

# Property Condition Assessment for

4030 Eastern Avenue, Parrsboro, Nova Scotia
February 12, 2020

Prepared For:

**Municipality of Cumberland**
1395 Blair Lake Road
Upper Nappan, NS, B4H 3Y4
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Project Number: 191-15252-00

# General Description

The property at 4030 Eastern Avenue, in Parrsboro, Nova Scotia includes a vacant two-story town service Centre. There is a basement level for building services and storage. The gross floor area is about 7,000 ft² including the basement. We believe the original property was constructed in the mid-1800s with an addition added in the 1980s.

The structure is wood-framed and is supported by below-grade foundation walls which are a mixture of natural stone masonry and reinforced concrete.

The exterior walls are primarily clad in white vinyl siding. Main floor windows are single glazed in wood frames. The roofs are sloped and covered with asphalt shingles.

There is a fire alarm but no sprinkler system. Fire extinguishers and battery powered emergency lights are located throughout the building.

Heating is provided by an oil furnace and a wood furnace in the basement. No cooling or ventilation is supplied to the spaces. Additional heating is provided by electric baseboard heaters and electric unit heaters.

Domestic hot water is generated by one electric domestic hot water tank heater. The plumbing distribution piping is copper.

Electrical power is supplied to the building via a pole mounted transformer. The main disconnect is rated at 200A, 120/240V.

# Executive Summary

MANDATE

This report was prepared at the request of The Municipailty of Cumberland as a capital plan of the property. Our review considers a 3-year capital renewal timeframe and a $2,500 capital threshold.

KEY FINDINGS

The building will require significant capital investment to render suitable for use, and ensure reliable long-term performance.

A fire inspection report done in 2018 by the Municipality of Cumberland noted extensive deficiencies. Budgets have been included to address these concerns.

There are numerous deficiencies with the first-floor framing, as viewed from the basement. We have included a budget for a further structural review and analysis of the first-floor framing and included a placeholder budget for repairs and retrofits, pending the findings of the review. Please refer to the Structural section of our report for more details.

Portions of the stone foundation walls require exposure by excavation to address exterior repairs such as re-pointing joints and waterproofing. A budget is included.

The roof shingles are well past their reliable service life and require replacement prior to any major interior finish renovations. A budget is included to replace the roofing.

The siding is in poor condition, while local repairs may be possible, for consistent appearance and based on age, a budget had been included for the full replacement of the vinyl siding.

The window are generally in poor condition. Based on estimated age and conditions noted, window replacement is recommended. We have included a budget to restore the wood window sills/trim and replace the windows.

The furnaces have reached the end of the typical expected service life, ductwork is poor, and he oil storage tank (single wall steel) in the basement does not have leak detection systems or secondary containment. The plan includes a budget to modernize the HVAC system with a central air handling unit with outdoor ventilation air, in a new mechanical room.

The battery powered lights and fire alarm system do not function, and the exit lighting is problematic. The plan budgets for replacement.

The electrical distribution equipment is not contained in a fire rated room and some equipment is outdated. A budget is included for a utility room to be created and for old equipment to be replaced.

CLOSURE

No part of this report should be read in isolation. It is intended to be relied upon only in its entirety including the Scope of Work and Limitations.

# Capital Expenditures

The table on the following page summarizes our opinion of reasonable budgets for the capital expenditures identified over the term of this report. Voluntary upgrades or improvements are not included. Deficiencies that can be remedied with routine maintenance or miscellaneous minor repairs, or minor conditions that generally do not present material physical deficiencies, have not been identified.

The budgets assume a prudent level of ongoing maintenance. Dollars shown are inflated, and include contingencies (typically 5 to 15%) and allowances for design/project management (typically 5 to 15%), where relevant. Taxes are excluded.

Capital projects are classified as follows:

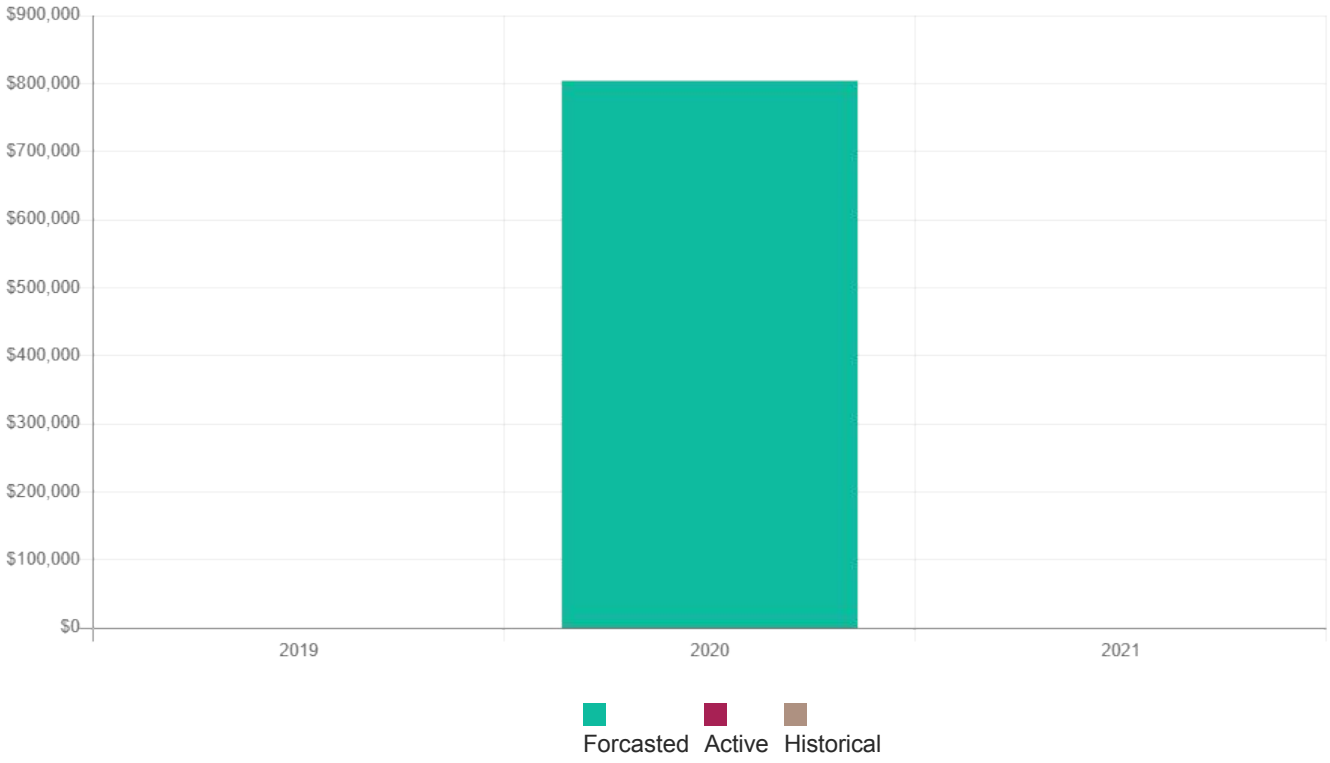
1 = Life Safety/Immediate Items
2 = Deferred Maintenance
3 = Normal/Life Cycle Renewal
4 = Mandatory Statutory Compliance
5 = Upgrades/Discretionary Items

