



FACILITY EVALUATION REPORT

City Hall

30 Van Horne Avenue, Dryden, ON

Facility Details

Gross Area (Sq.m.):	2111		
Construction Year:	Varies (1910, 1957, 1997, 2022)		
Replacement Cost:	\$ 9.0 million		
Previous Evaluation:	2010	By:	Stantec
Date of Evaluation:	09-Aug-22	Project #:	22091
Evaluator:	Quartek Group Inc. architects, engineers, planners		

Repair/Maintenance Events **See attached breakdown of action items by period.*

0-5 year Recommended Event Action Budget	\$ 381,550.00
6-10 year Recommended Event Action Budget	\$ 530,210.00
11-20 year Recommended Event Action Budget	\$ 1,352,810.00

General Summary:

The facility consists of a series of additions and renovations that define its current configuration, the most recent renovation being an extensive interior alteration to its main floor offices and reception area. The building is classified as Group D, O.B.C. 3.2.2.25 permitting up to two storeys height and un sprinklered. The key immediate actions would include roof repair and any remedial repair to improve fire resistance of the drywall ceiling within the oldest part of the basement. Due to the age and nature of the original former school's wood and timber construction, a focused structural study is warranted for the original building. The collective age of mechanical and electrical equipment, fixtures and systems, the facility will require a schedule of progressive replacement over the next twenty years in order to maintain reliable operation and energy efficiency.

Structural Summary (Superstructure):

Apart from the recommended study of the timber and wood framing in the original building, the foundation in general and the overall structure is generally sound.

Envelope Summary (Shell):

Due the range of construction phases, the building has various envelope configurations and a generally low insulation value compared to a new facility. The general age of the original building at over a hundred years and even the most recent additions all at over 35 years, most materials particularly windows, would warrant a study to evaluate the scheduled replacement and budgeting.

Interior Summary:

While the main floor level of the building has received a recent 2022 renovation and therefore has many replaced and resurfaced elements, there are other parts of the building that will require attention over the next ten years. Although generally in good condition the evaluation assumes that there will be renewal of finishes need in 15 to 20 years commensurate to other replacement events and due to simple wear and normal material/coating degradation.

Mechanical Summary:

While the facility is reported to have good operational history, there are a number of primary mechanical equipment items noted to be into the normal replacement range when they are likely to fail or lose partial function at some point within the next ten years. Similar comment applies to some fixtures noted. Due to the overall age of system installation, the theoretical life of various mechanical systems (piping, drains, ducting, etc.) are likely to require partial or whole replacement within the event horizon of the study (20years) that should be budgeted.

Electrical Summary:

Due to the concealment of most electrical wiring, the study could not fully determine the wiring age or its overall condition beyond a sampling of the age of various panel boards, some of which are due for replacement within the next 5 to 10 years. The emergency lighting batteries will require routine replacement. Due to the overall age of system installation, the theoretical life of various electrical systems are likely to require partial or whole replacement within the event horizon of the study (20 years) that should be budgeted.

Study References and Methodology:

The study provides a snapshot of the physical condition and age of building components or systems of the facility at the time of the site visit conducted for evaluation. The site visit is a brief visual, non-invasion walk-through survey of the readily accessible aspects of the building and its site. The survey should not be considered technically exhaustive. The study team also reviews any technical drawings and or other reports and/or building records that are supplied to the evaluator by the facility owner/operator. A brief interview is conducted with maintenance personnel or building users, when possible, to further ascertain known issues for the facility assessment.

The study follows the Uniformat II method for categorizing building components and identifies a potential repair or replacement event. Such an event is provided with an approximate estimate of quantities and cost to maintain the building and not necessarily create an improvement of building feature or performance. The events are organized into potential risk of occurrence over three periods starting with the next five years, years 6 to 10 thereafter and for a period not exceeding a horizon of 20 years from the visit date. In each period, the variables affecting repair or replacement events diminish in accuracy of event cost the further this action is undertaken from the date of the report.

The methodology used in this study is based on the contract scope and the terminology/limitations of ASTM E2018-15 Standard Guide for Property Assessments. Event estimates provided herein are represented in 2022 Canadian dollars. Future periods referred to in this report should be indexed based on several factors affecting future costs, of which may include inflation indexing, regional changes in labour or material availability in the construction industry. The reader would apply these accordingly.

Extra Study: In context to a Uniformat II item, our report may on occasion make a recommendation for the City to engage an expert to conduct additional investigation and/or study concerning an existing building component. This is because a determination could not be reasonably ascertained by Quartek within the parameters of our study scope or because the study/investigation will afford the City more latitude as to the best remedial action other than simply a repair/replacement option. The study/investigation recommendation is in itself an event and we identify a potential cost amount for budgeting this action. The studies we noted:

Archaic Wood Timber (City Hall)- No means to assess structure without intrusive information collection, member sizing and configuration (frame) analysis. This would require a separate and possibly invasive investigation of the existing timber and its condition and a review of connection details. As well, the study would include new floor loading calculation to be compared to the nominal design of the timber in the original school.

