ORILLIA OPERA HOUSE | CONSERVATION PLAN UPDATE 2025

July 2nd, 2025 DRAFT

Orillia Opera House

ORILLIA OPERA HOUSE

+VG architecture structure interiors

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION + BACKGROUND

In 2014 +VG Architects completed a 10-year Conservation Plan for the Orillia Opera House, a Provincial Heritage Property. Important conservation work has been completed during the 2014 – 2024 Conservation Plan. The previous theatre manager Wendy Fairbairn who was key to coordination of the work, advised that approximately three million ($3m) had been spent in the 10-year period.

In early 2024, +VG was engaged to develop the next 10-year conservation plan which would also assist in capital and operational planning, as well as grant applications. By early summer 2024, an extensive amount of historic windows were falling out and the City acted to replace the units temporarily with wood infill. +VG was asked to provide a scope of work and related opinion of cost for the window replacement work for Council's consideration. This work was not pursued at the time and is included in this 2025 Conservation Plan.

Like the 2014 CP, the 2025 CP is a strategic business plan for the OOH which updates:

- the physical conditions with regards to safety, accessibility, function and aesthetics,
- identifies deficient and/or incompatible building materials,
- proposes a restoration renovation strategy for specific spaces/ functions,
- prioritizes capital projects to improve the safety, accessibility, function and aesthetics of the building over the course of the next 10+ years, and
- provides cost estimates to support the proposed prioritized work.

It is intended that the 2025 CP be read in tandem with the 2014 CP which provides historic and background information, program deficiencies and design considerations for washrooms. Much of the conservation work identified in the 2014 CP has been completed.

+VG Architects 1) prepared markups of the 2014 as-found drawing plans to document changes; 2) reviewed previous assessments and reports; 3) visually reviewed and updated the existing conditions; 4) provided building elevation markups of the window replacements required; and 5) prepared a prioritized list of prioritized work and associated opinion of cost.

1.2 HERITAGE DESIGNATION

Architectural and Heritage Value (Excerpts from Heritage Designation By-Law Number 1978-284)

All and singular that certain parcel or tract of land and premises situate, lying and being in the City of Orillia, in the County of Simcoe, and being composed of part of Market Block as shown on a Plan registered in the Registry Division for the County of Simcoe as Plan No. 180.

The 1978 By-Law includes the building and site in its entirety as having architectural and heritage value. Refer to Appendix A for a copy of the Heritage Designation By-Law.

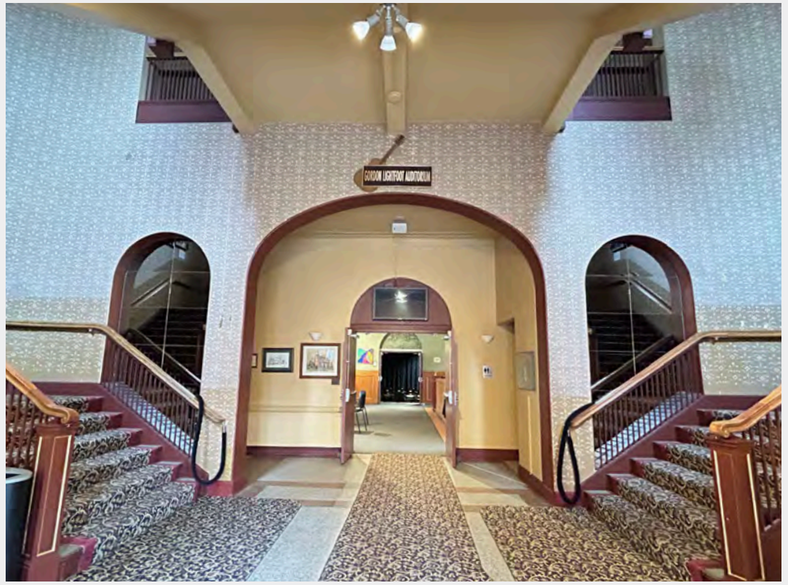
The historic and contextual value of the Opera House lies in the fact it has been a cultural hub for the City of Orillia since it was first constructed in 1895. The Register of Designated Properties (1990) cites the reasons for designation:
1. Architecturally, "the interior maintains several original features typical of the period of construction", and
2. Historically the building has played an important role in the community as a Town Hall, theatre, market, municipal offices, police station and jail.

Guided by the Standards and Guidelines for Conservation of Provincial Heritage Properties, this Conservation Plan identifies and describes features of significance in support of the designation. Refer to the 2014 Conservation Plan for detailed information on the designation, historical and contextual value, and supporting details and images.

1.3 CURRENT CONDITIONS - GENERAL

+VG visited the site to review current conditions in 2024 and April 2025. Reviews were conducted visually and no intrusive testing was performed. +VG gratefully acknowledges the assistance of Emily Martin, Theatre Manager and Claude Labrecque, Technical Director who provided information on the extent of work completed that was identified in the 2014 report.

The Building Condition Assessment section of this report lists the work completed as well as work remaining, and an update of the conditions. In early 2024, a Building Condition Assessment (BCA) was prepared by BLDG Sci Advisory Inc. Conditions and comments related to the heritage features of the building are included in each pertinent section of this 2025 report in a table format. The full BCA report is provided in Appendix C for reference.



Entrance Foyer

1.4 CURRENT CONDITIONS – CONSERVATION PRIORITIES

Conservation priorities are assessed based on importance to overall building health and integrity. Specifically, the building envelope which is key to maintaining the viability of the building, is the primary focus. Without barriers to the elements and intrusion, all exterior and interior features are vulnerable to water migration and damage.

Conservation work on the building envelope has been completed such as the slate tile roof on the turrets, the main roof and market space overhang. Other work remains essential to the building envelope such as the windows, many of which have fallen out and replaced with wood infill. (Building Elevation drawings showing the infilled windows are provided in the appendix for reference.) There is moisture transfer at the perimeter of the openings which contributes to telescoping in the interior plaster where the window shapes are visible in the House. The telescoping affects the integrity of the interior plaster to the extent that pieces are falling and floor clean-up is a daily task prior to arrival of visitors. This has become an urgent safety issue.

Other items are noted for visitor and staff occupant safety as per the Ontario Building Code (OBC). These include access such as entrance ramp, handrails, pathways clear of tripping hazards, change in floor height markings, Barrier-free access, etc.

Conservation priorities and costings are divided into 3 key categories based on conditions and effect on life-safety of building occupants:

- Immediate (Short Term Action required), 1-2 years
- Medium Action, 3-5 years, and
- Long Term Action, 6-10 years.

1.5 RECOMMENDATIONS

It is recommended that any proposed work affecting the historical fabric of the building be reviewed by the authorities having jurisdiction including the Orillia Municipal Heritage Committee, and the Ontario Ministry of Citizenship and Multiculturalism who oversees conservation of Provincial Heritage Properties.

Immediate work is important to maintaining the building envelope and not jeopardizing the building integrity. The most critical of these remaining items includes:

- The repair of missing/broken slate tiles on the roof,
- Repair of built-up membrane flat roofing areas,
- Investigation of wood-filled window areas to develop a design that prevents intrusion of elements especially water migration,
- Completion of exterior building envelope wall repair at the House,
- Completion of interior building envelope wall repairs at the House.

The estimated cost for Immediate Action (1-2 years)* is:

RESTORATION CONSTRUCTION TOTAL EXCLUDING HST	**$1,396,300**
Contingency (15%)	$ 209,445
Division 1 + OH/P (20%)	$ 279,260
TOTAL ESTIMATED BUDGET EXCLUDING HST	**$1,885,005**
Note: Escalation is currently estimated at 4% as per Hanscomb's Yardsticks for Costing 2025. 4% should be added to construction starting	

*Note that the 2024 BCA Report by BLDG Sci considers the short term 1-3 years.

The estimated cost for Medium Term Action (3-5 years) is:

RESTORATION CONSTRUCTION TOTAL EXCLUDING HST	**$1,775,300**
Contingency (15%)	$ 266,295
Division 1 + OH/P (20%)	$ 355,060
TOTAL ESTIMATED BUDGET EXCLUDING HST	**$2,396,655**
Note: Escalation is currently estimated at 4% as per Hanscomb's Yardsticks for Costing 2025. 4% should be added to construction starting	

The estimated cost for Long Term Action (6-10 years) is:

RESTORATION CONSTRUCTION TOTAL EXCLUDING HST	**$48,800**
Contingency (15%)	$ 7,320
Division 1 + OH/P (20%)	$ 9,760
TOTAL ESTIMATED BUDGET EXCLUDING HST	**$65,880**
Note: Escalation is currently estimated at 4% as per Hanscomb's Yardsticks for Costing 2025. 4% should be added to construction starting	

Routine maintenance should be monitored on a routine basis to provide proactive, specialized and continuous care for the building fabric and site of the Orillia Opera House. The City of Orillia intends to adopt a care program for all its facilities to manage this.

2.0 BUILDING CONDITIONS - UPDATE

2.1 WORK COMPLETED & REMAINING

2.1.1 EXTERIOR

+VG Architects examined the existing exterior conditions of OOH in 2024 and 2025. Reviews were conducted visually, and no intrusive testing was performed. In 2024, a Building Condition Assessment was completed by BLDG Sci Advisory Inc. Applicable notes for heritage conditions are included in the relevant sections.

East Elevation

West Elevation

View of north east corner

2.1.1.1 ENTRANCES

East Entrance - Main Entrance Vestibule

The existing east entrance was built in 1987 in an architectural style unsympathetic to the 1915 Opera House. The entrance vestibule is generally in good condition. A barrier-free ramp was constructed to the north side of the main entrance vestibule complete with stainless steel guard and handrails.

There are semi-circular concrete steps with metal railings at the main entrance. The concrete landing has minor cracks and rust from the metal railings and the railings do not meet current OBC requirements.

Completed

- Monitor the exterior concrete stair.

Remaining

- Remove and replace existing metal railings to meet current O.B.C. requirements.
- Remove and replace the main entrance vestibule.

North and West Entrances – Former Market Entrance

Large wood-trussed canopies on the north and west entrances mark the former entrances for the Orillia market. Paint on the wood-trussed canopies is flaking and there is some wood deterioration.

The west canopy slate roof has been restored. The canopy over the north entrance is covered with asphalt shingles and appears to be in poor condition possibly due to accumulated debris fallen from above, rendering it inefficient. The new elevator tower at the NW corner has reduced the length of the north canopy. The existing eavestrough and downspouts are damaged, missing paint and poorly fastened to the wood fascia board and canopy rafters.

Completed

- Remove and replace the slate shingles over the west canopy entrance.

Remaining

- Remove and replace the existing pre-painted metal flashings.
- Remove and replace the existing pre-painted aluminum eavestrough and downspouts.
- Remove paint on wood-trussed canopies back to bare wood. Cut back all deteriorated and damaged wood and apply epoxy consolidant. Prime and paint wood-trussed canopies to match heritage colour scheme.
- North canopy shingles to be reviewed and cleaned or replaced.

Conditions - April 2013

Current Conditions

East Elevation

NorthElevation

East Elevation handrails

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Overhang	B Shell	B20 Exterior Enclosure	1950	50
Description & Recommendation				
The wood overhang that is installed to the exterior of the market room has evident water damage and perforations when viewed from below. The water marks and stains appear to be stemming from above the decking, with the damaged areas appeared to be wide enough to allow both creatures and elements in. It is recommended that the damaged planks be replaced in the short term, with the cause of the damage investigated.				

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Exterior Wood Doors	B Shell	B20 Exterior Enclosure	1915	30
Description & Recommendation				
The wood doors are original to the building construction and have been repainted over the years. From what could be decerned from the available vantage points on the ground, the units are exhibiting areas of concern and failure. It is recommended that the units be refinished and damage repaired.				

South Entrances – (Previous) Public Washrooms

Public washrooms were previously accessed via exterior covered staircases on the south side of the building. The entrance structures are distractions from the heritage character of the building along Mississauga Street. One has been removed and capped at the side walls height. The other provides an entrance used by City Bus Drivers.

Completed

- Relocate public washrooms within the facility, provide access to public washrooms from ground floor level, or remove this service from the Opera House building.
- Men's washroom entrance removed, opening capped.

Remaining

- Complete removal of the entrance structures and repair stone masonry foundation walls where damaged.

Conditions - April 2013

Current Conditions

Rear market entrance

Rear market entrance canopy reduced size with elevator addition on the right corner.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Entryway	B Shell	B20 Exterior Enclosure	1950	75
Description & Recommendation				
The entryway for the door into the bus driver space has an awning comprised of metal roofing on a wood structure. The roofing is beige painted metal panels over a wood structure. Both the materials have paint loss occurring, as well as localized damage of the wood. It is recommended that the structure be refinished with any damage repaired as part of building O&M.				

South Entrance – Administration

The administrative entrance for the Opera House is located at the south west corner of the building. The entrance is a new pre-painted aluminum door with sidelight set in a brick masonry arched opening. There are large cracks to either side of the masonry opening, currently being monitored to determine if the masonry is settled or if it continues to move. The crack to the west of the entrance continues up the wall to the stone banding above the second floor windows.

The masonry bay west of the administrative entrance is similar in that it has glazing set in a brick masonry arched opening.

Completed

- Cut-out cracked, loose and missing mortar joints and repoint.

Remaining

- Remove and replace existing entrance door, sidelight and glazing window. Provide support to brick arch with face brick and masonry backup. Provide new lintel over the opening.
- Remove and replace cracked and broken brick.

Basement Entrance- North Elevation

There was a covered basement entrance west of the north stair tower, constructed of brick masonry walls with a wood framed roof. With masonry walls in poor condition, deteriorated brick, significant cracks in the mortar joints and large voids between masonry units. Removal was recommended.

Completed

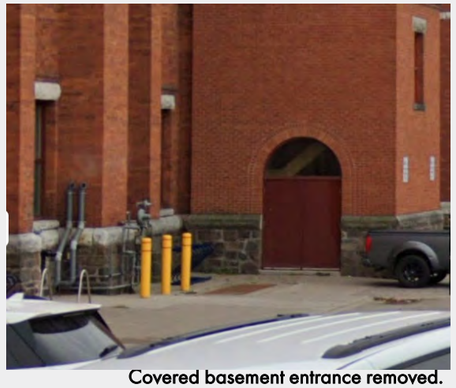
- Remove and replace entrance structure or repair and stabilize large voids between masonry units until entrance is fully removed and replaced.

Conditions - April 2013

Current Conditions

Entrances to (previous) public washrooms.
One entrance remains (right) for Bus Driver access.

Administrative entrance



Covered basement entrance removed.

2.1.1.2 FOUNDATIONS

The stone masonry foundations are generally in very good condition. Vines were noted on the foundation stone of the south turret.

Completed

- Routine Maintenance
- Vines removed and replaced with plantings on the Mississauga St W elevation.

Remaining

- Routinely check the condition of the existing stone masonry foundations using a maintenance checklist.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Foundation and Footings	A Substructure	A10 Foundations	1915	100
Description & Recommendation				
The foundation is visible within the perimeter basement areas and in sections along the exterior. Within the basement spaces, concrete slabs and stones comprise the foundation walls. The walls showed signs of settlement and material loss, but not to a concernable level. There were also stains from both moisture penetration and retention in the areas where equipment transverse through the material. The foundations are expected to last the life of the building.				

2.1.1.3 MASONRY

The exterior walls of the Opera House are constructed of multi-wythe brick masonry. The brick is red with specials and generally red coloured mortar joints. The exterior brick masonry walls are generally in good condition below the brick corbel banding.

Existing Vegetation

The exterior brick and stone masonry of the south turret was covered with vines and vegetation. Vines embedded in the masonry mortar joints have potential to cause deterioration of the mortar joints over time.

Conditions - April 2013

Current Conditions

Ribbed joints at stone masonry foundation

Vines on stone masonry foundation

Exterior brick masonry,

Completed

- Vines removed from exterior brick and stone masonry.

Miscellaneous Nails and Fasteners

There are miscellaneous nails and fasteners in the exterior brick masonry, especially at locations of former wiring and conduit.

Remaining

- Remove all miscellaneous nails and fasteners. Replace brick and re-point where nails and fasteners have significantly damaged the masonry. Repair and fill holes.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Masonry Bricks	B Shell	B20 Exterior Enclosure	1915	50
Description & Recommendation				
The exterior brickwork is showing signs of its age as the faces appear worn, mortar joints have multiple areas of cracking or missing material, and there are sections where the brickwork was replaced. It is recommended that repointing be performed, with bricks/stones that are in poor repair replaced as part of it.				

Atmospheric Staining and Efflorescence

The exterior brick masonry has aged and weathered however the brick is generally 'clean.' There is atmospheric staining on the brick masonry piers, areas above the brick corbel banding, and on brick ledges and projections. There is also efflorescence on the west and north elevations below the mechanical louvers and in select areas around the exterior.

Remaining

- Remove efflorescence and staining on west and north elevations.
- Remove atmospheric staining on brick masonry piers and brick above the corbel banding. Use low pressure wash to ensure the brick maintains an aged patina.

Continuous Cracks

There are continuous cracks in the brick masonry mortar joints at typical weak points above and below openings. With the exception of the cracks on the south elevation, east corner, the cracks are relatively minor.

Conditions - April 2013

Current Conditions

Vines on brick masonry have been removed.

Efflorescence and staining on brick masonry

Remaining

- Cut-out deficient mortar along continuous cracks in brick masonry and deep repoint joints.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Masonry Bricks	B Shell	B20 Exterior Enclosure	1950	50
Description & Recommendation				
The exterior brickwork is showing signs of its settlement and shifting, as identified by the measurement devices installed in multiple locations on the exterior. The brick faces appear worn, mortar joints have multiple areas of cracking, and the wall joints have missing material. In addition, there are sections where the brickwork was replaced. It is recommended that the cause for the building shifting be identified prior to repairs. It is recommended that the bricking have repointing performed, with damaged bricks replaced as part of it.				

Deficient Bricks

The brick masonry is in relatively good condition. There are broken bricks at continuous cracks above, below and around openings, and some spalling bricks on the north and south elevations above the brick corbel banding. Portions of the brick piers require rebuilding.

Previous repairs: Former holes in the brick masonry and mortar have been filled with incompatible mortars. Former continuous cracks in the brick masonry mortar joints above and below openings have been repaired with incompatible mortars.

Remaining

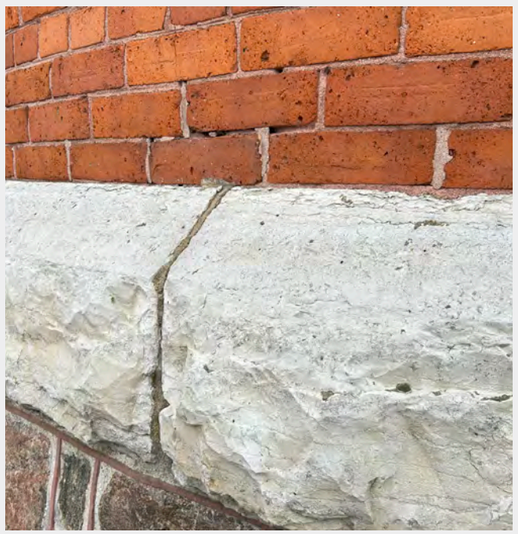
- Remove and replace spalled, broken, missing and misplaced bricks to match the originals. Allow for 5% brick replacement on all elevations.
- Reset and flash concrete caps over the brick piers on the north and south elevations.
- Cut-out incompatible mortars and repoint mortar to match the original in colour and tooling.

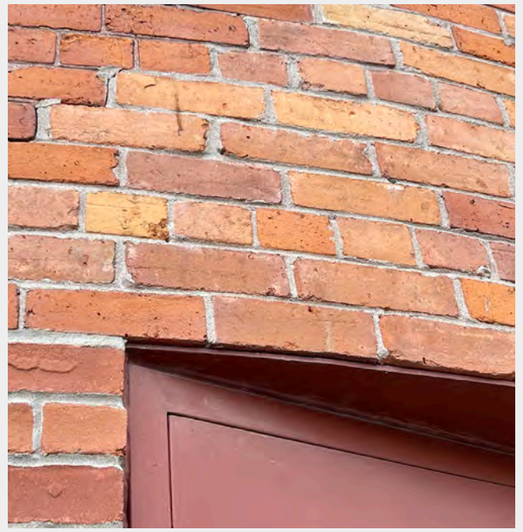
Deficient Mortar Joints

Generally the exterior brick masonry mortar joints are in good condition. Areas above the brick corbel banding, the base of the turret eaves and the east elevation (at high level) are in the worst condition. These high areas are continually exposed to the elements. Mortar is also cracked and missing around window and door openings.

Conditions - April 2013

Current Conditions





North elevation bricks showing holes, cracks and incompatible mortars.

Remaining

- Repoint the brick masonry piers and fields above the corbel banding 100%.
- Repoint high areas on the turrets and the east elevation 50%. Provide 10% general repoint on all elevations.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Masonry Bricks	B Shell	B20 Exterior Enclosure	1980	50
Description & Recommendation				
The exterior brickwork is largely intact with some staining along the lower wall. The mortar is without major loss and has minor evidence of settlement. It is expected that the material will last to the end of its expected useful life.				

2.1.1.4 ROOFING AND TURRETS

Roofing

The existing roofing complete with metal flashing was replaced in 2006. There is a pre-painted aluminum rain water leader fed from a scupper drain on the south stair tower. The paint on this rain water leaders is peeling.

Remaining

- Remove and replace damaged rain water leaders.

Turrets

The turrets were noted with multiplle poor-fair conditions in 2014 including a number of broken, missing, stained and/or discoloured slates on the turrets. The pre-painted metal cornice at the base of the slate roofing is deteriorated in areas (cracked and peeling), and the finial structural conditions were unknown. A 2013 BCA report from Tacoma Engineers listed the items of concern and recommendations.

Completed

- Performed localized repairs and replacement of slate roofing on turrets.
- Removed and replaced the pre-painted metal cornice.
- Finial restoration has been completed.
- Locally patched small openings in roof sheathing with plywood sheathingin thickness to match the existing on both the North Turret and the South Turret.

Conditions - April 2013

Current Conditions

East elevation

Rain Water Leaders

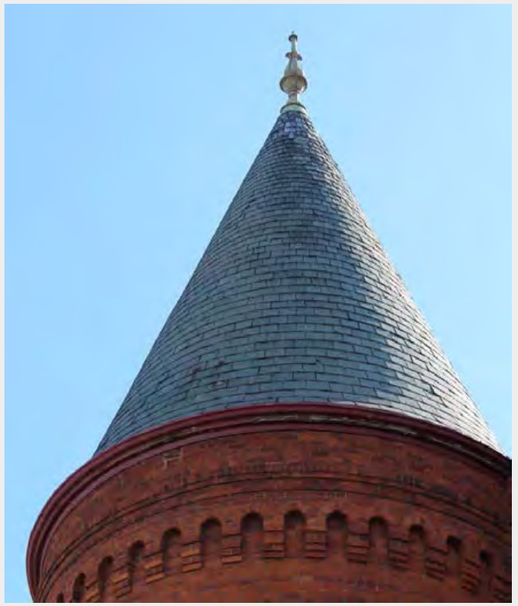
- Sistered additional 2x6s on each side of the damaged roof rafters with three nails at 12" o.c. Extended new rafters a minimum of 12" beyond the end of any observed splits.
- Provided new 2x6 ceiling ties at 900o.c. (perpendicular to the existing ties) at the North Turret.
- Reinstated connection from existing 2x6 ties to existing rafters in the North Turret.
- Provided new 2x6 solid blocking at 900 o.c. in the South Turret from the 2x6 ceiling joists to the existing wood sill plates.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Roof Construction	B Shell	B10 Superstructure	1915	100
Description & Recommendation				
The original roof construction is formed from iron I-beams mechanically fastened together, forming the structure a pitched roof. Above the beams lay wood joists that support the wood plank decking. The wooden material have signs of water damage in sporadic areas. The amount that was able to be viewed did not appear to be at a concernable level. It is expected that the structure will last the life of the building.				

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Roof Construction	B Shell	B10 Superstructure	1950	100
Description & Recommendation				
The roof construction for the building addition is formed from iron I-beams mechanically fastened together, forming a sloped roof structure that peaks toward the Southeast. Above the beams lay the corrugated metal decking that supports the roofing material above. No major damage or points of concern were identified from the available vantage points. It is expected that the structure will last the life of the building.				

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Built Up Roof Assemblies	B Shell	B30 Roofing	1980	20
Description & Recommendation				
There are areas of grit loss, bubbling, and water pooling. The visible mastic has dried out and begun to crack apart. The material also had many patches evident from repairs over time. It is recommended that the roofing be replaced in the short term.				

Conditions - April 2013



Current Conditions

Turret views

2.1.1.5 WINDOWS AND DOORS

East Elevation

There are three fixed painted wood windows set in painted wood frames above the main entrance vestibule. These windows provide light into the main staircase east of the auditorium. The paint on the windows is alligatored and there is some wood deterioration.

Remaining

- Remove paint on wood windows, frames and sills back to bare wood. Cut back all deteriorated and damaged wood and apply epoxy consolidant. Provide Dutchman repairs where wood is significantly damaged. Reset glass in wood window sash. Prime and paint wood windows and frames to match heritage colour scheme.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Exterior Metal Doors	B Shell	B20 Exterior Enclosure	2001	30
Description & Recommendation				
The exterior doors for the facility are hollow metal units that have areas of weathering, gapping, as well as rusting along the bottom edges. The doors have denting from visitor interactions, which appear to be minor. The frames for the doors have the same appearance as the doors in regards to paint loss. It is recommended that the units be replaced in the short term.				

Conditions - April 2013

Current Conditions

East entrance showing 3 historic windows above later addition.

South Elevation - Mississauga Street

All upper level spandrel window units (11) have fallen out and were replaced with wood infill in 2024, including former window locations at the orchestra and balcony levels and the window between the former exit doors. The spandrel windows were installed to prevent exterior light from entering the performance space. (Elevation drawings are provided in the appendix for reference.)

There are two sets of painted wood panelled doors and frames set in masonry openings at former exit stair locations. The doors appear to be in good condition but paint is deteriorating.

There are four 4 over 4 fixed painted arched-top painted metal windows installed approximately 2012. The windows are set in painted wood frames. The exterior and interior window seals are failing.

There are also four 1 over 1 new fixed painted metal windows above the administrative entrance and adjacent bay.The exterior and interior window seals are failing.

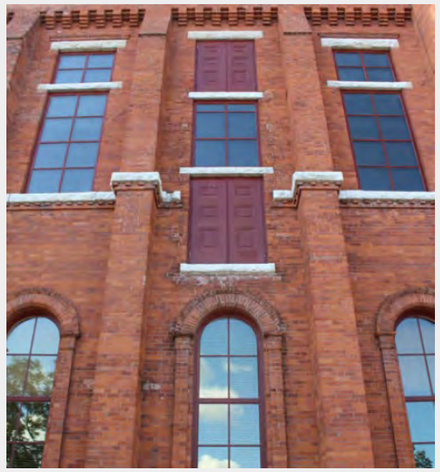
There are four double hung 1 over 1 painted wood windows set in painted wood frames. These windows are in stairwells and corridors. The paint on the windows is alligatored and there is some wood deterioration. There are also four small double hung 1 over 1 painted wood windows with painted wood window frames.

Note: further investigation is required to determine if the existing 1 over 1 double hung wood windows were originally multi-pane windows. Remove paint from sash to reveal any previous patch and repair work.

Remaining

- Routinely check the condition of the spandrel windows using a maintenance checklist.
- Routinely check the condition of the wood doors using a maintenance checklist.
- Routinely check the condition of the archedtop windows.
- Routinely check the condition of the new metal windows.
- Remove paint on wood windows, frames and sills back to bare wood. Cut back all deteriorated and damaged wood and apply epoxy consolidant. Provide Dutchman repairs where wood is significantly damaged. Replace single pane glass with thermally sealed units and rabbet units into sash. Prime and paint wood windows and frames to match heritage colour scheme.
- Remove painted metal vent and plywood and replace with new pre-painted metal louvre to fill the opening.

Conditions - April 2013



Current Conditions

Partial South Elevation windows and doors

West Elevation

There are two entrance doors on the west elevation. These doors once served as entrance doors to the market. The doors are painted wood with 8 lites and 2 panels set in painted wood frames in brick masonry openings. Adjacent to the doors are double hung 4 over 4 painted wood windows with painted wood panels below. The paint on the wood doors, frames and windows is alligatored and there is some deterioration of the wood stops. At least one of the door lites is frosted glass instead of clear. There is a 'wood patch' on one of the wood panels below the wood windows. The heritage hardware was removed and replaced with a metal cover plate, knob handle and deadbolt lock.

Between the entrance doors is a set of double hung 4 over 4 painted wood windows with painted wood panels below. The windows are set in painted wood frames in a brick masonry opening. The paint on the windows is alligatored and there is some deterioration of the wood stops.

There are six windows above the former market entrance. These windows appear to be in fair/good condition, however the frames are white and do not match the colour of the OOH windows and doors.

There are six 2 over 4 painted wood windows in the centre bay of the west elevation that have fallen out and replaced with wood infill. These windows serve the backstage areas of the Opera House.

There are three 1 over 1 painted wood windows in the stair bay. These windows serve the backstage stairwell. The paint on the windows is alligatored and there is some wood deterioration.

Note: further investigation is required to determine if the existing 1 over 1 double hung wood windows were originally multi-pane windows. Remove paint from sash to reveal any previous patch and repair work.

One former door/window opening was previously filled with non-matching brick and mortar.

There is a painted metal door and frame at the loading bay. Paint on the door and frame is weathered and damaged.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Windows - Insulated Glazing Units	B Shell	B20 Exterior Enclosure	1915	30
Description & Recommendation				
The window units are original to the building and exhibit no damage to the glazing. The painted wood frames and trim work are intact physically with areas of paint loss and weathering. As these are historical, no action is required at this time. However, it is recommended that methods be implemented to lessen the gapping found along the unit edges.				

Conditions - April 2013

Current Conditions

West Elevation windows and doors at the Farmers Market

North Elevation

All upper level spandrel window units (9) have fallen out and were replaced with wood infill in 2024, including former window locations at the orchestra and balcony levels and the window between the former exit doors. The spandrel windows were installed to prevent exterior light from entering the performance space. (Elevation drawings are provided in the appendix for reference.)

There is a set of painted wood doors set in a painted wood frame above the north canopy entrance. The paint on the doors is flaking at the base and there is wood deterioration.

Remaining

- Remove paint on wood doors, frames and windows back to bare wood. Cut back all deteriorated and damaged wood and apply epoxy consolidant. Provide Dutchman repairs where wood is significantly damaged. Remove wood stops and reset glass. Replace any cracked, broken, frosted or textured glass. Prime and paint wood doors, windows and frames to match heritage colour scheme. Remove and replace hardware with heritage hardware.
- Paint six new windows above the former market entrance to match the heritage colour scheme.
- Remove paint on wood windows, frames and sills back to bare wood. Cut back all deteriorated and damaged wood and apply epoxy consolidant. Provide Dutchman repairs where wood is significantly damaged. Replace single pane glass with thermally sealed units and rabbet units into sash. Prime and paint wood windows and frames to match heritage colour scheme.
- Remove paint on wood windows, frames and sills back to bare wood. Cut back all deteriorated and damaged wood and apply epoxy consolidant. Provide Dutchman repairs where wood is significantly damaged. Replace single pane glass with thermally sealed units and rabbet units into sash. Prime and paint wood windows and frames to match heritage colour scheme.
- Remove non-matching brick and mortar in former door/window opening and replace with new brick and field stone to match the originals, recessed in the opening.
- Prime and paint metal door and frame at loading bay.

The new elevator addition has been constructed on the west side of the entrance canopy. There are numerous small openings and vents in the north elevation. The existing vent and louvre covers do not match. Several windows are filled with a painted metal vent and painted plywood.

There are four 2 over 2 painted metal windows set in painted wood frames. The type of glazing depends on the location of the window. The windows appear to be in fair condition. One of the former main level windows was previously filled with painted plywood and a painted metal vent.

Two of the former window openings in the stone masonry foundation are filled with a painted metal vent and painted plywood.

Conditions - April 2013

Openings above the north canopy entrance

Current Conditions

View showing new elevator addition on right side of canopy.

Wood door over north canopy entrance.

North elevation upper windows and doors.

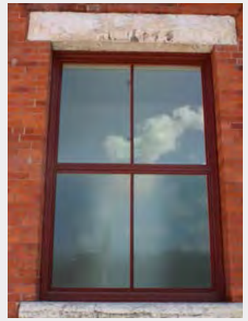
Remaining

- Remove painted metal vent and plywood and replace with new pre-painted metal louvre to fill the opening.
- Remove paint on wood door frames and doors back to bare wood. Cut back all deteriorated and damaged wood and apply epoxy consolidant. Provide Dutchman repairs where wood is significantly damaged.
- Routinely check the condition of the spandrel windows using a maintenance checklist.
- Routinely check the condition of the wood doors using a maintenance checklist
- Remove painted metal vents and plywood and replace with new pre-painted metal louvres to fill the openings. Delete vents if no longer in use.