# Budget Table

## Annual Budgets

| Item | Description | Class | Status | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|
| **1** | **Structure** | | | | | |
| **1.1.1** | Structural Evaluation | 3 | Forecasted | $0 | $14,586 | $0 |
| **1.1.2** | Structural Repair Allowance | 3 | Forecasted | $0 | $23,664 | $0 |
| **1.2.1** | Excavate and Waterproof Below-Grade Walls | 3 | Forecasted | $0 | $78,275 | $0 |
| **1.2.2** | New Concrete Wall | 3 | Forecasted | $0 | $17,707 | $0 |
| **2** | **Building Envelope** | | | | | |
| **2.1.1** | Replace Vinyl Siding | 3 | Forecasted | $0 | $77,112 | $0 |
| **2.2.1** | Repair/Paint Window Sills, and Trim | 3 | Forecasted | $0 | $45,900 | $0 |
| **2.2.2** | Window Replacement | 3 | Forecasted | $0 | $66,096 | $0 |
| **2.3.1** | Repair/Replace Door Hardware | 3 | Forecasted | $0 | $8,211 | $0 |
| **2.4.1** | Replace Asphalt Shingle Roofing | 3 | Forecasted | $0 | $42,352 | $0 |
| **3** | **Fire Safety** | | | | | |
| **3.1.1** | Correct Exit Lighting | 3 | Forecasted | $0 | $3,672 | $0 |
| **3.1.2** | Replace Fire Alarm System | 3 | Forecasted | $0 | $10,200 | $0 |
| **3.2.1** | Stairwell Fire Separation Repairs / Retrofits Allowance | 3 | Forecasted | $0 | $43,350 | $0 |
| **3.2.2** | Floor and Wall Framing Fire Separation Allowance | 3 | Forecasted | $0 | $61,200 | $0 |
| **3.3.1** | Add Interior Basement Egress Door | 3 | Forecasted | $0 | $6,120 | $0 |
| **4** | **Site** | | | | | |
| **4.2.1** | Full Asphalt Paving Renewal | 3 | Forecasted | $0 | $106,080 | $0 |
| **4.2.2** | Replace Concrete Ramp | 3 | Forecasted | $0 | $25,194 | $0 |
| **5** | **HVAC** | | | | | |
| **5.1.1** | Replace HVAC System | 3 | Forecasted | $0 | $133,824 | $0 |
| **5.1.2** | Washroom and Kitchen Exhaust Improvements | 3 | Forecasted | $0 | $7,140 | $0 |
| **6** | **Plumbing** | | | | | |
| | No projects identified | | | - | - | - |
| **7** | **Electrical** | | | | | |
| **7.1.1** | Electrical System Repairs | 3 | Forecasted | $0 | $21,318 | $0 |
| **8** | **Environmental** | | | | | |
| **8.1.1** | Designated Substances & Hazardous Materials Assessment | 3 | Forecasted | $0 | $12,240 | $0 |
| **Total** | | | | **$0** | **$804,241** | **$0** |
| $ / ft² | | | | $0.00 | $114.89 | $0.00 |

## Graph-Total Expenditures



# Budget Summary Table

## Expenditure Summary Table

| | Uninflated | Inflated |
|---|---|---|
| Total For 3-Year Reporting Period | $788,472 | $804,241 |
| Forecasted Projects Total | $788,472 | $804,241 |
| Active Projects Total | $0 | $0 |
| Historical Projects Total | $0 | $0 |
| Total Per Unit | $788,472 | $804,241 |
| Total Per ft² | $112.64 | $114.89 |
| Average Annual Budget | $262,824 | $268,080 |
| Average Annual Budget Per Unit | $262,824 | $268,080 |
| Average Annual Budget Per ft² | $37.55 | $38.30 |

**Total Number of Units:** 1

**Total Area:** 7,000 ft²

**Average Area Per Unit:** 7,000 ft²

**Inflation Rate:** 2%

# 1. Structure

## 1.1 Structural Frame

**Description:**

The structure is wood-framed, and has a wood-framed roof with wood decking on wood joists. The roof assembly in the original portion of the structure was unconfirmed due to access restrictions. A wood framed addition was made to the original structure in the 1980's.

The basement is unfinished with a concrete slab-on-grade and has the original wood columns from the 1800's which have been augmented with a series of steel floor jack columns.

The vault on the main floor is formed by cast-in-place, reinforced concrete walls and ceiling.

**Condition / Recommendation:**

We note the following structural concerns:

- Temporary shoring and joist reinforcements in the original basement are poorly executed and not adequate.
- Some of the retrofitted basement steel post jacks are not properly installed.
- The opening for the retrofitted basement staircase opening has floor framing members that are inadequately supported.

No significant or unusual sagging is apparent with second floor and roof framing. Some age-related movement is inevitable. Futher assessment of roof framing is desirable at time of re-roofing. Multiple roof leaks the original house section may have caused damage to the sheathing. A repair allowance is included with re-roofing budgets.

We note hairline cracking in concrete vault structure near the connection to the building. We believe this may be related to settlement of the vault structure since construction. The Vault structure requires investigation and review by structural engineer.

We recommend performing a detailed review of the existing first floor framing including load analysis in order to repair and reinfrocement strategies. We suspect the following measures will be part of the rscope:

- Replace unsatisfactory floor framing members;
- Reinforce and stabilize basement support columns;
- Replace decayed wood framing;
- Sister or add support for underside joists.

We have included a placeholder allowance for first floor structural framing retrofits and repairs pending the detailed structural review.

### 1.1.1 Structural Evaluation

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $14,300 | $14,586 | 2020 | N/A | One time | 3 | Forecasted |

### 1.1.2 Structural Repair Allowance

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $23,200 | $23,664 | 2020 | N/A | One time | 3 | Forecasted |

## 1.2 Below Grade Perimeter Walls

**Description:**

The below-grade foundation walls are natural stone and reinforced concrete.

The historic stone and mortar foundation wall outlines the perimeter of the original buildings basement. It is our belief that the original basement was a crawl space which was supported by masonry brick foundation walls that were later dug out to accommodate a full height basement. At the west end of the original basement is an exposed section of on grade soil that we believe is the original height of the original crawlspace. This section of the basement was left untouched and has been left exposed.

The foundation of the 1980's addition is constructed out of cast in place concrete.

There is a small portion of concrete block wall on the northeast side of the basement.

**Condition / Recommendation:**

The original building natural stone foundation walls are in typically fair condition, with deteriorated mortar joints with visible active moisture leakage, and efflorescence. The stone wall has signs of bowing along the south elevation, however, this might be the wall configuration set in place when originally constructed.

To ensure performance we recommend excavation, pointing/parging and waterproofing the stone foundation walls along the north and south elevations of the original building structure.

A budget has been included to build a new concrete wall infront of the exposed original crawl space soil. We believe this is a more efficient option than excavating the full extent of the original building which may affect surrounding building supports.