Window (and door) Condition Study: This is a situation we find commonly with window frames and glazing conditions. Glazing may have been replaced or glazing replacement may be one of the options for the City to consider instead of whole window (frame) replacement often at considerably less cost and with improved performance. Where we have recommended a study, this precedes any budgeting exercise. So in the case where we proposed

Steel Framing Study: Pre-engineered buildings are by nature built to minimum tolerances. The steel framing is typically designed to use least steel and meet design tolerances based on snow loading used from NBC weather data charts of the day and by applying design tolerances according to the version of the Ontario Building Code governing at the date of building's design/construction. As of the date of this study, NBC weather data hasn't been updated recently and instead there is new data sources available that is being used in energy and structural analysis for today's buildings and for today's more extreme weather occurrences. The OBC has vastly changed particularly Part 4 (Structural Designs) since the construction of the pre-engineered buildings reviewed in this study. For the City to invest into the recladding of a building of this age, our recommendation would be to conduct a structural analysis before hand to determine if reinforcement and other structural changes are required to make the building safe for continued use.

Elevator Study: A passenger elevator, to maintain its license, must be inspected by TSSA and generally requires a maintenance agreement with a local elevator servicing company. An operational review of the features relevant to accessibility and other current standards is further recommended for public buildings.

We may determine that as a follow-up after implementing a recommended study/investigation, the result (findings) are likely to facilitate a cost for replacement, remediation or other action, a budgetary amount in the form of an allowance has been noted. The findings of the recommended study may exceed this allowance depending on the outcome, but some funding will presumably be allocated to cover a portion of the action.

Theoretical Life: (References provided from RE Capp and Other M/E reference documents) We have provided selective examples of typical operational/functional life for various building components as a general guide to readers:

Electrical Components

Electrical Switch gear	40 years
Electrical Light Fixtures	20 - 30 years + *Efficiency Obsolescence
Radiant Electrical Heating	20 years + *Efficiency Obsolescence
Main Conductors	60 – 70 years
Transformers	30 - 40 years + *Efficiency Obsolescence

Mechanical Components

Plumbing Piping (Copper)	50-60 years
Hydronic Piping (galv.Iron)	70 - 90 years + *Efficiency Obsolescence
Washroom Fixtures	30 years + *Efficiency Obsolescence
San.Waste Piping (Iron)	60 – 70 years
Gas Furnaces(combustion)	20 - 30 years + *Efficiency Obsolescence
Air handling with H/C coils	50 years + *Efficiency Obsolescence
Light Metal Ducting	60 – 70 years

Enclosure Components

Window Units (Alum.Frame)	40-50 years + *Efficiency Obsolescence
Flat Roofing Membranes	30 - 40 years + *Efficiency Obsolescence
Sloped Roofs (Shingles)	20-40 years
San. Waste piping (Iron)	30–70 years
Standard Brick (Veneer)	80 - 100 years
Conventional EIFS wall	40 - 60 years
Exterior Metal Siding	40 - 60 years

Superstructure Components

Concrete Foundations	40-50 years + *Efficiency Obsolescence
Structural Steel Framing	30 - 40 years + *Efficiency Obsolescence
Masonry Walls	20-40 years
San. Waste piping (Iron)	30–70 years

Copyright

Copyright 2024, Corporation of the City of Dryden, Ontario. All Rights Reserved. The preparation of this project was carried out with assistance from the Government of Canada and the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them

General Report Disclaimer:

The report should be reviewed in context to any prior hazardous building materials assessment studies as to further budgeting considerations beyond the limited repair/replacement events described in this report. The intended use of the report is for assistance with long-range asset management planning for a facility under its current state so ideally adequate budgeting can be provided.

The repair replacement events identified in the report are not intended to capture routine maintenance of various components of the facility that would be generally anticipated as part of the day-to-day operations. Deferred maintenance can lead to earlier than predicted failure of equipment, systems, materials, etc. Notwithstanding the described methodology, the study findings are only as accurate as the available information provided, the allowable time to conduct a site visit to properly document findings and the level of access afforded the surveyors by the owner's representative. Costing accuracy may vary due to our ability to fully assess that collateral affects of a repair/replacement event on other elements of the building or surrounding site.

Part A Substructure

No Events

Part B Shell**B10 Superstructure**

B1010

Floor Construction

B101001 Structural Frame

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
Allowance	Study	1	\$ 5,000	Timber frame consisting of beams and columns in basement of original school building.	Study Rq'd.

Condition Limited visibility. No immediate issues reported or observed. Timber frame has been partially reinforced with steel beams and columns. Reinforcing of remaining timber frame may be necessary in the future if the checks in the wood become deeper.

Scope The structural frame could consist of structural steel including columns, beams, joists, and all associated items. It could be a concrete frame utilizing concrete or masonry columns and concrete girders and beams. The structural frame could be wood columns with wood beams or wood trusses. The structural frame could be a combination of the above. For example, concrete or masonry columns with structural steel beams and joists. All associated work items should be included in each assembly. Separate assemblies would be used for different types of construction. The unit of measure at the assembly level is the square footage of the supported area. Decks and slabs are not included in this assembly

B20 Exterior Enclosure

B2010

Exterior Walls

B201004 Parapets

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
LM		55m	\$ 8,250	Refers to Replacement of Coping and roof-side flashing related to re-roofing adjacent to parapets.	Replace

Condition Flashing and coping in poor condition

Scope Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony.

B201010 Exterior Coatings

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		133	\$ 1,100	Existing Exposed Painted Masonry Block	Coating

Condition Paint has degraded and cracks are noted in block joints; to be re-pointed prior to paint

Scope Assemblies include paint, stucco, etc. The unit of measure at the assembly level is area of exterior coatings.