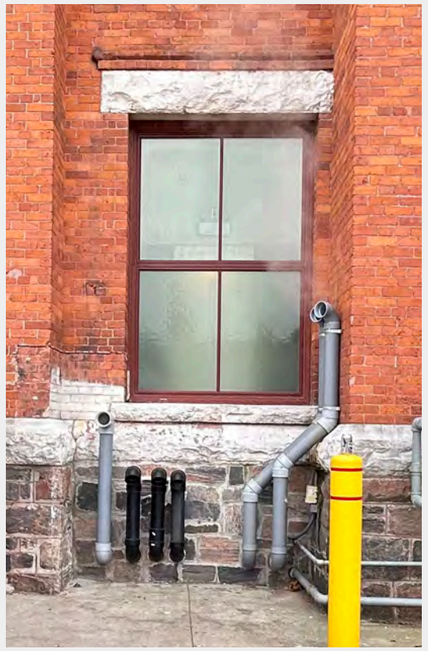
Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Windows - Insulated Glazing Units	B Shell	B20 Exterior Enclosure	2012	30
Description & Recommendation				
The window units that are not original to the building construction, with a mix of dates visible, though 2012 appeared to be the most prominent. The fixtures are exhibiting both interior and perimeter sealant deterioration. This deterioration allows for the interior gas fill to escape, limiting the effectiveness of the units. It is expected that a major window replacement will be required in the medium term.				

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Window Sealants	B Shell	B20 Exterior Enclosure	2012	30
Description & Recommendation				
The window sealants that are installed around the interior and exterior frames are generally intact with desiccation and cracks having begun to occur. The material is expected to require replacing in the short term.				

Conditions - April 2013



Current Conditions



Main level two over two windows

North elevation painted metal vents

2.1.2 INTERIOR

+VG Architects examined the existing interior conditions of OOH in 2024 and 2025. Reviews were conducted visually, and no intrusive testing was performed. In 2024, a Building Condition Assessment was completed by BLDG Sci Advisory Inc. Applicable notes for heritage conditions are included in the relevant sections.

2.1.2.1 MASONRY

The Basement

The stone masonry foundations are generally in very good condition. The stone masonry foundations were repaired and repointed in 2011. There is efflorescence on interior brick masonry in Fan Room 005 around existing water pipes.

Remaining

- Remove efflorescence from interior brick masonry.

Mechanical Room 501

There is efflorescence on interior brick masonry in Mechanical Room 501 on the north and west exterior walls.

Remaining

- Remove efflorescence from interior brick masonry.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Concrete Masonry Units	C Interiors	C30 Interior Finishes	1915	75
Description & Recommendation				
The bricking visible is original to the building. Many areas were seen to have missing, deteriorating, or damaged bricks; such as in the top of the turrets. It is recommended that the damaged and missing units be replaced.				

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Concrete Masonry Units	C Interiors	C30 Interior Finishes	1950	100
Description & Recommendation				
The blocks are physically intact but do show signs of repairs and wearing from interactions over time. The units are also finished in a coat of paint in most areas, of which are generally intact with minor chipping. It is expected that the walls will last the life of the building.				

Conditions - April 2013

Current Conditions

Stone masonry foundations

Fan Room, brick walls with effluorescence

Mechanical Room

2.1.2.2 WOODWORK

The House – Wood Base Board

The existing wood base board on the main level of the house consists of an 8" base with a 2" cap and ¾" shoe. The wood base board is painted off white with a band of maroon painted immediately below the base cap.
The existing wood base board on the balcony level of the house consists of an 8" base with a 2" cap and ¾" shoe. The wood base board is painted off white. It is evident the wood base board on the balcony level was modified to allow for the stairs flanking the balcony seating.

Generally the painted wood base board is worn throughout the House and the paint is flaking in several areas.

Remaining

- Repair the wood base board where damaged and refinish in accordance with the heritage colour scheme for the room (recommend removing all paint from the base boards and refinishing the oak to match the remainder of the woodwork in the house).
- Revise configuration of wood base board to properly accommodate the stairs flanking the balcony seating.

The House – Wood Balcony Step and Guard

There is a wood step and guard at the rear of the balcony. The wood step and guard are generally in good condition.

Completed

- Repair and refinish wood step and guard when remainder of the house is restored.

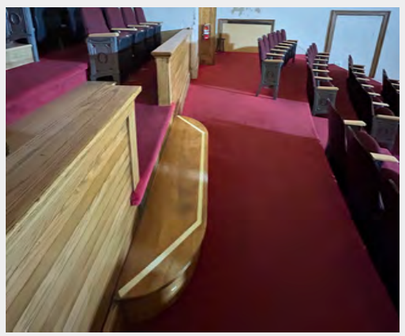
Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Millwork	C Interiors	C10 Interior Construction	1980	25
Description & Recommendation				
The millwork installed in the facility includes the counters within the washrooms and green rooms. These are manufactured from wood and finished with melamine. The units have evident areas of damage and material loss along the edges. It is recommended that the units be replaced in the short term.				

Conditions - April 2013

Current Conditions

Wood base board house main level,

Wood base board house balcony level,



Wood step and guard house balcony level, with refinishing and visibility strip on right.

The House – Wood Casements and Panelling

There are decorative wooden casements around the exit doors in the house with wood panelling and cornice above the doors. Exit lighting is set in the wood panelling. There are six exits with wooden casements and panelling and each is numbered.

Generally the casements and panelling are in good condition. There are minor deficiencies in the wood as well as miscellaneous screws and nails. In addition, Exit #2 is missing one of two wooden flower embellishments and the wood panelling seems to have separated from the plaster wall behind.

Exit #2 is unique in that it is the only exit without the wooden casement (trim) on either side of the exit doors. Either the wood trim never existed or the door opening was modified over time.

Remaining

- Repair the wood casements and panelling where damaged and refinish as required.
- Provide new wooden flower embellishment at Exit #2 to match existing.
- Reset wood panelling at Exit #2.
- Provide new wood casement at Exit #2 to match those around the other exit doors in the house.

The House – Wood Dado Trim (Raceway)

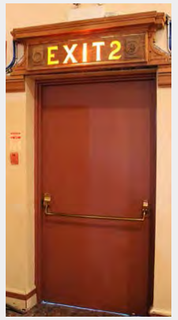
There is wood dado trim on the walls of the house. The wood dado trim provides visual interest in the house and also access points for electrical wires and switches. Currently electrical wires and data cabling are run along the top of the wood dado trim.

Generally the wood dado trim is in good condition. A number of the electrical switches have been capped while others have been replaced.

Remaining

- Modify the existing wood dado trim to accept /conceal the electrical wires and data cabling.

Conditions - April 2013



Wood dado trim (raceway).,

Current Conditions

Wood casements and panelling

Exit 2 without wooden casement

2.1.2.3 WINDOWS AND DOORS

The House – Exit Doors

There are two hollow metal exit doors in the house that open into exit stairwells on either side of the main stage.

Exit #1 has a hollow metal door with panel embellishments, metal push-bar hardware and door closer on the house side of the door. There is a hold open device on the exit side of the door. The door is painted maroon and generally in good condition.

Exit #2 has a hollow metal door with metal push-bar hardware on the house side of the door. There is a hold open device on the exit side of the door. The door is painted maroon and generally in good condition.

There are three sets of hollow metal exit doors in the house, on the east side of the room.

Exits #3 and #4 open into the upper foyer. The doors are hollow metal with brass push-bar hardware and closers on the house side of the door. There are hold open devices on the exit side of each set of doors. The doors are painted maroon and the paint is starting to chip where the doors meet. There are also gaps between the doors.

There is a third set of hollow metal exit doors along the east wall that open into the south turret exit stair. The doors are hollow metal with small lites. The doors have brass turn knobs and closers on the house side of the doors. There is a hold open device on the exit side of the door. The doors are painted maroon and the paint is starting to chip where the doors meet. There are also gaps between the doors.

Completed

- Replace hollow metal exit doors with fire rated panelled wood doors.

The House Balcony – Exit Doors

There are two sets of hollow metal exit doors that open directly into the exit stairwells (north and south turrets) from the house balcony.

Exit #5 is located along the east wall of the house balcony and opens into the north turret. Exit #6 is located along the east wall of the house balcony and opens into the south turret. The doors are hollow metal with small lites. The doors have brass push plates and turn knob handles. There are door closers on the house sides of the doors and hold open devices on the exit sides of the doors. The doors are painted maroon and brown and the paint is starting to chip where the doors meet. There are also gaps between the doors.

Conditions - April 2013

Current Conditions

House exit doors with wiring above dado and panelling.

House exit doors

Completed

- Replace hollow metal exit doors with fire rated panelled wood doors.

The House – Stage Access Door

There is a flight of stairs and stage access door on the south side of the main stage. The door is painted hollow metal and set in the original opening. The door has brass turn knob handles. The door is relatively good condition.

Remaining

- Replace the hollow metal stage access door with a panelled door to match the existing door for the fire hose cabinet on the north side of the main stage.
- Relocate the flight of stairs for access to the stage to the interior side of the door.
- Set the new wood door in its original location, in line with the wood trim casing.

The House – Fire Hose Cabinet

There is a fire hose cabinet on the north side of the main stage. The door for the cabinet is the original wood panel door. Generally the door is in good condition.

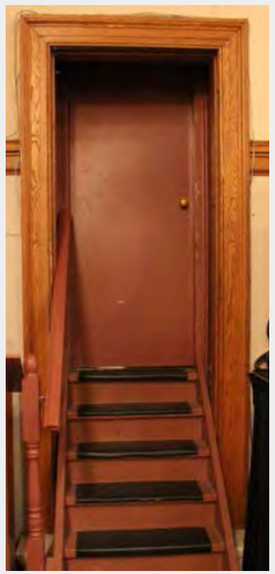
The Green Room and Studio Theatre

There are two sets of doors in the green room. One set exits into the entrance foyer while the other provides an exit for the Studio Theatre. Both sets of doors were originally wood and have been replaced with fire-rated flat metal doors. There are hold open devices on the exit sides of the doors.

Completed

- Wood doors have been replaced with fire-rated metal doors.

Conditions - April 2013

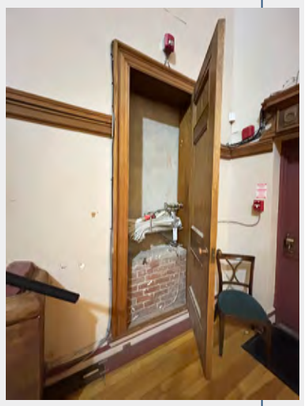


Stage Access Door

Fire Hose Cabinet Door

Current Conditions

Stage Access Door



Fire Hose Cabinet Door

The Studio Theatre – Former Windows

Three of the original windows have been boarded on the interior side of the Studio Theatre on the north side of the room. Window trim and sills remain and have been painted black. The infill is also painted black.

Remaining

- Remove the infill panels on the interior side of the studio theatre to determine the composition of the infill (backup) beyond the interior wall panels.
- Fill the openings with brick masonry, if not already present.
- Cover the brick masonry with plaster or gypsum board with carefully detailed recesses reflecting the original window pattern, as recommended in the 1985 survey.

Entrance Foyer

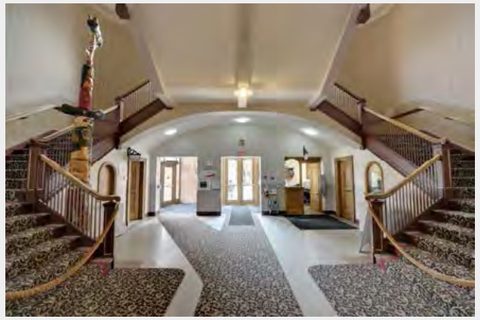
There are three wood doors with wood trim in the entrance foyer for the box office, coat room and office. Each door has a centre panel with arched top. Centre panels in the coat room and office doors open up and have a ledge at the base of the openings. The doors are stained and varnish with brass hardware and generally in good condition.

Remaining

- Routinely check the condition of the doors in the entrance foyer using a maintenance checklist.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Entrance Door	B Shell	B20 Exterior Enclosure	1980	30
Description & Recommendation				
The glass doors with wood frame are located at the front of the building and act as the main entry into/ out of the facility. The panes were found to be without damage, while the frames have some weathering of the paint coat. The hardware is tarnished but functional. It is recommended that the door will require replacement in the medium term.				

Conditions - April 2013



Current Conditions

Former fire escape access (inside dashed lines) and telescoping plaster at previous windows to the right.

Entrance Foyer

Studio Theatre former windows,

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Exterior Glass Doors	B Shell	B20 Exterior Enclosure	2012	30
Description & Recommendation				
The glass door provides staff access point to either the main or upper floor via the staircase. The unit has a metal frame with the panes free of visible damage. The hardware is functioning well. It is expected that the door will require replacement in the long term.				

The House – Former Fire Escape Access

In the 1916 opera house there were 11 tall windows in the auditorium. Six of the original windows were impacted by the addition of the balcony. Two of these six windows were lengthened (one on either side of the building) to provide access doors for the fire escapes. The fire escapes have since been removed and the doors have been sealed.

The 1985 survey recommended that the window heights be restored to the original pre-fire escape size and height. The 1985 survey also recommended the existing window closures be reconstructed in thick masonry, connected and sealed to the existing walls to produce a continuous heavy separation.

On the interior, the 1985 survey recommended that the windows on each side of the auditorium be identified in the wall finish treatment with carefully detailed recessed panels reflecting the original window pattern.

Remaining

- Remove the infill panels on the interior side of the house to determine the composition of the infill (backup) beyond the wall panels.
- Fill the openings with brick masonry, if not already present.
- Cover the brick masonry with plaster or gypsum board with carefully detailed recessess reflecting
- the original window pattern, as recommended in the 1985 survey. Refer also to Section 2.1.2.4 Plaster.
- Note: if the intent is to install insulation and vapour barrier throughout the house, install insulation and vapour barrier in the opening prior to covering with plaster or gypsum board finish.

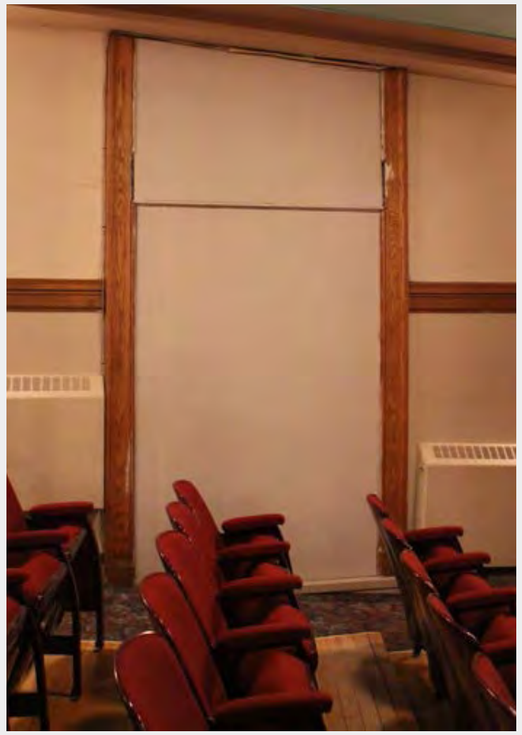
Upper Foyer - Exit Doors

There is a set of hollow metal exit doors with small lites that open directly into the north turret from the upper balcony. The doors have new brass push-bar hardware and closers on the exit side, and lever handles and hold open devices on the upper foyer side. The doors are painted maroon and generally in good condition. There is a gap between the doors.

Completed

- Replace hollow metal exit doors with fire rated panelled wood doors.

Conditions - April 2013



Current Conditions

Former fire escape access door opening.

Upper Foyer exit door, replacement on right

2.1.2.4 PLASTER

The House – Plaster Walls

The interior of Orillia Opera House is largely finished with painted plaster. The walls have a 'rough' plaster finish above the wood dado trim and a 'smoother' plaster finish below.

Areas of the existing plaster are loose, cracked and/or missing, especially at low level corners and below the wood dado trim. Plaster is also damaged around the perimeter of the radiators and immediately above the wood dado trim where the electrical wires and data cabling is installed.

Areas with loose, cracked and/or missing plaster have been repaired over time. These repairs are particularly visible above the wood dado trim and immediately below the house balcony. Generally the plaster repairs do not have smooth transitions with the adjacent original plaster.

There are also large plaster patch repairs on the north and south walls of the house at former windows. The plaster patches do not have smooth transitions with the adjacent original plaster and are visible distractions within the house.

Note: refer to the 1985 survey recommendations and the 2014 Conservation Plan for discussion points.

The plaster walls have continued to deteriorate with plaster pieces falling daily in the auditorium. The condition creates urgency in treatment of the building envelope (windows) of the auditorium work in order to have a permanent solution. Once the window work and environmental intrusion prevented, interior plaster work can commence.

Remaining

- Remove / cut back deficient (loose, cracked and/or missing plaster) and replace with new to match the existing/adjacent plaster in composition, finish texture and colour.
- Remove the large plaster patch repairs. Refer also to Section 4.33 Windows and Doors.

The House – Plaster Ceiling

The ceilings have a smooth plaster finish with simple detailing, off-white and brown fields with coral, light blue and yellow accents. The ceiling has been restored. Minor skimcoat patches (3) were observed.

Completed

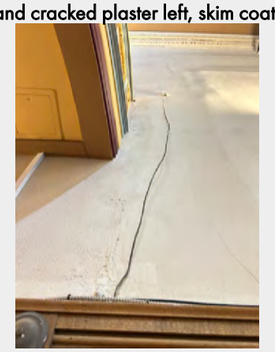
- Remove / cut back deficient (loose, cracked and/or missing plaster) and replace with new to match the existing/adjacent plaster.

Conditions - April 2013

Current Conditions

Loose and cracked plaster at balcony wall and guard

Loose and cracked plaster left, skim coat peeling right



Exposed electrical wiring

The House – Plaster Details

There is a detailed plaster cornice around the perimeter of the house with flowers, leaves and ribbon motifs. The plaster cornice is painted off-white to match the walls of the house. The plaster cornice is generally in good condition. There is some damage to the cornice above the house balcony.

There is a plaster proscenium arch around the house stage with flowers and fruit motifs. The plaster proscenium arch is painted coral with green/blue accents. The plaster proscenium arch is generally in good condition. There is some damage to the proscenium arch at stage level. The rose bud accent strips in the arch have buds missing.

The face of the house balcony has plaster embellishments and has been restored.

Completed

- Repair plaster cornice details where damaged.
- Plaster proscenium arch and details have been restored.

Conditions - April 2013

Current Conditions

Plaster proscenium arch detail

Plaster proscenium arch detail

Plaster detail on balcony face

The House Exit Stair - Plaster Ceiling

The ceiling of the stair addition on the north side of the house is damaged due to roof leaking above. The roof has been repaired and the plaster ceiling requires lath support and new plaster finish.

Work Scope

- Remove loose plaster and broken lath.
- Rebuild lath support and provide new plaster finish.

Studio Theatre - Plaster Ceiling

The plaster ceiling of the Studio Theatre has recently begun to fail. A large section of plaster approximately .6m x .6m dropped to the stage floor. The full extent of the plaster ceiling should be investigated for conditions by a plaster restoration specialist. This work is considered urgent to avoid potential further failure.

Work Scope

- Condition of plaster ceiling to be investigated.
- Ceiling restoration repairs to follow the investigation.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Plaster Walls	C Interiors	C30 Interior Finishes	1915	100
Description & Recommendation				
The plaster walls installed are original to the building and are exhibiting damage and loss. It is recommended that the plaster walls be refinished in the short term.				

Current Conditions

House Exit Stair damaged plaster ceiling.

Studio Theatre ceiling plaster missing (top centre white area).

Turret Exit Stairwells

The turret exit stairwells are finished with plaster throughout. Generally the plaster is in good condition. There is water damage to the plaster on either side of the main level exit doors in the north turret stairwell. The plaster has been patched over with drywall which also shows signs of water damage and deterioration, especially at the lower area at the exit door. The south turret stairwell has been repaired and is in good condition.

Remaining

- Remove patch repair and remaining plaster behind to find source of water and moisture. Perform test in north stairwell.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Gypsum Board Walls	C Interiors	C30 Interior Finishes	1980	75
Description & Recommendation				
The drywall within the building is largely intact with a coat of paint applied. The areas where damage was viewed was on the ground floor of the turrets where the emergency exits are located. The walls have holes and deterioration evident adjacent to the doorway. It is recommended that the damage be patched as part of building O&M. No replacement is expected to be required until the end of its effective useful life.				

2.1.2.5 PAINTING

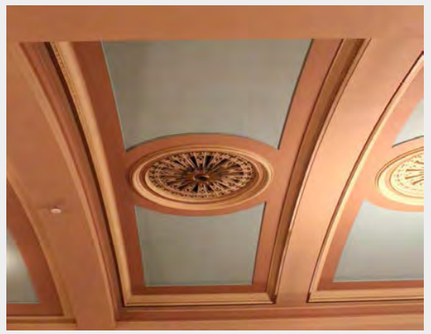
The House

Paint is in good condition on the ceiling, proscenium arch and balcony guard face. There is flaking paint on areas of the plaster walls and cornice. Cracks in the paint are generally associated with cracks in the plaster which are many as the windows behind telescope into the plaster. The colour scheme consists of offwhite fields with coral, light blue and yellow accents. The plaster decorated proscenium is highlighted with coral and a green/blue accent and has been repaired and repainted.

Remaining

- Conduct paint finishes investigation prior to plaster repair work on the walls and cornice to determine the earliest colour layers and propose heritage colour scheme.
- Prime and paint house in accordance with approved heritage colour scheme following plaster repair work.

Conditions - April 2013



Current Conditions

Turret stairwells at exit doors

Plaster cornice,

Panelled house ceiling,

Entrance Foyer and Stairwell

Generally the paint is in good condition throughout the entrance foyer and stairwell. Any cracks in the paint are generally associated with cracks in the plaster. The colour scheme consists of off-white ceilings, grey and yellow walls and maroon accents (baseboard and doors). There is a decorative flowered stencil finish throughout the foyer and stairwell and a glaze approximately half way up the wall.

Completed

- Conduct paint finishes investigation prior to plaster repair work to determine the earliest colour layers and propose heritage colour scheme.

Remaining

- Prime and paint entrance foyer and stairwell in accordance with approved heritage colour scheme.
- Further plaster investigation required and repair of cracks.

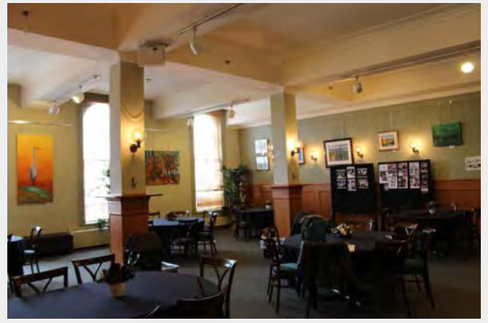
Green Room

Generally the paint is in good condition throughout the green room. The colour scheme consists of white ceilings and light green walls. There is a decorative flowered stencil finish, generally on the east and west walls.

Remaining

- Routinely check condition of paint in green room using a maintenance checklist.

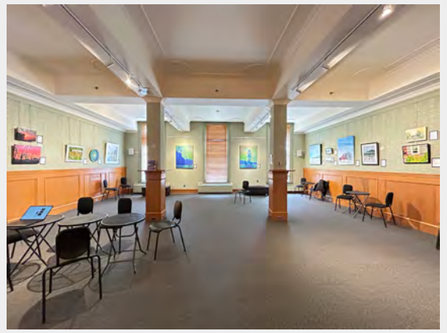
Conditions - April 2013



Current Conditions

Foyer Stairwell paint stencil deterioration.

Green room arch above doors leading to the Studio Theatre



Green Room

2.1.2.6 FLOORING

The House – Wood Flooring

The existing flooring in the house is thin tongue and groove wood boards. The wood boards are exposed between rows of seats to maintain a hard surface for improved acoustics. Repair work has been completed and maintaining the finish is all that is required. There are former wood patch 'fillers' on the main level remaining which appear incompatible with the grand theatre and should be replaced. The balcony wood flooring has been repaired and red carpet installed.

Completed

- Remove and replace previous patch repairs, repair damaged wood boards, refinish wood boards.
- Remove and replace existing cover for orchestra pit with wood to match the existing wood flooring.

Remaining

- Remove wood 'filler' pieces and provide wood repairs to integrate with existing.
- Refinish wood flooring with clear coat every few years based on wear.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Wood Flooring	C Interiors	C30 Interior Finishes	2015	70
Description & Recommendation				
The wood strips are intact and installed in an offset pattern. The clear coat finishing has begun to wear away, allowing the wood to be exposed. It is recommended that the floor be refinished in the short term. The flooring material is expected to last until the end of its expected useful life.				

The House - Carpet

Flooring for the main level of the house consists of stained and varnished tongue and groove wood boards (refer to Woodwork section regarding the wood flooring). Carpet covering the aisles has been removed. The carpet at the upper level is generally in good condition.

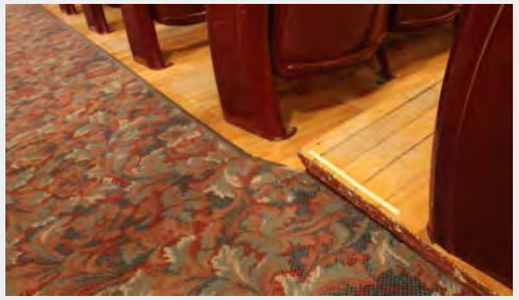
Flooring for the balcony consists of painted tongue and groove wood boards (refer to Woodwork section regarding the wood flooring) which has been covered with red carpet.

Remaining

- Add visually impaired warning strip at stair nosings of red balcony carpet.

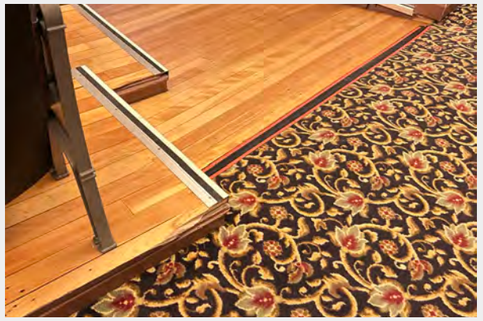
Conditions - April 2013

Terrazzo flooring at entrance to elevator in foyer



Current Conditions

House main level wood floor 'fillers'



House main level carpet,

Carpet at upper foyer and stairwell,

Stage - Pre-finished Panels

Stage flooring has been replaced with new panels. Maintenance required of taped seams and edging.

Completed

- Replacement of the stage floor finish.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Theatrical Stage	C Interiors	C30 Interior Finishes	2015	50
Description & Recommendation				
The stage uses finished panels as the flooring. The faces of the panels have areas of scratches and staining. It is expected that the stage will last until the end of its useful life. it is recommended that the damaged panels continue to be replaced as necessary.				

Entrance Foyer and Stairwell

Flooring for the entrance foyer consists of terrazzo on the main level and stairs with carpet covering the stairs and upper foyer.

There are cracks and previous repairs in the terrazzo. A portion of the flooring was also previously removed and/or damaged at the entrance to the elevator.

The flower motif roll carpet is in good condition.

Remaining

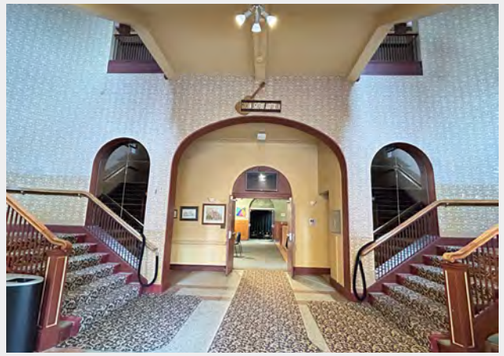
- Repair/restore terrazzo flooring where damaged and previously repaired throughout the entrance foyer.

Conditions noted in the BCA report are included in the table below				
Element Name	Level 1 Major Group	Level 2 Major Group Element	Vintage	Service Life
Terrazzo Concrete Flooring	C Interiors	C30 Interior Finishes	1915	100
Description & Recommendation				
The floor is original to the building and has many areas of settlement cracking. The face is smooth with some chipping visible. It is recommended that the flooring be repaired in the short term. Due to the historical nature of the building it is highly recommended that the governing historical society be consulted with prior to undertaking any work.				

Conditions - April 2013

Current Conditions

Stage flooring



Entrance Foyer and Stairs

Terrazzo flooring in entrance foyer

3.0 OPINION OF COST

3.1 PRIORITIZED CONSERVATION WORK

IMMEDIATE (SHORT TERM)
These existing conditions represent priorities for immediate action (1-2 years).

	EXTERIOR	Condition	Reference Notes	Cost 2025
1.	**Entrances**			
	Areas of damage and missing stones at the interlock pathway around the building perimeter. (OBC requirements for accessibility.)	Poor	OBC Requirements, BCA Report	$36,800
	East - Remove and replace existing concrete steps and existing metal railings. 11.82 sq.m./127.23 sq.ft.	Poor	OBC Requirements, BCA Report $3,800	$20,000
	South (Administration) - Remove and replace cracked and broken brick (75).	Poor		$7,500
	South - Cut out cracked, loose and missing mortar joints and repoint.	Poor	See Masonry	incl.
	Entrances Subtotal			**$64,300**
2.	**Masonry + Foundations**			
	Masonry brickwork requires repointing and some bricks/stone replacement where in poor condition.	Poor	BCA Report	$78,000
	Masonry + Foundations Subtotal			**$78,000**
3.	**Roofing**			
	Main Roof - Missing slate tiles to be replaced. It is recommended that extra tiles to be ordered for future repairs.	Good	BCA Report	TBD
	Built-up Roof Assemblies - Roofing replacement recommended in the short term due to extent of deteriorated conditions and water pooling.	Poor	BCA Report	$60,900
	Roofing Subtotal			**$60,900**
4.	**Windows + Doors**			
	House window replacement to align with interior plaster restoration. 20 units in total. (North and South Elevations)	Poor		$464,000
	Vinyl Window Replacements - Vinyl and other windows have been installed in 2012 are deteriorated and leaking. Replacement is required in the medium term in the BCA report. (20)	Poor	BCA Report	$50,700
	South Elevation - Windows (6) filled with wood to be replaced to match original design.	Poor		$12,000
	West Elevation (Farmer's Market Entrance) - Restore painted wood door units. Note the 2024 BCA describes these as hollow metal door units.	Fair	BCA Report	$27,300
	Doors + Windows Subtotal			**$554,000**
	EXTERIOR RESTORATION SUBTOTAL			**$757,200**

	INTERIOR		Reference Notes	Cost 2025
1	**Masonry**			
	Parging on basement stone walls is stained and cracked in areas. Finishing replacement recommended in the short term.	Poor	BCA Report	$6,000
	Interior Masonry Subtotal			**$6,000**
2	**Woodwork - See Medium Priorities List**			
3	**Windows + Doors**			
	House former fire escape doors and windows – Remove the infill panels on the interior side of the house to determine the composition of the infill beyond the interior wall panels; fill openings with brick masonry; cover the brick masonry with plaster or gypsum board with carefully detailed recesses reflecting the original window pattern.		Refer to Plaster	incl.
4	**Plaster**			
	Auditorium house walls have areas in poor condition. Exterior window frames are visibly telescoping into the plaster causing damage. Testing recommended to identify source and extent of deterioration and cause.	Poor	Updated Conditions	$3,000
	House plaster walls - Remove/cut back deficient (loose, cracked, and /or missing plaster) and replace with new to match the existing / adjacent plaster. (200sq.m. wall area + $80k scaffolding)	Poor		$520,000
	House plaster cornice is damaged and missing in one area. Identified as an immediate priority along with the auditorium plaster walls.	Poor		$10,000
	House Exit Stair #116 - Stair addition ceiling is peeling and open in areas.	Poor		$5,000
	Foyer Walls at Staircase - Wallpaper is peeling from the wall along the seams and edges, as well as damage and some material loss. Material to be repaired in the short term.	Poor	BCA Report	$16,100
	Studio Theatre - Plaster ceiling breach in areas requires repair. Review source of issue and extent of repair. (4 sq.m. budget)	Poor	TBD	$6,000
	Plaster Subtotal			**$560,100**
5	**Painting**			
	Prime and paint house walls in accordance with approved heritage colour scheme following the plaster repair work.			**$60,000**
6.	**Carpet and Flooring**			
	House Wood Flooring - repairs have been made. The BCA report notes that finish is wearing and floor should be refinished in the short term.		BCA Report (no cost provided)	$10,000
	House Balcony - Carpet replaced, nosing strips to be added to treads.			$3,000
	Carpet and Flooring Subtotal			**$13,000**
	INTERIOR SUBTOTAL			**$639,100**
	RESTORATION CONSTRUCTION TOTAL EXCLUDING HST			**$1,396,300**
	Contingency (15%)			$ 209,445
	Division 1 + OH/P (20%)			$ 279,260
	TOTAL ESTIMATED BUDGET EXCLUDING HST			**$1,885,005**

Note: Escalation is currently estimated at 4% as per Hanscomb's Yardsticks for Costing 2025. 4% should be added to construction starting in 2026.

MEDIUM TERM
These existing conditions represent priorities for medium-term action (3-5 years).