The concrete block wall in the basement was seen to be visibly wet with signs of effloresces. We believe this may be due to poorly controlled run-off of the roof or poor grading of the exterior landscape. This area of wall has been included in the budget for excavation and waterproofing.

A structural review of the natural stone and mortar foundation walls is recommended once exposed from the exterior, and included in the engineering assessment of the framing discussed in the previous section.

### 1.2.1 Excavate and Waterproof Below-Grade Walls

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $76,740 | $78,275 | 2020 | N/A | One time | 3 | Forecasted |

### 1.2.2 New Concrete Wall

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $17,360 | $17,707 | 2020 | N/A | One time | 3 | Forecasted |

# 2. Building Envelope

## 2.1 Walls

**Description:**

The exterior walls are clad in vinyl siding. The age of the siding is unknown, however, the site contact believes it to have been completed during the 1980s renovation and addition.

**Condition / Recommendation:**

The siding is in poor condition. Deterioration includes:

- Localized areas of cracked and damaged vinyl siding on all elevations;
- Moss due to roof runoff;
- Tar staining and damage from previous roof repairs.

While local repairs may be possible, for consistent appearance and based on age, we recommend full replacement of the vinyl siding. The underlying condition of the sheathing is unknown. The budget has not allowed for extensive repair or replacement of sheathing or to add significantly to the wall insulation level.

### 2.1.1 Replace Vinyl Siding

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $75,600 | $77,112 | 2020 | N/A | One time | 3 | Forecasted |

## 2.2 Windows

**Description:**

Most of the windows consist of single hung, double-glazed insulating glass units (IGUs) in aluminum frames. As reviewed on the IGU stamps the windows vary in age from 1981 to 1993.

On the upper story there are two gabled dormers with single-glazed windows in original wood frames. Aluminum storm windows have been added to the exterior of these windows.

Windows on all elevations are surrounded by wood trim.

**Condition / Recommendation:**
There are reports and signs of water and excessive air leakage through some of the office windows on both the first and second floors, with a few noted IGU failures. Some of the window hardware is inoperable.

The exterior of the wood window frames and trim is generally in poor condition. The painted finishes on the exterior wood frames and sills are generally peeling and flaking. At some locations, interior window sills show signs of water damage, with damage and chipping of the wood at most locations. There is peeling paint on the interior side window frames which indicates the presence of moisture in the wood. Moisture is travelling through the frames and/or there is a build up of condensation during winter months. There are paint blisters, bare/exposed wood and isolated wood deterioration on all windows.

Based on estimated age and conditions noted, window replacement is recommended.

We have included a budget to restore the historic wood window sills and trim. While much of the wood can be restored, it is likely that many of the wood sills will need to be replaced.

### 2.2.1 Repair/Paint Window Sills, and Trim

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $45,000 | $45,900 | 2020 | 15 | Recurring | 3 | Forecasted |

### 2.2.2 Window Replacement

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $64,800 | $66,096 | 2020 | 30 | Recurring | 3 | Forecasted |

## 2.3 Doors

**Description:**
Doors include the following:
- Exterior Exit (South and North elevation): painted hollow metal door in metal frame.
- Stairwell Separation Doors: painted hollow metal door in metal frame.

**Condition / Recommendation:**
We note no major problems with the doors slabs and frames. Replacement is not required.

We note deficiencies with some of the doors fixtures and locking mechanisms, some of the doors self closing devices are not in use or missing, and some of the doors have inadequate locking and opening devices. Proper egress hardware is required at all exit doors in the form of push panic bars.

We have included an allowance for the replacement of door fixtures and locks.

Refer to Fire Safety Section for further door requirements.

### 2.3.1 Repair/Replace Door Hardware

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $8,050 | $8,211 | 2020 | 25 | Recurring | 3 | Forecasted |

## 2.4 Sloped Roofing

**Description:**

The intersecting sloped gable roofs are covered with asphalt shingles.

There are two areas of roof with gutters and downspouts; they are located above the building front and rear entrance/exit doors where the roof drains into prefinished metal gutters and downspouts that discharge at grade.

There are perforated vinyl soffits at overhangs, and roof gable vents. We had no access to the attics.

**Condition / Recommendation:**

The site representative reports that roof leakage problems are increasing in frequency. We note extensive granule loss, curling, and cracking of the shingles.

The shingles are well past their reliable service life and require replacement prior to any major interior finish renovations.

A budget is included to replace the roofing. The budget includes a relatively modest sheathing repair allowance. If full replacement of roof decking is required, additional costs will be incurred. The shingle and siding replacement projects should include providing improved ventilation for all attic spaces. Access hatches to attic spaces are desirable.

### 2.4.1 Replace Asphalt Shingle Roofing

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $41,522 | $42,352 | 2020 | N/A | One time | 3 | Forecasted |

# 3. Fire Safety

## 3.1 Fire Safety Systems

**Description:**

Portable fire extinguishers, illuminated exit signs, and battery-powered emergency light packs are located throughout the occupied areas.

The building is equipped with a fire alarm system controlled by an Edwards 6500 central fire alarm panel. There are also stand alone battery powered smoke alarms.

There is no sprinkler system

A fire hydrant is located on Eastern Ave approximately 62 meters south of the main doors.

**Condition / Recommendation:**

The battery powered lights are a mixture of old outdated units and newer (approximately 5 year old) units. Most of the lights did not function when the test button was pressed. We recommend that the older units be replaced and the batteries be replaced on all the newer units.

Most of the exit lighting was in good condition (approximately 5 year old). Deficiencies noted include:

- There are a few areas where additional exit lighting is required;
- The exit lighting is installed in such a way that some taller people will strike their heads on them;
- We recommend replacing these exit lights with a different style to help avoid this issue;
- When replacing exit lights it is recommended to change to the current 'running man' style.

The central fire alarm system appears to be non-operational with a pull station in the tripped position in the basement and a ground floor alarm condition at the panel but no audible alarms active.

Many of the battery powered smoke alarms require new batteries, and CO sensors are required.

Based on the conditions noted, we have included a budget to upgrade the fire alarm system, add CO sensors and correct exit and battery powered lighting systems. We assume on going annual testing and repairs/replacement of individual components (i.e., extinguishers) will be completed as-needed as a maintenance expense.

### 3.1.1 Correct Exit Lighting

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $3,600 | $3,672 | 2020 | 10 | Recurring | 3 | Forecasted |

### 3.1.2 Replace Fire Alarm System

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $10,000 | $10,200 | 2020 | 20 | Recurring | 3 | Forecasted |

## 3.2 Containment

**Description:**

The building is of combustible construction. The floor assemblies are constructed of wood joists with wood floor boards supported by wood columns. There are currently no fire rated separations between the floors, the roof, or framing members.

There is a stairwell on the north side of the building between the first and second floors. This stairwell is part of the 1980s addition and is equipped with 2 hollow metal doors that have self-closing and latching devices.

There is a stairwell on the south side that enters from exterior grade directly onto the second floor.

Wood basement stairs provide access to the first floor from the basement.

It should be noted that we have not conducted any test cutting or probing to check the as-built condition of the walls. These walls may or may not be built correctly.