B201099 Other Exterior Walls

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
	Unit Cost Est.		\$ 5,000	Localized Stone Concrete Sill repair on south original bldg. wall face at council Chambers	Repair
Condition	Sill cracked and loose from brick				
Scope	Exterior walls not described by the assembly categories listed above				

B2020

Exterior Windows

B202001 Windows

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
	Unit Cost Est.	3	\$ 8,400	Replace remaining Wood Windows on original City Hall Building (North) 3 in total @ 2.4 m2	Replace
Condition	Wood frames and sashes appear rotted and paint has flaked off of exterior surfaces. Exceeding theoretical life and performance				
Scope	Fixed or operable windows located in exterior walls or exterior skin. Assemblies would include frames, glazing, caulking, finishes, and other associated work.				

B2030

Exterior Doors

B203001 Solid Doors

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		1	\$ 1,200	Basement Access Door	Coating
Condition	Unfinished exterior: to be cleaned of rust, prime coat and finish paint				
Scope	Assemblies include all exterior solid doors, hollow metal or wood with frames. Solid doors may include viewing lites in door. Door hardware is located in B203008 EXTERIOR DOOR HARDWARE.				

B30 Roofing

B3010

Roof Coverings

B301002 Low Slope Membrane Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		approx. 230m2	\$ 16,100	Ballasted Inverted EPDM Flat roof over South 1996 addition and and Bell bldg.	Replace
Condition	Very poor condition.				
Scope	Assemblies include roof coverings, such as built-up, elastomeric, modified bitumen, etc. Also, walkways or work areas (used to gain access to rooftop equipment) will be included here.				

B301003 Roof Insulation and Fill

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		approx. 230m2	\$ 6,900	Flat roof over southern portion of building	Replace
Condition	Replaced (1996) South part of Roof - Inverted membrane roof const. Bell Roof Poor Also: allow B201002, B301003 & B301004 (@\$129/m2) = \$28,400				
Scope	Assemblies include all types of insulation associated with the roof area.				

B301004 Flashing and Trim

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		approx. 230m2	\$ 5,800	Flat roof over southern portion of building	Replace
Condition	Replaced (1996) South part of Roof - Inverted membrane roof const.				
Scope	Assemblies include all flashings associated with the roof, i.e., eave flashing, gable flashing, etc.				

B301006 Roof Openings and Supports

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
	Unit Cost Est.	7	\$ 9,900	Flat Roofs: Chimney flashing, Mechical Roof-top Equipment Curbs and joints between dissimilar materials	Replace
Condition	Numerous flashing and sealant failure locations				
Scope	All roof penetrations including roof hatches, sky lights, area glazing, roof hatches, gravity roof ventilators, smoke vents, etc.				

Part C Interiors**C30 Interior Finishes**C3020 **Floor Finishes**

C302004 Resilient Floor Finishes

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		40	\$ 5,000	Basement -level public washrooms	Replace
Condition	Sheet resilient flooring stained, cracked and seams failing.				
Scope	Assembly includes Resilient Floors and bases.				

C302007 Painting and Staining Floors

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		240	\$ 6,000	Basement areas with exposed painted concrete floors	Coating
Condition	40 to 50 percent of painted floor in need of repainting				
Scope	Assemblies include painted and stained floor surfaces.				

C3030

Ceiling Finishes

C303003 Gypsum Wallboard Ceiling Finishes

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		108	\$ 16,400	Original Basement ceiling in storage rooms and mechanical rooms	Repair Code Req'mt.
Condition	Significant number of openings in fire protection , exposing existing wood joists and some locations around duct chases.				
Scope	Assemblies include gypsum wallboard applied to interior ceilings. Furring strips or channels are included in this assembly if they are applied directly to the ceiling surface. If the gypsum board is applied to a suspended ceiling system, the suspended system would be in Assembly Category C303007. This assembly does not include items that directly apply to ceiling finishes covered elsewhere in this subsystem.				

Part D Services**D30 HVAC**

D3020

Heat Generating Systems

D302003 Furnaces

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
KW	EA	4	\$ 72,800	Basement Main Furnaces, multi zone	Replace
Condition	Exceeds theoretical life of equipment operation. Not efficient				
Scope	This is a system that heats air. Assemblies would include furnace and necessary fittings and specialties required for hookup, including flue and stack. The unit of measure at the assembly level is each.				

D3030

Cooling Generating Systems

D303003 Direct Expansion Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
KW	EA	4	\$ 28,000	Basement Main Cooling, multi zone	Replace
Condition	Exceeds theoretic life of Equipment Operation. Not efficient				
Scope	Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each.				

D3050 **Terminal and Package Units**

D305006 Packaged Units

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		1	\$ 5,600		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Assemblies include complete package units, with integral roof top curbs and all associated devices. A heating system can be selected from hot water, steam coil, or gas furnace and can be a single or multi-zone system. The unit of measure at the assembly level is each.

D50 ElectricalD5050 **Electrical Service and Distribution**

D501001 Main Transformers

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
AMP		1	\$ 60,000	Exterior Pad mount	Replace

Condition Enclosure starting to show some signs of rust. Who owns transformer, Utility or City of Dryden?

Scope Apportioned share of building service to City Hall. Overhead or underground transformers used for primary electrical service. Assemblies include transformers, pad, trenching, and backfill.