EXTERIOR		Condition	Reference Notes	Cost 2025
1.	**Entrances**			
	South - Bus Driver space entryway awning is a metal roof on wood framing with localized damage of the wood. Refinish.	Poor	BCA Report	$3,800
	South - Remove and replace existing entrance door, sidelight and glazing window. Provide support to brick arch with face brick and masonry backup. Provide new lintel over the opening.	Poor	BCA Report	$21,000
	North /West (Former Market Entrance) - Remove and replace existing pre-painted metal flashings.	Poor		$30,000
	North /West (Former Market Entrance) - Remove paint on wood trussed canopies back to bare wood. Cut back all deteriorated and damaged wood and apply epoxy consolidant. Prime and paint wood-trussed canopies to match heritage colour scheme.	Poor	BCA Report	$10,100
	North/West (Farmer's Market Entrance) - Replace exterior hollow metal door units.	Fair	BCA Report	$27,300
	Entrances Subtotal			**$92,200**
2.	**Masonry + Foundations**			
	Main stage area slabs are visible. The reinforced materials was unfinished and contained holes and damage from use over time. Major slab repairs are expected in the medium term.	Poor	BCA Report	$222,300
	Exterior brickwork shows signs of settlement and shifting. Testing required to determine cause for shifting. Repointing and damaged bricks to be replaced.	Poor	BCA Report	$66,300
	Masonry cleaning: remove miscellaneous nails and fasteners, replace brick and repoint where brick has been damaged. Repair and refill holes. Remove efflorescence and staining on west and north elevations.	Poor		$25,000
	Brick masonry replacement. (Allow for 5% brick replacement on all elevations.)	Poor		$135,000
	Repointing, including removal and fill at fasteners, repair of cracks and replacement of previous incompatible repairs. 1) Repoint the brick masonry piers and fields above the corbel banding 100%; 2) Provide 10% general repoint on all elevations.	Poor		$150,000
	Masonry + Foundations Subtotal			**$598,600**
3.	**Roofing**			
	South Stair Tower - Remove and replace pre-painted metal rainwater leader.	Poor		$5,000
	North /West (Former Market Entrance) - Remove and replace the existing pre-painted aluminum eavestroughs and downspouts.	Fair		$20,000
	Roofing Subtotal			**$25,000**
4.	**Windows + Doors**			
	East Elevation - Fixed windows (3) wood restoration (above entrance addition).	Fair/Poor		$1,800
	East Elevation - Front entrance doors in glass with wood frame weathering. Door to be replaced in medium term.	Fair		$14,800
	South Elevation - Metal louvre replacement.	Poor		$1,500
	West Elevation - Door restoration (loading bay)	Poor		$1,500
	Doors + Windows Subtotal			**$19,600**
	EXTERIOR RESTORATION SUBTOTAL			**$735,400**

INTERIOR			Reference Notes	Cost 2025
1	**Masonry**			
	Basement Fan Room 005 - Remove efflorescence from interior brick masonry.	Good		$1,000
	Mechanical Room 501 – Remove efflorescence from interior brick masonry.	Good		$1,000
	Original brickwork has missing deteriorating or damaged bricks. Repointing and replacement of severely deteriorated bricks recommended.	Poor	BCA Report	$951,000
	Interior Masonry Subtotal			**$953,000**
2	**Woodwork**			
	Wood base board - Repair the wood base board where damaged and refinish in accordance with the heritage colour scheme for the room.	Poor		$7,500
	Wood base board - Revise configuration of wood base board to properly accommodate the stairs flanking the balcony seating	Poor		$6,000
	Wood casements and panelling – Repair the wood casements and panelling where damaged, and refinish as required.	Good		$2,400
	Wood casements and panelling – Reset wood panelling at Exit #2.	Good		$1,500
	Wood casements and panelling – Provide new wood casement at Exit #2 to match those around the other exit doors in the house.	Good		$1,500
	Wood dado trim – Modify the existing wood dado trim to accept / conceal the electrical wires and data cabling.			$25,000
	Interior Woodwork Subtotal	Good		**$43,900**
3	**Windows + Doors**			
	Studio theatre former windows – Remove the infill panels on the interior side of the studio theatre to determine the composition of the infill beyond the interior wall panels; fill openings with brick masonry; cover the brick masonry with plaster or gypsum board with carefully detailed recesses reflecting the original window	Fair		$30,000
	Windows + Doors Subtotal			**$30,000**
4	**Plaster**			
	Turret Stairwells - Repairs have been completed however there are signs of damage on the north turret lower walls at the door. Testing required to determine source of water.			$3,000
	Plaster Subtotal			**$3,000**
5	**Painting**			
6.	**Carpet and Flooring**			
	Entrance Foyer - Repair/restore terrazzo flooring where damaged and previously repaired. (Budget amount $10k)			$10,000
	Carpet and Flooring Subtotal			**$10,000**
	INTERIOR SUBTOTAL			**$1,039,900**
	RESTORATION CONSTRUCTION TOTAL EXCLUDING HST			**$1,775,300**
	Contingency (15%)			$ 266,295
	Division 1 + OH/P (20%)			$ 355,060
	TOTAL ESTIMATED BUDGET EXCLUDING HST			**$2,396,655**

Note: Escalation is currently estimated at 4% as per Hanscomb's Yardsticks for Costing 2025. 4% should be added to construction starting in 2026.

LONG TERM
These existing conditions represent priorities for long-term action (6-10 years).

	EXTERIOR	Condition	Reference Notes	Cost 2025
4.	**Windows + Doors**			
	South Elevation - Glass entrance door used as staff access will require replacement in the long term.	Fair	BCA Report	$21,000
	Exterior Wood Doors - located on north , south and west elevations to be refinished.	Poor	BCA Report	$6,300
	Sealants/caulking required at most unit edges. To be reviewed annually.	Fair	BCA Report	$1,000
	Doors + Windows Subtotal			**$28,300**
	EXTERIOR RESTORATION SUBTOTAL			**$28,300**
	INTERIOR		**Reference Notes**	**Cost 2025**
3	**Windows + Doors**			
	House stage access door – Replace hollow metal stage access door with a panelled door to match the existing door for the fire hose cabinet on the north side of the main stage.			$2,500
	House stage access door – Relocate the flight of stairs for access to the stage to the interior side of the door.			$18,000
	Windows + Doors Subtotal			**$20,500**
	INTERIOR SUBTOTAL			**$20,500**
	RESTORATION CONSTRUCTION TOTAL EXCLUDING HST			**$48,800**
	Contingency (15%)			$ 7,320
	Division 1 + OH/P (20%)			$ 9,760
	TOTAL ESTIMATED BUDGET EXCLUDING HST			**$65,880**

Note: Escalation is currently estimated at 4% as per Hanscomb's Yardsticks for Costing 2025. 4% should be added to construction starting in 2026.

APPENDIX

Appendices

A1.0 Provincial Heritage Properties

A2.0 Heritage Designation By-Law

A3.0 Building Condition Assessment (BLDG Sci 2024)

A4.0 Building Floor Plans

A5.0 Building Elevations

APPENDICES

APPENDIX A

STANDARDS AND GUIDELINES FOR THE CONSERVATION OF PROVINCIAL HERITAGE PROPERTIES

A. General Provisions

Ministries and prescribed public bodies shall:

A.1. Recognize, manage, and use provincial heritage properties as assets that can support ministry or public body mandates and contribute to the social and economic well-being of Ontario's communities.

A.2. Be accountable for all decisions affecting the cultural heritage value of property in their care and shall integrate provisions for conserving provincial heritage properties into decision-making processes in property planning and asset management.

A.3. Base decisions affecting a provincial heritage property on appropriate studies and research (including analysis of physical, documentary, and oral evidence), aimed at understanding the property's cultural heritage value, including its level of significance (e.g., local, provincial, etc.), the impact of proposed activities on its cultural heritage value and heritage attributes, and measures to mitigate these impacts.

A.4. Engage groups and individuals with associations to a provincial heritage property by providing them with opportunities to participate in understanding and articulating the property's cultural heritage value and in making decisions about its future.

A.5. Establish and maintain a cultural heritage conservation policy and procedure(s) for identifying and managing provincial heritage properties, including objectives and targets and a commitment to continual improvement. The policy and procedure(s) should be available for review by the public.

A.6. Follow their cultural heritage policy and procedure(s) in complying with these Standards and Guidelines.

B. Identification and Evaluation

Ministries and prescribed public bodies shall:

B.1. Apply the "Criteria for Determining Cultural Heritage Value or Interest" set out in Ontario Regulation 9/06 under the Act as amended or replaced from time to time (see Appendix A) to determine the cultural heritage value or interest of a property; and apply the "Criteria for Determining Cultural Heritage Value of Provincial Significance" set out in Ontario Regulation 10/06 as amended or replaced from time to time (see Appendix B) to determine whether a property is of provincial significance.

B.2. Develop an evaluation process to identify provincial heritage properties, consisting of the general sequence of events and actions set out below, and submit the process to the Ministry of Tourism and Culture for approval.

a. Prepare a description of the property.
b. Gather and record information about the property sufficient to understand and substantiate its heritage value.

c. Determine cultural heritage value or interest, including potential provincial significance, based on the advice of qualified persons and with appropriate community input. If the property meets the criteria in Ontario Regulation 9/06, it is a provincial heritage property. If the property meets the criteria in Ontario Regulation 10/06, it is a provincial heritage property of provincial significance.
d. Document the identification process with a written account of the research and the evaluation.

e. For each provincial heritage property, prepare a Statement of Cultural Heritage Value and a description of its heritage attributes. In reviewing and approving a ministry's or public body's evaluation process under this section the Ministry of Tourism and Culture shall take into account the mandate of the ministry or public body and its cultural heritage conservation policy.

B.3. As they are identified, add properties to the list of provincial heritage properties maintained by the Ministry of Tourism and Culture, in order to ensure that decision-makers, asset managers, and the public know the extent and nature of the provincial heritage properties in the control of each ministry and prescribed public body (including whether a property has been evaluated as being of local or provincial significance).

B.4. If a ministry or prescribed public body has not evaluated a property in its care or control, and if that property contains a building or structure that is 40 or more years old, then the ministry or prescribed public body shall:

a. prevent the building or structure from undergoing demolition by neglect; and
b. obtain the consent of the Minister of Tourism and Culture before removing or demolishing the building or structure, or before transferring the property from provincial control. Property, for purposes of this provision, excludes unpatented Crown land unless the land is within a provincial park or conservation reserve, or is being considered for development, change in use or disposal.

C. Protection

Ministries and prescribed public bodies shall:

C.1. For identified provincial heritage properties, prepare a Strategic Conservation Plan to provide guidance on conserving, maintaining, using and disposing of them. For each provincial heritage property of provincial significance, submit the Strategic Conservation Plan to the Ministry of Tourism and Culture for approval.

C.2. Place records associated with identifying and conserving a provincial heritage property in a permanent archive and make information about provincial heritage property publicly accessible, observing security, privacy and other requirements.

C.3. Protect archaeological sites by conserving them in their original location or through archaeological fieldwork. Endeavour to conserve significant archaeological resources in their original location through documentation, protection, and avoidance of impacts. Where activities could disturb significant archaeological resources or areas of archaeological potential, take appropriate measures to mitigate impacts.

C.4. Ensure that only archaeologists licensed under Part VI of the Ontario Heritage Act will conduct archaeological fieldwork on provincial heritage property.

D. Maintenance

Ministries and prescribed public bodies shall:

D.1. Maintain provincial heritage properties through continuous care, guided by the property's Statement of Cultural Heritage Value and Strategic Conservation Plan.

D.2. Repair or conserve, rather than replace, building materials and finishes and other components that are part of a provincial heritage property's heritage attributes. Apply a minimum intervention approach that protects the cultural heritage value of the property.

D.3. Retain and maintain the visual settings and other physical relationships that contribute to the cultural heritage value of a provincial heritage property. Ensure that new construction, visual intrusions, or other interventions do not adversely affect the heritage attributes of the property.

D.4. If changes that may adversely affect a provincial heritage property's cultural heritage value are proposed for purposes of compliance with health and safety requirements, obtain advice from qualified persons on compliance alternatives or reasonable variances that protect cultural heritage value while satisfying health and safety objectives.

D.5. In maintaining provincial heritage properties, consider energy-efficiency technologies and energy saving practices and incorporate them in ways that do not adversely affect cultural heritage value. Make decisions on energy saving measures based on the total environmental cost of proposed changes compared to the total environmental cost of retaining existing features.

E. Use

Ministries and prescribed public bodies shall:

E.1. Where the use of a provincial heritage property is significant or of long standing, and the property has cultural value or interest because of that use, apply best efforts to continuing that use.

E.2. When an existing use of a provincial heritage property ends, or the property is no longer fully used, or any part of the property becomes surplus to the needs of the occupant, apply best efforts to arrange for an alternate use of the property that requires minimal or no change to its heritage attributes(adaptive reuse).

E.3. Apply best efforts to avoid uses which adversely affect the cultural heritage value of a provincial heritage property.

E.4. Give preference to using existing built heritage resources over constructing or leasing new space for accommodation needs, if those needs can be met without adverse impact on the cultural heritage value of a provincial heritage property. In accommodation design and space planning, respect and reinforce the heritage attributes of the property.

E.5. In implementing accessibility standards made pursuant to the Accessibility for Ontarians with Disabilities Act, 2005, balance accessibility needs with the need to conserve the cultural heritage value of provincial heritage properties, with the objective of providing the highest degree of access with the lowest level of impact on the heritage attributes of the property. Determine appropriate solutions by consulting qualified persons as well as affected users.

E.6. Ensure that the cultural heritage value or interest of a provincial heritage property is appropriately interpreted and presented to communicate its meaning and to enhance public understanding and enjoyment.

F. Disposal

Ministries and prescribed public bodies shall:

F.1. Where an adaptive reuse cannot be found within a reasonable period, take timely steps to mothball or otherwise dispose of the property.

F.2. If a provincial heritage property is to leave provincial control, use best efforts to the extent possible in law to ensure the ongoing, legally binding protection of the property's cultural heritage value (such as designation under Part IV of the Act, heritage conservation easement, etc.) in any sale or other disposal agreement. The level of protection should be appropriate to the cultural heritage value of the property.

F.3. Make provisions for effective protection of heritage attributes when granting leases, licenses, rights, or operating agreements affecting provincial heritage property.

F.4. All other alternatives having been considered, consider removal or demolition as a last resort, subject to heritage impact assessment and public engagement. Use best efforts to mitigate loss of cultural heritage value.

F.5. In the case of a provincial heritage property of provincial significance, obtain the consent of the Minister of Tourism and Culture before removing or demolishing buildings or structures on the property, or before transferring the property from provincial control. The Minister may grant consent, with or without conditions, where the Minister is of the

opinion that all alternatives to the removal, demolition or the transfer of the property have been considered by the Ministry or the prescribed public body requesting consent, including alternatives that would not adversely affect the property, and the best alternative in all the circumstances has been adopted. The Minister, as a condition of consent, may require that such reasonable steps as the Minister may specify be taken to minimize or mitigate adverse effects on the property resulting from the removal, demolition or the transfer of the property.

F.6. When disposing of property considered to contain an area of archaeological potential, take appropriate measures to notify future owners, tenants or licensees of the existence of archaeological potential.

BY-LAW NUMBER 1978-294 OF THE CITY OF ORILLIA

A BY-LAW TO DESIGNATE THE OPERA HOUSE AS BEING OF ARCHITECTURAL AND HISTORICAL VALUE OR INTEREST.

WHEREAS the Ontario Heritage Act, 1974, authorizes the Council of a municipality to enact by-laws to designate real property, including all buildings and structures thereon, to be of architectural and historic value or interest; and

WHEREAS the Council of the Corporation of the City of Orillia has caused to be served on the owners of the lands and premises known as the Opera House and upon the Ontario Heritage Foundation, notice of intention to so designate the aforesaid real property and has caused such notice of intention to be published in the same newspaper having general circulation in the municipality once for each of three consecutive weeks; and

WHEREAS no notice of objection to the proposed designation has been served on the Clerk of the municipality;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE CITY OF ORILLIA HEREBY ENACTS AS FOLLOWS:

1. THAT The Opera House, more particularly described in Schedule "A" attached hereto, be and it is hereby designated as being of architectural and historic value or interest.

2. THE Clerk is hereby authorized to cause a copy of this by-law to be registered against the property described in Schedule "A" attached hereto in the Registry Office for the division of Simcoe.

3. THE Clerk is hereby authorized to cause a copy of this by-law to be served upon the owner of the aforesaid property and on the Ontario Heritage Foundation and to cause notice of the passing of this by-law to be published in the same newspaper having general circulation in the municipality once for each of three consecutive weeks.

BY-LAW read a first, second and third time and finally passed this 11th day of September A.D. 1978.

MAYOR

DEPUTY CLERK

SCHEDULE "A" TO BY-LAW NUMBER 1978-294 OF THE CITY OF ORILLIA

ALL AND SINGULAR that certain parcel or tract of land and premises situate, lying and being in the City of Orillia, in the County of Simcoe, and being composed of part of Market Block as shown on a Plan registered in the Registry Division for the County of Simcoe as Plan No. 180, described as follows:

COMMENCING at the intersection of the Northerly limit of Mississaga Street and the Westerly limit of West Street (Northwest corner of Mississaga Street and West Street);

THENCE Northerly 125 feet along the Westerly limit of West Street to a point;

THENCE Westerly along a line parallel to Mississaga Street a distance of 182.75 feet to a point;

THENCE Southerly in a line parallel to West Street 125 feet to a point;

THENCE Easterly along the North limit of Mississaga Street a distance of 182.75 feet to the POINT OF COMMENCEMENT.

IN THE MATTER OF The Ontario Heritage Act, 1974

-and-

IN THE MATTER OF By-law Number 1978- , a by-law to designate certain property pursuant to the Act.

REASONS FOR DESIGNATION

THE ORILLIA OPERA HOUSE

HISTORY

November 26th, 1895 was the date of the opening ceremonies of the newly built Opera House with the presentation of Henrich Ibsen's play "The Doll's House" starring Miss Julia Stewart. The new Opera House was to bring about a cultural change to the town of Orillia, and it's castle-like appearance gave the small town an air of grandeur. The City fathers in their optimism called the building "City Hall" and it was not until 70 years later that Orillia became a City.

For the next 20 years, the Opera House served as a Town Hall, theatre, market, municipal offices, and a police station with a jail cell. It housed touring shows, political rallies, and silent movies. In 1915 the Opera House was gutted by fire and reopened two years later. Until the mid-twenties the Opera House continued to be a centre of local culture then live entertainment gave way to films. Local groups would still gather at the Opera House but the building became primarily a cinema for the latest Hollywood films until the Geneva Theatre in Orillia opened its doors in the early 1940's. During the Second World War a platoon of the 177th Battalion was billeted in the basement of the Opera House.

With the forming of the Mariposa Arts Theatre in 1971, the Opera House provided a stage for three or four amateur plays and musicals per year. The Opera House received another boost when the Festival of Humour Corporation was started in 1974 - producing annually, a week long celebration of variety stage shows performed by Canadian comedians. This new surge of interest precipitated the plans for complete restoration under the guidance of the Opera House Restoration Foundation.

ARCHITECTURAL FEATURES

Exterior

1. twin turrets with slate roofs and "climbing" windows.
2. carved turret finials (peak of roof).
3. carved cornice detailing at turret eaves and above each of the three upper windows in each turret.
4. date stones and building name plate at parapet of main foyer.
5. market canopy on north and west walls.
6. brick detailing - corbelling at top of piers, arches over windows, patternwork on wall between two turrets.
7. three birch trees on Mississaga Street.

Interior

1. two arched ticket windows in main foyer.
2. ornate wooden casements around two rear theatre exits.
3. plaster carvings around procenium opening.
4. segmental ceiling consisting of a series of 18 recessed panels and plaster cornice at junction of ceiling and wall.
5. plaster insets on balcony face and large brass balcony rail.

DATED the 11th day of September, 1978

THE CORPORATION OF THE CITY OF ORILLIA

BY-LAW NUMBER 1978-294

A By-law to designate the Opera House as being of Architectural and Historical value or interest

650875

No.
Registry Division of Simcoe (No. 51)
I CERTIFY that this instrument is registered as of
2:12 P.M.
SEP 27 1978 in the
and
Registry Office
at Barrie,
Ontario.
REGISTRAR

MARSHALL, RUSSELL, WAITE & CHRISTIE
Barristers and Solicitors
76 Coldwater Street East
Box 158
Orillia, Ontario
L3V 6J3

10.00

Building Condition Assessment
Orillia Opera House

Prepared for:
City of Orillia
Orillia Opera House
20 Mississaga St West
Orillia, Ontario
Canada, L3V 3A6

Prepared by:
BLDG Sci Advisory Inc.
868 Glenwood Ave
Burlington, Ontario
Canada, LT7 2J9

April 30, 2024

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Third-party disclaimer

Contract Client Reference

BLDG Sci was retained by City of Orillia to conduct a Building Condition Assessment for the Orillia Opera House, located at 20 Mississaga St West in Orillia, Ontario, Canada and operated by City of Orillia. The contractual relationship exists between BLDG Sci and the City of Orillia.

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Executive Summary

BLDG Sci Advisory Inc. (BLDG Sci) was retained by the City of Orillia to complete a Building Condition Assessment at **Orillia Opera House** located at 20 Mississaga St West in Orillia, Ontario, Canada (Facility).

The Building Condition Assessment was conducted so the City of Orillia can better understand the true condition of its facility and any underlying issues of concern that require attention in the short term. A walk-through non-invasive site visit was conducted in accordance with the ASTM E2018-15 Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process.

The purpose of the visual assessment was to provide an overview of the present condition of the major components of the Site building and Site features, and to present an opinion of probable cost (order of magnitude) to better predict the long term (25-year horizon) capital requirements needed to maintain the Site in an efficient, functional, and structurally sound condition and in compliance with all applicable codes. The report did not identify any immediate areas of concern.

The report tabulates what funds in 2024 Dollar (-) are recommended to be held in reserve in the:

- Immediate;
- Short term (1-4 years);
- Medium term (5-10 years); and
- Long term (11-25 years).

Architectural & Structural Executive Summary

The Orillia Opera House has had major structural or architectural renovations since its original erection in 1915. It had an expansion occur in the 1950s and an entry vestibule addition in the 1980s. The property is considered a historic building, and as such, has guidelines it must maintain when making updates and repairs. The building has ongoing upgrades occurring every year based on the available funding. Based on the visual review of the site, the building is in a functional state with any identified deficiencies indicated in this report.

The building foundation consists of masonry blocks and poured concrete supported on footings. The building has a brick and stone facade, plaster, brick, and drywall interior walls, and a mix of tile, concrete, carpet, and wood flooring finishes. The roof structure was able to be viewed and is comprised of mechanically fastened metal beams and wood which support the roofing decks. The shingle roof assembly has damage and deficiencies that include vegetative growth and lifting, while the strip asphalt is worn and includes multiple areas of desiccation and bulling. The slate roof was largely redone in 2021 and was found to have areas of missing tiles. The overhang by the market room is still utilizing the original slate tiles and are visibly worn and degrading.

The exterior walls of the structure is clad with bricks and stones. There are areas of concern identified and includes brick degradation, brick loss, and shifting of the walls. The exterior wood and glass entry doors act as the main ways visitors enter/leave the building. The remaining metal exterior doors provide additional egress for patrons and personnel. The doors were operational and seen to have weathering and rust, a well as exhibit areas of gapping along their edges. This allows for communication between the interior and exterior environments.

The walls within the building consist of largely masonry/stone in the basement and plaster, brick and block, and drywall in the remaining areas. The walls have areas of damage and material loss from use over time, including cracking and flaking of the plaster wall in the large theatre space. The painted wall finishings have minor areas of chipping and the wallpaper is adhered well with minor peeling within the small theatre and grand stairwell space.

The ceiling of the building is largely plaster with areas of acoustic tiles and drywall as its covering. The plaster is generally original with the large theatre space having been redone in 2017. The remaining ceiling finishes are intact overall, with some locations having localized damage or staining present. No areas of major concern were identified. The floor finishes within the facility include largely concrete and vinyl flooring material, as well as carpeting, tile, and wood. The wood floors have areas of sealant loss and wearing from use overtime and the vinyl flooring has areas of loss, exposing the mastic below it. This mastic is typically asbestos containing according to the supplied DSS report.

During the assessment, some parts of the structural components were concealed by interior furnishings and equipment. Overall, no major structural deficiencies were noted for the building.

Plumbing Executive Summary

Main incoming water enters the building through an uninsulated pipe located in the basement on the east end near transport services. The water service is metered and equipped with shut-off valves and a backflow preventer. Copper piping is used as the primary means of domestic water distribution. Upgrades to portions of the distribution piping occurs during equipment upgrades such as bathroom renovations (circa 2013) and DHW heater replacement (circa 2020). The majority of pipe lengths are insulated with pipe wrap to prevent heat loss and condensation, as well to reduce noise transmission. The assessment noted a combination of chrome brass and PVC drain piping present under sinks with braided stainless steel water lines to faucets. There is no evidence to suggest any immediate issues with the domestic water distribution piping. The facility experiences water leaks at infrequent intervals and conducts repair as necessary. Overall, the domestic water distribution is in fair condition, however the infrastructure is aging and will require increased corrective maintenance with time. A cost for complete replacement is provided in the medium term.

Storm water from roof and area drains is collected in drain stacks and transported by gravity to the municipal sewer system. The existing drainpipes are cast iron piping/fittings. A portion of the drain stack was viewed in the crawl space under the south stairs to the Lightfoot Gallery. The section is in a deteriorating condition with staining from water residue and moderate rust formation present. We assume the condition is representable drain piping throughout the facility and recommend replacement with PVC drainpipes in the medium term.

Domestic Hot Water (DHW) for the Building is provided by a 4.5 kW heater/tank manufactured by Bradford White. The unit (model RE265T6-1NCWW) has a 2020 vintage and a 231 Litre (61 USG) capacity. There is no evidence of rust, corrosion, or leaks from the tank, and it is in good condition overall. Pipe insulation should be applied on distribution lines to reduce heat loss. Replacement is anticipated in the medium term and end of expected useful life.

Facility washrooms consists of a total of fourteen (14) sinks, twenty (20) toilets, and two (2) urinals. Renovations to washrooms occurred circa 2013 with the majority of components upgraded at that time. Plumbing fixtures in the Green Room Washrooms are unique in regard to components containing sensor activated flush and flow valves. Deficiencies reported include insufficient capacity to support high volume venues. Overall, the flush and flow fixtures are in fair condition. Replacements can be deferred until next bathroom renovation. Action is anticipated in the medium term.

A one-piece 'roll-in' fiberglass shower stall is located in the 2nd floor Dressing Room Area. The unit equipped with a shower head, thermostatic control valve, drain, "grab-bars", a basic shower curtain, and a foldable seat. It is AODA complaint and in good condition. Replacement is not anticipated in the next 15 years.

There are stainless steel sinks present in the Green Room (single bowl) and the Farmer Market (single bowl & double bowl). The sinks are in fair condition. Sink replacement is anticipated in the long term

and replacement of faucets are anticipated to occur on an as fail basis and to be covered under the O&M budget.

Four (4) service sinks are located on site. There is a free-standing utility sink located backstage of the Lightfoot Theatre. Floor mounted fiberglass wash basins are located in the Studio Theatre Custodial closet and in the basement near AHU-4. There is a wall mounted cast iron tub located in the basement near the boilers. All the units are scuffed and stained from heavy use. Replacements are recommended on an as fail basis. Action is anticipated in the medium term.

There are two (2) cold water Elkay drinking fountains in the facility with a unit in the Green Room and another located in the 2nd floor Dressing Room area. The water fountains are in very good condition and have a 2022 vintage. Replacement is anticipated in the long term.

There is a cold-water Oasis-brand drinking fountain in the lobby. The water fountain (model FLF100-001) is in fair working condition and has a 1998 vintage. Replacement is anticipated in the medium term on an as-fail basis.

Two (2) sumps are located in the basement serving the elevator pit which are automatically controlled via a Duplex waterproof control panel (model BF120D). Typical expected useful life is 10 years. Replacement is recommended on an as-fail basis. Action is anticipated in the short term.

One (1) sump pump is located in the basement for stormwater and is connected to the sanitary sewer. The sump is automatically controlled via a wall mounted panel equipped with a high-level alarm. Documentation posted on a nearby wall indicates the sump is a Hydromatic Pump (model SW25A) with a 1991 vintage. The sump is operating beyond its expected useful life and replacement is recommended in the immediate term.

At the time of the site investigation, there was no evidence to suggest any immediate issues with the sanitary drainage and vent system. However, the system could not be accurately assessed due to the concealed location. To evaluate the integrity of the sanitary and storm piping, a camera could be used to route through the piping.

Mechanical Executive Summary

The building mechanical systems range from poor to good. Mechanical upgrades occurred between 2017 and 2020 which modernized the majority of Heating, Ventilation, and Air Conditioning (HVAC) serving the Opera House.

All critical HVAC components are controlled by a Honeywell Building Automation System (BAS). The graphical interface includes real-time troubleshooting, advanced alarming, reporting, and remote connectivity. Building operators noted the Furnace and AHU-4 require manual engagement to switch from heating to cooling, and vice-versa. Overall, the BAS system is in good condition. Expected useful life is 20 years for controls and instrumentation systems. Replacement is anticipated in the long term.

The building contains a central heating plant located in the basement which is comprised of three (3) hydronic boilers. B-1 & B-2 are rated at 310 MBH (model Ultra 310) and B-3 is rated at 230 MBH (model Ultra 230). The units have a 2017 vintage and are in good condition. Replacement is recommended in the long term at end of expected useful life. The heating plant serves the hydronic radiators, plate & frame heat exchanger (serving AHU-4), and heating coil in AHU-5.

Each boiler is equipped with a fractional horsepower (HP) circulation pump. Hot water distribution throughout the facility (i.e. the heating loop) is served by three (3) fractional HP pumps. Pumps failures can be handled as necessary with replacement anticipated in the medium term.

Hot water radiators in assembled enclosures (including finned-tube radiation, convectors, and cabinet heaters) are located throughout the building in areas such as the stage, theatre, dressing rooms, washrooms, offices, turrets, studio, and greenroom. Exact vintage of the hydronic heating systems is not known and suspected to be 50+ years old. The units are connected to the Building Automation System with control valves converted from pneumatic to Direct Digital Control (DDC) circa 2018. The enclosures are in fair condition with the exception of loose and/or bent cover panels. Radiator fins have debris (dirt, dust, garbage, hair, etc.) buildup and we recommended the enclosure cover be removed and any visible debris inside the unit cleaned using a vacuum, soft brush or even a steam pressure cleaner. If any of the fins are bent or damaged, they should be straighten using a pair of needle-nose pliers, metal scrapper or putty knife. Oxidation and rust buildup is visible on the exterior side of distribution piping. Inefficiencies with system performance is likely a result sediment accumulation and corrosion from inside the pipe network. Based on the current age of the hydronic radiators, failures are anticipated (such as pin hole leaks), and in order to address multiple failures and repairs, complete replacement of heating distribution piping and radiators is recommended in the short term.

The primary ventilation needs of the building is provided via four (4) Air Handling Units.

AHU-5 is worst for wear. It serves the green room and is estimated to be 40 years old. The Constant Air Volume (CAV) Trane Climate Changer (model 8MP-HFFVU) is equipped with two (2) Direct Expansion (DX) cooling coils, a hot water heating coil (served by the Weil-McLain boilers), a 3 horsepower (HP) supply fan, and a 1 HP return fan. Exact vintage of AHU is unknown. Individual component parts are replaced through ad-hoc and routine maintenance procedures (fan belts, motors, filter banks, pump for heating coil, etc.). Modifications to convert the unit to Direct Digital Control (DDC) occurred during implementation of the BAS. Overall, the unit is aging, in poor condition, and receives recurrent maintenance to remain operational. Replacement/refurbishment is anticipated in the immediate term. Suggested upgrades to AHU include new heating coils, DX coils, and supply/return fans with Variable Frequency Drives (VFDs).

The DX coils for AHU-5 is served by a ~15-ton roof top air cooled condenser (model HS29-180-24) manufactured by Lennox in 2004. The unit consists of two (2) R-22 scroll compressors and four (4) fractional HP condenser fans. R-22 (Freon) is a HCFC refrigerant being phased out in Canada due to its harsh environmental impact. The condenser has served its useful life and replacement should coincide with AHU-5 upgrade in the immediate term.

The heating coil in AHU-5 is equipped with an Armstrong pump (model 816032MF-000) and a fractional HP A.O. Smith motor. The pump has a 2021 vintage and is in good condition. Replacement is anticipated in the long term, however any modifications to AHU-5 may expedite need for earlier action.

AHU-1 is located in the mechanical penthouse and provides fresh air, heating, and cooling for the Gordon Lightfoot Theatre. The packaged Variable Air Volume (VAV) Engineered Air unit (model FW453/DJE140) is equipped with a C-TRAC3 controller, two (2) DX cooling coils, a natural gas indirect fired burner (1,100 MBH input capacity), a 15 HP supply fan, and a 7.5 HP return fan. Both fan motors are equipped with Variable Frequency Drives (VFD). The 15,000 Cubic Feet per Minute (CFM) Air Handling Unit (AHU) has a 2017 vintage and is in good condition with no deficiencies noted. The expected service life for indoor AHUs is 25-30 years. Individual component parts are inspected in routine maintenance procedures (fan belts, motors, filter banks, etc.). Replacement is anticipated in the long term.

AHU-2 is located in the mechanical penthouse and serves the Gordon Lightfoot Theatre Stage. The packaged VAV Engineered Air unit (model FW163/DJS40) is equipped with a DJM controller, two (2) DX cooling coils, a natural gas indirect fired burner (325 MBH input capacity), a 7.5 HP supply fan, and a 3 HP return fan. Both fan motors are equipped with VFDs. The 6,000 CFM unit has a 2017 vintage and is in good condition with no deficiencies noted. Replacement is anticipated in the long term.

AHU-4 is located in the basement and serves the Studio Theatre. The Constant Air Volume (CAV) Daikin unit (model CAH006GDAM) is equipped with two (2) DX cooling coils, a glycol heating coil (served by the Weil-McLain boilers via Bell & Gossett heat exchanger), a 5 HP supply fan, and a 3 HP return fan. The unit has a 2018 vintage and an estimated 2,500 CFM airflow capacity. It is in good condition with no deficiencies noted. Replacement is anticipated in the long term.