**Condition / Recommendation:**
A number of separation and containment of deficiencies are noted, and reported in the 2018 Fire Inspection Report. These include:

- The fire-resistance rating of the fire separation between floors, roofs, and building framing members are required to be not less than 45 minutes.

- The stair door that provides access from the basement to the first floor is not fired rated, and does not have a self-closing or self-latching device. This door should be replaced with a fire rated door. Also, the portion of the stairwell that extends above the first-floor framing should be replaced with adequate fire rated materials.

- The stairs that feed directly from the exterior to the second floor require a full fire rated containment separation built around the staircase. A fire rated door is required at the exit and the second floor of the stairwell. Additionally, the stairwell guards and handrails do not comply with local by-law requirements for height. As this by-law applies retroactively to existing buildings, we have included to replace the guards and handrails, as included in the stairwell fire separation budget. Modifying the existing components is not likely to be practical or cost effective.

Budgets are included for all staircase fire separation requirements and for structural framing protection. These are preliminary allowances pending further review.

The electrical panels and furnaces require separate containment rooms with 1-hour fire rating equipped with fire rated doors. Budgets for these containment rooms have been included in the HVAC and Electrical sections of this report.

### 3.2.1 Stairwell Fire Separation Repairs / Retrofits Allowance

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $42,500 | $43,350 | 2020 | N/A | One time | 3 | Forecasted |

### 3.2.2 Floor and Wall Framing Fire Separation Allowance

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $60,000 | $61,200 | 2020 | N/A | One time | 3 | Forecasted |

## 3.3 Egress

**Description:**

We expect the building is classified as class D - public offices.

The Jail cells in both the main section of the basement and the separate jail area are still functional with steel cell doors and locks.

**Condition / Recommendation:**
Based on the building being classified as class D (Public Offices) every main area of the building requires a minimum two means of egress.

The jail portion of the basement is an accessible public space and therefore requires two means of egress from the area. There is currently only one means of egress from the jail area of the basement. To address this issue, we have included a budget to install a retrofitted service door between the jail section and the main basement through the dividing concrete block wall. The newly installed door between the two sections of the basement will allow for two means of egress for the entire basement.

The jail containment cells should be decommissioned. The locks or the doors should be removed.

### 3.3.1 Add Interior Basement Egress Door

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $6,000 | $6,120 | 2020 | N/A | One time | 3 | Forecasted |

# 4. Site

## 4.1 Site Features

**Description:**

Site features include the following:

- Large wood gazebo referred to as the Parrsboro Band Stand;
- Flag Poles;
- Soft landscaping, including grass sodded areas with shrubs and mature trees on all sides of the property;
- Gravel pathways that lead up to a large statue; and
- Concrete walkways provide access to street and parking areas.

**Condition / Recommendation:**

Site features generally appear reasonably maintained. We assume site features will be repaired or replaced individually as needed as a maintenance expense.

## 4.2 Paving

**Description:**

The site features a wide asphalt drive lane and parking area. The main access for the site is from Eastern Avenue on the south side of the property. There is a second access point from Upper Main Street on the west side.

There are cast-in-place concrete curbs around the perimeter of the paving.

An outdoor concrete ramp leads down from the paved parking to the jail basement addition. The ramp is reportedly heat traced and includes a trench drain.

**Condition / Recommendation:**

We could not confirm the age of the paving, but it appears to be about 20 to 30 years old. Typical of its age, there are many unsealed cracks in the wear course, including longitudinal, transverse cracks, and alligator cracking. There are some areas with closely-spaced cracks, and isolated pot holes. We note no widespread settlement that would indicate general problems with the subgrade, but we did not make test pits to sample granular condition.

We have included a budget for full renewal of the asphalt paving and concrete curbs. The budget allows only for modest sub-base repairs. More extensive drainage layer repairs will add to overall project cost.

The exterior concrete ramp is in generally poor condition. Deficiencies noted include:

- Extensive cracking throughout drive surface of the concrete;
- Deteriorated and blocked metal trench drain;
- Electrical heat tracing was reported to be inoperable.

A budget is included for replacement of the concrete ramp, metal trench drain, and electrical heat tracing.

### 4.2.1 Full Asphalt Paving Renewal

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $104,000 | $106,080 | 2020 | 20 | Recurring | 3 | Forecasted |

### 4.2.2 Replace Concrete Ramp

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $24,700 | $25,194 | 2020 | N/A | One time | 3 | Forecasted |

# 5. HVAC

## 5.1 Heating Ventilation and Air Conditioning

**Description:**

The main source of heat for the building is two forced air furnaces located in the basement; one oil fired and one wood fired.

The oil fired, forced air furnace was manufactured by Enterprise Foundry Co. Ltd. (LBO-195R) with a Enterprise SR60RK burner and has a rated heating output of 194 MBH. The furnace burns Number 2 fuel oil from a storage tank located in the basement.
The fuel tank was manufactured by Parrsboro Metal Fabricators Ltd in 2003 and is of 900 litre capacity with a metal thickness of 2.6 mm (Serial # N-907876) and is single walled.

The second furnace is a wood fired unit manufactured by Parrsboro Metal Fabricators Ltd, the "Kerr" Scotsman Model DB-101-ADD and has a rated heating output of 140 MBH.

There is no central air conditioning.

Heated air from the two furnaces is distributed throughout the building by metal ductwork in the basement and the first floor ceiling plenum.

Heat is supplemented by electric baseboard heaters and force flow heaters at the exterior doors. The Jail is heated by electric unit heaters suspended from the ceiling.

Washroom exhaust is provided by small local fans. Cooking appliances have not been provided with ventilation.

The building does not have mechanical fresh air ventilation.

as required by current building code and ASHRAE standards

**Condition / Recommendation:**
We believe the oil furnace is more than 35 years old and is showing signs of wear and corrosion. It is past the end of its expected service life (approximately 25 years).

The oil tank supplying the furnace is 16 years old and does not have a leak detection system or secondary containment. The tank was empty during our visit and the building was vacant (the furnace had been running in the hours leading up to our visit as the building was warm).

The wood furance is more than 30 years old and is past the end of its expected service life (approximately 25 years). We assume this is a backup system only.

Based on age and conditions noted, we have included a budget to replace the furnaces with a new system which includes air conditioning, fresh air, and ventilation. The tank should also be replaced with one that incorporates secondary containment and leak detection. Most of the ductwork in the basement will need to be replaced in order to adequately supply fresh air and heating to all the spaces. The budget allows to build a new code-compliant furance room. We have not allowed for any environmental remediation that may be required. When replacing the entire heating system alternate heat sources should be considered such as propane and/or a heat pump.

Some of the washroom exhaust fans appear to not be operational, and kitchen exhaust should be added to the two cooking areas. The cooking areas should also be modified with non combustible construction. A budget is included.

The condition of the outdoor ramp heating cables could not be assessed and is unknown, if operation of this system is required, it should be tested by an electrician.

### 5.1.1 Replace HVAC System

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $131,200 | $133,824 | 2020 | N/A | One time | 3 | Forecasted |

### 5.1.2 Washroom and Kitchen Exhaust Improvements

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $7,000 | $7,140 | 2020 | N/A | One time | 3 | Forecasted |

# 6. Plumbing

## 6.1 Domestic Water Systems

**Description:**

The main water service to the building is located in the basement. There is a 1-inch diameter incoming domestic water line equipped with a water meter. The water meter was disconnected and the plumbing system drained at the time of our visit.