D501002 Secondary

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
AMP		1	\$ 6,000	Wiring runs underground from pad mount transformer to main switchboard.	Replace

Condition Age and condition of wiring unknown but based on main disconnect is due for renewal

Scope Apportioned share of building service to City Hall. Transformers fed from protection equipment on the building side of primary transformer. Assemblies include transformers, conduit, conduit support, and wire.

D501003 Main Switchboards

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
AMP		1	\$ 36,000	Main Electrical Room in City Hall	Replace

Condition Main switchboard appears to be original to the building. Breakers at or near end of theoretical life.

Scope Apportioned share of building service to City Hall. This includes the protection equipment and metering devices for main distribution. Assemblies include main distribution panel, breaker, fuses, and meters.

D501005 Panels

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
AMP		1	\$ 12,000	Panel A and B in main electrical room and Panel C in basement	Replace

Condition Exceeds theoretic life of Panel.

Scope Apportioned share of building service to City Hall. Branch circuit panel boards. Assemblies include panel boards, breakers, conduit, and wire.

D501005 Panels

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
AMP		1	\$ 14,000	Replace old panels in original 2 storey building. Panel "M-A" plus old FPE Stab-lok panels	Replace
Condition	Exceeds theoretic life of Panel.				
Scope	Branch circuit panelboards. Assemblies include panelboards, breakers, conduit, and wire.				

D501006 Enclosed Circuit Breakers

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
AMP		1		Below Panel B in main electrical room	Replace

Condition Incorporate into new panel B when paperboards are replaced

Scope Over-current protection device enclosed in its own housing. Assemblies include enclosed circuit breaker, conduit, and wire

Part E Equipmt. & Furnishings

No Events

Part F Special Construction

No Events

Part G Bldg. Sitewoks**G20 Site Improvements**G2030 **Pedestrian Paving**

D203003 Paved Surfaces

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		150	\$ 51,000	At north entrance., facing parking lot.	Replace

Condition Depression: Regrading required to address drainage issues. Possible underdrainage required

Scope This is material that is placed atop the base layer to provide the walking or driving surface.

G2040

Site Development

D204003 Exterior Furnishings

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		1	\$ 1,100	Steel Bicylce Rack	Replace
Condition	Appeared to be in fair/ poor condition. Anticipated to be replaced with more modern style rack.				
Scope	Included are assemblies for on-site construction of fences, retaining walls, playing fields, fountains, and other site improvements. Walks, steps, ramps, terraces not described by the assembly categories listed above.				

Part A Substructure

No Events

Part B Shell**B10 Superstructure**

B1010

Floor Construction

B101001 Structural Frame

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
Allowance		1	\$ 250,000	Timber frame consisting of beams and columns in basement of original school building.	Allowance

Condition Reserve fund subject to completion of study to determine degree of remediation if any

Scope The structural frame could consist of structural steel including columns, beams, joists, and all associated items. It could be a concrete frame utilizing concrete or masonry columns and concrete girders and beams. The structural frame could be wood columns with wood beams or wood trusses. The structural frame could be a combination of the above. For example, concrete or masonry columns with structural steel beams and joists. All associated work items should be included in each assembly. Separate assemblies would be used for different types of construction. The unit of measure at the assembly level is the square footage of the supported area. Decks and slabs are not included in this assembly

B101003 Floor Decks and Slabs

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
Reserve Fund		1		Floor construction (Original Building) with non-nominal wood joists.	Allowance

Condition Reserve fund (See B101001) sourced subject to completion of study to determine degree of remediation if any.

Scope Slabs above grade should be broken into assemblies according to their particular type of construction (i.e., flat slab, pan slab, precast or pre-stressed slab, four-way slab, slabs on metal or wood decking with concrete fill, etc.). All associated work items should be included in each assembly, such as expansion and contraction joints.

B101005 Ramps

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		28	\$ 6,000	Exterior Concrete Ramp with steel railing at entry.	Repair

Condition Some rust on railing and general surface were warranting a localized repair event only

Scope Ramps above grade should be broken into assemblies according to their type of construction. All associated items including handrails should be included in the assembly.

B1020

Roof Construction

B102001 Structural Frame

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
Allowance			\$ 4,000	Wood (Original Building)	Study Re'qd.

Condition No Access to Attic for review. Recommendation due to age of original building and absence of any structural reports. See also B101001

Scope The structural frame could consist of structural steel including columns, beams, joists, and all associated items. It could be a concrete frame utilizing concrete or masonry columns and concrete girders and beams. The structural frame could be wood columns with wood beams or wood trusses. The structural frame could be a combination of the above. For example, concrete or masonry columns with structural steel beams and joists. All associated work items should be included in each assembly. Separate assemblies would be used for different types of construction. The unit of measure at the assembly level is the square footage of the supported area. Decks and slabs are not included in this assembly

B20 Exterior Enclosure

B2010

Exterior Walls

B201011 Joint Sealant

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
LM		300	\$ 3,000	General maintenance labour and sealant supply to various joint locations throughout.	Repair

Condition Some caulking has dried and is cracked; other evidence of gaps and lack of elasticity. Theoretical life of exterior sealant is 10 to 15 years.

Scope Exterior application of joint sealants

B2020

Exterior Windows

B202004 Exterior Glazing

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
LM		300	\$ 3,000	All exterior Glass to be reviewed for gasketing, glazing and performance.	Repair

Condition General: window frames are in fair condition but reglazing due to age of sealed units.