A 10-ton air cooled condenser located in the basement serves the DX coil in AHU-4. The United Coolair unit (model BVA10G3AHA-X) is equipped with one (1) 5 HP condenser motor and two (2) compressors charged with R-410A. It has a 2018 vintage and is in good condition. Replacement is anticipated in the long term.

Heat exchange between the hot water loop and glycol loop is provided by a Bell & Gossett plate & frame heat exchanger. The unit (model BP 415-040) has a 30-year life expectancy with replacement anticipated in the long term. Two (2) fractional HP Bell & Gosset high efficiency circulating pumps (model ecocirc XL 55-45) operating in duty/standby configuration serve the glycol loop. The pumps have a 2017 vintage and are in good condition. Replacement is anticipated in the medium term at end of expected useful life.

There is a glycol fill system equipped with a fractional HP pump located in the basement next to AHU-4. No deficiencies noted and the feed package is in good condition. Replacement is anticipated in the long term.

Exhaust is provided in all washrooms by independent systems. The units are all functional with replacements recommended on an as-fail basis.

The elevator machine room for the passenger lift is equipped with an exhaust fan. The Greenheck unit (model SQD-10-B) has a fractional HP motor and is in fair condition. Replacement is anticipated in the immediate term to coincide with upgrades to the passenger elevator.

There is an exhaust fan located in the penthouse with duct work running through the floor backstage of the Lightfoot Theatre. The exhaust system is suspected to serve the basement however we request the City of Orillia confirm purpose and report back. The Greenheck unit (model SQ-90-DGEX-QD) has a fractional HP motor and is in fair condition. Replacement is anticipated in the long term.

A furnace (ID Furnace 3) serves the backstage area of the Studio Theatre. The Keeprite unit (model NBCM036XKB2) is equipped with a Direct Expansion (DX) cooling coil served by a ~3-ton air cooled condenser (model KSSC3600) located on the roof. The furnace and condenser have a 1991 vintage and are operating beyond their expected useful life. Replacement is recommended in the immediate term.

Fresh air and ventilation for the Farmer Market is provided by a Venmar Fantech (model SHR150) Heat Recovery Ventilator (HRV) which serves as a Dedicated Outdoor Air System (DOAS). The air-to-air heat exchanger has a 2018 vintage and recovers sensible heat from exhaust air. The unit is equipped with a 4.0 kW Thermolec duct heater (model FC-CTPBX) to provide additional heating capacity during cold weather. Replacement is anticipated in the long term.

The Farmer's Market is also served by a Daikin Variable Refrigerant Flow (VRF) heat pump system. An outdoor unit (model RXTQ60TAVJU) is exteriorly located on wall mounted metal support rack at the south-west elevation of the building envelope. Three (3) fan coil units (model FXAQ18PVJU) are located within market. The VRF heat pump has a 2018 vintage and utilizes R-410a refrigerant. Temperature control setpoints are provided via a wall mounted digital thermostat. Replacement is anticipated in the medium term.

A Daikin split Air Conditioning (A/C) system provides cooling for the elevator machine room. There is a condenser unit (model RKS30LVJU) exteriorly located on the roof with an evaporator unit in the form of a Fan Coil Unit (FCU model FTXS30LVJU) located in the basement. The 2.5-ton unit was manufactured in 2013 and is charged with R-410A. Temperature set points are controlled with a wall mounted programmable thermostat. The system appears adequately sized for the space it serves. Routine service/maintenance is recommended annually in the spring to ensure optimal operation. Replacement is anticipated in the short term at end of expected useful life.

There is a Mitsubishi split A/C system providing cooling for the box office. The condenser unit (model MU09TW) is exteriorly located on wall mounted metal support rack at the south-east elevation. The evaporator FCU (model MS09TW) is located in the box office. The 3/4-ton unit has a 2004 vintage and is charged with R-22 (Freon) which is a HCFC refrigerant being phased out in Canada due to its harsh environmental impact. Temperature set points are controlled with a remote controller. Replacement is anticipated in the short term as the unit has served its expected life.

The building contains electric heating systems in the form of wall heaters and baseboard heaters. Electric wall heaters are located at the base of the turrets near the exterior doors. Wall heaters are also used for supplemental heat in the Front Office and Accessible Washroom. Electric baseboard heaters provide supplemental heating in the Box Office and the Farmers Market. Overall the electric heating systems are in fair condition. Replacement is recommended on an as-fail basis. Action is anticipated in the medium term.

Electrical Executive Summary

The electric feed from the utility is directed to one (1) 300 kVA pad mounted Cam Tran Co. Ltd. transformer located outside the building on the north-east elevation. High voltage (13.86 kV) is stepped down to a 120/208V service for the building. There is a utility grade meter located in a cabinet in the basement electrical room. No issues were identified with the transformer and meter, which are owned and operated under the responsibility of the local utility.

Power from the primary transformer is directed to a 1,200-amp Westinghouse switchgear unit located in the basement Electrical room. The switchgear vintage is assumed to be 1982. The expected useful life for commercial grade electrical systems is generally 30-40 years, if properly maintained. The assessment noted breaker switches have been replaced with Eaton units, which may be a result of the maintenance program identifying potential overheating locations within the switchboard, or the installation of new equipment. The switchgear is recommended for replacement in the short term as it is at the end of its life cycle.

The assessment identified five (5) splitter boxes. There is a Stelpro unit serving the DHW heater, a Square D unit serving subpanel LP-E, a BEL Inc. unit in the penthouse serving disconnects for AHU-1 & AHU-2, and two (2) splitters (make N/A) on the Lightfoot theatre stage for auxiliary equipment. During the site investigation, no testing of systems was undertaken and the enclosures were not opened to verify internal components. Splitter vintages are expected to date to the 1980s era, putting them at the end of their expected useful life. Replacement is recommended in the short term.

The electrical delivery consists of 120/208V distribution panels, branch panels, and breaker switches for power to building equipment, lighting, and receptacles loads. Panels include one (1) Westinghouse (Panel 2), two (2) Federal Pioneer (Panel 4 & Panel 8), and two (2) Eaton (Panel LP-A1 & Panel LP-B). The Westinghouse and Federal Pioneer panels have reached the end of their expected useful life of 40 years. Replacement is anticipated in the short term and should be guided by the maintenance program. Eaton panels have a 2013 vintage and are in good condition. Replacement is not anticipated in term of analysis.

There are four (4) 125-amp and one (1) 225-amp Stab Lok panels on site, including Panel 3 (basement), Panel 3A (basement), Panel 5 (Studio Theatre Server Room), Panel 7 (Front Office), and Panel 8B (Lightfoot Theatre Stage). Stab-lok panels have been found to fail safety requirement testing and therefore are considered a safety risk. Replacement is recommended in the immediate term.

The facility has undertaken lighting efficiency projects with LED providing the majority of illumination throughout the building. Linear fluorescent lamps were retrofitted with LED equivalent tubes. Traditional lamps (incandescent, compact fluorescent) used in screw-base sockets were replaced with A19 LED bulbs. Halogen pot lights were replaced with M16 LED bulbs. Bulbs in specialty fixtures such as chandeliers located in the Upper Lobby and Auditorium were replaced with LED Candelabra bulbs. Lighting control sensors are provided in spaces with intermittent occupancy. Overall, the LED lighting systems are in good condition. Complete fixture replacement is anticipated in the long term.

Both theatres are fully equipped with professional lighting equipment. The specialty lighting systems were updated in 2016 and are in good condition overall. Replacement is anticipated in the long term.

The Lightfoot Theatre is equipped with a Dimming System (model SR48+) manufactured by Sensor+ and a lighting control panel (model DR6) manufactured by Unison. The controllers have an assumed 1999 vintage and appear to be in fair operating condition. Replacement is anticipated in the short term as they have exceeded their effective useful life.

Exterior lighting around the building envelope is provided via five (5) wall packs. The wall packs have either been retrofitted with LED lamps or replaced completely with LED units. There are four (4) suspended lighting fixtures at the main entrance with LED bulbs. There is one (1) wall sconce with LED bulb at the Market egress door. All exterior lighting is controlled via timer. The exterior lighting is in good condition with replacement anticipated in the long term.

There are two (2) ground mounted flood lights on the south elevation of the building and one (1) unit on the roof directed towards the library parking lot. The fixtures are lamped with High Pressure Sodium (HPS) bulbs. Replacement is recommended on an as-fail basis. Action is anticipated in the short term.

The facility is equipped with a DSC security system with burglary alarm. The central control panel is located in the basement Electrical room and there are three (3) keypads present including in the Main lobby, Farmers Market, and Studio Theatre Entrance. The system is understood to be monitored by a third party, in which they alert authorities should the burglary alarm activate. The keypad, associated wiring, and end-use devices have a 2016 vintage. Replacement/upgrading the security system should be done every 20 years. Replacement is anticipated in the long term.

Fire and Life Safety Executive Summary

Fire and life safety components throughout the Opera House are in good condition overall. Inspections are conducted in-house or via licenced professionals on a routine basis to ensure devices perform in accordance with their intended operation or function.

Fire detection is activated by a two-stage Notifier fire alarm system. There is a NFS-3030D control panel located in the basement Electrical room with annunciator panels located in the Front Lobby and Studio Theatre Entrance. Overall coverage of detectors and alarms appeared adequate. Installation includes head end equipment, pull stations, bells, heat and smoke detectors, conduit, wire and connections. The fire alarm system is inspected annually in compliance with the requirement of the National Fire Code. It has a 2018 vintage and is in overall good condition. Replacement is anticipated in the long term.

Fire suppression for the building is served by a wet sprinkler system. There are no sprinklers in the Foyer, Dressing Room #110, Office #111, Auditorium, and Stage. The main shutoff valve and jockey pump (Marathon electric model 5KC36MNB527X) is located on the incoming standpipe in the basement boiler room. A fire department Siamese connection is installed on the exterior wall of the at the south elevation. Expected useful life of standpipes systems 75 years. It is recommended to conduct a complete maintenance inspection for testing of valves, pipework, fittings, hanger/seismic bracing, and the sprinklers themselves in the long term.

Fire extinguishers are located in the building providing an extra layer of fire protection for occupants. They are appropriately charged with their indicator dial set in the green zone. Unit vintages vary (1987, 2006, 2012, etc.) and the fire extinguishers are in fair condition overall. Replacement is anticipated in the short term and should be guided by routine life safety inspections.

Fire hose cabinets are situated throughout the building. The cabinets are outfitted with a single valve, length of hose, and handheld extinguisher. The devices are inspected on a routine basis apart of the fire life safety program. The doors for the cabinets are largely glass and are opened via a release tab. No deficiencies noted for the systems. Replacement is anticipated in the long term.

The building includes an average density exit lighting system of wall mounted exit signs. The quantity and coverage of the signage appeared to be adequate. All exit signs were illuminated during the site visit, and which is compliant with Canadian Electrical Code (CEC) requirements. The units are in an adequate working condition. Replacement is anticipated in the medium term and should be guided by life safety inspections.

The building includes an average density emergency lighting system consisting of self contained lamp pack and remote light heads. The units are connected to integrated batteries that will engage and illuminate when line utility power drops out. Various vintages are present indicating units are replaced on an as-fail basis as a result of routine life safety inspections. Replacement is anticipated in the medium term and should be guided by maintenance regime.

Elevator/Lift/Conveying System Executive Summary

A ThyssenKrupp passenger elevator is located in the main lobby and provides access to the gallery of the Lightfoot Theatre. The cabin is operated with a hydraulic controller in the form of a 15HP Rota-Flow power unit (model RP-60-15; serial E-66847) manufactured by Dover circa 1982. The hydraulic device has failed, and the elevator is currently out of service. The elevator cabin was not accessed during the site assessment. Staining from hydraulic fluid is present on the south wall in the basement machine room. Investigation is required by an elevator specialist to determine source and extent of hydraulic leak as well as any remediation concerns. It is recommended to modernize the elevator control system and refurbish the cabin interiors in the immediate term.

A freight elevator with a capacity of 5,500 kgs (12,125 lbs), or 73 persons, is present in the west end of facility. It provides access between the basement and level 2. The elevator has a 2013 vintage and is operated with a I.T.I Hydaulik controller (Part no. 3462/015 C4PIC-276P). The cabin finishes include metal flooring, stainless steel handrails and laminated panel walls. The asset is in fair condition however it has frequent breakdowns (door jams, malfunctioning control mechanisms, and leveling adjustments) with repair and maintenance conducted by Elevator1. It is recommended the freight elevator is recommissioned to operate as intended. The assistance of a qualified service provider in determining the scope of the problem and offering solution, with professional oversight is required. An allowance for an investigational study on the elevator is provided in the immediate term. Cabin renovation and control system replacement are anticipated in the long term.

A piano lift is located backstage of the Lightfoot Theatre. The structure consists of four (4) horizontal steel beams anchored to the wall supporting two (2) vertical posts. Mechanical components include a

power unit (motor), drive shaft, leaf chain, wire rope, and limit switch. A wall mounted push button switch is utilized to raise and lower the platform hoist. The system is used to store a grand piano away from foot traffic. The piano lift is assumed to be original to 1917 with implementation occurring during the rebuilding of the Opera House after the fire in 1915. It receives routine inspections with the last review occurring September 12 2023, by Zelus Material Handling. The inspection process includes visual inspection, compliance check, lubrication, and wear analysis. Individual mechanical components are replaced as needed (hoist, cables, etc.). Replacement should be guided by maintenance regime. No work is foreseen in the short or medium term other than general preventative maintenance assuming normal use is continued. The piano lift is anticipated to function adequately for another 10 years.

There is an 'S' shaped track fitted with a 1-ton hoist located in the backstage of the Lightfoot Theatre. The steel I-Beam track is fixed in place with lengths of steel angle that are attached to the building's superstructure. The electrical hoist can be used to transport items from the building's exterior to the stage, via a large access hatch in the west exterior wall. The 1-ton hoist provides redundancy to the freight elevator. The entire system receives routine inspections by Zelus Material Handling. Overall, it is in fair condition with no deficiencies noted. Vintage of electrical hoist equipment is unknown however it is suspected to be approximately 5 years old. Replacement should be guided by maintenance regime. No work is foreseen in the short or medium term other than general preventative maintenance. It is anticipated to function adequately for another 10 years.

Site Executive Summary

The building is situated in the area where it was originally erected in the early 1900s. The walkway around the building perimeter is comprised of concrete and interlock stones. The interlock was found to have areas of damage and missing stones. The remainder of the site is shared with the Orillia Library, paid parking lot, or are adjacent to the roadways.

Code Compliance

The building's structure, building envelope, roofing system, and site conditions were visually examined, where possible, during a walkthrough inspection. The structural components (columns, bricks, etc.) were randomly inspected to assess the overall condition. Original architectural and structural drawings were consulted but not to verify or analyze design loads or design details. The following notes are listed summarizing code requirements or safety aspects:

- Ontario's Building Code requires a barrier-free path of travel throughout. The site is in compliance with the Accessibility for Ontarians with Disabilities Act (AODA), however the passenger elevator for the Lightfoot Theatre requires replacement/refurbishment.
- The following systems use R-22 which is a HCFC refrigerant being phased out in Canada due to its harsh environmental impact. Procedure for appropriate disposal of HCFC or HFC refrigerants can be referred to via the Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI.ca). Most Original Equipment Manufactures (OEM) will handle equipment disposals and can be arranged through preferred NAV Canada sub-contractor.
- 3-ton Keeprite condenser serving Furnace
- 15-ton Lennox condenser serving AHU-5
- Mitsubishi split AC system serving Box Office
- Stab-lok panels have been found to fail safety requirement testing and therefore are considered a safety risk.
- The overall coverage of detectors, alarms, exit signs, and emergency lighting systems appeared adequate and in compliance of building regulations and fire code.

Capital Needs Summary

The following table summarizes the capital needs sorted by term and building system category.

Building System	Immediate Term (2024)	Short Term (2025-2028)	Medium Term (2029-2034)	Long Term (2035-2049)
A Substructure	-0	-0	-0	-0
B Shell	-0	-195,100	-417,900	-134,900
C Interior	-0	-1,709,900	-1,231,200	-222,600
D Service	-308,500	-424,300	-294,700	-2,319,700
E Equipment	-0	-0	-63,800	-0
G Building Sitework	-0	-40,600	-0	-171,000
Lifecycle Replacement Total	**-308,500**	**-2,369,900**	**-2,007,600**	**-2,848,200**

The recommendations within the report have been placed within several types of action categories as defined within the project scope. A recommendation may have more than one applicable category. The category has been selected based upon the perceived need, the most heavily impacted building system and the category with the greatest life safety significance.

The information presented in this report is based on direct visual observation made by personnel with BLDG Sci and in some instances as noted within the report on information provided by others. Recommendations contained within our report reflect our informed opinion based on the information gathered during our investigation. The findings cannot be extended to components of the building or portions of the site that were not reviewed or that were concealed or unavailable for direct observation at the time of our visit. There is a possibility for additional deficiencies being present in the building which have not been identified during our visit, given the limited nature of this review.

Summary of Capital Reserve Expenditures from 2024-2049

The summary of capital reserve expenditures from 2024-2049 is provided below.

Immediate Term

2024
-308,500

Short Term

2025	2026	2027	2028
-1,313,400	-280,900	-287,800	-487,800

Medium Term

2029	2030	2031	2032	2033	2034
-362,600	-27,800	-106,700	-107,300	-58,400	-1,344,800

Long Term

2035	2036	2037	2038	2039
-185,400	-421,200	-240,700	-565,700	-49,100

2040	2041	2042	2043	2044
-12,800	-10,600	-58,400	-402,400	-12,400

2045	2046	2047	2048	2049
-40,200	-254,400	-324,400	-195,000	-75,500

Current Replacement Value (CRV) - 2024

Current Replacement Value (CRV) is defined as the dollar amount (2024) required to reproduce a facility and all associated assets located on the same property, in like kind and materials at one time, including the cost of demolishing the existing facility and site assets, in accordance with current market prices for materials and labour. Replacement Cost Estimates will include the following hard & soft costs:

- Plans, specifications, surveys, building permits including architect's & engineering fees as required;
- All material & labour costs;
- Normal site preparation including finish, grading and excavation for foundation and backfill for the structures only;
- Underground Utilities from structure to lot line figured for typical setback;
- Contractor's overhead and profit, including job supervision, workmen's compensation;
- Site improvements, landscaping, etc.; and
- Demolition.

Table E-1 below provides a general guideline to support the CRV facility estimate when accounting for the general hard and soft costs as mentioned above. It is further broken down into the various project implementation stages where applicable as to be expected to reproduce a facility and all associated assets located on the same property.

Table E-1

Project (CRV) Implementation	
Installation	35%
Commissioning	5%
Training	1%
Engineering	12%
Design Review	3%
Contingency	15%
Project Management	15%

The summary of Current Replacement Value in 2024 ($) is an opinion of probable cost provided in the below Table E-2 incorporating the Project Implementation guideline.

Table E-2

Level 2 Description	Level 2	Orillia Opera House
Foundations	A10	$175,956
Basement construction	A20	-
Superstructure	B10	$758,322
Exterior Enclosure	B20	$729,120
Roofing	B30	$737,490
Interior Construction	C10	$487,134
Stairs	C20	$231,942
Interior Finishes	C30	$6,852,798
Conveying	D10	$1,072,104
Plumbing	D20	$430,776
HVAC	D30	$2,558,988
Electrical	D50	$1,130,322
Fire Protection	D40	$598,920
Equipment	E10	$118,668
Furnishings	E20	-
Special Construction	F10	-
Selective Building Demolition	F20	-
Site Improvements	G20	$398,412
Site Civil/Mechanical Utilities	G30	-
Site Electrical Utilities	G40	-
Other Site Construction	G90	-
Current Replacement Value (CRV)		**$16,280,952**

Facility Condition Index

The Facility Condition Index (FCI) is the total cost of the existing maintenance, repair, or renewal of the facility divided by the total estimated replacement value (or CRV, current replacement value) of the facility and is normally expressed as the following formula:

$$FCI = \frac{Immediate\ Year + 1\ and\ 2\ Costs}{Current\ Replacement\ Value}$$

The higher the FCI score the poorer the condition of the facility. The International Facility Management Association offers the following scale as a guideline:

- Very Good: 0% to 2.5%;
- Good: 2.6% to 5%;
- Fair: 5% to 10%;
- Poor: 10% to 30%; and
- Critical: greater than 30%.

Even if a facility is in good range, its condition should be documented on a regular basis. It can be used to prioritize maintenance and help determine how long a building should stay in operation. For instance, if a building with a 15% FCI rating is scheduled for redevelopment in three (3) or four (4) years, inexpensive maintenance projects can be prioritized to keep the building running until demolition is scheduled; meanwhile, expensive maintenance projects can be deferred as long as they don't prevent the building from being used.

FCI – Scoring

Building	FCI Score (0-5 years)	FCI Grade	FCI Score (0-10 years)	FCI Grade	FCI Score (0-25 years)	FCI Grade
Orillia Opera House	18.7%	Poor	28.8%	Poor	46.3%	Critical

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Acronyms and Abbreviations

A/C	air conditioner
ACM	asbestos containing materials
AFUE	average fuel utilization efficiency
AODA	Accessibility for Ontarians with Disabilities Act
ASHRAE	American Society of Heating, Refrigeration, and Air-Condition Engineers
ASTM	American Society for Testing and Materials
BAS	building automation system
BCA	building condition assessment
BCI	building condition index
BTU	British thermal unit
BTU/hr	BTU per hour
^{o}C	degree Celsius
CFM	cubic feet per minute
CAV	constant air volume
CDP	central distribution panel
CEC	Canadian Electrical Code
DCW	domestic cold water
DHW	domestic hot water
DSS	designated substance survey
DX	direct expansion
EER	energy efficiency ratio
^{o}F	degree Fahrenheit
FCI	facility condition index
FCU	fan coil unit
ft^2	square feet
ft^3	cubic feet
HCFC	hydrochlorofluorocarbon
HFC	hydrofluorocarbon
HPS	high pressure sodium
HRAI	Heating, Refrigeration and Air Conditioning Institute of Canada
HST	harmonized sales tax
HVAC	heating, ventilation, and air conditioning
IESNA	Illuminating Engineering Society of North America
IESO	Independent Electricity System Operator
IGU	insulated glazing unit
kVA	kilovolt-ampere
kW	kilo-watt
kWh	kilowatt hour

L	litres
LED	light emitting diode
LOS	level of service
OEM	original equipment manufacturer
m^2	square meters
MBH	million BTU per hour
MUA	make-up air
N/A	not applicable
NBC	National Building Code of Canada
O&M	operation and maintenance
O. Reg.	Ontario Regulation
OWSJ	open web steel joints
PUL	project useful life
RT	refrigeration tons
RTU	roof top unit
R-Value	thermal resistance measure in $(hr \cdot ft^2 \cdot °F)/BTU$
TVSS	transient voltage surge suppressor
U-Value	Thermal transmittance measured in $BTU/(hr \cdot ft^2 \cdot °F)$
USG	United States gallon
UV	ultraviolet
VFD	variable frequency drive
VSD	variable-speed drive
W	Watt

Glossary

The definition should be considered during the review of this **Building Condition Report**:

Building Automation System (BAS)	A distributed control system that is a computerized, intelligent network of electronic devices designed to monitor and control the mechanical, electronics, and lighting systems in a building. BAS core functionality keeps the building climate within a specified range, provides lighting based on an occupancy schedule, and monitors system performance and device failures and provides email and/or text notifications to building engineering/maintenance staff. The BAS functionality reduces building energy and maintenance costs when compared to a non-controlled building. A building controlled by a BAS is often referred to as an intelligent building.
Opinion of Probable Cost Alternate Term: **Capital Cost**	Opinions of Probable Costs identified in this report include costs including the following phases of work: design, equipment and materials, construction/ installation, project management, construction administration, and commissioning.
Constant Air Volume (CAV)	A type of air distribution system where the temperature of air is varied while the volume of air delivered is held constant depending on the heating or cooling needs of each space.
Contingency	A reserve amount (typically 15%) in Canadian Dollars which is incorporated into the Opinion of Probable Cost to cover potential events, uncertainties, or time delays not specifically accounted for in the cost estimate.
Direct Expansion (DX)	A type of cooling system where the refrigerant is prepared to absorb heat from a space by passing through an expansion valve.
Domestic Hot Water (DHW)	Hot water provided for potable uses, such as handwashing or laundry.
Greenhouse Gas (GHG)	Greenhouse Gases (GHGs) are primarily comprised of Carbon Dioxide (CO2), Methane (CH4), Nitrous Oxide (N2O), Sulfur Hexafluoride (SF6), Perfluorocarbons (PFCs), and Hydrofluorocarbons (HFCs).
Greenhouse Gas Carbon Dioxide Equivalence (CO2e)	GHGs are typically measured in terms of kilograms or tonnes of carbon dioxide equivalent (CO2e). Since different GHGs exhibit differences in the amount of global warming they can potentially cause, this allows emissions of different GHGs to be combined into a common unit of measure.
Heating, Ventilation, and Air-conditioning (HVAC)	This term collectively refers to the process of conditioning air for use in a built environment for the comfort of occupants.
Light Emitting Diode (LED)	An LED lamp passes electrical current through a diode designed to produce visible light. This is a relatively new technology that exhibits exceptional colour rendering and very low energy use.

Make-up Air Unit (MUA)	A MUA is a type of air handling unit designed to supply 100% outdoor air to a facility's spaces.
Original Equipment Manufacturer (OEM)	OEM is a company whose equipment, goods, or products are used in the products of other companies who sell the finished products to users.
Outdoor Air (OA)	The ambient air outside of a building.
Outdoor Air Temperature (OAT)	The temperature of the ambient air outside of a building.
Unit Heater (UH)	A type of terminal unit typically equipped with a fan and either an electric heater, hydronic heating coils, or a natural gas burner to provide space heating.
Variable Air Volume (VAV)	A type of air distribution system where the temperature of air is held constant while the volume of air delivered is varied depending on the heating or cooling needs of each space.
Variable Frequency Drive (VFD)	A type of adjustable-speed drive used in electro-mechanical drive systems to control AC motor speed and torque by varying motor input frequency and voltage.

1.0 INTRODUCTION

BLDG Sci Advisory Inc. (BLDG Sci) was retained by City of Orillia to complete a Building Condition Assessment (BCA) at **Orillia Opera House** located at 20 Mississaga St West in Orillia, Ontario, Canada (Facility). The site visit for this assessment was completed on October 3, 2023 by Nathan Sokolowski, P.Eng., CEM, and Eryk Mancini, EIT, RASDT, RHDT. The Property Condition Assessment carried out on the subject site is based on the ASTM E2018-15 Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process.

1.1 PURPOSE

Building condition assessments of the City of Orillia facilities are being undertaken so that the City:

- Can better understand the true condition of its major facilities and any underlying issues of concern that require attention in the short term; and
- Produce a facility revitalization budget that properly forecasts capital renewal costs and facility revitalization work that should be undertaken in the short, medium, and long term.

The intent of this report is to assess and rate the physical condition of the Orillia Opera House and its components, note deficiencies relevant to the term of analysis of 25 years, and allow a scoped preparation of work for continuing operations for the Facility with priorities to an end-of-life analysis. The report shall highlight any immediate areas of concern, along with recommended remediation actions and range of cost to remediate.

The report tabulates what funds in 2024 Dollar ($) are recommended to be held in reserve in the:

- Immediate;
- Short term (1-4 years);
- Medium term (5-10 years); and
- Long term (11-25 years).

The recommendations and our opinion of probable costs are based on walk-through non-invasive direct visual observations and in some instances as noted within the report on information provided by others. A detailed evaluation of the Facility compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing building and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may be referenced by BLDG Sci, at their discretion, to identify deficiencies and appropriate recommendations.

1.2 SCOPE OF ASSESSMENT

The Building Condition Assessment consisted of an on-site facility assessment, interviews with knowledgeable site staff, background information review, and preparation of a comprehensive report. The assessment report is organized as follows:

- Facility Description & Condition;
- Building Condition Assessment;
- Summary of Opinion of Costs; and
- Conclusions and recommendations.

The following documents were provided to BLDG Sci for review:

- Floor Plans

The following appendices referenced below provide further background that form part of this report:

- Appendix A – Capital Expenditures Summary;
- Appendix B – Assessment Methodology; and
- Appendix C – Limitations.

1.3 CLIENT INFORMATION

The following table summarizes key client information related to this assignment.

Table 1-1: Key Client Information Summary

Point of Contact	Mark Buma, C.E.T., GIS(PG) I
Title	Superintendent, Building Maintenance
Department	Environment and Infrastructure Services Department
Contact Information	Phone: 705-238-2718 Email: mbuma@orillia.ca

2.0 FACILITY DESCRIPTION

The following sections summarize the observations made during the site investigation.

2.1 OVERVIEW

The Facility located at 20 Mississaga St West in Orillia, Ontario is a 2,060 m2 (22,140 ft2) Orillia Opera House was constructed in 1915 and has had renovations in 1917, 1986-88 (Life Safety Renovations), 1991-95 (foundation restoration), 2011 (freight elevator addition), and 2013 (bathroom renovations). The building is occupied by staff working within the building during their operating hours.

Table 2-1: General Building Information

Client Name	City of Orillia
Property Name	Orillia Opera House
Department	Culture And Recreation
Site Address	20 Mississaga St West, Orillia, ON, L3V 3A6, CA
Gross Floor Area	2,060 m2 (22,140 ft2)
Floors	
Year built	1915
Date(s) of Major Renovations	1917, 1986-88, 1991-95, 2011, & 2013

Figure 2-1 presents a bird's eye view of the Orillia Opera House Facility.

Figure 2-1: Aerial View of Facility
(Google Earth and Google Maps aerial views, used with permission. Google is a registered trademarks of Google LLC)

3.0 BUILDING CONDITION ASSESSMENT

This section provides information on the condition of assets (infrastructure in the system or network), identifies and documents any deficiencies, provide an estimated timeline for action (replacement or remediation) and associated opinion of probable costs. A detailed assessment methodology is included in **Appendix B**. During the investigation, no testing of the systems was undertaken. The section is broken down as per the American Society for Testing and Materials (ASTM) UNIFORMAT level I major groups.

Specific details on Facility assets are documented and broken down following the UNIFORMAT level II classification for group elements.

- A Substructure;
- B Shell;
- C Interiors;
- D Services;
- E Equipment & Furnishings; and,
- G Building Sitework

3.1 A SUBSTRUCTURE

3.1.1 A10 Foundations

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Foundation and Footings	A Substructure	A10 Foundations	1915	100

Description & Recommendation

The foundation is visible within the perimeter basement areas and in sections along the exterior. Within the basement spaces, concrete slabs and stones comprise the foundation walls. The walls showed signs of settlement and material loss, but not to a concernable level. There were also stains from both moisture penetration and retention in the areas where equipment transverse through the material. The foundations are expected to last the life of the building. Due to the historical nature of the building it is highly recommended that, going forward, the governing historical society be consulted with prior to undertaking any work.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	End of Life	No Action	N/A	-

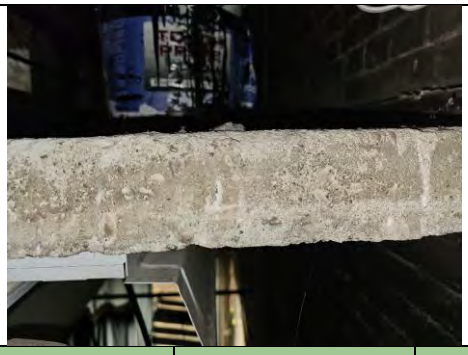
3.2 B SHELL

3.2.1 B10 Superstructure

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Floor Decks & Slabs	B Shell	B10 Superstructure	1950	75

Description & Recommendation

The majority of the floor construction is obfuscated by interior finishing. The area where slabs were visible was within the main stage area. The slabs on stage left and right allow for show staff to rig their equipment. The reinforced material was unfinished and contained holes and damage from use over time. It is expected that the slabs will require major repairs within the medium term.

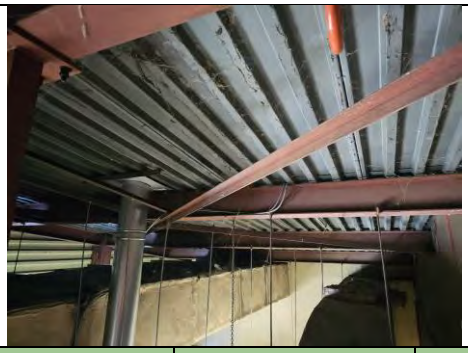



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Medium Term	Repair	2029	-222,300

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Roof Construction	B Shell	B10 Superstructure	1915	100

Description & Recommendation

The original roof construction is formed from iron I-beams mechanically fastened together, forming the structure a pitched roof. Above the beams lay wood joists that support the wood plank decking. The wooden material have signs of water damage in sporadic areas. The amount that was able to be viewed did not appear to be at a concernable level. It is expected that the structure will last the life of the building.