The building is not equipped with a backflow prevention device.

The system relies on the municipal water pressure to distribute water throughout.

Domestic hot water is supplied by an electric hot water tank heater manufactured by GSW (Model # SS630 SSEB-30 200 Serial # 1442A000043). According to the dataplate, the unit was manufactured in 2014 and has a heating input capacity of 3000 W and a storage capacity of 102L.

Domestic water distribution piping, where reviewed, is mostly copper with a small amount of PEX.

**Condition / Recommendation:**

We could not test the plumbing system.

The age of the piping could not be confirmed. No on-going occurrences of pinhole leaks were reported. Based on the limited quantity of domestic water piping, no major capital expenditures are anticipated within the report term. We assume repairs to address localized leaks will be completed as-needed as part of regular maintenance. Piping and fixture upgrades carried out as part of interior renovations are discretionary and outside of scope.

The domestic hot water tank heater is approximately 5 years is old and is serviceable. Replacement can be completed as required at a cost below the report threshold.

The existing washrooms have older style water closets which use between 14 and 23 liters per flush. We recommend replacing these fixtures. New water closets will use less than 7 liters per flush. We expect this will be addressed as part of interior improvements.

## 6.2 Drainage Systems

**Description:**

Drainage systems include the following:

- Roof: perimeter eavestroughs with external drains (limited to small areas of the roof)
- Sanitary drainage: combination of cast iron (Lead and oakum) and ABS.

The basement is equipped with a sump pit with a submersible sump pump. According to the site representative the pump and pit have been abandoned after the drainage was reworked many years ago.

**Condition / Recommendation:**

No major deficiences are noted or reported.

We assume repairs including replacement of sections of pipe will be completed as-needed at a cost below the report threshold. Eavestroughs should be replaced as part of replacing roofing and siding.

# 7. Electrical

## 7.1 Electrical Supply and Distribution

**Description:**

Electricity is supplied to the building overhead via a pole-mounted transformer at the southwest side of the building (across Main street).

The main disconnect switch is in the southwest corner of the basement. The disconnect is fused at 200A, 120/240V, single-phase.

The main disconnect feeds a bus which powers the "old side" and "new side" of the distribution. The old side appears to be pre 1970's equipment and includes several fused disconnect switches feeding fuse panels. The new side appears to have been added around 1980 and includes breaker disconnects feeding Panels A, B, C and D located throughout the space.

The power distribution also powers a electric car charging station, a panel located in the Parrsboro Bandstand and various outdoor receptacles designed to power Christmas lights and equipment.

The panels where checked are typically circuit-breaker-type lighting/power panels rated for 225A, 120/240V.

The building has four meters.

Wiring types include metallic and non-metallic sheathed cabling.

**Condition / Recommendation:**

The equipment appears to be in serviceable condition.

Major electrical equipment has an average service life of 40 to 50 years or more. Much of the distribution equipment is at that age, but we expect it will be managed by replacement as needed.

Deficiencies we note include:

- Some loose, ill-supported and abandoned wiring;
- Some inoperative lights;
- Old fused distribution panels well beyond their service lives;
- The main electrical equipment is not within its own fire-rated room

A budget is included to address the concerns identified.

Regular infrared scans are recommended to help identify trouble spots and allow proactive repairs before they develop into larger problems.

### 7.1.1 Electrical System Repairs

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $20,900 | $21,318 | 2020 | N/A | One time | 3 | Forecasted |

## 7.2 Lighting

**Description:**

Lighting systems include the following:
- a combination of 2x4ft ceiling-mounted strip fluorescent fixtures with T12 and T8 lamps in occupied areas (some 2 tube and some 4 tube fixtures)
- 1x4ft ceiling-mounted strip fluorescent fixtures with T12 lamps in the basement areas

The exterior lighting consists of pole mounted HID lights owned and operated by the utility, LED 'up' lights placed around the grandstand internally controlled by photocells.

**Condition / Recommendation:**
The first and second floor are lit by strip fluorescent fixtures using a mixture of T8 and T12 lamps. T12 lamps are becoming obsolete due to rapid advances in lighting technology, and are being replaced with more efficient systems. In some locations, T12 lamps and ballasts are becoming difficult to obtain. We suggest planning to upgrade or replace these lights with more energy efficient and readily available systems (e.g. T8, T5, LED). Given the limited amount of lighting, we expect the fixtures will be upgraded or replaced as they burn out, as part of ongoing maintenance.

# 8. Environmental

## 8.1 Potential Hazards Overview

**Description:**

A limited visual review to flag potential environmental concerns was completed, consisting of a walkthrough and visual inspection of the property in its current state.

**Condition / Recommendation:**

Potential concerns noted include:

- Vermiculite in the attic of original roof structure. Some of this insulation is known to include asbestos;
- Basement pipe insulation may be asbestos-containing materials (ACM);
- Solder of cast iron pipe connections may include lead;
- Plastered walls may be ACM;
- Mould observed in the attic insulation, the vault, and on various walls;
- Age of building results in likelihood of lead paint.

Based on our observations, we recommend a hazardous materials assessment and mould investigation would be required prior to any renovations of the building. Depending on the results of these assessments, abatement of hazardous materials (i.e. asbestos) and/or mould may be required in advance of building upgrades/renovations. Costs presented in this report do not account for remediation activities.

### 8.1.1 Designated Substances & Hazardous Materials Assessment

| Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | Class | Status |
|---|---|---|---|---|---|---|
| $12,000 | $12,240 | 2020 | N/A | One time | 3 | Forecasted |

# Scope Of Work

## Authorization

This report was prepared at the request of Justin Waugh-Cress of Municipality of Cumberland as a capital plan for the property.

## Mandate

The purpose of this report is to provide a general indication of the present physical condition of the building with respect to easily visible portions of the structure; enclosure; site work; mechanical, electrical, and plumbing systems; active fire safety systems; and elevating devices. For non-passive fire safety systems (e.g., fire containment and egress) a non-specialist review was completed. Interior finishes, furniture, and tenant equipment, are specifically excluded from our mandate. Please note that the report does not consider Accessibility Act upgrade Requirements. We were to record deficiencies or conditions noted during a single visual walk-through review that, in our opinion, will likely require Capital expenditures by the Owner over the next 3 years. Capital expenditures are defined as expenditures that are expected to exceed an annual threshold of $2,500 and are not normally associated with routine maintenance. Voluntary upgrades or improvements are excluded.

Our opinions of cost assume a prudent level of ongoing maintenance. It is not within our mandate to check the adequacy of existing maintenance practices, or confirm that all mandatory system tests and inspections have been completed (e.g., annual fire alarm testing). In the course of our review, we may identify some maintenance-type issues, but this should not be seen to indicate that a maintenance audit has been completed.