Scope Exterior application of joint sealants

B2030

Exterior Walls

B201004 Parapets

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		55	\$ 8,250	Basement Access Door	Coating

Condition Refers to Replacement of Coping and roof-side flashing related to re-roofing adjacent to parapets.

Scope Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony.

B30 Roofing

B3010

Roof Coverings

B301005 Gutter and Downspouts

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
LM		112	\$ 3,200	Flat roof scuppers/roof drains	Replace

Condition See Also: allow B201002, B301003 & B301004

Scope Assemblies include all gutters, downspouts, and associated work including splash blocks.

Part C Interiors**C10 Interior Construction**

C1010

Partitions

C101008 Joint Sealant

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
LM			\$ 3,600	General Locations Throughout.	Maint'nc.

Condition Repair - Original Basement thru-floor penetrations. Many open gaps in drywall and exposed flooring structure

Scope Assembly includes caulking, gasketing between dissimilar materials and at joints.

C30 Interior Finishes

C3020

Floor Finishes

C302005 Carpeting

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		130	\$ 8,500	Misc. locations in basement offices, and halls	Replace
Condition	Variety of sheet carpet colours/age of install and wearing /stained in places.				
Scope	Sheet or tile carpet with appropriate underlay				

D20 Plumbing

D2010

Plumbing Fixtures

D201001 Water Closets

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		5	\$ 11,900	main floor washrooms	Replace
Condition	Older High-volume fixtures. At theoretic life.				
Scope	Self explained				

D201002 Urinals

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		2	\$ 8,400	main floor washrooms	Replace
Condition	Older High-volume fixtures. At theoretic life.				
Scope	Self explained				

D201003 Lavatories

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		4	\$ 7,280	In washrooms	Replace
Condition	Older fixtures and faucets. At theoretic life.				
Scope	Self explained				

D201004 Sinks

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		4	\$ 7,280	In washrooms	Replace
Condition	Older fixtures and faucets. At theoretic life.				
Scope	Self explained				

D2020

Domestic Water Distribution

D202003 Domestic Water Equipment

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		3	\$ 16,800		Replace

Condition

Scope This assembly includes equipment associated with the domestic water supply, including fittings, and specialties required for hookup. Assemblies include hot water heaters, water treatment plant, i.e., water softeners, filters, distillers, etc.; pumps directly associated with domestic water supply; and tanks for the potable hot or cold water system. The unit of measure at the assembly level is pieces of equipment.

D2040

Rain Water Drainage

D204002 Roof Drains

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		10	\$ 16,800		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Assemblies include roof drains. The unit of measure at the assembly level is number of drains.

D30 HVAC

D3020

Heat Generating System

D302002 Hot Water Boilers

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
KW	EA	1	\$ 18,200	Basement Central	Replace

Condition Exceeds theoretic life of Equipment Operation.

Scope Assemblies include boilers, expansion tanks, chemical feeders, air separators, pumps, heat exchangers, boiler feed units, etc. This assembly would also include fittings and specialties and the flue stack. The unit of measure at the assembly level is each system..

D50 Electrical

D5020

Lighting and Branch Wiring

D502002 Lighting Equipment

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM			\$ 70,000	Mainly fluorescent light fixtures located throughout building. Some light fixtures have been replaced with LED light fixtures.	Replace
Condition	Energy Reduction Payback: Replace ballasts and lamps in fluorescent light fixtures. Replace drivers in LED light fixtures.				
Scope	This assembly includes fixtures, conduit, wire, and switching devices.				

D5090

Other Electrical Services

D509002 Emergency Lighting and Power

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM			\$ 3,500	Multiple battery units and remote heads located throughout building	Replace
Condition	Exceeded reliable Operation Life: Replace batteries at end of life. Replace lamps in remote heads.				
Scope	Assemblies include fixtures, motors used for power generation, connection and testing, transfer switches, conduit, wire, battery chargers, batteries, and solar panels.				

D509005 Electrical Heating

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM			\$ 5,600	Baseboard heaters in various rooms throughout building. Fan forced heaters near exterior doors. Unit heaters in basement storage room.	Replace
Condition	Exceeded reliable Operation Life and New, more efficient products for replacement.				
Scope	Items could include baseboard heaters and wall and ceiling heaters. Assemblies include safety switches, control devices, heaters, conduit, and wire.				

Part E Equipmt. & Furnishings

No Events

Part F Special Construction

No Events

Part G Bldg. Siteworks**G20 Site Improvements****G2020 Parking Lots****G202004 Marking & Signage**

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Markings on parking lot and signage on buildings.	
EA		150	\$ 4,200		Replace

Condition To be repainted at same time as repaving event.

Scope This includes painting of the parking stalls, signage, etc.

G202006 Resurfacing

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
				Asphalt parking lot resurfacing.	
SM		2500	\$ 66,700		Replace

Condition Patched multiple times and appears to be settled in areas. Block cracking was observed throughout the parking lot. It is expected that resurfacing will address this issue.

Scope This is the placement of an asphalt wearing course over the existing parking surface.

G2040 Site Development**D204003 Exterior Furnishings**

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		1	\$ 1,100	Steel Bicycle Rack	Replace

Condition Appeared to be in fair/ poor condition. Anticipated to be replaced with more modern style rack.

Scope Included are assemblies for on-site construction of fences, retaining walls, playing fields, fountains, and other site improvements. Walks, steps, ramps, terraces not described by the assembly categories listed above.