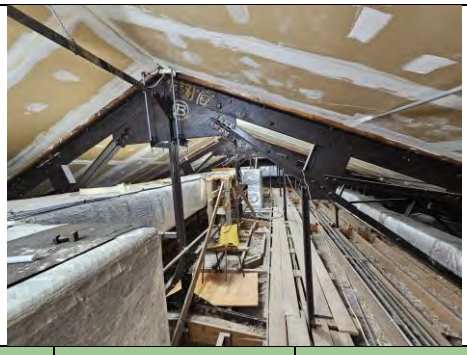



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	End of Life	No Action	N/A	-

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Roof Construction	B Shell	B10 Superstructure	1950	100

Description & Recommendation

The roof construction for the building addition is formed from iron I-beams mechanically fastened together, forming a sloped roof structure that peaks toward the Southeast. Above the beams lay the corrugated metal decking that supports the roofing material above. No major damage or points of concern were identified from the available vantage points. It is expected that the structure will last the life of the building.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	End of Life	No Action	N/A	-

3.2.2 B20 Exterior Enclosure

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Masonry Bricks	B Shell	B20 Exterior Enclosure	1915	50
Description & Recommendation				
The exterior brickwork is showing signs of its age as the faces appear worn, mortar joints have multiple areas of cracking or missing material, and there are sections where the brickwork was replaced. It is recommended that repointing be performed, with bricks/stones that are in poor repair replaced as part of it. Due to the historical nature of the building it is highly recommended that the governing historical society be consulted with prior to undertaking any work.				

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Short Term	Repair	2028	-78,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Masonry Bricks	B Shell	B20 Exterior Enclosure	1950	50
Description & Recommendation				
The exterior brickwork is showing signs of its settlement and shifting, as identified by the measurement devices installed in multiple locations on the exterior. The brick faces appear worn,				

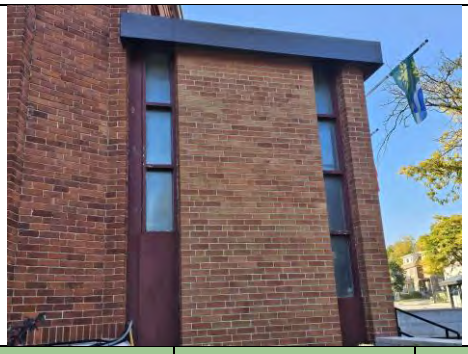
mortar joints have multiple areas of cracking, and the wall joints have missing material. In addition, there are sections where the brickwork was replaced. It is recommended that the cause for the building shifting be identified prior to repairs. It is recommended that the bricking have repointing performed, with damaged bricks replaced as part of it. Due to the historical nature of the building it is highly recommended that the governing historical society be consulted with prior to undertaking any work.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Medium Term	Repair	2031	-66,300

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Masonry Bricks	B Shell	B20 Exterior Enclosure	1980	50

Description & Recommendation

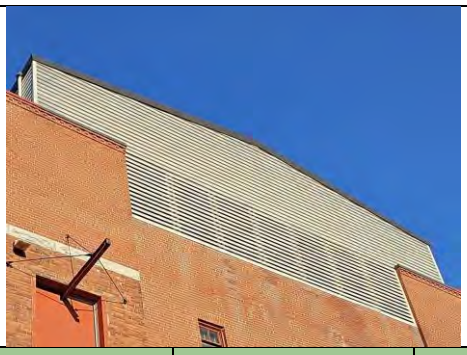
The exterior brickwork is largely intact with some staining along the lower wall. The mortar is without major loss and has minor evidence of settlement. It is expected that the material will last to the end of its expected useful life.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	End of Life	No Action	N/A	-

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Metal Siding	B Shell	B20 Exterior Enclosure	1950	50

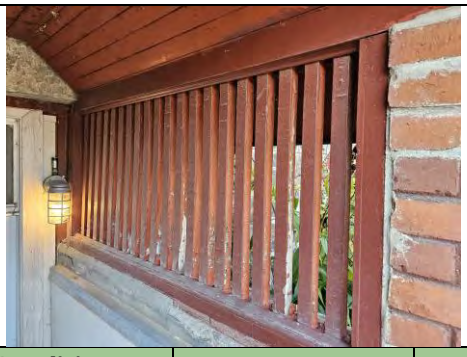
Description & Recommendation
Metal panels are installed as the walls of the mechanical penthouse. From the available vantage points, the material is intact with no major concerns identified. It is expected that the siding will require replacement in the long term.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Long Term	Replace	2035	-52,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Entryway	B Shell	B20 Exterior Enclosure	1950	75

Description & Recommendation
The entryway for the door into the bus driver space has an awning comprised of metal roofing on a wood structure. The roofing is beige painted metal panels over a wood structure. Both the materials have paint loss occurring, as well as localized damage of the wood. It is recommended that the structure be refinished with any damage repaired as part of building O&M.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Short Term	Refinish	2026	-3,800

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Overhang	B Shell	B20 Exterior Enclosure	1950	50

Description & Recommendation
The wood overhang that is installed to the exterior of the market room has evident water damage and perforations when viewed from below. The water marks and stains appear to be stemming from

above the decking, with the damaged areas appeared to be wide enough to allow both creatures and elements in. It is recommended that the damaged planks be replaced in the short term, with the cause of the damage investigated. Due to the historical nature of the building it is highly recommended that the governing historical society be consulted with prior to undertaking any work.

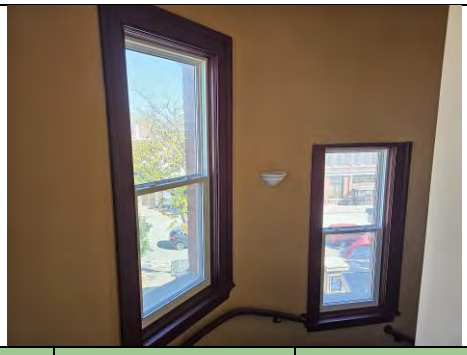
Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Short Term	Replace	2026	-10,100

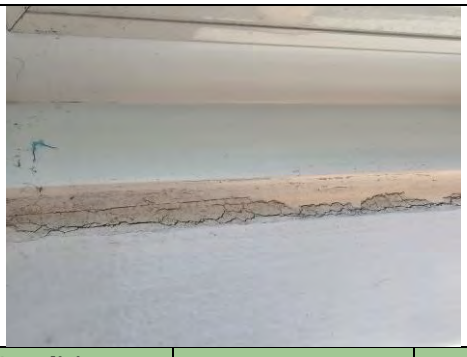
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Windows - Insulated Glazing Units	B Shell	B20 Exterior Enclosure	1915	30

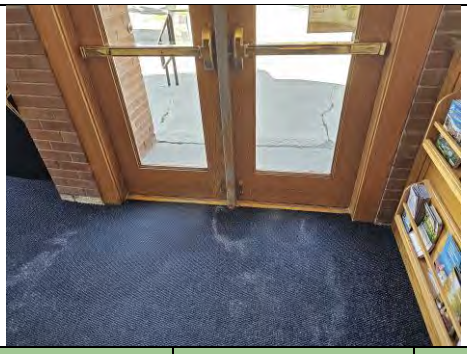
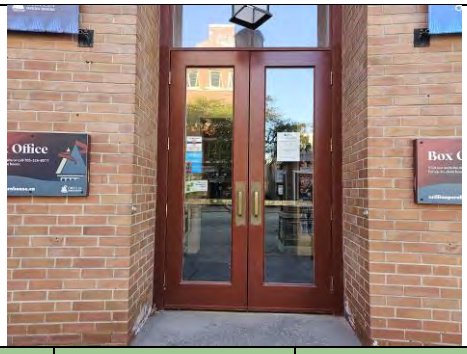
Description & Recommendation

The window units are original to the building and exhibit no damage to the glazing. The painted wood frames and trim work are intact physically with areas of paint loss and weathering. As these are historical, no action is required at this time. However, it is recommended that methods be implemented to lessen the gapping found along the unit edges. Due to the historical nature of the building it is highly recommended that the governing historical society be consulted with prior to undertaking any work.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Medium Term	Maintain	2034	-42,900

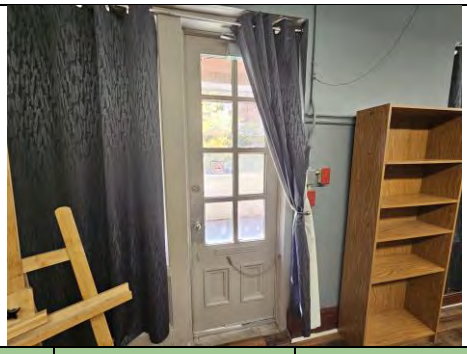
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Windows - Insulated Glazing Units	B Shell	B20 Exterior Enclosure	2012	30
Description & Recommendation				
The window units that are not original to the building construction, with a mix of dates visible, though 2012 appeared to be the most prominent. The fixtures are exhibiting both interior and perimeter sealant deterioration. This deterioration allows for the interior gas fill to escape, limiting the effectiveness of the units. It is expected that a major window replacement will be required in the medium term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Medium Term	Replace	2032	-50,700

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Window Sealants	B Shell	B20 Exterior Enclosure	2012	12
Description & Recommendation				
The window sealants that are installed around the interior and exterior frames are generally intact with desiccation and cracks having begun to occur. The material is expected to require replacing in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Short Term	Replace	2027	-1,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Entrance Door	B Shell	B20 Exterior Enclosure	1980	30
Description & Recommendation				
The glass doors with wood frame are located at the front of the building and act as the main entry into/out of the facility. The panes were found to be without damage, while the frames have some weathering of the paint coat. The hardware is tarnished but functional. It is recommended that the door will require replacement in the medium term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Medium Term	Replace	2030	-14,800

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Exterior Metal Doors	B Shell	B20 Exterior Enclosure	2001	30
Description & Recommendation				
The exterior doors for the facility are hollow metal units that have areas of weathering, gapping, as well as rusting along the bottom edges. The doors have denting from visitor interactions, which appear to be minor. The frames for the doors have the same appearance as the doors in regards to paint loss. It is recommended that the units be replaced in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Short Term	Replace	2028	-27,300

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Exterior Glass Doors	B Shell	B20 Exterior Enclosure	2012	30
Description & Recommendation				
The glass door provides is used as a staff access point to either the main or upper floor via the staircase. The unit has a metal frame with the panes free of visible damage. The hardware is functioning well. It is expected that the door will require replacement in the long term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Long Term	Replace	2042	-21,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Exterior Wood Doors	B Shell	B20 Exterior Enclosure	1915	30
Description & Recommendation				
The wood doors are original to the building construction and have been repainted over the years. From what could be decerned from the available vantage points on the ground, the units are exhibiting areas of concern and failure. It is recommended that the units be refinished and damage repaired. Due to the historical nature of the building it is highly recommended that the governing historical society be consulted with prior to undertaking any work.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Medium Term	Replace	2034	-6,300

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Hatch	B Shell	B20 Exterior Enclosure	1980	30
Description & Recommendation				
The access hatches are showing signs of weathering. This is not impacting the functionality of the unit. The doors were able to be propped opened and closed with no issues. The gasketing is intact and had no areas of damage. It is expected the units will need replacement in the medium term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Medium Term	Replace	2030	-13,000

3.2.3 B30 Roofing

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Shingle	B Shell	B30 Roofing	2021	20
Description & Recommendation				
The shingles installed on the building roofing were viewed from ground level to have vegetation forming both on the material and below it. This has caused some sections of material to lift and deform. It is recommended that the damaged shingling be replaced in the short term, with a full replacement expected in the medium term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Medium Term	Replace	2031	-1,600

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Built Up Roof Assemblies	B Shell	B30 Roofing	1980	20
Description & Recommendation				
There are areas of grit loss, bubbling, and water pooling. The visible mastic has dried out and begun to crack apart. The material also had many patches evident from repairs over time. It is recommended that the roofing be replaced in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Short Term	Replace	2027	-60,900

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Slate	B Shell	B30 Roofing	2021	100
Description & Recommendation				
The slate on the uppermost roof was installed in 2021. It was seen to have multiple tiles missing from the installation, which were found on the flat roof with some damage. It is recommended that the missing tiles be replaced, with a major replacement expected at the end of its expected useful life.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Good	End of Life	Repair	N/A	-

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Slate	B Shell	B30 Roofing	1915	100

Description & Recommendation
The slate on the building projections are original to the building erection. It was seen to have multiple tiles damaged, weathered, and missing from available vantage points. It is recommended that the tiles be replaced in the short term.

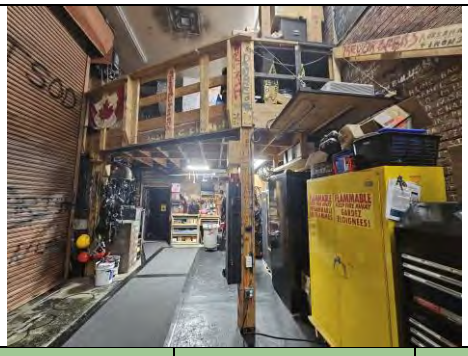
Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Short Term	Replace	2027	-14,000

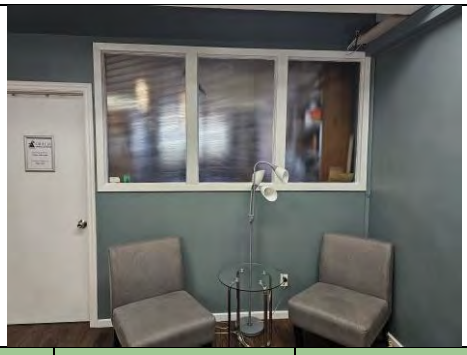
3.2.4 Summary of Opinion of Costs

Level 3	Component Description	Replacement Year	Immediate Term (2024)	Short Term (2025-2028)	Medium Term (2029-2034)	Long Term (2035-2049)
A1010	Foundation and Footings	2065	-0	-0	-0	-700
B1010	Floor Decks & Slabs	2029	-0	-0	-222,300	-0
B1020	Roof Construction	2055	-0	-5,300	-0	-0
B1020	Roof Construction	2075	-0	-0	-682,000	-0
B2010	Masonry Bricks	2028	-0	-78,000	-800	-0
B2010	Masonry Bricks	2031	-0	-0	-68,600	-0
B2010	Masonry Bricks	2060	-0	-0	-0	-0
B2010	Metal Siding	2035	-0	-0	-0	-52,000
B2010	Entryway	2026	-0	-3,800	-8,400	-0
B2010	Overhang	2026	-0	-11,500	-0	-1,400
B2020	Windows - Insulated Glazing Units	2034	-0	-0	-42,900	-0
B2020	Windows - Insulated Glazing Units	2032	-0	-0	-50,700	-25,000
B2020	Window Sealants	2027	-0	-1,000	-0	-1,000
B2030	Entrance Door	2030	-0	-0	-14,800	-0
B2030	Exterior Metal Doors	2028	-0	-27,300	-0	-0
B2030	Exterior Glass Doors	2042	-0	-0	-0	-21,000
B2030	Exterior Wood Doors	2034	-0	-0	-6,300	-0
B2030	Hatch	2030	-0	-0	-13,000	-0
B3010	Shingle	2031	-0	-0	-1,600	-0
B3010	Built Up Roof Assemblies	2027	-0	-60,900	-0	-60,900
B3010	Slate	2121	-0	-0	-0	-0
B3010	Slate	2027	-0	-14,000	-0	-0

3.3 C INTERIORS

3.3.1 C10 Interior Construction

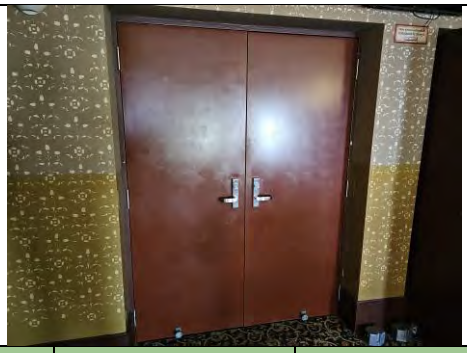
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Mezzanine	C Interiors	C10 Interior Construction	1980	75
Description & Recommendation				
A wooden storage mezzanine is installed backstage of the main theatre space. The structure is intact, anchored into the concrete floor, and the material is adorned by signatures. It is expected that the structure will require replacement at the end of its expected useful life.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	End of Life	No Action	N/A	-

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Interior Glazing	C Interiors	C10 Interior Construction	1980	50
Description & Recommendation				
The glass panes are intact, but do have minor scratches present. The frames have layers of paint that obfuscate their physical condition, but appear to be in a similar condition. The glazing installed within the office space are a ribbed, obfuscating type. It is recommended that the units be replaced in the long term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Long Term	Replace	2040	-4,600

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Interior Metal Doors	C Interiors	C10 Interior Construction	1980	40

Description & Recommendation

The metal doors within the building are painted either a blue-grey, black, or burgundy colour. The units in the backstage/working areas have denting due to the nature of their installed location. They also are adorned with signatures and notes from past theatre crews. The doors used by visitors tended to have scraping and paint chipping visible. The majority of units are expected to require replacement in the medium term.

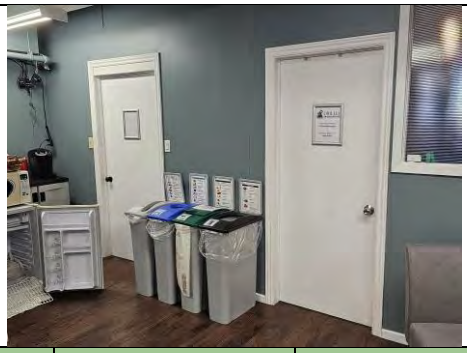


Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2029	-61,100

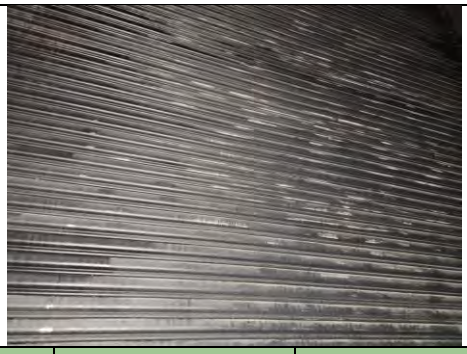
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Interior Wood Doors	C Interiors	C10 Interior Construction	1980	30

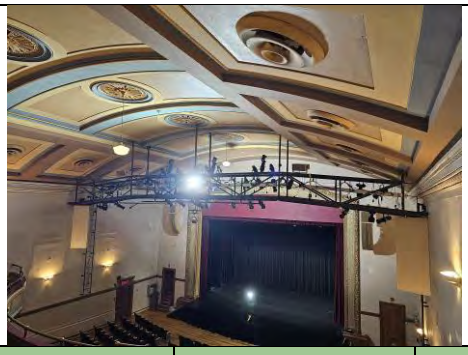
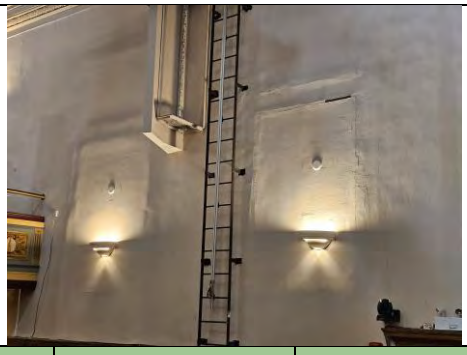
Description & Recommendation

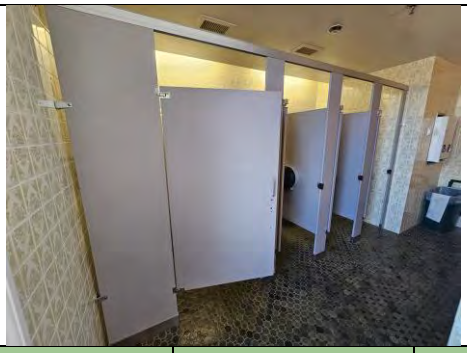
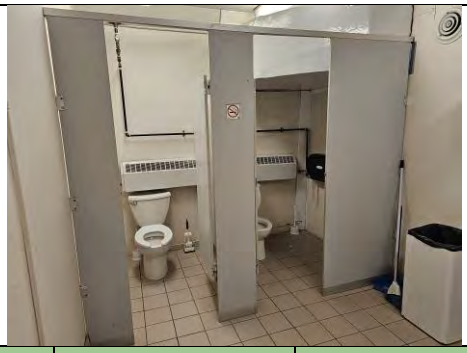
The wood doors within the building are generally painted either a blue-grey or white colour. The units in the working areas have damage along their face and edges due to the nature of their installed location. The doors used by staff and performers had exposed material and paint chipping visible. The majority of units are expected to require replacement in the medium term.

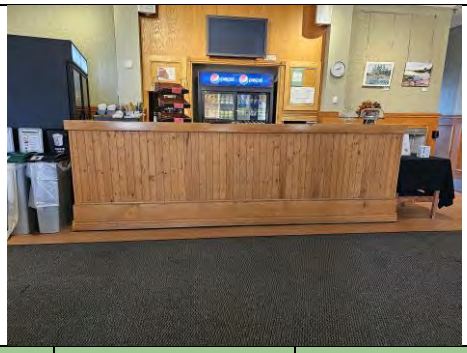


Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2031	-30,800

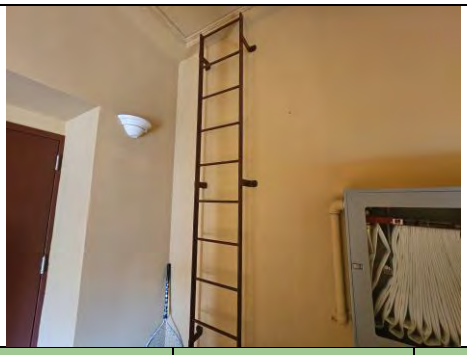
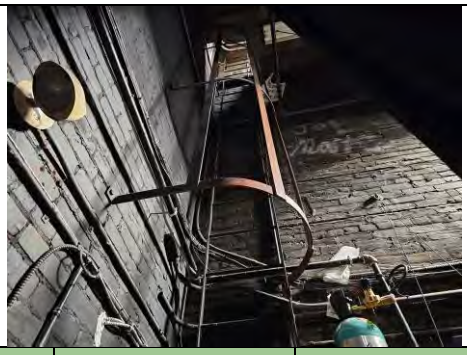
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Interior Bay Doors	C Interiors	C10 Interior Construction	1980	50
Description & Recommendation				
The bay door is installed in the main theatre space and used to move larger items to/from the stage. The unit is generally intact with scraping visible, and is also adorned with signatures from past theatre crews. The unit is expected to require replacement in the medium term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Medium Term	Replace	2034	-4,000

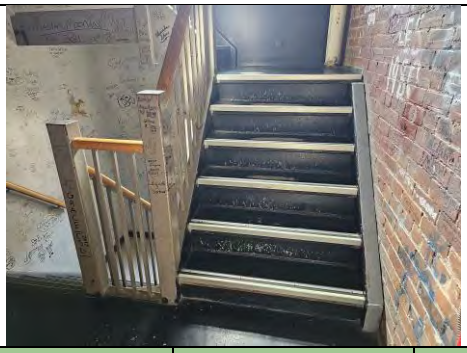
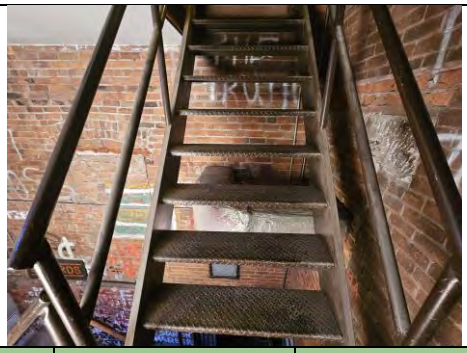
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Railings - Metal	C Interiors	C10 Interior Construction	1980	75
Description & Recommendation				
The catwalk and associated ladders were visible from ground level. The unit was last inspected in 2023 and did not appear to have concerns in relation to it. A replacement of the unit is expected at the end of its expected useful life.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	End of Life	No Action	N/A	-

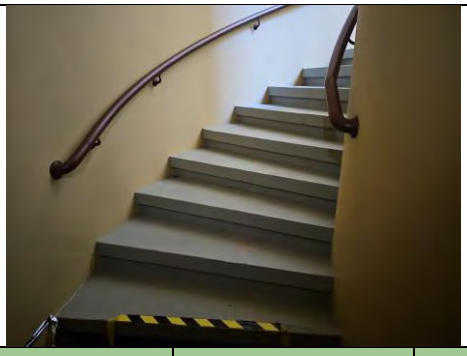
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Toilet Partitions	C Interiors	C10 Interior Construction	2016	20
Description & Recommendation				
The partitions installed within the washrooms are manufactured from melamine and include doors, coat hooks, and manual locks. The partitions are finished to have a grey tone and are without major concerns. It is expected that the units will require replacement in the long term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Long Term	Replace	2036	-13,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Millwork	C Interiors	C10 Interior Construction	1980	25
Description & Recommendation				
The millwork installed in the facility includes the counters within the washrooms and green rooms. These are manufactured from wood and finished with melamine. The units have evident areas of damage and material loss along the edges. It is recommended that the units be replaced in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Short Term	Replace	2028	-58,300

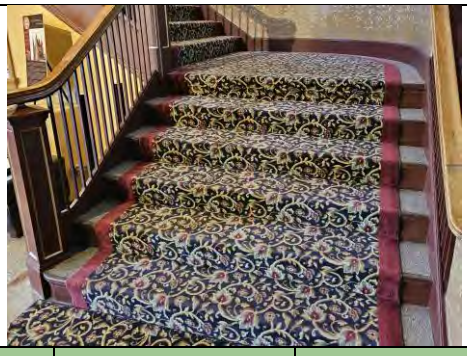
3.3.2 C20 Stairs

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Metal Staircases	C Interiors	C20 Stairs	1980	80
Description & Recommendation				
The ladders installed within the building are anchored into the walls. The finishing is wearing away due to use, exposing both the metal or previous coats of paint. The treads are without suitable traction tape, but the taller units do have safety devices are installed around them. It is recommended that the units be refinished, with traction tape installed, in the short term. It is expected that the units will require replacement at the end of their expected useful life.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	End of Life	Replace	N/A	-

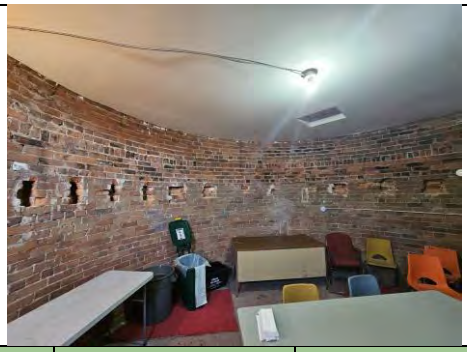
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Metal Staircases	C Interiors	C20 Stairs	1950	100
Description & Recommendation				
The metal staircases installed in the back of house areas are intact with no major concerns found. The material is stained and worn from use, where exposed, and includes signatures from past theatre crews. It is expected that the units will require replacement at the end of its expected useful life.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	End of Life	Replace	N/A	-

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Concrete Staircases	C Interiors	C20 Stairs	1915	150
Description & Recommendation				
The concrete stairs installed within the building had minor wear from use over the years, of which is not a concern. The visible material is intact and without loss. No action is recommended at this time.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	End of Life	No Action	N/A	-

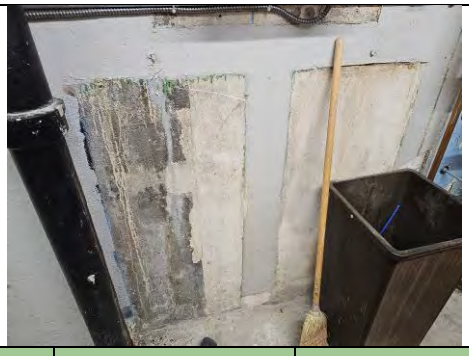
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Metal Stair Finishes	C Interiors	C20 Stairs	1980	30
Description & Recommendation				
The finishing on the metal stairs is a mix of materials, such as vinyl tile or rubber. The vinyl tile is damaged and scuffed, with some areas of mastic visible. The rubber treads leading to the second floor offices are showing areas of separation and lifting along edges while also retaining most of its traction properties. It is recommended that the finishing be replaced in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Short Term	Replace	2028	-3,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Concrete Stair Finishes	C Interiors	C20 Stairs	2012	30
Description & Recommendation				
The carpeting installed is free of visible damage or fraying. It is expected that it will require replacement in the long term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Long Term	Replace	2042	-15,300

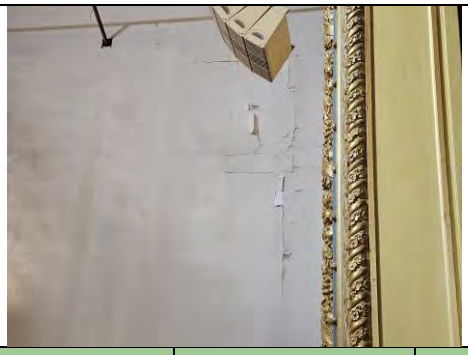
3.3.3 C30 Interior Finishes

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Concrete Masonry Units	C Interiors	C30 Interior Finishes	1915	75
Description & Recommendation				
The bricking visible is original to the building. Many areas were seen to have missing, deteriorating, or damaged bricks; such as in the top of the turrets. It is recommended that the damaged and missing units be replaced. Due to the historical nature of the building it is highly recommended that the governing historical society be consulted with prior to undertaking any work.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Medium Term	Replace	2034	-951,500

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Concrete Masonry Units	C Interiors	C30 Interior Finishes	1950	100
Description & Recommendation				
The blocks are physically intact but do show signs of repairs and wearing from interactions over time. The units are also finished in a coat of paint in most areas, of which are generally intact with minor chipping. It is expected that the walls will last the life of the building. No action is recommended at this time, outside of typical building O&M.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	End of Life	No Action	N/A	-

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Parging	C Interiors	C30 Interior Finishes	1980	30
Description & Recommendation				
The parging installed within the basement area was found to be stained and cracked in areas. Within the elevator room, hydraulic fluid is visible behind the finishing and felt oily when touched. The cracks identified were thin and likely due to temperature fluctuations over time. It is recommended that the finishing be replaced in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Short Term	Replace	2026	-6,000

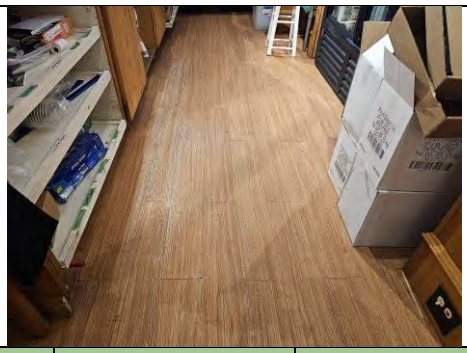
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Gypsum Board Walls	C Interiors	C30 Interior Finishes	1980	75
Description & Recommendation				
The drywall within the building is largely intact with a coat of paint applied. The areas where damage was viewed was on the ground floor of the turrets where the emergency exits are located. The walls have holes and deterioration evident adjacent to the doorway. It is recommended that the damage be patched as part of building O&M. No replacement is expected to be required until the end of its effective useful life.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Good	End of Life	Repair	N/A	-

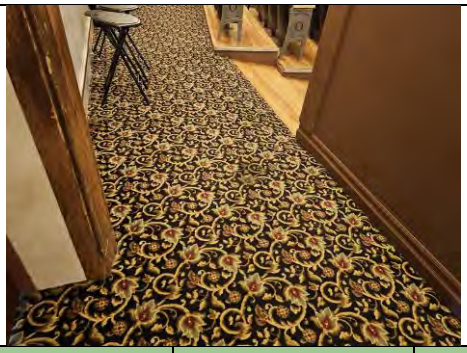
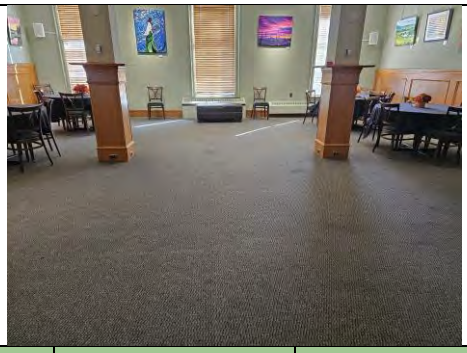
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Plaster Walls	C Interiors	C30 Interior Finishes	1915	100
Description & Recommendation				
The plaster walls installed are original to the building and are exhibiting damage and loss. It is recommended that the plaster walls be refinished in the short term. Due to the historical nature of the building it is highly recommended that the governing historical society be consulted with prior to undertaking any work.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Short Term	Replace	2025	-1,107,000

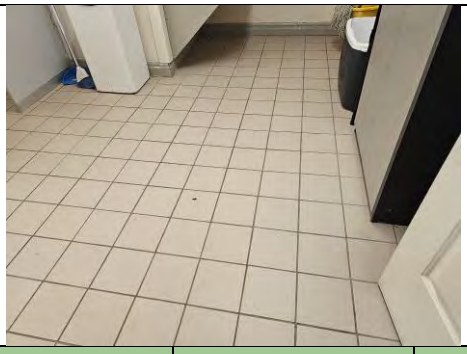
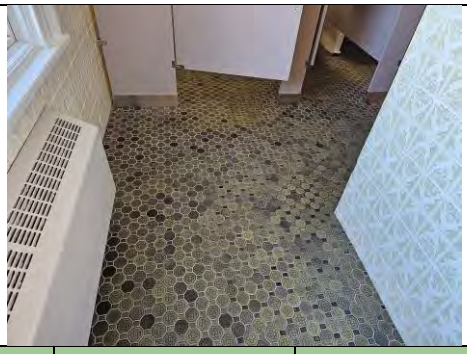
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Ceramic Tiles	C Interiors	C30 Interior Finishes	2017	50
Description & Recommendation				
The tiles viewed were found to be free of damage or concerns. The grouting was also seen to be without issues. It is expected that the material will last until the end its expected useful life.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Good	End of Life	No Action	N/A	-

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Wallpaper	C Interiors	C30 Interior Finishes	1980	30
Description & Recommendation				
The wallpaper is peeling from the wall along the seams and edges, as well as having rips and material loss. It is recommended that the material be replaced in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Short Term	Replace	2027	-16,100

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Wood Panel	C Interiors	C30 Interior Finishes	1950	30
Description & Recommendation				
The wood finish is installed within the market room and coated in a grey-tone paint. The material appeared to be intact and adhered well to the wall. It is expected that the finishing will require replacement in the long term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Long Term	Replace	2035	-18,900

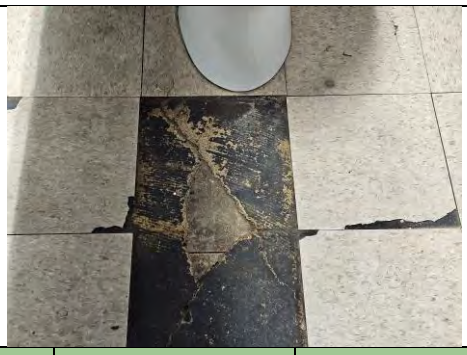
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Vinyl Plank Flooring	C Interiors	C30 Interior Finishes	2014	20
Description & Recommendation				
The flooring is installed without evident defects. The plank faces have wearing evident with no material loss or fractures visible. It is recommended that the flooring be replaced in the medium term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Medium Term	Replace	2034	-151,200

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Sheet Carpet Flooring	C Interiors	C30 Interior Finishes	1980	20
Description & Recommendation				
The carpeting installed has visible damage and fraying within the lounge space. The remaining material within the building is worn down but intact. It is recommended that the carpeting be replaced in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Short Term	Replace	2028	-107,500

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Ceramic Tile Flooring	C Interiors	C30 Interior Finishes	1980	50
Description & Recommendation				
The tiles viewed were found to be free of damage or concerns. The grouting was also seen to be without issues. It is expected that the flooring will require replacement in the long term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Long Term	Replace	2035	-44,200

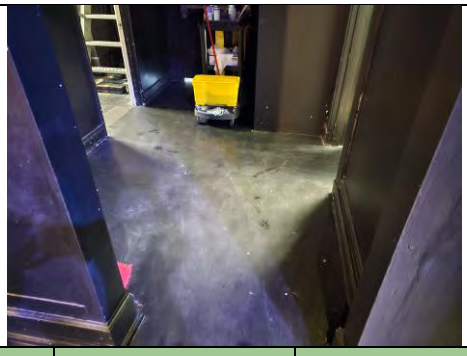
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Vinyl Tile Flooring	C Interiors	C30 Interior Finishes	1980	30

Description & Recommendation
The vinyl tile flooring is damaged and missing material in multiple areas. It is recommended that the flooring be replaced in the short term, with caution made to the potential of asbestos within the mastic.