Our mandate was to complete a visual walk-through survey of items, components, and systems that are conspicuous, patent, and that may be observed visually during the walk-through survey without intrusion, removal of material, exploratory probing, and the use of special equipment or design calculations. Therefore, concealed physical deficiencies and design inadequacies are specifically excluded from our mandate. Our interviews of building personnel attempt to uncover known concerns at the property, but we cannot attest to the integrity or knowledge of the interviewees, nor can this process, or the scope of work in its entirety, be considered technically exhaustive or be considered to eliminate all risks related to owning this property. Only conditions actually seen during examination of representative samples can be said to have been assessed, and comments on the balance of the conditions are assumptions based upon extrapolation.

Our mandate does not include an exhaustive review of visible conditions against all code, property standards by-law, or other legislative requirements that existed at the time of construction, or that may retroactively apply, including Human Rights Code violations. We do consider the following, where applicable: adequacy and acceptability of guards at stairs, window opening restrictors, daytime light levels in corridors, stairs, garages, elevator equipment guarding, and backflow preventers. In the course of our review, our site reviewers may also identify other potential compliance concerns, but the identification of these concerns should not be seen to indicate that an exhaustive review has been completed.

Our mandate is to provide opinions of probable costs that reflect the repair strategies that we foresee and should be considered preliminary budgets only. Accurate figures can only be obtained by establishing a scope of work and receiving quotes from suitable contractors. We cannot guarantee the actual age of equipment, apparent maintenance practices, or the service lives that we have predicted. Time frames given for undertaking work represent our opinion of when to budget for the work. Failure of the item, or the optimum repair/replacement process, may vary from our estimate. There can be no assurance that this forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated. Accordingly, readers should not place undue reliance on forward-looking information. Typically further investigation and design will be needed to firm up construction budgets and timing for any significant projects.

In selecting repair strategies, we try to select strategies to match the client's business strategy for the building, when this is communicated to us. In many circumstances, more or less conservative repair approaches could be selected. Our opinions of costs apply only to the strategies described in our report. In this instance, we assumed that the ownership strategy is to manage the property over the long term, balancing costs

with a reasonably high level of service and performance. Capital renewal programs have been timed to occur prior to degradation progressing to the point of being overly evident, creating excessive disruption or causing unnecessary inconvenience. Upgrades are included where mandated by codes or by-laws, and where recommended to provide levels of performance considered acceptable by modern standards.

Our review was intended to identify conditions resulting from past and current uses. Additional evaluation may be required if a change of use, renovations or additions are anticipated.

Our General Terms and Conditions issued at the time of engagement apply to this report.

## Survey Method

WSP reviewed the building structure; the building envelope; portions of the interior; the site; active fire safety systems; and mechanical, electrical, and plumbing systems. The site visit was completed on December 2, 2019.

Our field observers were Vaughn Keeble and Sam Fenwick. The report was reviewed by Gerard Gransaull.

The survey consisted of a visual review of samples of the following:

- the exterior walls, windows, and roof from ground level; and from interior areas where possible.
- main service rooms and common areas
- basement
- the parking area.
- the perimeter site.

## Information Provided

Gordon Strong of the Municipality of Cumberland answered our questions about the history of performance of the various systems and accompanied us during part of our site visit.

The following reports/documents were provided:
- Fire Inspection Report for the Town Service Center by the municipality of Cumberland, dated August 9, 2018.
- Town of Parrsboro Infrastructure Study by OPUS and EastPoint Engineering, dated March 20, 2009

No drawings were provided.

Respectfully submitted,
WSP Canada Inc.

Rachel C Smith

Rachel Smith, P.Eng.
Senior Project Manager

Gerard Gransaull, P.Eng.
Project Director and Property Condition Report Reviewer

# Limitations

WSP Canada Inc (“WSP”) prepared this report solely for the use of the intended recipient, The Municipality of Cumberland, in accordance with the professional services agreement. In the event a contract has not been executed, the parties agree that the WSP General Terms for Consultant shall govern their business relationship which was provided to you prior to the preparation of this report.

The report is intended to be used in its entirety. No excerpts may be taken to be representative of the findings in the assessment.

The conclusions presented in this report are based on work performed by trained, professional and technical staff, in accordance with their reasonable interpretation of current and accepted engineering and scientific practices at the time the work was performed.

The intended recipient is solely responsible for the disclosure of any information contained in this report. If a third party makes use of, relies on, or makes decisions in accordance with this report, said third party is solely responsible for such use, reliance or decisions. WSP does not accept responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken by said third party based on this report.

The content and opinions contained in the present report are based on the observations and/or information available to WSP at the time of preparation, using investigation techniques and engineering analysis methods consistent with those ordinarily exercised by WSP and other engineering/scientific practitioners working under similar conditions, and subject to the same time, financial and physical constraints applicable to this project.

It is understood and agreed by WSP and the recipient of this report that WSP provides no warranty, express or implied, of any kind. Without limiting the generality of the foregoing, it is agreed and understood by WSP and the recipient of this report that WSP makes no representation or warranty whatsoever as to the sufficiency of its scope of work for the purpose sought by the recipient of this report.

Only the specific information identified has been reviewed. No physical or destructive testing and no design calculations have been performed unless specifically recorded. Conditions existing but not recorded were not apparent given the level of study undertaken. Only conditions actually seen during examination of representative samples can be said to have been appraised and comments on the balance of the conditions are assumptions based upon extrapolation. Therefore, this work does not eliminate uncertainty regarding the potential for existing or future costs, hazards, or losses in connection with a property. We can perform further investigation on items of concern if so required.

Applicable codes and design standards may have undergone revision since the subject property was designed and constructed. Unless specifically included in our scope, no calculations or evaluations have been completed to verify compliance with current building codes and design standards.

Unless otherwise agreed in writing by WSP, the Report shall not be used to express or imply warranty as to the suitability of the site for a particular purpose. WSP disclaims any responsibility for consequential financial effects on transactions or property values, or requirements for follow-up actions or costs.

WSP is not responsible for, or obligated to identify, mistakes or insufficiencies in the information obtained from the various sources, or to verify the accuracy of the information.

WSP makes no other representations whatsoever concerning the legal significance of its findings.

WSP is not investigating or providing advice about pollutants, contaminants or hazardous materials. The Client and other users of this report expressly deny any right to any claim against the Consultant, including claims arising from personal injury related to pollutants, contaminants or

hazardous materials, including but not limited to asbestos, mould, mildew or other fungus.

Budget figures are our opinion of a probable current dollar value of the work and are provided for approximate budget purposes only. Accurate figures can only be obtained by establishing a scope of work and receiving quotes from suitable contractors.

Time frames given for undertaking work represent our opinion of when to budget for the work. Failure of the item, or the optimum repair/replacement process, may vary from our estimate.

WSP disclaims any obligation to update this report if, after the date of this report, any conditions appear to differ significantly from those presented in this report; however, WSP reserves the right to amend or supplement this report based on additional information, documentation or evidence.

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This limitations statement is considered an integral part of this report.

# Photos



Photo No. 1: Southeast Elevation



Photo No. 2: South Elevation.



Photo No. 3: North Elevation.



Photo No. 4: West Elevation.



Photo No. 5: Grandstand.