G40 Site Electrical Utilities Preparations

G4020

Site Lighting

G402006 Exterior Lighting Fixtures and Controls

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		3	\$ 2,100	Wall and or ceiling mounted light fixtures at building entrance / exits. Façade flood lighting near main entrance.	Replace

Condition Theoretic Age of fixture; repalcemnt bulb costs

Scope Exterior electrical transmission and distribution systems including transformers, conductors, switches, controls and other devices, supporting structures, grounding systems, metering and all other equipment required to support electrical power distribution projects.

G402099 Other Area Lighting

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		1	\$ 800	Receptacle at monument in northeast corner of property	Replace

Condition Depression: Regrading required to address drainage issues. Possible underdrainage required

Scope Includes components and equipment used for area lighting.

Part A Substructure

No Events

Part B Shell**B20 Exterior Enclosure**

B2010

Exterior Walls

B201008 Exterior Soffits

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		71	\$ 10,000	Entry canopy and original bldg soffit. Selective repair/ replacement. See also library	Repair

Condition Typical deterioration of surface from exposure to elements, discolouration.

Scope Assemblies would include all associated materials which make up the soffit and supports for the soffit. Typical materials would include wood, aluminum, exterior grade gypboard, stucco, etc.

B201010 Exterior Coatings

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		133	\$ 1,100	Existing Exposed Painted Masonry Block	Coating

Condition Typical deterioration of painted surface from exposure to elements, discolouration.

Scope Assemblies include paint, stucco, etc. The unit of measure at the assembly level is area of exterior coatings.

B201011 Joint Sealant

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
LM		300	\$ 3,000	General maintenance labour and sealant supply to various joint locations throughout.	Repair

Condition Routine periodic maintenance or future event. Theoretical life of exterior sealant is 10 to 15 years.

Scope Exterior application of joint sealants

B2020

Exterior Windows

B202004 Exterior Glazing

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM	Study		\$ 3,000	All exterior Glass to be reviewed for gasketing, glazing and performance.	Study Req'd

Condition Periodic scheduled review of glazing performance, sealed unit performance, etc.

Scope In addition to glass, this includes acrylic, polycarbonate, and plastic glazing.

B30 Roofing

B3010

Roof Coverings

B301001 High Slope Roof Coverings

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		approx. 290	\$ 12,200	Upper original building	Replace

Condition Upper original building shingles performance life exceeded.

Scope Assemblies include roof coverings, such as shingle, wood shake, and standing seam, etc.

B301004 Flashing and Trim

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		approx. 230m2	\$ 5,800	Flat roof over southern portion of building	Replace

Condition Replaced (1996) South part of Roof - Inverted membrane roof const.

Scope Assemblies include all flashings associated with the roof, i.e., eave flashing, gable flashing, etc.

B301006 Roof Openings and Supports

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
	Unit Cost Est.	15	\$ 4,000	Flat Roofs: Chimney flashing, Mechical Roof-top Equipment Curbs and joints between dissimilar materials	Replace

Condition Numerous flashing and sealant failure locations

Scope All roof penetrations including roof hatches, sky lights, area glazing, roof hatches, gravity roof ventilators, smoke vents, etc.

Part C Interiors**C30 Interior Finishes**

C3010

Wall Finishes

C103005 Painting to Walls

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		27200	\$ 598,000	all drywall surfaces on main and second floor plus select basement walls	Coating

Condition General paint wear and damage over period of use.

Scope This assembly includes painting, spackling and sealant applied directly to an interior wall surface.

C103006 Wall Coverings

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		240	\$ 11,000	Primarily in council chambers and select second floor rooms	Replace
Condition General paint wear and damage over period of use.					
Scope This assembly includes wall coverings and protective strips applied directly to an interior wall surface.					

C1010 **Partitions**

C101008 Joint Sealant

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
LM			\$ 2,500	General maintenance labour and sealant supply to various joint locations throughout.	Repair
Condition Some caulking has dried and is cracked; other evidence of gaps and lack of elasticity. Theoretical life of exterior sealant is 10 to 15 years.					
Scope Exterior application of joint sealants					

C30 Interior FinishesC3020 **Floor Finishes**

C302005 Carpeting

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		256	\$ 20,000	Second Floor	Replace
Condition Theoretical life of upper-floor (non-tile) carpet exceeded and due for replacement.					
Scope Sheet or tile carpet with appropriate underlay					

C302007 Painting and Staining Floors

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM		240	\$ 6,000	Basement areas with exposed painted floors	Coating
Condition 40 to 50 percent of painted floor in need of repainting. Theoretical life of paint of concrete exceeded					
Scope Assemblies include painted and stained floor surfaces.					

Part D Services**D20 Plumbing**

C2020

Domestic Water Distribution

D202001 Pipes and Fittings

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA	Assembly	1	\$ 24,500		Replace
Condition	Exceeds theoretic life of Equipment Operation. Not efficient				
Scope	Assemblies include all pipe, fittings, and associated work with regard to domestic water supply. The unit of measure at the assembly level is number of fixtures.				

D202002 Valves and Hydrants

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA	Assembly	1	\$ 8,680		Replace
Condition	Exceeds theoretic life of Equipment Operation. Not efficient				
Scope	Assemblies include all valves and hydrants. Hose bibbs are included in this assembly. The unit of measure at the assembly level is number of valves and hydrants.				