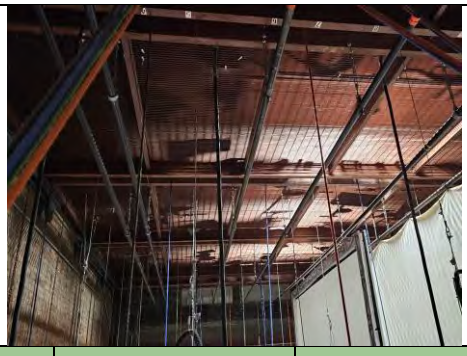


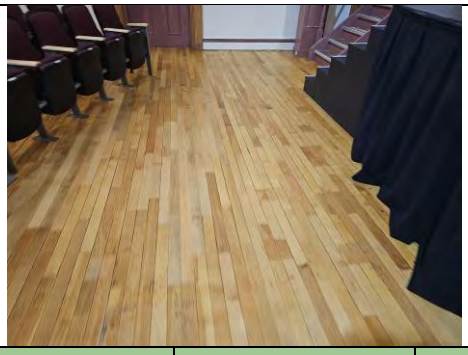
Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Very poor/Failing	Short Term	Replace	2025	-50,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Sheet Vinyl Flooring	C Interiors	C30 Interior Finishes	2015	20
Description & Recommendation				
The flooring is installed within the smaller theatre space as the performance floor and hallway finishing. The material has areas of scuffs and staining, but is intact with no heavily worn areas visible. It is recommended that the flooring be replaced in the medium term.				

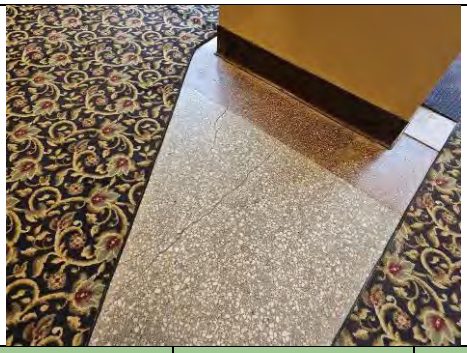


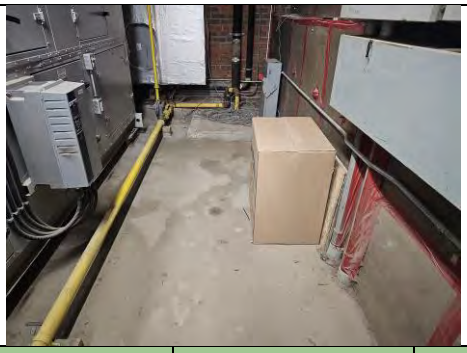
Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2032	-13,500

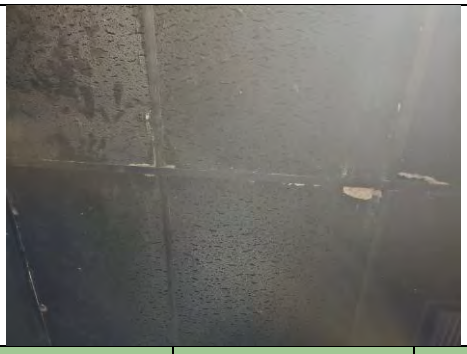
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Metal Flooring	C Interiors	C30 Interior Finishes	1980	80
Description & Recommendation				
The open metal flooring installed above the main stage is intact and secure based on the available vantage and access points. The metal has lost most of its paint along the top. It is expected that the flooring will require replacement at the end of its expected useful life.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	End of Life	No Action	N/A	-

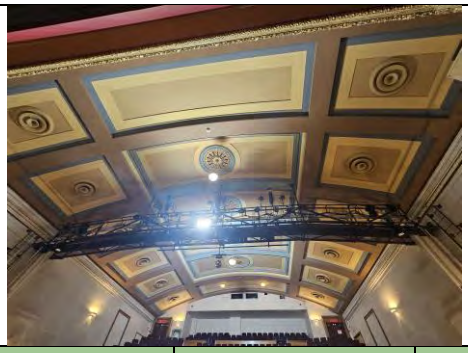
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Wood Flooring	C Interiors	C30 Interior Finishes	2015	70
Description & Recommendation				
The wood strips are intact and installed in an offset pattern. The clear coat finishing has begun to wear away, allowing the wood to be exposed. It is recommended that the floor be refinished in the short term. The flooring material is expected to last until the end of its expected useful life.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	End of Life	Repair	N/A	-

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Theatrical Stage	C Interiors	C30 Interior Finishes	2015	50
Description & Recommendation				
The stage uses finished panels as the flooring. The faces of the panels have areas of scratches and staining. It is expected that the stage will last until the end of its useful life. it is recommended that the damaged panels continue to be replaced as necessary.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	End of Life	No Action	N/A	-

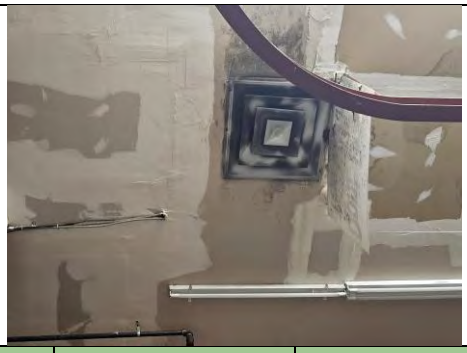
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Terrazzo Concrete Flooring	C Interiors	C30 Interior Finishes	1915	100
Description & Recommendation				
The floor is original to the building and has many areas of settlement cracking. The face is smooth with some chipping visible. It is recommended that the flooring be repaired in the short term. Due to the historical nature of the building it is highly recommended that the governing historical society be consulted with prior to undertaking any work.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Short Term	Repair	2027	-192,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Concrete Flooring	C Interiors	C30 Interior Finishes	1950	100
Description & Recommendation				
The concrete flooring has areas of settlement cracking and staining. Loss of paint is occurring in multiple areas, exposing the material below. It is expected that the material will last the life of the building. It is recommended that the floor finishing be repaired as part of building O&M.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	End of Life	Replace	N/A	-

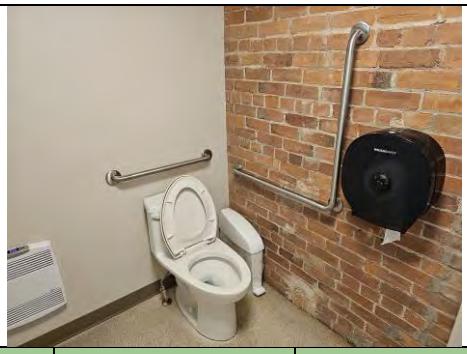
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Acoustic Ceiling Tiles	C Interiors	C30 Interior Finishes	1980	25
Description & Recommendation				
The drop ceiling tiles have visible damage, including missing material, cracks, and staining. It is recommended they be replaced in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Short Term	Replace	2026	-6,600

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Plaster Ceiling	C Interiors	C30 Interior Finishes	2017	100
Description & Recommendation				
The ceiling was redone in 2017 and, from what was visible from the available vantage points, has no areas of concern. It is expected that the plaster will require a replacement at the end of its expected useful life.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Very good	End of Life	No Action	N/A	-

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Plaster Ceiling	C Interiors	C30 Interior Finishes	1950	50
Description & Recommendation				
The ceiling is largely original to the building construction and had areas of concern visible. These include holes, settlement cracks, and patchwork in many areas. It is recommended that the plaster be replaced in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Short Term	Replace	2028	-73,500

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Gypsum Board Ceilings	C Interiors	C30 Interior Finishes	1950	75
Description & Recommendation				
The drywall ceiling is largely original to the building and had areas of concern visible. These include holes, staining, and patchwork in many areas. It is recommended that the damaged panels be replaced in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Short Term	Replace	2028	-89,100

3.3.4 C33 AODA

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
AODA Components	C Interiors	C33 AODA	2017	15
Description & Recommendation				
The accessibility devices include grab bars within the washrooms, insulation on the exposed drainage pipes of washroom sinks, and powered door operators with button activation. These devices were intact and operational. In addition, the seating within the main theatre has certain aisle seats that are able to be removed to allow for wheelchair accommodation. No action is required at this time. It is expected that the accessibility devices will require replacement in the medium term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Medium Term	Replace	2033	-19,100

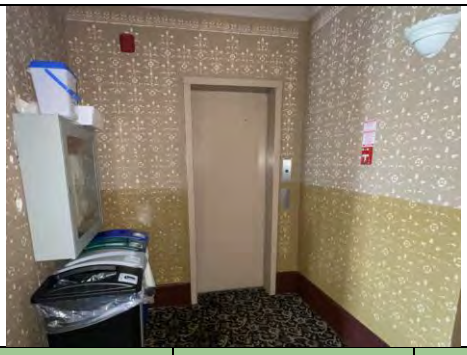
3.3.5 Summary of Opinion of Costs

Level 3	Component Description	Replacement Year	Immediate Term (2024)	Short Term (2025-2028)	Medium Term (2029-2034)	Long Term (2035-2049)
C1010	Mezzanine	2055	-0	-0	-0	-0
C1010	Interior Glazing	2040	-0	-0	-0	-4,600
C1020	Interior Metal Doors	2029	-0	-0	-61,100	-0
C1020	Interior Wood Doors	2031	-0	-0	-30,800	-0
C1020	Interior Bay Doors	2034	-0	-0	-4,000	-0
C1030	Railings - Metal	2055	-0	-0	-0	-0
C1030	Toilet Partitions	2036	-0	-0	-0	-13,000
C1030	Millwork	2028	-0	-58,300	-0	-0
C2010	Metal Staircases	2060	-0	-0	-0	-0
C2010	Metal Staircases	2050	-0	-0	-0	-0
C2010	Concrete Staircases	2065	-0	-0	-0	-0
C2020	Metal Stair Finishes	2028	-0	-3,400	-0	-0
C2020	Concrete Stair Finishes	2042	-0	-0	-0	-15,300
C3010	Concrete Masonry Units	2034	-0	-0	-951,500	-0
C3010	Concrete Masonry Units	2050	-0	-0	-0	-0
C3010	Parging	2026	-0	-6,000	-0	-0
C3010	Gypsum Board Walls	2055	-0	-0	-0	-0
C3010	Plaster Walls	2025	-0	-1,107,000	-0	-0
C3010	Ceramic Tiles	2067	-0	-0	-0	-0
C3010	Wallpaper	2027	-0	-16,100	-0	-0
C3010	Wood Panel	2035	-0	-0	-0	-18,900
C3020	Vinyl Plank Flooring	2034	-0	-0	-151,200	-0
C3020	Sheet Carpet Flooring	2028	-0	-107,500	-0	-107,500
C3020	Ceramic Tile Flooring	2035	-0	-0	-0	-44,200
C3020	Vinyl Tile Flooring	2025	-0	-50,400	-0	-0

Level 3	Component Description	Replacement Year	Immediate Term (2024)	Short Term (2025-2028)	Medium Term (2029-2034)	Long Term (2035-2049)
C3020	Sheet Vinyl Flooring	2032	-0	-0	-13,500	-0
C3020	Metal Flooring	2060	-0	-0	-0	-0
C3020	Wood Flooring	2085	-0	-0	-0	-0
C3020	Theatrical Stage	2065	-0	-0	-0	-0
C3020	Terrazzo Concrete Flooring	2027	-0	-192,000	-0	-0
C3020	Concrete Flooring	2050	-0	-0	-0	-0
C3030	Acoustic Ceiling Tiles	2026	-0	-6,600	-0	-0
C3030	Plaster Ceiling	2117	-0	-0	-0	-0
C3030	Plaster Ceiling	2028	-0	-73,500	-0	-0
C3030	Gypsum Board Ceilings	2028	-0	-89,100	-0	-0
C3300	AODA Components	2033	-0	-0	-19,100	-19,100

3.4 D SERVICES

3.4.1 D10 Conveying

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Passenger Elevator	D Services	D10 Conveying	1982	30
Description & Recommendation				
A ThyssenKrupp passenger elevator is located in the main lobby and provides access to the gallery of the Lightfoot Theatre. The cabin is operated with a hydraulic controller in the form of a 15HP Rota-Flow power unit (model RP-60-15; serial E-66847) manufactured by Dover circa 1982. The hydraulic device has failed and the elevator is currently non-operational. The elevator cabin was not accessed during the site assessment. It is recommended to modernize the elevator control system and refurbish the cabin interiors in the immediate term. Refer to 'Elevators - Investigation' for additional recommendations.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Very poor/Failing	Immediate	Replace	2024	-159,500

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Freight Elevator	D Services	D10 Conveying	2013	30
Description & Recommendation				
A freight elevator with a capacity of 5,500 kgs (12,125 lbs), or 73 persons, is present in the west end of facility. It provides access between the basement and level 2. The elevator has a 2013 vintage and is operated with a I.T.I Hydaulik controller (Part no. 3462/015 C4PIC-276P; serial NF38622-2). The cabin finishes include metal flooring, stainless steel handrails and laminated panel walls. The asset is in fair condition however it has frequent breakdowns with repair and maintenance conducted by Elevator1. Cabin renovation and control replacement are anticipated in the long term. Refer to 'Elevators - Investigation' for immediate term recommendations.				


Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Long Term	Refurbish	2043	-366,300

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Elevators - Investigation	D Services	D10 Conveying	1982	30

Description & Recommendation

The passenger elevator is currently out of service. Staining from hydraulic fluid is present on the south wall in the basement machine room. Investigation is required by an elevator specialist to determine source and extent of hydraulic leak as well as any remediation concerns. The Freight Elevator witnesses intermittent service disruptions in the form of door jams, malfunctioning control mechanisms, and leveling adjustments. It is recommended the freight elevator is recommissioned to operate as intended. The assistance of a qualified service provider in determining the scope of the problem and offering solution, with professional oversight is recommended. An allowance for an investigational study on both elevators is provided in the immediate term.

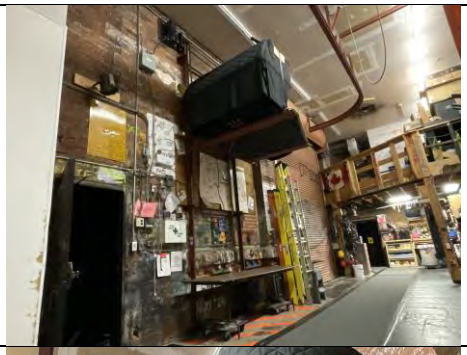
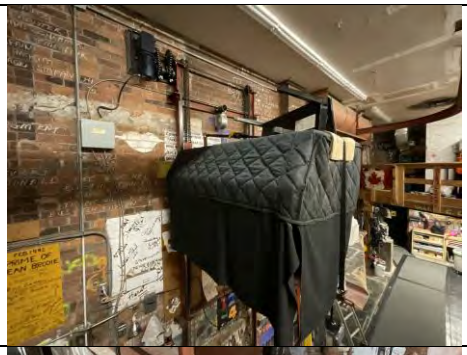

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Immediate	Investigate	2024	-8,000

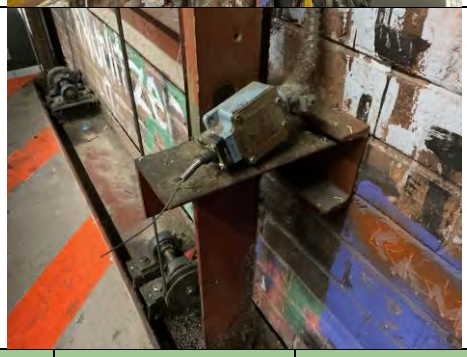
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Piano Lift	D Services	D10 Conveying	1917	100

Description & Recommendation

A piano lift is located back stage of the Lightfoot Theatre. The structure consists of four (4) horizontal steel beams anchored to the wall supporting two (2) vertical posts. Mechanical components include a power unit (motor), drive shaft, leaf chain, wire rope, and limit switch. A wall mounted push button

switch is utilized to raise and lower the platform hoist. The system is used to store a grand piano away from foot traffic. The piano lift is assumed to be original to 1917 with implementation occurring during the rebuilding of the Opera House after the fire in 1915. It receives routine inspections with the last review occurring September 12 2023, by Zelus Material Handling. The inspection process includes visual inspection, compliance check, lubrication, and wear analysis. Individual mechanical components are replaced as needed (hoist, cables, etc.). Replacement should be guided by maintenance regime. No work is foreseen in the short or medium term other than general preventative maintenance assuming normal use is continued. The piano lift is anticipated to function adequately for another 10 years.

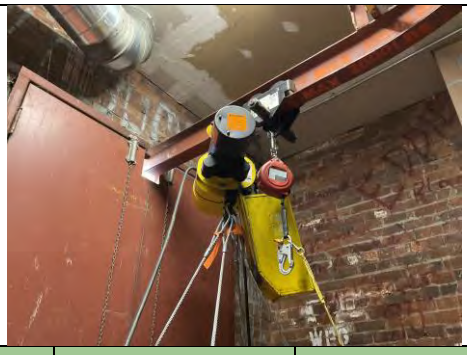


Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Long Term	Refurbish	2035	-21,300

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Hoist - 1 Ton	D Services	D10 Conveying	1917	100

Description & Recommendation

There is an 'S' shaped track fitted with a 1-ton hoist located in the back stage of the Lightfoot Theatre. The steel I-Beam is fixed in place with lengths of steel angle that are attached to the buildings superstructure. The electrical hoist can be used to transport items from the buildings exterior to the stage, via a large access hatch in the west exterior wall. The entire system receives routine inspections by Zelus Material Handling. Overall it is in fair condition with no deficiencies noted. Vintage of electrical hoist equipment is unknown however it is suspected to be approximately 5 years old. Replacement should be guided by maintenance regime. No work is foreseen in the short or medium term other than general preventative maintenance assuming normal use is continued. The 1-ton hoist is anticipated to function adequately for another 10 years.

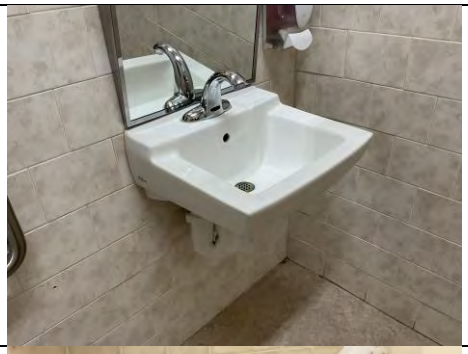
Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Long Term	Refurbish	2035	-21,300

3.4.2 D20 Plumbing

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Sinks	D Services	D20 Plumbing	2013	20

Description & Recommendation

Sinks in washrooms consist of a combination of wall mounted, drop-in counter top, and countertop units. Sinks in the Green room public washroom (including the accessible washroom) consists of sensor activated faucets. All remaining sinks are manually operated. Overall the components are in fair condition. Replacement is anticipated in the medium term at end of expected useful life.

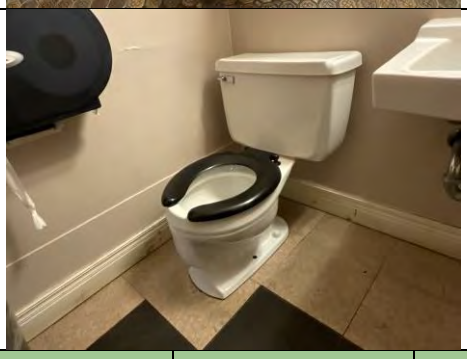
	
	

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2033	-7,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Toilets	D Services	D20 Plumbing	2013	20

Description & Recommendation

Renovations to washrooms occurred circa 2013 with the majority of toilets upgraded at that time. Wall mounted tankless units with sensor activated flush valves are present in the Green room public washrooms. All remaining toilets are floor mounted two (2) piece units with manual flush valves. Overall the toilets are in fair condition. Replacement is anticipated in the medium term at end of expected useful life. There are approximately three (3) toilets which were not replaced during renovations and have 1970-1980 vintages. These units should be replaced on an as-fail basis and covered under the O&M budget.

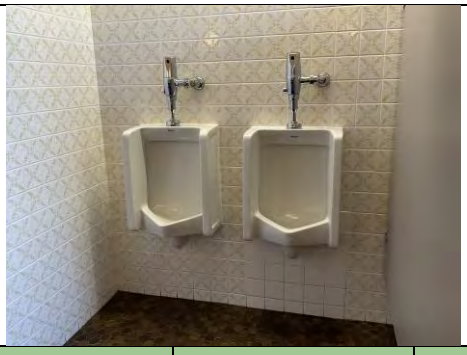


Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2033	-21,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Urinal	D Services	D20 Plumbing	2013	20

Description & Recommendation

The male washroom off the Green room contains two (2) wall mounted urinals equipped with sensor activated flush valves. The urinals are in fair operating condition with no deficiencies noted. Replacement is anticipated in the medium term.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2033	-2,200

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Shower	D Services	D20 Plumbing	2013	30

Description & Recommendation

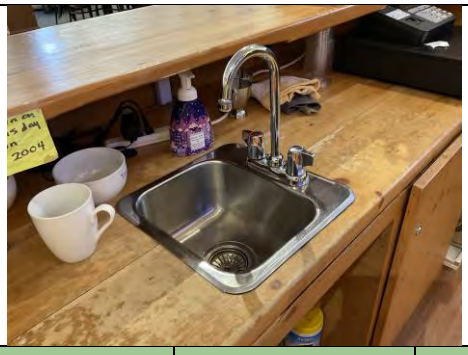
There is a one-piece 'roll-in' fiberglass shower stall located in the 2nd floor Dressing Room Area equipped with a shower head, thermostatic control valve, drain, "grab-bars", a basic shower curtain, and a foldable seat. It is AODA complaint and in good condition. Replacement is not anticipated in the next 15 years.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2043	-4,800

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Stainless Steel Sinks	D Services	D20 Plumbing	2013	20

Description & Recommendation

There are stainless steel sinks present in the green room (single bowl) and the Farmer Market (single bowl & double bowl). The sinks are in fair condition. Sink replacement is anticipated in the long term and replacement of faucets are anticipated to occur on an as fail basis and to be covered under the O&M budget.

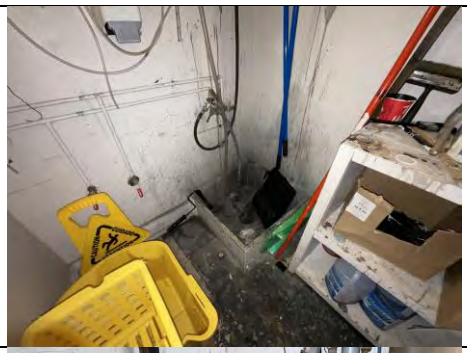


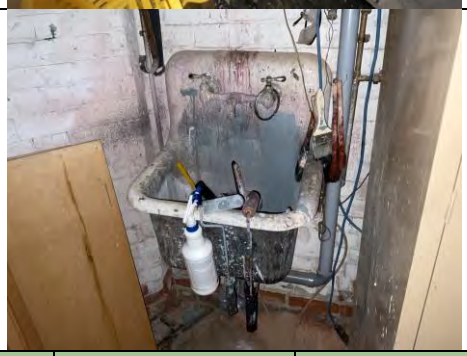

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Long Term	Replace	2035	-2,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Service Sink	D Services	D20 Plumbing	1986	20

Description & Recommendation

Four (4) service sinks are located on site. There is a free standing utility sink located backstage of the Lightfoot Theatre which shows heavy use. There are floor mounted fiberglass wash basins located in the Studio Theatre Custodial closet and in the basement near AHU-4. There is a wall mounted cast iron tub located in the basement near the boilers. All the units are scuffed and stained. Replacements are recommended on an as fail basis. Action is anticipated in the medium term.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Medium Term	Replace	2029	-3,200

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Water Fountain	D Services	D20 Plumbing	2022	30
Description & Recommendation				
There are two (2) cold water Elkay drinking fountains in the facility with a unit in the Green Room and another located in the 2nd floor Dressing Room area. The water fountains are in very good condition and have a 2022 vintage. Replacement is not anticipated in the term of analysis.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Very good	End of Life	Replace	N/A	-

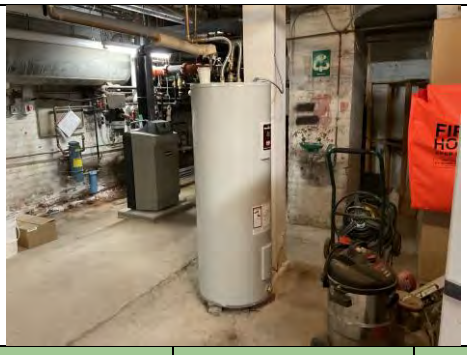
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Domestic Water Distribution	D Services	D20 Plumbing	1917	60
Description & Recommendation				
Main incoming water enters the building through an uninsulated pipe located in the basement on the east end near transport services. The water service is metered and equipped with shut-off valves and a backflow preventer. Copper piping is used as the primary means of domestic water distribution. Upgrades to portions of the distribution piping occurs during equipment upgrades such as bathroom renovations (circa 2013) and DHW heater replacement (circa 2020). The majority of pipe lengths are insulated with pipe wrap to prevent heat loss and condensation, as well to reduce noise transmission. The assessment noted a combination of chrome brass and PVC drain piping present under sinks with braided stainless steel water lines to faucets. There is no evidence to suggest any immediate issues with the domestic water distribution piping. The facility experiences water leaks at infrequent intervals and conducts repair as necessary. Overall the domestic water distribution is in fair condition, however the infrastructure is aging and will require increased corrective maintenance with time. A cost for complete replacement is provided in the medium term.				
				

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2034	-88,500

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Domestic Water Heater	D Services	D20 Plumbing	2020	12

Description & Recommendation

Domestic Hot Water (DHW) for the facility is provided by one (1) 4.5 kW heater/tank manufactured by Bradford White. The unit (model RE265T6-1NCWW; serial WK46791887) has a 2020 vintage and a 231 Litre (61 USG) capacity. There is no evidence of rust, corrosion, or leaks from the tank and it is in good condition overall. Pipe insulation should be applied on distribution lines to reduce heat loss. Replacement is anticipated in the medium term and end of expected useful life.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Medium Term	Replace	2032	-3,300

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Sump Pumps - Elevator Pit	D Services	D20 Plumbing	2013	10

Description & Recommendation

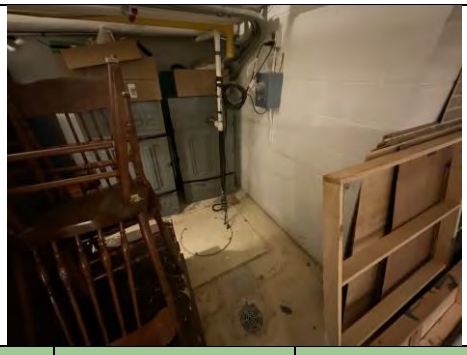
Two (2) sumps are located in the basement serving the elevator pit which are automatically controlled via a Duplex waterproof control panel (model BF120D). Typical expected useful life is 10 years. Replacement is recommended on an as-fail basis. Action is anticipated in the short term.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Short Term	Replace	2026	-8,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Sump Pump - Stormwater	D Services	D20 Plumbing	1991	10

Description & Recommendation

One (1) sump pump is located in the basement for stormwater and is connected to the sanitary sewer. The sump is automatically controlled via a wall mounted panel equipped with a high level alarm. Documentation posted on a nearby wall indicates the sump is a Hydromatic Pump (model SW25A) with a 1991 vintage. The sump is operating beyond its expected useful life and replacement is recommended in the immediate term.

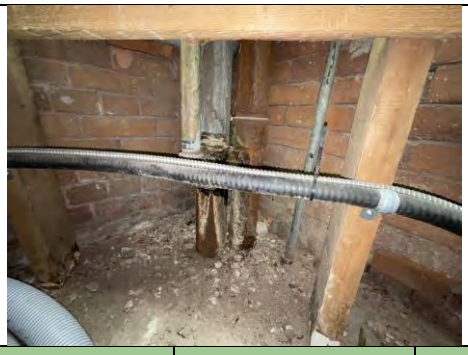


Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Immediate	Replace	2024	-4,200

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Rain Water Drainage	D Services	D20 Plumbing	1917	75

Description & Recommendation

Storm water from roof and area drains is collected in drain stacks and transported by gravity to the municipal sewer system. The existing drain pipes are cast iron piping/fittings. A portion of the drain stack was viewed in the crawl space under the south stairs to the Lightfoot Gallery. Staining from water residue and rust formation was visible. Replacement with PVC drain pipes is recommended in the medium term. It is estimated there is approximately 400 ft of cast iron drain pipe present in the facility.



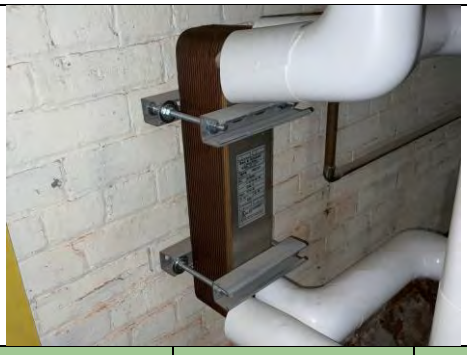

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Medium Term	Replace	2029	-76,000

3.4.3 D30 HVAC

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Gas Supply System	D Services	D30 HVAC	2020	25
Description & Recommendation				
Incoming natural gas enters the facility on the north elevation of the building envelope. A Honeywell rotary corrector (utility grade meter) was installed circa 2020. No issues identified with the meters which are owned and operated by the utility. No action required.				


Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	N/A	No Action	2045	-0

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Heat Exchanger	D Services	D30 HVAC	2018	30
Description & Recommendation				
There is a Bell & Gossett plate & frame heat exchanger located in the basement. The unit (model BP 415-040; serial 56860504003) is fed from the boilers to heat the glycol loop serving the heating coil in AHU-4. The life expectancy for plate & frame heat exchangers is 30 years based on industry standard. Replacement is anticipated in the long term.				



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2048	-9,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Hot Water Boilers	D Services	D30 HVAC	2017	20

Description & Recommendation

There are three (3) hot water boilers (B-1, B-2, & B-3) located in the basement which serve the hot water radiators, plate & frame heat exchanger, and heating coil in AHU-5. B-1 & B-2 are rated at 310 MBH (model Ultra 310; serial B-1 550207755; serial B-2 N/A) and B-3 is rated at 230 MBH (model Ultra 230; serial B-3 550201464). The units have a 2017 vintage and are in good condition. Replacement is recommended in the long term at end of expected useful life.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2037	-80,700

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Boiler Circulation Pumps	D Services	D30 HVAC	2017	15

Description & Recommendation

Each boiler is equipped with a fractional horsepower circulation pump. B-1 is served by a Taco cartridge circulator (model 0014-F1-1IFC; serial N/A). B-2 is served by a Taco cartridge circulator (model 0014-F1; serial N/A). B-3 is served by a Bell & Gossett high efficiency circulator pump (model ecocirc XL 55-45; serial 01227). Pumps failures can be handled as necessary. Replacement is anticipated in the medium term.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2032	-11,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Heating Distribution Pumps	D Services	D30 HVAC	2017	15

Description & Recommendation

There are three (3) fractional horsepower circulator pumps for the hot water loop. P-1 and P-2 are Taco circulators equipped with 3/4 HP WEG motors which serve the hot water radiators in the facility. P-5 is a Bell & Gosset high efficiency circulating pump (model ecocirc XL 55-45; serial 01310) suspected to be dedicated to the plate & frame heat exchanger. Pumps failures can be handled as necessary. Replacement is anticipated in the medium term.


Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2032	-11,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Glycol Pumps	D Services	D30 HVAC	2017	15
Description & Recommendation				
The glycol loop for the heating coil in AHU-4 is served by two (2) fractional horsepower Bell & Gosset high efficiency circulating pumps (model ecocirc XL 55-45; serial P-7 01307; serial P-8 00873) that operate in duty/standby configuration. The pumps have a 2017 vintage and are in good condition. Replacement is anticipated in the medium term at end of expected useful life.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Good	Medium Term	Replace	2033	-7,600

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Glycol Feed Package	D Services	D30 HVAC	2021	20
Description & Recommendation				
There is a glycol fill system equipped with a fractional HP pump located in the basement next to AHU-4. No deficiencies noted and the Glycol Feed Package is in good condition. Replacement is anticipated in the long term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Good	Long Term	Replace	2041	-10,600

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Heating Distribution Pump - AHU-5	D Services	D30 HVAC	2021	15

Description & Recommendation

The heating coil in AHU-5 is served by one (1) Armstrong pump (model 816032MF-000) with a fractional HP A.O. Smith motor. The pump has a 2021 vintage and is in good condition. Replacement is anticipated in the long term, however any modifications to AHU-5 may expedite need for earlier action.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2036	-3,800

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Interior Air Handling Unit - AHU-1	D Services	D30 HVAC	2017	30

Description & Recommendation

AHU-1 is located in the mechanical penthouse and provides fresh air, heating, and cooling for the Gordon Lightfoot Theatre. The packaged Variable Air Volume (VAV) Engineered Air unit (model FW453/DJE140; serial 56520 RT-1) is equipped with a C-TRAC3 controller, two (2) Direct Expansion (DX) cooling coils, a natural gas indirect fired burner (1,100 MBH input capacity), a 15 horsepower (HP) supply fan, and a 7.5 HP return fan. Both fan motors are equipped with Variable Frequency Drives (VFD). The 15,000 CFM Air Handling Unit (AHU) has a 2017 vintage and is in good condition with no deficiencies noted. The expected service life for indoor AHUs is 25-30 years. Individual component parts are inspected in routine maintenance procedures (fan belts, motors, filter banks, etc.). Replacement is anticipated in the long term.


Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2047	-165,200

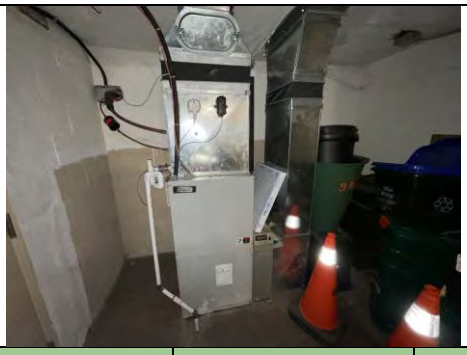
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Interior Air Handling Unit - AHU-2	D Services	D30 HVAC	2017	30

Description & Recommendation

AHU-2 is located in the mechanical penthouse and provides fresh air, heating, and cooling for the Theatre Stage. The packaged Variable Air Volume (VAV) Engineered Air unit (model FW163/DJS40; serial 56520 RT-2) is equipped with a DJM controller, two (2) Direct Expansion (DX) cooling coils, a natural gas indirect fired burner (325 MBH input capacity), a 7.5 HP supply fan, and a 3 HP return fan. Both fan motors are equipped with Variable Frequency Drives (VFD). The 6,000 CFM unit has a 2017 vintage and is in good condition with no deficiencies noted. Replacement is anticipated in the long term.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2047	-75,500

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Furnace	D Services	D30 HVAC	1991	18
Description & Recommendation				
Heating and ventilation for the backstage area of the Studio Theatre is provided by a Keeprite furnace (ID Furnace-3) located in the basement. The unit (model NBCM036XKB2; serial L911969107) has a 1991 vintage and is operating beyond its expected useful life. Replacement is recommended in the immediate term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Immediate	Replace	2024	-11,900

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Interior Air Handling Unit - AHU-4	D Services	D30 HVAC	2018	30
Description & Recommendation				
AHU-4 is located in the basement and provides fresh air, heating, and cooling for the Studio Theatre. The Constant Air Volume (CAV) Daikin unit (model CAH006GDAM; serial FBOU180100836) is equipped with two (2) Direct Expansion (DX) cooling coils, a glycol heating coil (served by the Weil-McLain boilers via Bell & Gossett heat exchanger), a 5 HP supply fan, and a 3 HP return fan. The unit has a 2018 vintage and an estimated 2,500 CFM airflow capacity. It is in good condition with no deficiencies noted. Replacement is anticipated in the long term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Good	Long Term	Replace	2048	-51,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Interior Air Handling Unit - AHU-5	D Services	D30 HVAC	1982	30

Description & Recommendation

AHU-5 is located in the basement and provides fresh air, heating, and cooling for the Green Room. The Constant Air Volume (CAV) Trane Climate Changer (model 8MP-HFFVU; serial 633079) is equipped with two (2) Direct Expansion (DX) cooling coils, a hot water heating coil (served by the Weil-McLain boilers), a 3 HP supply fan, and a 1 HP return fan. Exact vintage of AHU is unknown and estimated to be roughly 40 years old. Individual component parts are replaced through ad-hoc and routine maintenance procedures (fan belts, motors, filter banks, pump for heating coil, etc.). Modifications to convert the unit to Direct Digital Control (DDC) occurred during implementation of the BAS. Overall the unit is aging, in poor condition, and receives recurrent maintenance to remain operational. Replacement/refurbishment is anticipated in the immediate term. Suggested upgrades to AHU include new heating coils, DX coils, and supply/return fans with Variable Frequency Drives (VFDs).

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Immediate	Replace	2024	-51,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Exhaust Fans - Washrooms	D Services	D30 HVAC	1982	20

Description & Recommendation

Each washroom contains an exhaust fan which is interlocked with the lighting circuit. Fans in the public washrooms (near Green room) and accessible washrooms (main lobby & 2nd floor dressing room) have a circa 2013 vintage. Fan units serving the Studio Theatre washrooms and bathrooms in the basement have reached the end of their life expectancy and require renewal. Replacement is recommended in the short term.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Short Term	Replace	2025	-11,200

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Exhaust Fan - Elevator Machine Room	D Services	D30 HVAC	1982	20

Description & Recommendation

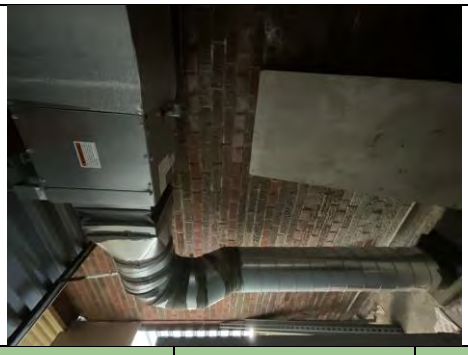
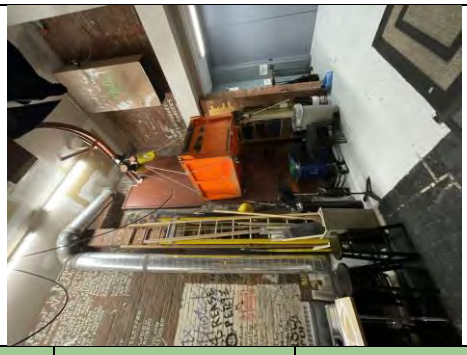
The elevator machine room for the passenger lift is equipped with an exhaust fan. The Greenheck unit (model SQD-10-B; serial 20331) has a fractional horsepower motor and is in fair condition. Replacement is anticipated in the immediate term to coincide with upgrades to the passenger elevator.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Immediate	Replace	2024	-1,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Exhaust Fan - Penthouse	D Services	D30 HVAC	2018	20

Description & Recommendation

There is an exhaust fan located in the penthouse with duct work running through the floor backstage of the Lightfoot Theatre. It is suspected to serve the basement however we request the City of Orillia confirm purpose and report back. The Greenheck unit (model SQ-90-DGEX-QD; serial 15185369) has a fractional horsepower motor and is in fair condition. Replacement is anticipated in the long term.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Long Term	Replace	2038	-1,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Ceiling Fan	D Services	D30 HVAC	2013	20

Description & Recommendation

There is a ceiling fan installed in the Ticket Office. The fan is manually operated via a wall mounted toggle switch to provide air circulation and evaporative cooling for occupants. Replacement is anticipated in the medium term on an as-fail basis.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2033	-1,100

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Air Cooled Condenser - Furnace	D Services	D30 HVAC	1991	15

Description & Recommendation

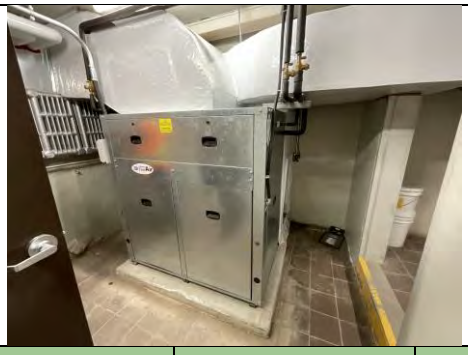
There is a ~3-ton air cooled condenser located on the roof which serves the furnace. The Keeprite unit (model KSSC3600; serial N/A) utilizes R-22 (Freon) which is a HCFC refrigerant being phased out in Canada due to its harsh environmental impact. The unit is operating beyond its expected useful life and replacement should coincide with the furnace upgrade in the immediate term.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Immediate	Replace	2024	-10,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Air Cooled Condenser - AHU-4	D Services	D30 HVAC	2018	15

Description & Recommendation

There is a 10-ton air cooled condenser located in the basement which serves AHU-4. The United Coolair unit (model BVA10G3AHA-X; serial 1803005) is equipped with one (1) 5 HP condenser motor and two (2) compressors charged with R-410A. It has a 2018 vintage and is in good condition. Replacement is anticipated in the long term.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2035	-25,300

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Air Cooled Condenser - AHU-5	D Services	D30 HVAC	2004	15

Description & Recommendation

There is a ~15-ton air cooled condenser located on the roof which serves AHU-5. The Lennox unit (model HS29-180-24; serial N/A) consists of two (2) R-22 scroll compressors and four (4) fractional horsepower condenser fans. R-22 (Freon) is a HCFC refrigerant being phased out in Canada due to its harsh environmental impact. The unit is operating beyond its expected useful life and replacement should coincide with AHU-5 upgrade in the immediate term.

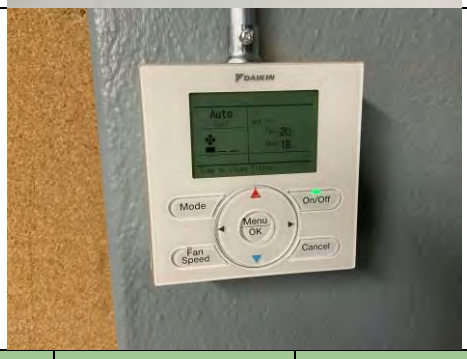
Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Immediate	Replace	2024	-38,100

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
VRF Heat Pump System (5-ton)	D Services	D30 HVAC	2018	15

Description & Recommendation

There is a Daikin Variable Refrigerant Flow (VRF) heat pump system serving the Farmer Market. There is an outdoor unit (model RXTQ60TAVJU; serial F002429) exteriorly located on wall mounted metal support rack at the south-west elevation of the building envelope. There are three (3) FCUs (model FXAQ18PVJU; serial FCU-1 E010057; serial FCU-2 E010046; serial FCU-3 E010049) located within market. The VRF heat pump has a 2018 vintage and utilizes R-410a refrigerant. Temperature control setpoints are provided via a wall mounted digital thermostat. Replacement is anticipated in the medium term.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2034	-32,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Split AC System - Elevator	D Services	D30 HVAC	2013	15

Description & Recommendation

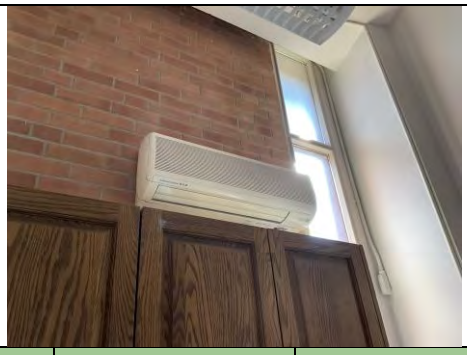
There is a Daikin split Air Conditioning (A/C) system providing cooling for the elevator machine room. There is a condenser unit (model RKS30LVJU; serial N/A) exteriorly located on the roof with an evaporator unit in the form of a Fan Coil Unit (FCU model FTXS30LVJU; serial E001021) located in the basement. The 2.5 ton unit was manufactured in 2013 and is charged with R-410A. Temperature set points are controlled with a wall mounted programmable thermostat. The system appears adequately sized for the space it serves. Routine service/maintenance is recommended every Spring to ensure cooling needs are provided to the elevators hydraulic controller. Replacement is anticipated in the short term at end of expected useful life.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Short Term	Replace	2028	-10,400

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Split AC System - Box Office	D Services	D30 HVAC	2004	15

Description & Recommendation

There is a Mitsubishi split Air Conditioning (A/C) system providing cooling for the box office. There is a condenser unit (model MU09TW; serial 4000055) exteriorly located on wall mounted metal support rack at the south-east elevation of the building envelope with an evaporator unit in the form of a Fan Coil Unit (FCU model MS09TW; serial 4000100) located in the box office. The 3/4 ton unit was manufactured in 2004 and is charged with R-22 (Freon) which is a HCFC refrigerant being phased out in Canada due to its harsh environmental impact. Temperature set points are controlled with a remote controller. Replacement is anticipated in the short term as the unit is operating beyond its expected useful life.

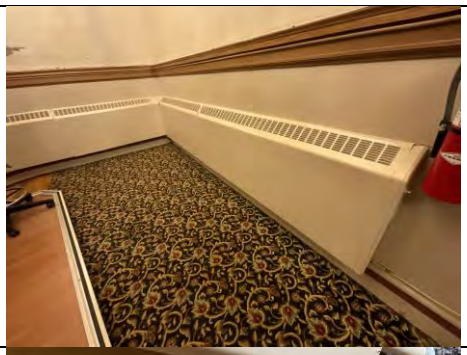


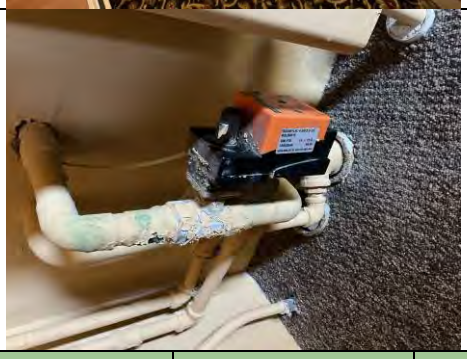
Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Short Term	Replace	2025	-8,200

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Hydronic Radiators	D Services	D30 HVAC	1973	20

Description & Recommendation

Hot water radiators in assembled enclosures (including finned-tube radiation, convectors, and cabinet heaters) are located throughout the building in areas such as the stage, theatre, dressing rooms, washrooms, offices, turrets, studio, and greenroom. Exact vintage of the hydronic heating systems is not known and suspected to be 50+ years old. The units are connected to the Building Automation System with control valves converted from pneumatic to Direct Digital Control (DDC) circa 2018. The enclosures are in fair condition with the exception of loose and/or bent cover panels. Radiator fins have debris (dirt, dust, garbage, hair, etc.) buildup and we recommended the enclosure cover be removed and any visible debris inside the unit cleaned using a vacuum, soft brush or even a steam pressure cleaner. If any of the fins are bent or damaged they should be straighten using a pair of needle-nose pliers, metal scrapper or putty knife. Oxidation and rust buildup is visible on the exterior side of distribution piping. Inefficiencies with system performance is likely a result sediment accumulation and corrosion from inside the pipe network. Based on the current age of the hydronic radiators, failures are anticipated (such as pin hole leaks), and in order to address multiple failures and repairs, complete replacement of heating distribution piping and radiators is recommended in the short term.



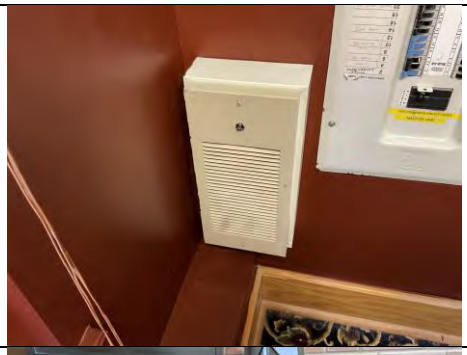



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Short Term	Replace	2026	-246,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Electric Heating Sources	D Services	D30 HVAC	2013	18

Description & Recommendation

Electric wall heaters are present in select locations in the facility. There are units located near the exterior doors of the turrets, and units used for supplemental heating sources in the Front Office and Accessible Washroom. Electric baseboard heaters are also used for supplemental heating in areas such as the Box Office and Farmers Market. Overall the electric wall heating systems are in fair condition. Replacement is recommended on an as-fail basis. Action is anticipated in the medium term.

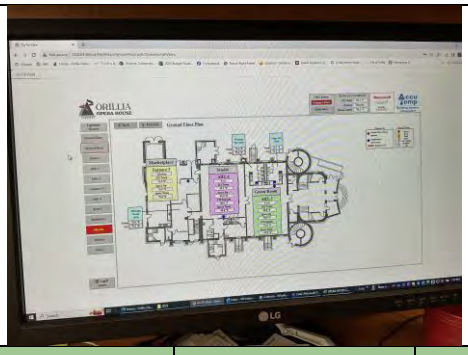



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2031	-8,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
BAS - DDC	D Services	D30 HVAC	2018	20

Description & Recommendation

All major HVAC components are controlled by a Honeywell Building Automation System (BAS) with interface design executed by AccuTemp. Honeywell's Niagara Framework WEBs-N4 version 4.3.58.22.5 is installed on a workstation located in the second floor office area. The graphical interface includes real-time troubleshooting, advanced alarming, reporting, and remote connectivity. There are estimated to be 100 control points connected with various HVAC equipment on site such as boilers, hydronic radiators, and Air Handling Units (AHUs). No major issues reported with BAS system, however building operators noted the Furnace and AHU-4 need manual engagement to switch from heating to cooling, and vice-versa. Overall the BAS system is in good condition. Expected useful life is 20 years for controls and instrumentation systems. Replacement is anticipated in the long term.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2038	-36,700

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
BAS - DDC, Physical Control Point	D Services	D30 HVAC	2018	20
Description & Recommendation				
placeholder				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Good	Long Term	Replace	2038	-450,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Heat Recovery Ventilator	D Services	D30 HVAC	2018	18
Description & Recommendation				
Fresh air and ventilation for the Farmer Market is provided by a Venmar Fantech (model SHR150; serial N/A) Heat Recovery Ventilator (HRV) which serves as a Dedicated Outdoor Air System (DOAS). The air-to-air heat exchanger has a 2018 vintage and recovers sensible heat from exhaust air. The unit is equipped with a 4.0 kW Thermolec duct heater (model FC-CTPBX; serial 389804-001) to provide additional heating capacity during cold weather. Replacement is anticipated at end of useful life expectancy.				

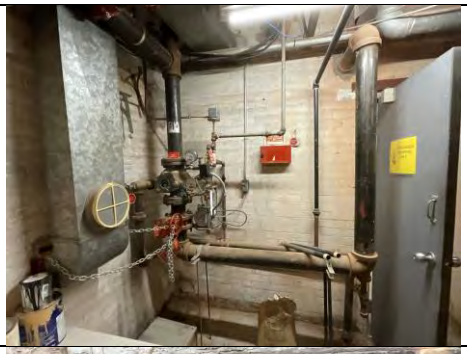
Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Long Term	Replace	2036	-5,300

3.4.4 D40 Fire Protection

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Wet Sprinkler System	D Services	D40 Fire Protection	2016	75

Description & Recommendation

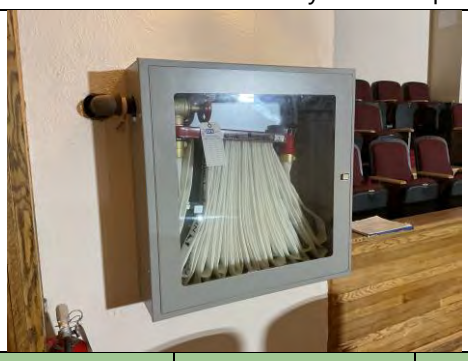
Fire suppression for the building is served by a wet sprinkler system. There are no sprinklers in the Foyer, Dressing Room #110, Office #111, Auditorium, and Stage. The main shutoff valve and jockey pump (Marathon electric model 5KC36MNB527X; serial K16J300126) is located on the incoming standpipe in the basement boiler room. A fire department Siamese connection is installed on the exterior wall of the at the south elevation. Expected useful life of standpipes systems 75 years. It is recommended to conduct a complete maintenance inspection for testing of valves, pipework, fittings, hanger/seismic bracing, and the sprinklers themselves in the long term.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Maintain	2049	-31,900

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Wet Sprinkler System - Replacement	D Services	D40 Fire Protection	2016	75
Description & Recommendation				
placeholder				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Good	End of Life	Replace	N/A	-

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Fire Hose Cabinet, Recessed, Glass Door	D Services	D40 Fire Protection	2018	25
Description & Recommendation				
Fire hose cabinets are situated throughout the building. The cabinets are outfitted with a single valve, length of hose, and handheld extinguisher. The devices are inspected on a routine basis apart of the fire life safety program. The doors for the cabinets are largely glass and are opened via a release tab. No deficiencies noted for the systems. Replacement is anticipated in the long term.				



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2043	-9,900

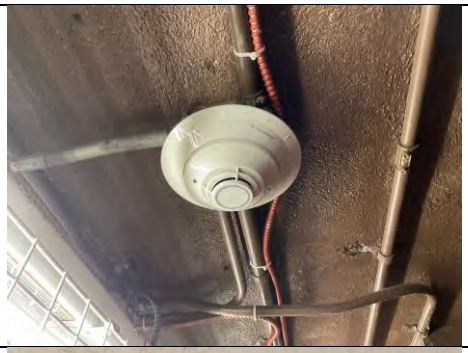
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Fire Extinguishers, Dry Chem, Portable	D Services	D40 Fire Protection	2006	8
Description & Recommendation				
Fire extinguishers are located throughout the building. The fire extinguishers are appropriately charged with their indicator dial set in the green zone. Unit vintages vary (1987, 2006, 2012, etc.) and the fire extinguishers are in fair condition overall. Replacement is anticipated in the short term and should be guided by routine life safety inspections.				


Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Short Term	Replace	2028	-3,500

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Fire Protection Specialties	D Services	D40 Fire Protection	2018	20

Description & Recommendation

Hardwired smoke and heat detectors, strobe alarms, and pull stations are installed throughout the building. The components are Notifier/Honeywell brand, which coincides with the manufacturer of the fire alarm control panel. No issues identified and overall the components are in good condition. Replacement should be guided by fire safety inspection program and is recommended to occur every 10-20 years. Action is anticipated in the long term.




Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2038	-55,300

3.4.5 D50 Electrical

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Primary Transformer	D Services	D50 Electrical	2022	40
Description & Recommendation				
The electric feed from the utility is directed to one (1) 300 kVA pad mounted Cam Tran Co. Ltd. transformer located outside the building on the north-east elevation. High voltage (13.86 kV) is stepped down to a 120/208V service for the building. There is a utility grade meter located in a cabinet in the basement electrical room. No issues were identified with the transformer and meter, which are owned and operated under the responsibility of the local utility.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Good	N/A	No Action	N/A	-

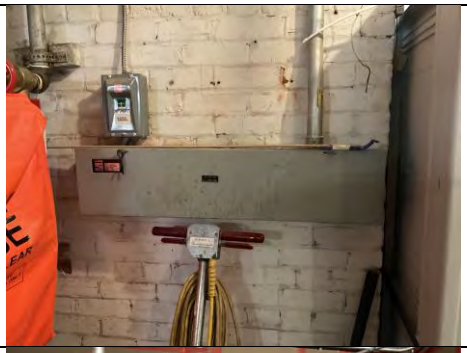
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Switchgear	D Services	D50 Electrical	1982	40
Description & Recommendation				
Power from the primary transformer is directed to a 1,200-amp Westinghouse switchgear unit located in the basement Electrical room. The switchgear vintage is assumed to be 1982. The expected useful life for commercial grade electrical systems is generally 30-40 years, if properly maintained. The assessment noted breaker switches have been replaced with Eaton units, which may be a result of the maintenance program identifying potential overheating locations within the switchboard, or the installation of new equipment. The switchgear is recommended for replacement in the short term as it is at the end of its life cycle.				
				

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Short Term	Replace	2025	-33,200

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Splitter Electrical Distribution	D Services	D50 Electrical	1982	40

Description & Recommendation

The assessment identified five (5) splitter boxes. There is a Stelpro unit serving the DHW heater, a Square D unit serving subpanel LP-E, a BEL inc unit in the penthouse serving disconnects for AHU-1 & AHU-2, and two (2) splitters (make N/A) on the Lightfoot theatre stage for auxiliary equipment. During the site investigation, no testing of systems were undertaken and the enclosures were not opened to verify internal components. Splitter vintages are expected to date to the 1980s era, putting them at the end of their expected useful life. Replacement is recommended in the short term.




Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Short Term	Replace	2025	-43,500

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Electrical Delivery - 120/208V Panels - Westinghouse & Federal Pioneer	D Services	D50 Electrical	1982	40

Description & Recommendation
The electrical delivery consists of 120/208V distribution panels, branch panels, and breaker switches for power to building equipment, lighting, and receptacles loads. Panels include one (1) Westinghouse (Panel 2), two (2) Federal Pioneer (Panel 4 & Panel 8), and two (2) Eaton (Panel LP-A1 & Panel LP-B). The Westinghouse and Federal Pioneer panels have reached the end of their expected useful life of 40 years. Replacement is anticipated in the short term and should be guided by the maintenance program. Eaton panels have a 2013 vintage and are in good condition. Replacement is not anticipated in term of analysis.




Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Short Term	Replace	2025	-30,900

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Electrical Delivery - 120/208V Panels - Eaton	D Services	D50 Electrical	2013	40

Description & Recommendation
placeholder

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	End of Life	Maintain	N/A	-

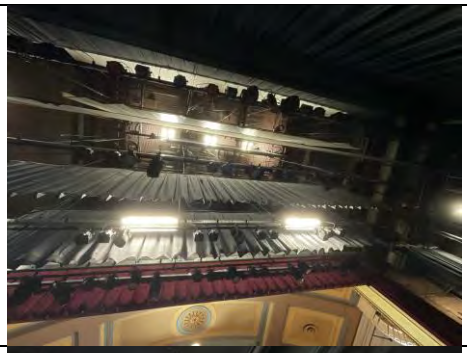
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Electrical Delivery - Stab-Lok Panels	D Services	D50 Electrical	1982	40

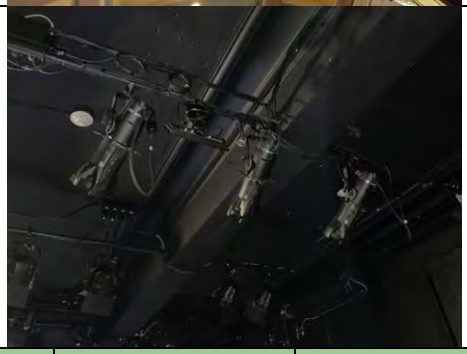
Description & Recommendation
There are four (4) 125-amp and one (1) 225-amp Stab Lok panels on site, including Panel 3 (basement), Panel 3A (basement), Panel 5 (Studio Theatre Server Room), Panel 7 (Front Office), and Panel 8B (Lightfoot Theatre Stage). Stab-lok panels have been found to fail safety requirement testing and therefore are considered a safety risk. Replacement is recommended in the immediate term.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Immediate	Replace	2024	-24,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Theatre Lighting	D Services	D50 Electrical	2016	20

Description & Recommendation
Both theatres are fully equipped with professional lighting equipment. The specialty lighting systems were updated in 2016 and are in good condition overall. Replacement is anticipated in the long term.





Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2036	-215,000

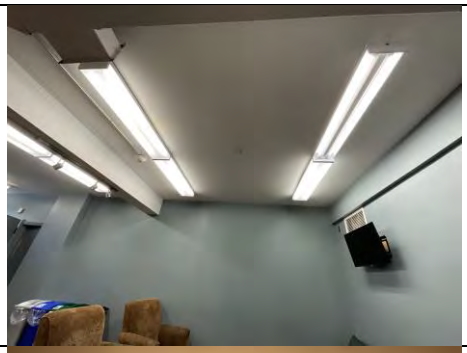
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Lighting Dimming System	D Services	D50 Electrical	1999	20
Description & Recommendation				
The Lightfoot Theatre is equipped with a Dimming System (model SR48+; serial N/A) manufactured by Sensor+. The rack is in fair condition and their were no reported deficiencies. Replacement is anticipated in the short term assuming a 1999 vintage.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Short Term	Replace	2025	-15,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Lighting Control System	D Services	D50 Electrical	1999	20
Description & Recommendation				
Lighting equipment for the Lightfoot Theatre is operated with an Unison lighting control panel (model DR6; serial N/A). The controller has an assumed 1999 vintage and is in fair condition. Replacement is anticipated in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Short Term	Replace	2025	-13,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Interior Fixtures - LED	D Services	D50 Electrical	2016	20

Description & Recommendation

The facility has undertaken lighting efficiency projects with LED providing the majority of illumination throughout the building. Linear fluorescent lamps were retrofitted with LED equivalent tubes. Traditional lamps (incandescent, compact fluorescent) used in screw-base sockets were replaced with A19 LED bulbs. Halogen pot lights were replaced with M16 LED bulbs. Bulbs in specialty fixtures such as chandeliers located in the Upper Lobby and Auditorium were replaced with LED Candelabra bulbs. Lighting control sensors are provided in spaces with intermittent occupancy. Overall the LED lighting systems are in good condition. Complete fixture replacement is anticipated in the long term.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2036	-165,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Exterior Fixtures - LED	D Services	D50 Electrical	2016	20

Description & Recommendation

Exterior lighting around the building envelope is provided via five (5) wall packs. The wall packs have either been retrofitted with LED lamps, or replaced completely with LED units. There are four (4) suspended lighting fixtures at the main entrance with LED bulbs. There is one (1) wall sconce with LED bulb at the Market egress door. All exterior lighting is controlled via timer. The exterior lighting is in good condition with replacement anticipated in the long term.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2036	-2,900

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Exterior Fixtures - HPS	D Services	D50 Electrical	1999	20

Description & Recommendation

There are two (2) ground mounted flood lights on the south elevation of the building and one (1) unit on the roof directed towards the library parking lot. The fixtures are lamped with High Pressure Sodium (HPS) bulbs. Replacement are recommended on an as-fail basis. Action is anticipated in the short term.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Short Term	Replace	2025	-1,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Fire Alarm Control Panel	D Services	D50 Electrical	2018	20

Description & Recommendation

Fire detection is activated by a two-stage Notifier fire alarm system. There is a NFS-3030D control panel located in the basement Electrical room with annunciator panels located in the Front Lobby and Studio Theatre Entrance. Overall coverage of detectors and alarms appeared adequate. Installation includes head end equipment, pull stations, bells, heat and smoke detectors, conduit, wire and connections. The fire alarm system is inspected annually in compliance with the requirement of

the National Fire Code. It has a 2018 vintage and is in overall good condition. Replacement is anticipated in the long term.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	Long Term	Replace	2038	-22,300

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Security Alarm System	D Services	D50 Electrical	2016	20

Description & Recommendation

The facility is equipped with a DSC security system with burglary alarm. The central control panel is located in the basement Electrical room and there are three (3) keypads present including in the Main lobby, Farmers Market, and Studio Theatre Entrance. The system is understood to be monitored by a third party, in which they alert authorities should the burglary alarm activate. The keypad, associated wiring, and end-use devices have a 2016 vintage. Replacement/upgrading the security system should be done every 20 years. Replacement is anticipated in the long term.

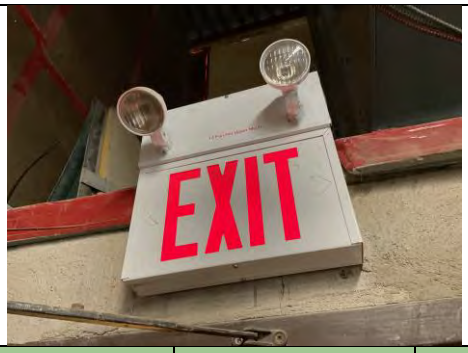
Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Long Term	Replace	2036	-4,300

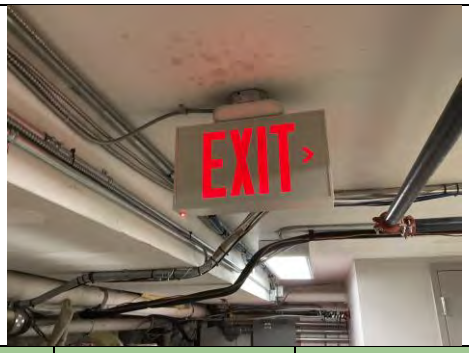
Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Exit Lighting	D Services	D50 Electrical	2012	20

Description & Recommendation

The building includes an average density exit lighting system of wall mounted exit signs. The quantity and coverage of the signage appeared to be adequate. All exit signs were illuminated during the site visit and which is compliant with Canadian Electrical Code (CEC) requirements. The units are in an

adequate working condition. Replacement is anticipated in the medium term and should be guided by life safety inspections.