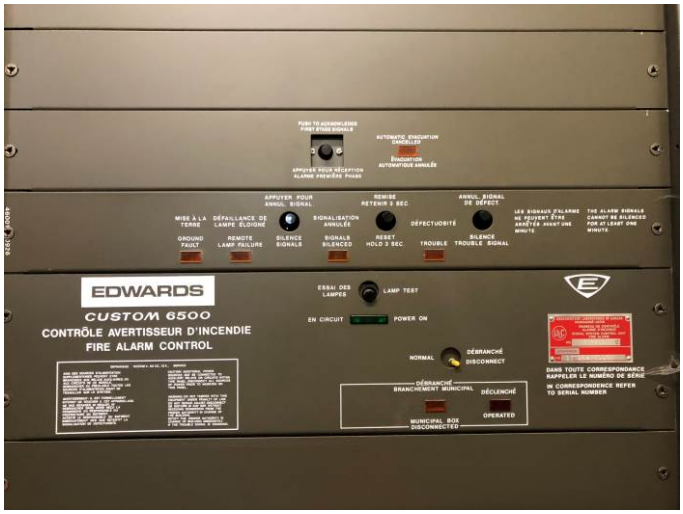



Photo No. 6: Fire Alarm Panel.




Photo No. 7: Battery Light and Exit Light.



Photo No. 8: Wood Furnace.



Photo No. 9: Oil Furnace.



Photo No. 10: Oil Tank.



Photo No. 11: Water Heater.




Photo No. 12: Fuse Panel.

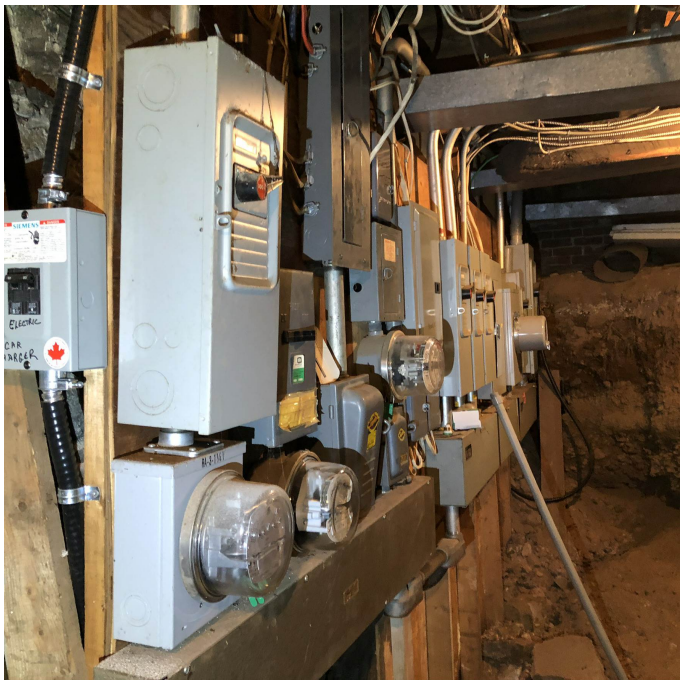


Photo No. 13: Main Electrical Distribution.



Photo No. 14: Attic Space of 1980s Addition



Photo No. 15: Basement Exposed Soil

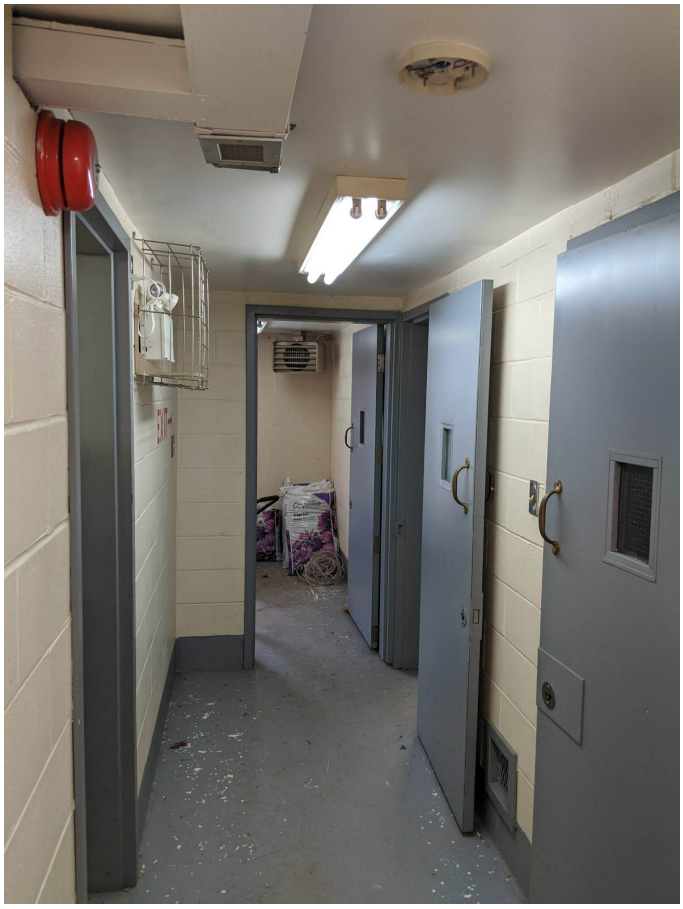


Photo No. 16: Basement Jail Area




Photo No. 17: Basement Stairs

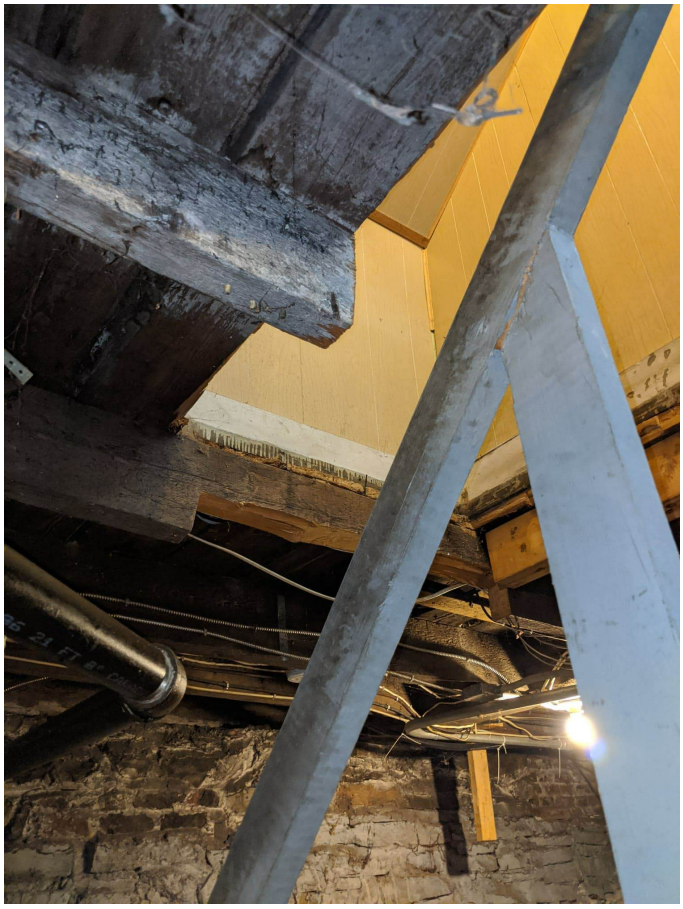


Photo No. 18: Basement Stairwell Opening



Photo No. 19: Typical Condition of Wood Window Trim.