D202004 Insulation and Identification

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA	Assembly	1	\$ 9,800		Replace
Condition	Exceeds theoretic life of Equipment Operation. Not efficient				
Scope	Assemblies include insulation used in association with domestic water supply. The unit of measure at the assembly level is number of fixtures.				

D202005 Specialties

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA	Assembly	1	\$ 5,000		Replace
Condition	Exceeds theoretic life of Equipment Operation. Not efficient				
Scope	Any other special items associated with domestic water supply. All associated work items, including pipes, fittings, valves, insulation, and hookup should be included in this assembly. The unit of measure at the assembly level is pieces of special equipment.				

C2030

Sanitary Waste

D203001 Waste Pipe and Fittings

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA	Assembly	1	\$ 12,250		Replace
Condition	Exceeds theoretic life of System Operation.				
Scope	Assemblies include all pipe, fittings, and associated work with regard to sanitary waste pipe and fittings. The unit of measure at the assembly level is number of fixtures.				

D203002 Vent Pipe and Fittings

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA	Assembly	1	\$ 7,000		Replace

Condition Exceeds theoretic life of System Operation.

Scope Assemblies include all pipe, fittings, and associated work with regard to sanitary vent pipe and fittings. The unit of measure at the assembly level is number of fixtures.

D203003 Floor Drains

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		10	\$ 9,800		Replace

Condition Exceeds theoretic life of System Operation.

Scope Assemblies include all floor drains. Hub drains are considered to be pipe and are not included in this category. The unit of measure at the assembly level is number of drains.

D2040 Rain Water Drainage

D204001 Pipes and Fittings

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA	LFT	400	\$ 14,000		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Assemblies include pipe and fittings from the roof drains to the discharge points, including supports and other associated work

D204004 Insulation and Identification

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
LF		10	\$ 1,680		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Assemblies include insulation used in association with rain water drainage system.

HVAC

D3010

Energy Supply

D301002 Gas Supply System

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
KW	Assembly	1	\$ 10,500		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope This category includes both natural gas and LPG. Assemblies include metering and regulation equipment, storage equipment, transfer equipment, and distribution piping. The unit of measure at the assembly level is each system.

D3020 Heat Generating Systems

D302003 Furnaces

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		1	\$ 72,800		Replace

Condition Exceeds theoretic life of Equipment Operation.

Scope This is a system that heats air. Assemblies would include furnace and necessary fittings and specialties required for hookup, including flue and stack. The unit of measure at the assembly level is each.

D3030 Cooling Generating Systems

D303003 Direct Expansion Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
KW	EA	4	\$ 28,000	Basement Main Cooling, multi zone	Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each.

D3040 Distribution Systems

D304001 Air Distribution, Heating and Cooling

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
L/S	Assembly	1	\$ 161,200		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Assemblies include heating coils, cooling coils, and fittings and specialties required for water hook-up. This assembly also includes duct heaters, filters, humidifiers, supply and return ductwork, dampers, fire dampers, supply and return grilles, registers and diffusers, turning vanes, sound traps, and all associated insulation. The unit of measure at the assembly level is CF/M.

D304003 Hot Water Distribution System

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
L/S	Assembly	1	\$ 4,200		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is MBH.

D304008 Exhaust Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
L/S	Assembly	1	\$ 11,600		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Assemblies include ductwork grilles, registers, diffusers, fans, and all associated work. The unit of measure at the assembly level is each system.

D3050

Terminal and Package Units

D305001 Unit Ventilators

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		1	\$ 18,200		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Assemblies include the complete terminal unit and wall sleeve with all controls.

D305006 Packaged Units

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		2	\$ 11,200		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Assemblies include complete package units, with integral roof top curbs and all associated devices. A heating system can be selected from hot water, steam coil, or gas furnace and can be a single or multi-zone system. The unit of measure at the assembly level is each.

D305006 Packaged Units

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		1	\$ 56,000		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Assemblies include complete package units, with integral roof top curbs and all associated devices. A heating system can be selected from hot water, steam coil, or gas furnace and can be a single or multi-zone system. The unit of measure at the assembly level is each.

D305099 Other Terminal & Packaged Units

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		1	\$ 11,200		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Terminal and package units not described by the assembly categories listed above.

D40 Fire Protection

D4090

Other fire Protection Systems

D409003 Clean Agent Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		1	\$ 16,800		Replace

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope

D50 Electrical

D5020

Lighting and Branch Wiring

D502001

Branch Wiring

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM			\$ 60,000	Newer Decora style devices on Ground and Second Floor. Older toggle switches and standard receptacles in basement. Some emt conduits and bx cables visible in basement.	Replace
Condition	Age and condition of devices and wiring unknown and mixed.				
Scope	This assembly includes switches, receptacles, equipment connections, conduit, and wire.				

D502002

Lighting Equipment

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM			\$ 70,000	Mainly fluorescent light fixtures located throughout building. Some light fixtures have been replaced with LED light fixtures.	Replace
Condition	Energy Reduction Payback: Replace ballasts and lamps in fluorescent light fixtures. Replace drivers in LED light fixtures.				
Scope	This assembly includes fixtures, conduit, wire, and switching devices.				

