect on the other parts of the building and lead to "scope creep" or project expansion. For instance, for an elevator to go in the side office a new area needs to be prepared for the office.

The upcoming improvements, over about 5 years, should include major repairs to the play room, proper finishes in the back stairwell, and improvements to the lobby and upgrades to the meeting hall. After that I suggest an annual maintenance allowance for



painting and floor covering replacement. Fortunately, many rooms in a church are not used daily and service lives are greatly increased.

Accessibility

The building was constructed before the age of providing access to facilities for people of all abilities. It has stairs at the front entrance, no accessible restroom and a lift to the second floor that

does not meet current standards.

Keefe and Wesner Architects proposed changes to the facility to meet access standards. My understanding is the ramp they proposed is not possible since the parsonage was sold. The alternative is to create a handicap entrance at the back of the building. This side of the building is considerably higher above the adjacent ground (about 42") than the front, making a ramp difficult. The best, but expensive solution might be to have an enclosed structure at the back of the building that served as the back stairs, basement entrance and housed a lift from ground level to the first floor or even the second floor. A clever architect should be able to utilize this space well and not have an enormous structure. The most obvious problem with this design is finding the right location for lift to access the sanctuary. I'll have to leave this idea for a professional to figure out.

An accessible bathroom requires a new room that meets handicap dimensions for maneuverability. The old bathrooms require replacement and should be redesigned to include one accessible bathroom. You should also look at what it would take to utilize the closet off the meeting hall as finished space, possible a part of the bathrooms.

If the back of the building is used for handicap access the existing parking for the garage or a new space closer to the building could be created for handicap parking. This plan should be incorporated into the regrading at the back of the building.

Environmental

I have not received any reports on previous testing for environmental hazards in the building. Further testing is beyond the scope of this report.

There is some fuel, paint, solvent and chemical storage in the garage and basement but they are in keeping with the size and use of the property.

There is an old fuel oil tank in the basement. It was reportedly empty and would be difficult to access and remove. You should verify it is empty and consider cutting it up to remove it.

The property was constructed while lead based paint was in routine use. The paint should be tested or assumed to be lead containing when construction projects will disturb painted surfaces. Lead safe maintenance practices should be followed.

It also may contain asbestos containing products, especially in older sheet floor covering, some older floor tiles, adhesives and some chimney sealants. Suspect materials should be identified and tested prior to construction projects. Safe remediation measures should be followed for any identified materials.

No testing for radon was conducted as part of this report.

This building has a wet basement. Wet basements encourage the formation of mold, a potentially hazardous situation. You should remove all the damaged stored materials from the basement and complete measures to prevent future flooding. These measures are more fully discussed in the Foundation and Drainage and Grading sections.

Most buildings have fewer environmental concerns, but this building has fallen behind in making improvements. This building is lovely and quaint, but faces real concerns with a play room that may contain lead paint, old asbestos containing floor covering and a moldy basement.

Capital Improvement Program

This building has been many years without major renovations. While the roof and exterior are sound and the sanctuary and meeting room are very attractive, there are accumulated problems. These include the wet basement, structural problems, electrical updates, poor insulation, windows without storms, poor handicap accessibility, worn finishes in the office and play room, old bathrooms, and foundation mortar damage.

The list may seem long, but not every item is very expensive and completing several items per year can make steady headway and improvements. The order of improvements has some flexibility but there is an order to construction that must be respected to avoid having to damage or repeat finish work to complete more basic improvements. As your plans are refined you will need to revisit the order to see that it remains accurate.

This plan concentrates urgent improvements in the first three years. It is possible to either consolidate the work into a single general contract or spread the improvement over a couple of additional years.

Year 1 – 2015

Regrade around building and improve drainage
Repoint foundation walls

Install new back entrance for handicap access
Repave back walk after regrading and handicap parking space
Replace back porch steps and landing, repair bulkhead, replace back stairway door (part of access project)
Install storm windows on 9 second floor windows and 1 stained glass window
Hire structural engineer to evaluate floor, roof and second floor structure
Overhaul 15 year old furnaces
Gut bathrooms and install 2 new bathrooms with HC access
Replace selected supply and drain lines to serve new bathrooms
Install range hood per code for kitchen range

Year 2 – 2016

Repair slate roof
Repair floor and roof structure
Install additional wall heater
Improve play room interior

Year 3 – 2017

Repair garage
Replace garage roof
Draft seal building
Upgrade electrical system, rewire light fixtures
Insulate walls and attic
Improve meeting hall

Year 4 – 2018

Repair front porch steps and columns
Replace side office door
Improve lobby

Year 5 – 2019

Paint and floor covering for 1 room

Year 6 – 2020

Paint and floor covering for 1 room
Repair and paint exterior
Replace yellowed storm panels on stained glass
Replace hot water heater

Year 7 – 2021

Repair slate roof
Paint and floor covering for 1 room

Year 8 – 2022

Paint and floor covering for 1 room
Replace refrigerators

- Year 9 – 2023
Paint and floor covering for 1 room
- Year 10 – 2024
Paint and floor covering for 1 room
Replace furnaces
- Year 11 – 2025
Paint and floor covering for 1 room
Replace sewer line to street
- Year 12 – 2026
Repair front entry doors
Repair slate roof
Paint and floor covering for 1 room
Replace supply and drain lines to kitchen
Replace kitchen cabinets, counters and sink
- Year 13 – 20267
Repair and paint exterior
Paint and floor covering for 1 room
Replace garage doors, repair garage
Replace first floor storm windows
- Year 14 – 20278
Paint and floor covering for 1 room
Repave driveway and parking lot
- Year 15 – 2029
Paint and floor covering for 1 room
Repair back door
- Year 16 – 2030
Paint and floor covering for 1 room
- Year 17 – 2031
Repair slate roof
Paint and floor covering for 1 room
- Year 18 – 2032
Paint and floor covering for 1 room
Electrical upgrades
- Year 19 – 2033
Paint and floor covering for 1 room

Year 20 – 2034

- Repair and paint exterior
- Paint and floor covering for 1 room
- Replace alarm panel and upgrade detectors

Financial Projections

The property has current reserves of about \$18,000 and has received a bequest of \$125,000 to be used on the building. These should be combined with an annual deposit to the reserves to maintain the building over the long run. This can be accomplished with annual deposits in the \$5,000 range and indexed to increase with construction price inflation.