Photo No. 20: Typical Damaged Vinyl Siding

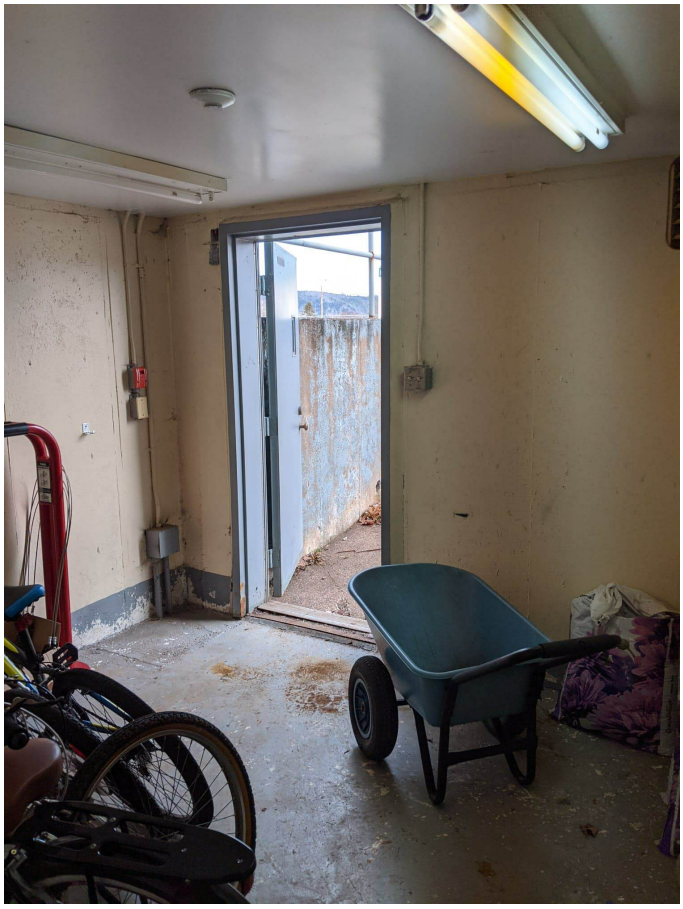


Photo No. 21: Entrance to Jail Portion of the Basement



Photo No. 22: Asphalt pavement is generally old and deteriorated.



Photo No. 23: Deteriorated pavement.



Photo No. 24: First Floor Framing Members



Photo No. 25: Historic Gothic Style Windows With Retrofitted Storm Windows.

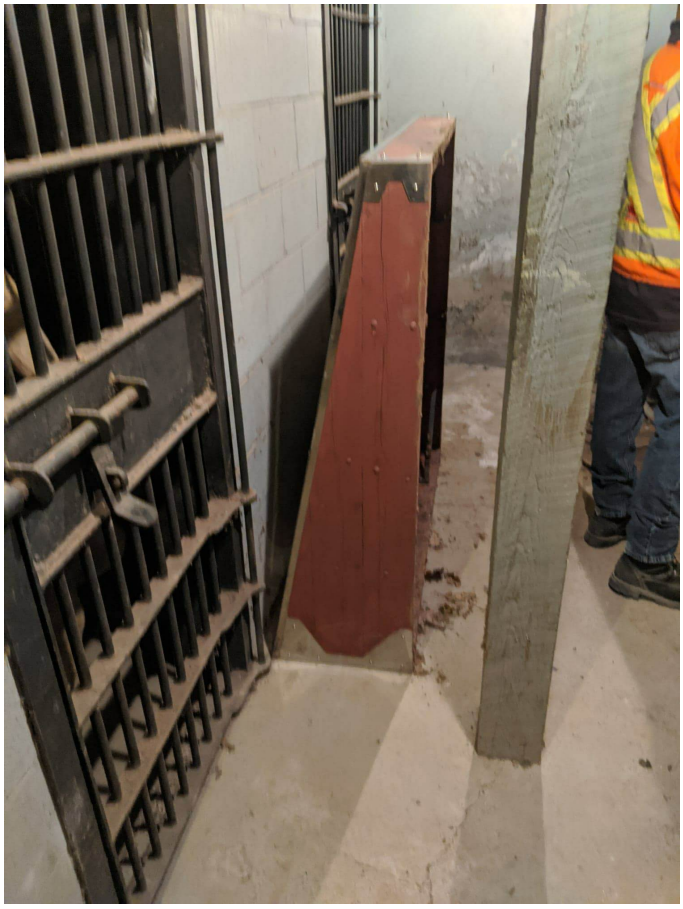


Photo No. 26: Jail Cells – Main Basement

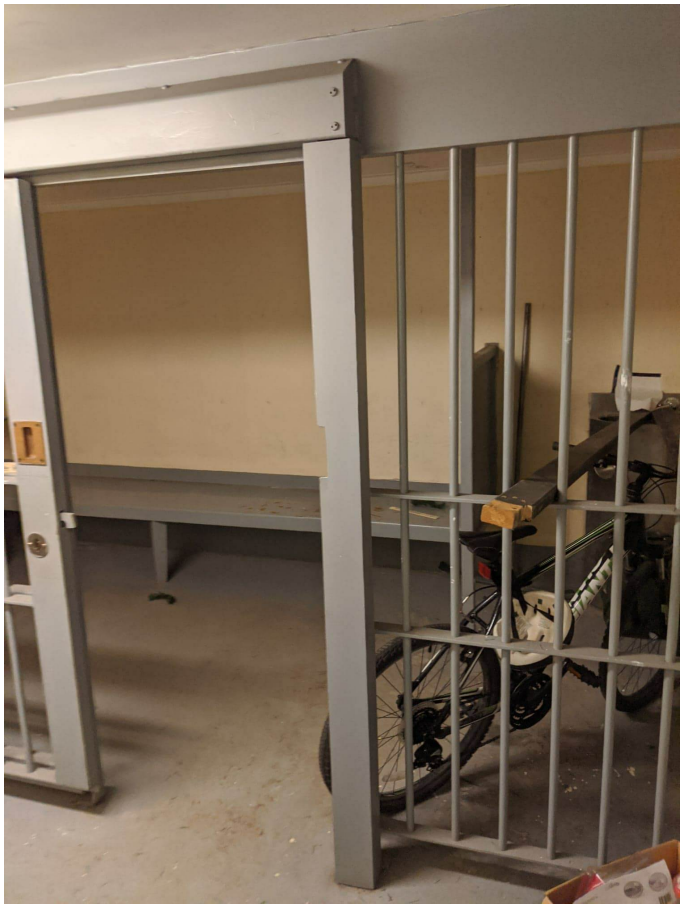


Photo No. 27: Jail Containment Cell



Photo No. 28: Natural Stone Foundation Wall



Photo No. 29: Wood Window Frames and Trim.