D5030

Communications and Security

D503001

Fire Alarm Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM			\$ 35,000	Fire Alarm Panel in basement and annunciator in vestibule. Detectors, pull stations and bells located throughout building.	Replace
Condition	Replace Fire Alarm Panel and devices at end of theoretical life.				
Scope	Assemblies include wire, conduit, conduit support or fastening systems, fire alarm devices, fire detection devices, safety switches, all electrical connections, and other associated items				

D503099 Other Communications and Alarm Systems

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM			\$ 7,000	A/V system in Council Chambers	Replace
Condition	Replace / upgrade equipment at end of theoretical life.				
Scope	Communication and alarm systems not described by the assembly categories listed above.				

D5090 Other Electrical Services

D509002 Emergency Lighting and Power

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
SM			\$ 3,500	Multiple battery units and remote heads located throughout building	Replace
Condition	Exceeded reliable Operation Life: Replace batteries at end of life. Replace lamps in remote heads.				
Scope	Assemblies include fixtures, motors used for power generation, connection and testing, transfer switches, conduit, wire, battery chargers, batteries, and solar panels.				

Part G Bldg. Sitewoks**G20 Site Improvements**

G2020 Parking Lots

G202007 Miscellaneous Structures and Equipment

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		5	\$ 4,200	Planter at light pole	Replace
Condition	Appeared to be in good condition. Replacement anticipated at time of pavement replacement.				
Scope					

G40 Site Electrical Utilities Preparations

G4020 Site Lighting

G402006 Exterior Lighting Fixtures and Controls

Unit/Meas.	O/Factor	Quantity	Event \$ Est.	Location	Flag
EA		150	\$ 2,100	Wall and or ceiling mounted light fixtures at building entrance / exits. Façade flood lighting near main entrance.	Replace
Condition	Depression: Regrading required to address drainage issues. Possible underdrainage required				
Scope	Includes fixtures, controls, and all components used in conjunction with Site lighting				

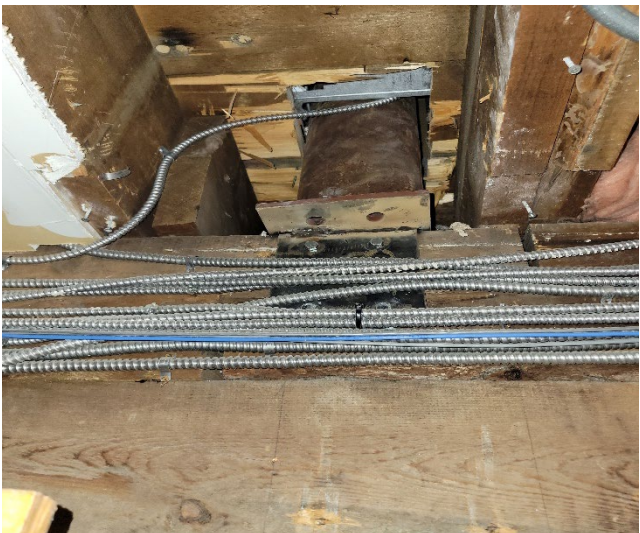
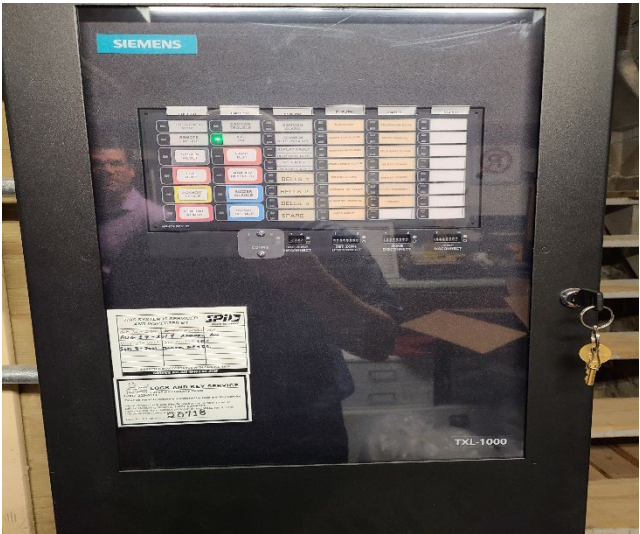
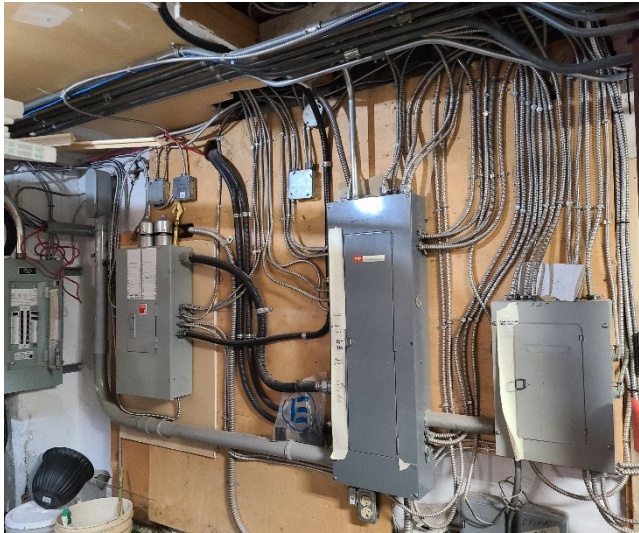
Roof and Exterior Damage



Mechanical and Interior



Electrical and Structural



Exterior and Basement Ceiling/Framing