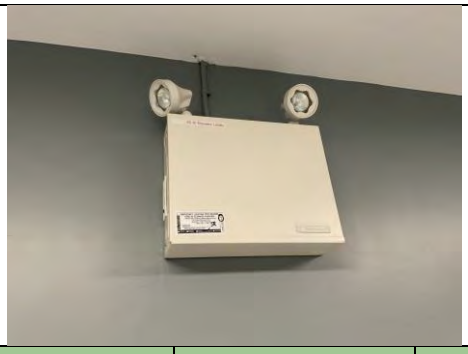


Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2032	-6,800

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Emergency Lighting, Self-Contained Lamp Pack	D Services	D50 Electrical	2012	10

Description & Recommendation

The building includes an average density emergency lighting system consisting of self contained lamp pack and remote light heads. The units are connected to integrated batteries that will engage and illuminate when line utility power drops out. Various vintages are present indicating units are replaced on an as-fail basis as a result of routine life safety inspections. Replacement is anticipated in the medium term and should be guided by maintenance regime.



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2032	-10,200

3.4.6 Summary of Opinion of Costs

Level 3	Component Description	Replacement Year	Immediate Term (2024)	Short Term (2025-2028)	Medium Term (2029-2034)	Long Term (2035-2049)
D1010	Passenger Elevator	2024	-159,500	-0	-0	-0
D1010	Freight Elevator	2043	-0	-0	-0	-366,300
D1010	Elevators - Investigation	2024	-8,000	-0	-0	-0
D1010	Piano Lift	2035	-0	-0	-0	-21,300
D1010	Hoist - 1 Ton	2035	-0	-0	-0	-21,300
D2020	Domestic Water Distribution	2034	-0	-0	-88,500	-0
D2010	Sinks	2033	-0	-0	-7,400	-0
D2010	Toilets	2033	-0	-0	-21,000	-0
D2010	Urinal	2033	-0	-0	-2,200	-0
D2010	Shower	2043	-0	-0	-0	-4,800
D2010	Stainless Steel Sinks	2035	-0	-0	-0	-2,400
D2010	Service Sink	2029	-0	-0	-3,200	-3,200
D2010	Water Fountain	2052	-0	-0	-0	-0
D2020	Domestic Water Heater	2032	-0	-0	-3,300	-3,300
D2040	Sump Pumps - Elevator Pit	2026	-0	-8,400	-0	-16,800
D2040	Sump Pump - Stormwater	2024	-4,200	-0	-4,200	-4,200
D2040	Rain Water Drainage	2029	-0	-0	-76,000	-0
D3060	BAS - DDC	2038	-0	-0	-0	-36,700
D3060	BAS - DDC, Physical Control Point	2038	-0	-0	-0	-450,000
D3010	Gas Supply System	2045	-0	-0	-0	-0
D3020	Hot Water Boilers	2037	-0	-0	-0	-80,700
D3020	Boiler Circulation Pumps	2032	-0	-0	-11,400	-11,400
D3020	Heating Distribution Pumps	2032	-0	-0	-11,400	-11,400
D3040	Interior Air Handling Unit - AHU-1	2047	-0	-0	-0	-165,200
D3040	Interior Air Handling Unit - AHU-2	2047	-0	-0	-0	-75,500
D3040	Furnace	2024	-11,900	-0	-0	-11,900

Level 3	Component Description	Replacement Year	Immediate Term (2024)	Short Term (2025-2028)	Medium Term (2029-2034)	Long Term (2035-2049)
D3050	Air Cooled Condenser - Furnace	2024	-10,000	-0	-0	-10,000
D3040	Interior Air Handling Unit - AHU-4	2048	-0	-0	-0	-51,400
D3050	Air Cooled Condenser - AHU-4	2035	-0	-0	-0	-25,300
D3010	Heat Exchanger	2048	-0	-0	-0	-9,400
D3020	Glycol Pumps	2033	-0	-0	-7,600	-7,600
D3020	Glycol Feed Package	2041	-0	-0	-0	-10,600
D3040	Interior Air Handling Unit - AHU-5	2024	-51,400	-0	-0	-0
D3050	Air Cooled Condenser - AHU-5	2024	-38,100	-0	-0	-38,100
D3020	Heating Distribution Pump - AHU-5	2036	-0	-0	-0	-3,800
D3090	Heat Recovery Ventilator	2036	-0	-0	-0	-5,300
D3050	VRF Heat Pump System (5-ton)	2034	-0	-0	-32,400	-32,400
D3050	Split AC System - Elevator	2028	-0	-10,400	-0	-10,400
D3050	Split AC System - Box Office	2025	-0	-8,200	-0	-8,200
D3050	Hydronic Radiators	2026	-0	-246,000	-0	-246,000
D3050	Electric Heating Sources	2031	-0	-0	-8,000	-8,000
D3040	Exhaust Fans - Washrooms	2025	-0	-11,200	-0	-11,200
D3040	Exhaust Fan - Elevator Machine Room	2024	-1,400	-0	-0	-1,400
D3040	Exhaust Fan - Penthouse	2038	-0	-0	-0	-1,400
D3040	Ceiling Fan	2033	-0	-0	-1,100	-0
D4010	Wet Sprinkler System	2049	-0	-0	-0	-31,900
D4010	Wet Sprinkler System - Replacement	2091	-0	-0	-0	-0
D4020	Fire Hose Cabinet, Recessed, Glass Door	2043	-0	-0	-0	-9,900
D4030	Fire Extinguishers, Dry Chem, Portable	2028	-0	-3,500	-0	-7,000
D4030	Fire Protection Specialties	2038	-0	-0	-0	-55,300
D5010	Primary Transformer	2062	-0	-0	-0	-0
D5010	Switchgear	2025	-0	-33,200	-0	-0
D5010	Splitter Electrical Distribution	2025	-0	-43,500	-0	-0

Level 3	Component Description	Replacement Year	Immediate Term (2024)	Short Term (2025-2028)	Medium Term (2029-2034)	Long Term (2035-2049)
D5010	Electrical Delivery - 120/208V Panels - Westinghouse & Federal Pioneer	2025	-0	-30,900	-0	-0
D5010	Electrical Delivery - 120/208V Panels - Eaton	2053	-0	-0	-0	-0
D5010	Electrical Delivery - Stab-Lok Panels	2024	-24,000	-0	-0	-0
D5020	Theatre Lighting	2036	-0	-0	-0	-215,000
D5020	Lighting Dimming System	2025	-0	-15,000	-0	-15,000
D5020	Lighting Control System	2025	-0	-13,000	-0	-13,000
D5020	Interior Fixtures - LED	2036	-0	-0	-0	-165,000
D5020	Exterior Fixtures - LED	2036	-0	-0	-0	-2,900
D5020	Exterior Fixtures - HPS	2025	-0	-1,000	-0	-1,000
D5030	Fire Alarm Control Panel	2038	-0	-0	-0	-22,300
D5030	Security Alarm System	2036	-0	-0	-0	-4,300
D5090	Exit Lighting	2032	-0	-0	-6,800	-0
D5090	Emergency Lighting, Self-Contained Lamp Pack	2032	-0	-0	-10,200	-10,200

3.5 E EQUIPMENT & FURNISHINGS

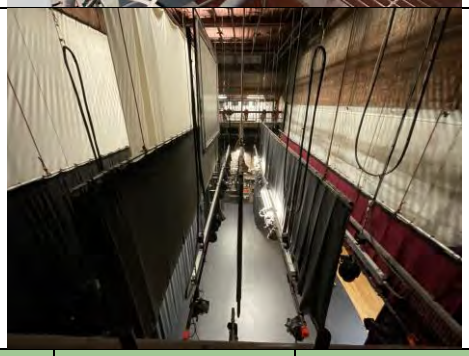
3.5.1 E10 Equipment

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Curtain System	E Equipment & Furnishings	E10 Equipment	2000	20

Description & Recommendation

The Lightfoot Theatre is equipped with a motorized curtain system. There are twelve (12) 7.5 horsepower motors located in the rafters above the stage. The SEW-Eurodrive motors operate various cable, pulley, and flybar systems to allow for controlled adjustments of stage drapes during performances. The curtain system is linked with the Fire Alarm Control Panel and will drop the fire curtain to create a fire separation between the auditorium and stage during a stage 2 event. It receives routine inspections with the last review occurring September 12 2023, by Zelus Material Handling. Replacement should be guided by maintenance program. No work is foreseen in the short or medium term other than general preventative maintenance assuming normal use is continued. The curtain system is anticipated to function adequately for another 10 years. Opinion of probable cost for curtains, drapes, backdrop, etc. was not considered.

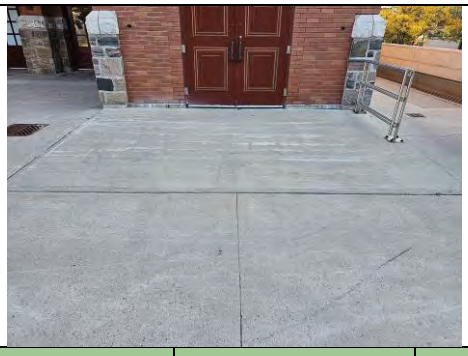


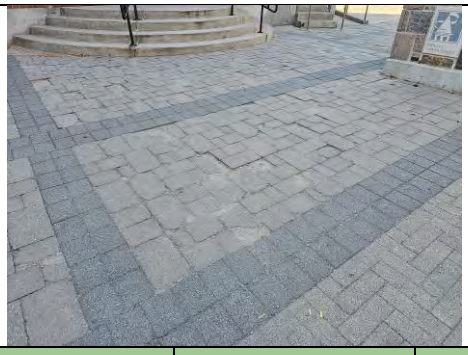



Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Medium Term	Replace	2034	-63,800

3.6 G BUILDING SITEWORK

3.6.1 G20 Site Improvements

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Concrete Walkways	G Building Sitework	G20 Site Improvements	1980	40
Description & Recommendation				
A concrete walkway is installed around the building and includes ways for visitors with mobility issues to access the building via integrated ramps that lead to raised doorways. The concrete is intact and showing no areas of concern, though there is scraping visible. No action is required at this time. A major replacement is expected in the long term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Fair	Long Term	Replace	2037	-160,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Concrete Walkways	G Building Sitework	G20 Site Improvements	1980	40
Description & Recommendation				
The interlock walkway along the perimeter of the building has areas of settling with vegetation protruding through. In addition, there are also damaged and missing stones, which could pose a tripping risk. It is recommended that the interlock be regraded and reinstalled, with damaged and missing blocks replaced, in the short term.				
				
Condition Rating	**Priority**	**Action**	**Action Year**	**Opinion of Probable Cost**
Poor	Short Term	Replace	2028	-36,800

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Concrete Walkways	G Building Sitework	G20 Site Improvements	1980	40

Description & Recommendation

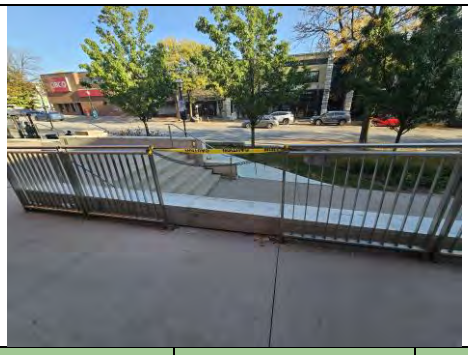
The steps are exhibiting fracturing from building to interlock along the concrete steps, in line with the hand rails. In addition, rust staining and weathering are present. It is recommended that the steps be replaced in the short term.

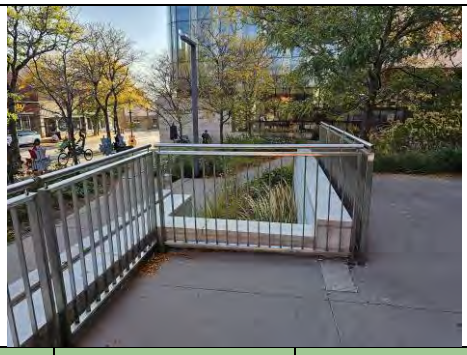
Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Poor	Short Term	Replace	2027	-3,800

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Railings - Metal	G Building Sitework	G20 Site Improvements	2013	30

Description & Recommendation

The units are intact and set into the concrete approximately two inches. There is a known issue of persons attempting, and succeeding, in removing sections of railing. No action is required at this time, though methods to deter malice is advisable. A major replacement of the fencing is expected to be required in the long term.





Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Fair	Long Term	Replace	2043	-11,000

Element Name	Level 1 Major Group	Level 2 Group Element	Vintage	Service Life
Bollards	G Building Sitework	G20 Site Improvements	2021	30

Description & Recommendation

The bollards are constructed from concrete and covered with a yellow plastic casing with red banding at the top. The units are intact and vertical, with no visible points of concern. It is expected that the units will require replacement at the end of its expected useful life.

Condition Rating	Priority	Action	Action Year	Opinion of Probable Cost
Good	End of Life	No Action	N/A	-

3.6.2 Summary of Opinion of Costs

Level 3	Component Description	Replacement Year	Immediate Term (2024)	Short Term (2025-2028)	Medium Term (2029-2034)	Long Term (2035-2049)
E1090	Curtain System	2034	-0	-0	-63,800	-0
G2030	Concrete Walkways	2037	-0	-0	-0	-160,000
G2030	Concrete Walkways	2028	-0	-36,800	-0	-0
G2030	Concrete Walkways	2027	-0	-3,800	-0	-0
G2034	Railings - Metal	2043	-0	-0	-0	-11,000
G2034	Bollards	2051	-0	-0	-0	-0

4.0 CONCLUSIONS AND RECOMMENDATIONS

BLDG Sci conducted a Building Condition Assessment for Orillia Opera House located at 20 Mississaga St West, Orillia, Ontario, Canada. The facility was assessed in accordance with the ASTM E2018-15 Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process.

The purpose of the visual assessment was to provide an overview of the present condition of the major components of the Site building and Site features, and to present an opinion of probable cost (order of magnitude) to better predict the long term (25-year horizon) capital requirements needed to maintain the Site in an efficient, functional, and structurally sound condition and in compliance with all applicable codes. The report did not identify any immediate areas of concern.

Table 4-1: Level I Capital Needs Summary

Building System	Immediate Term (2024)	Short Term (2025-2028)	Medium Term (2029-2034)	Long Term (2035-2049)
A Substructure	-0	-0	-0	-0
B Shell	-0	-195,100	-417,900	-134,900
C Interior	-0	-1,709,900	-1,231,200	-222,600
D Service	-308,500	-424,300	-294,700	-2,319,700
E Equipment	-0	-0	-63,800	-0
G Building Sitework	-0	-40,600	-0	-171,000
Lifecycle Replacement Total	**-308,500**	**-2,369,900**	**-2,007,600**	**-2,848,200**

The summary of capital reserve expenditures from 2024-2049 is provided below.

Immediate Term

2024
-308,500

Short Term

2025	2026	2027	2028
-1,313,400	-280,900	-287,800	-487,800

Medium Term

2029	2030	2031	2032	2033	2034
-362,600	-27,800	-106,700	-107,300	-58,400	-1,344,800

Long Term

2035	2036	2037	2038	2039
-185,400	-421,200	-240,700	-565,700	-49,100

2040	2041	2042	2043	2044
-12,800	-10,600	-58,400	-402,400	-12,400

2045	2046	2047	2048	2049
-40,200	-254,400	-324,400	-195,000	-75,500

Current Replacement Value (CRV) - 2024

Current Replacement Value (CRV) is defined as the dollar amount (2024) required to reproduce a facility and all associated assets located on the same property, in like kind and materials at one time, including the cost of demolishing the existing facility and site assets, in accordance with current market prices for materials and labour. Replacement Cost Estimates will include the following hard & soft costs:

- Plans, specifications, surveys, building permits including architect's & engineering fees as required;
- All material & labour costs;
- Normal site preparation including finish, grading and excavation for foundation and backfill for the structures only;
- Underground Utilities from structure to lot line figured for typical setback;
- Contractor's overhead and profit, including job supervision, workmen's compensation;
- Site improvements, landscaping, etc.; and
- Demolition.

The summary of CRV in 2024 ($) is an opinion of probable cost provided below.

Level 2 Description	Level 2	Orillia Opera House
Foundations	A10	$175,956
Basement construction	A20	-
Superstructure	B10	$758,322
Exterior Enclosure	B20	$729,120
Roofing	B30	$737,490
Interior Construction	C10	$487,134
Stairs	C20	$231,942
Interior Finishes	C30	$6,852,798
Conveying	D10	$1,072,104
Plumbing	D20	$430,776
HVAC	D30	$2,558,988
Electrical	D50	$1,130,322
Fire Protection	D40	$598,920
Equipment	E10	$118,668
Furnishings	E20	-
Special Construction	F10	-
Selective Building Demolition	F20	-
Site Improvements	G20	$398,412
Site Civil/Mechanical Utilities	G30	-
Site Electrical Utilities	G40	-
Other Site Construction	G90	-
Current Replacement Value (CRV)		**$16,280,952**

APPENDIX A – CAPITAL EXPENDITURES SUMMARY

Level 3 - Component	Asset Name	Condition Average	Condition Rating	Action Type	Priority	Vintage	Age of Element (Years)	Normal Life (Years)	Remaining Life (Years)	Action Year	Unit	Quantity	Unit Repl. Cost	Opinion of Probable Cost	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
A1010 Standard Foundations	Foundation and Footings	3	Fair	No Action	End of Life	1915	109	100	41	2065	Sq. Ft.	2,200	$ 43	$ 94,600																											
B1010 Floor Construction	Floor Decks & Slabs	4	Poor	Repair	Medium Term	1950	74	75	5	2029	Sq. Ft.	5,700	$ 39	$ 222,300						$ 222,300																				
B1020 Roof Construction	Roof Construction	3	Fair	No Action	End of Life	1915	109	100	31	2055	Sq. Ft.	3,900	$ 18	$ 70,200																										
B1020 Roof Construction	Roof Construction	3	Fair	No Action	End of Life	1950	74	100	51	2075	Sq. Ft.	6,400	$ 18	$ 115,200																										
B2010 Exterior Walls	Masonry Bricks	4	Poor	Repair	Short Term	1915	109	50	4	2028	Sq. Ft.	6,000	$ 13	$ 78,000					$ 78,000																				
B2010 Exterior Walls	Masonry Bricks	4	Poor	Repair	Medium Term	1950	74	50	7	2031	Sq. Ft.	5,100	$ 13	$ 66,300								$ 66,300																		
B2010 Exterior Walls	Masonry Bricks	3	Fair	No Action	End of Life	1980	44	50	36	2060	Sq. Ft.	230	$ 21	$ 4,800																										
B2010 Exterior Walls	Metal Siding	3	Fair	Replace	Long Term	1950	74	50	11	2035	Sq. Ft.	1,300	$ 40	$ 52,000												$ 52,000														
B2010 Exterior Walls	Entryway	4	Poor	Refinish	Short Term	1950	74	75	2	2026	EA	1	$ 3,800	$ 3,800			$ 3,800																						
B2010 Exterior Walls	Overhang	4	Poor	Replace	Short Term	1950	74	50	2	2026	Sq. Ft.	280	$ 36	$ 10,100			$ 10,100																						
B2020 Exterior Windows	Windows - Insulated Glazing Units	4	Poor	Maintain	Medium Term	1915	109	30	10	2034	Sq. Ft.	330	$ 130	$ 42,900											$ 42,900														
B2020 Exterior Windows	Windows - Insulated Glazing Units	4	Poor	Replace	Medium Term	2012	12	30	8	2032	Sq. Ft.	390	$ 130	$ 50,700									$ 50,700																
B2020 Exterior Windows	Window Sealants	3	Fair	Replace	Short Term	2012	12	12	3	2027	Ln. Ft.	90	$ 11	$ 1,000				$ 1,000													$ 1,000								
B2030 Exterior Doors	Entrance Door	3	Fair	Replace	Medium Term	1980	44	30	6	2030	EA	4	$ 3,700	$ 14,800							$ 14,800																		
B2030 Exterior Doors	Exterior Metal Doors	3	Fair	Replace	Short Term	2001	23	30	4	2028	EA	13	$ 2,100	$ 27,300					$ 27,300																				
B2030 Exterior Doors	Exterior Glass Doors	3	Fair	Replace	Long Term	2012	12	30	18	2042	EA	10	$ 2,100	$ 21,000																				$ 21,000						
B2030 Exterior Doors	Exterior Wood Doors	4	Poor	Replace	Medium Term	1915	109	30	10	2034	EA	3	$ 2,100	$ 6,300											$ 6,300														
B2030 Exterior Doors	Hatch	3	Fair	Replace	Medium Term	1980	44	30	6	2030	EA	5	$ 2,600	$ 13,000							$ 13,000																		
B3010 Roof Coverings	Shingle	4	Poor	Replace	Medium Term	2021	3	20	7	2031	Sq. Ft.	120	$ 13	$ 1,600								$ 1,600																		
B3010 Roof Coverings	Built Up Roof Assemblies	4	Poor	Replace	Short Term	1980	44	20	3	2027	Sq. Ft.	2,900	$ 21	$ 60,900				$ 60,900																				$ 60,900		
B3010 Roof Coverings	Slate	2	Good	Repair	End of Life	2021	3	100	97	2121	Sq. Ft.	6,400	$ 50	$ 320,000																										
B3010 Roof Coverings	Slate	4	Poor	Replace	Short Term	1915	109	100	3	2027	Sq. Ft.	280	$ 50	$ 14,000				$ 14,000																						
C1010 Partitions	Mezzanine	3	Fair	No Action	End of Life	1980	44	75	31	2055	EA	1	$ 5,100	$ 5,100																										
C1010 Partitions	Interior Glazing	3	Fair	Replace	Long Term	1980	44	50	16	2040	Sq. Ft.	80	$ 58	$ 4,600																	$ 4,600								
C1020 Interior Doors	Interior Metal Doors	3	Fair	Replace	Medium Term	1980	44	40	5	2029	EA	47	$ 1,300	$ 61,100						$ 61,100																			
C1020 Interior Doors	Interior Wood Doors	3	Fair	Replace	Medium Term	1980	44	30	7	2031	EA	28	$ 1,100	$ 30,800								$ 30,800																		
C1020 Interior Doors	Interior Bay Doors	4	Poor	Replace	Medium Term	1980	44	50	10	2034	EA	1	$ 4,000	$ 4,000											$ 4,000														
C1030 Fittings	Railings - Metal	3	Fair	No Action	End of Life	1980	44	75	31	2055	EA	1	$ 85,000	$ 85,000																										
C1030 Fittings	Toilet Partitions	3	Fair	Replace	Long Term	2016	8	20	12	2036	EA	10	$ 1,300	$ 13,000													$ 13,000												
C1030 Fittings	Millwork	4	Poor	Replace	Short Term	1980	44	25	4	2028	Ln. Ft.	110	$ 530	$ 58,300					$ 58,300																				
C2010 Interior Stair Construction	Metal Staircases	3	Fair	Replace	End of Life	1980	44	80	36	2060	EA	4	$ 2,600	$ 10,400																										
C2010 Interior Stair Construction	Metal Staircases	4	Poor	Replace	End of Life	1950	74	100	26	2050	Steps	80	$ 270	$ 21,600																										
C2010 Interior Stair Construction	Concrete Staircases	3	Fair	No Action	End of Life	1915	109	150	41	2065	Steps	200	$ 370	$ 74,000																										
C2020 Interior Stair Finishes	Metal Stair Finishes	4	Poor	Replace	Short Term	1980	44	30	4	2028	Ln. Ft.	100	$ 34	$ 3,400					$ 3,400																				
C2020 Interior Stair Finishes	Concrete Stair Finishes	3	Fair	Replace	Long Term	2012	12	30	18	2042	Ln. Ft.	180	$ 85	$ 15,300																				$ 15,300						
C3010 Wall Finishes	Concrete Masonry Units	4	Poor	Replace	Medium Term	1915	109	75	10	2034	Sq. Ft.	17,300	$ 55	$ 951,500											$ 951,500														
C3010 Wall Finishes	Concrete Masonry Units	3	Fair	No Action	End of Life	1950	74	100	26	2050	Sq. Ft.	4,000	$ 55	$ 220,000																										
C3010 Wall Finishes	Parging	4	Poor	Replace	Short Term	1980	44	30	2	2026	Sq. Ft.	400	$ 15	$ 6,000			$ 6,000																						
C3010 Wall Finishes	Gypsum Board Walls	2	Good	Repair	End of Life	1980	44	75	31	2055	Sq. Ft.	1,200	$ 27	$ 32,400																										
C3010 Wall Finishes	Plaster Walls	4	Poor	Replace	Short Term	1915	109	100	1	2025	Sq. Ft.	41,000	$ 27	$ 1,107,000		$ 1,107,000																								
C3010 Wall Finishes	Ceramic Tiles	2	Good	No Action	End of Life	2017	7	50	43	2067	Sq. Ft.	1,000	$ 34	$ 34,000																										
C3010 Wall Finishes	Wallpaper	4	Poor	Replace	Short Term	1980	44	30	3	2027	Sq. Ft.	2,300	$ 7	$ 16,100				$ 16,100																						
C3010 Wall Finishes	Wood Panel	3	Fair	Replace	Long Term	1950	74	30	11	2035	Sq. Ft.	700	$ 27	$ 18,900												$ 18,900														
C3020 Floor Finishes	Vinyl Plank Flooring	3	Fair	Replace	Medium Term	2014	10	20	10	2034	Sq. Ft.	3,600	$ 42	$ 151,200											$ 151,200														
C3020 Floor Finishes	Sheet Carpet Flooring	4	Poor	Replace	Short Term	1980	44	20	4	2028	Sq. Ft.	4,300	$ 25	$ 107,500					$ 107,500																			$ 107,500		
C3020 Floor Finishes	Ceramic Tile Flooring	3	Fair	Replace	Long Term	1980	44	50	11	2035	Sq. Ft.	1,300	$ 34	$ 44,200												$ 44,200														
C3020 Floor Finishes	Vinyl Tile Flooring	5	Very poor/Failing	Replace	Short Term	1980	44	30	1	2025	Sq. Ft.	1,800	$ 28	$ 50,400		$ 50,400																								
C3020 Floor Finishes	Sheet Vinyl Flooring	3	Fair	Replace	Medium Term	2015	9	20	8	2032	Sq. Ft.	500	$ 27	$ 13,500									$ 13,500																
C3020 Floor Finishes	Metal Flooring	3	Fair	No Action	End of Life	1980	44	80	36	2060	Sq. Ft.	1,400	$ 32	$ 44,800																										
C3020 Floor Finishes	Wood Flooring	4	Poor	Repair	End of Life	2015	9	70	61	2085	Sq. Ft.	5,500	$ 16	$ 88,000																										

C3020 Floor Finishes	Theatrical Stage	3	Fair	No Action	End of Life	2015	9	50	41	2065	Sq. Ft.	1,600	$ 57	$ 91,200																										
C3020 Floor Finishes	Terrazzo Concrete Flooring	3	Fair	Repair	Short Term	1915	109	100	3	2027	Sq. Ft.	1,200	$ 160	$ 192,000				$ 192,000																						
C3020 Floor Finishes	Concrete Flooring	3	Fair	Replace	End of Life	1950	74	100	26	2050	Sq. Ft.	6,100	$ 11	$ 67,100																										
C3030 Ceiling Finishes	Acoustic Ceiling Tiles	4	Poor	Replace	Short Term	1980	44	25	2	2026	Sq. Ft.	600	$ 11	$ 6,600			$ 6,600																							
C3030 Ceiling Finishes	Plaster Ceiling	1	Very good	No Action	End of Life	2017	7	100	93	2117	Sq. Ft.	13,300	$ 21	$ 279,300																										
C3030 Ceiling Finishes	Plaster Ceiling	4	Poor	Replace	Short Term	1950	74	50	4	2028	Sq. Ft.	3,500	$ 21	$ 73,500					$ 73,500																					
C3030 Ceiling Finishes	Gypsum Board Ceilings	4	Poor	Replace	Short Term	1950	74	75	4	2028	Sq. Ft.	3,300	$ 27	$ 89,100					$ 89,100																					
C3300 Accessibility	AODA Components	3	Fair	Replace	Medium Term	2017	7	15	9	2033	Lump Sum	1	$ 19,100	$ 19,100										$ 19,100														$ 19,100	
D1010 Elevators & Lifts	Passenger Elevator	5	Very poor/Failing	Replace	Immediate	1982	42	30	0	2024	EA	1	$ 159,500	$ 159,500	$ 159,500																									
D1010 Elevators & Lifts	Freight Elevator	3	Fair	Refurbish	Long Term	2013	11	30	19	2043	EA	1	$ 366,300	$ 366,300																				$ 366,300						
D1010 Elevators & Lifts	Elevators - Investigation	4	Poor	Investigate	Immediate	1982	42	30	0	2024	EA	1	$ 8,000	$ 8,000	$ 8,000																									
D1010 Elevators & Lifts	Piano Lift	3	Fair	Refurbish	Long Term	1917	107	100	11	2035	EA	1	$ 21,300	$ 21,300												$ 21,300														
D1010 Elevators & Lifts	Hoist - 1 Ton	3	Fair	Refurbish	Long Term	1917	107	100	11	2035	EA	1	$ 21,300	$ 21,300												$ 21,300														
D2020 Domestic Water Distribution	Domestic Water Distribution	3	Fair	Replace	Medium Term	1917	107	60	10	2034	Sq. Ft.	22,135	$ 4	$ 88,500											$ 88,500															
D2010 Plumbing Fixtures	Sinks	3	Fair	Replace	Medium Term	2013	11	20	9	2033	EA	14	$ 530	$ 7,400										$ 7,400																
D2010 Plumbing Fixtures	Toilets	3	Fair	Replace	Medium Term	2013	11	20	9	2033	EA	20	$ 1,050	$ 21,000										$ 21,000																
D2010 Plumbing Fixtures	Urinal	3	Fair	Replace	Medium Term	2013	11	20	9	2033	EA	2	$ 1,100	$ 2,200										$ 2,200																
D2010 Plumbing Fixtures	Shower	2	Good	Replace	Long Term	2013	11	30	19	2043	EA	1	$ 4,800	$ 4,800																				$ 4,800						
D2010 Plumbing Fixtures	Stainless Steel Sinks	3	Fair	Replace	Long Term	2013	11	20	11	2035	EA	3	$ 800	$ 2,400												$ 2,400														
D2010 Plumbing Fixtures	Service Sink	4	Poor	Replace	Medium Term	1986	38	20	5	2029	EA	4	$ 800	$ 3,200						$ 3,200																				$ 3,200
D2010 Plumbing Fixtures	Water Fountain	1	Very good	Replace	End of Life	2022	2	30	28	2052	EA	2	$ 5,100	$ 10,200																										
D2020 Domestic Water Distribution	Domestic Water Heater	2	Good	Replace	Medium Term	2020	4	12	8	2032	EA	1	$ 3,300	$ 3,300									$ 3,300												$ 3,300					
D2040 Rainwater Drainage	Sump Pumps - Elevator Pit	3	Fair	Replace	Short Term	2013	11	10	2	2026	EA	2	$ 4,200	$ 8,400			$ 8,400										$ 8,400										$ 8,400			
D2040 Rainwater Drainage	Sump Pump - Stormwater	4	Poor	Replace	Immediate	1991	33	10	0	2024	EA	1	$ 4,200	$ 4,200	$ 4,200										$ 4,200										$ 4,200					
D2040 Rainwater Drainage	Rain Water Drainage	4	Poor	Replace	Medium Term	1917	107	75	5	2029	Ln. Ft.	400	$ 190	$ 76,000						$ 76,000																				
D3060 Controls & Instrumentation	BAS - DDC	2	Good	Replace	Long Term	2018	6	20	14	2038	EA	1	$ 36,700	$ 36,700															$ 36,700											
D3060 Controls & Instrumentation	BAS - DDC, Physical Control Point	2	Good	Replace	Long Term	2018	6	20	14	2038	EA	100	$ 4,500	$ 450,000															$ 450,000											
D3010 Energy Supply	Gas Supply System	2	Good	No Action	N/A	2020	4	25	21	2045	EA		$ -	$ -																						$ -				
D3020 Heat Generating Systems	Hot Water Boilers	2	Good	Replace	Long Term	2017	7	20	13	2037	EA	3	$ 26,900	$ 80,700														$ 80,700												
D3020 Heat Generating Systems	Boiler Circulation Pumps	3	Fair	Replace	Medium Term	2017	7	15	8	2032	EA	3	$ 3,800	$ 11,400									$ 11,400															$ 11,400		
D3020 Heat Generating Systems	Heating Distribution Pumps	3	Fair	Replace	Medium Term	2017	7	15	8	2032	EA	3	$ 3,800	$ 11,400									$ 11,400															$ 11,400		
D3040 Distribution Systems	Interior Air Handling Unit - AHU-1	2	Good	Replace	Long Term	2017	7	30	23	2047	EA	1	$ 165,200	$ 165,200																								$ 165,200		
D3040 Distribution Systems	Interior Air Handling Unit - AHU-2	2	Good	Replace	Long Term	2017	7	30	23	2047	EA	1	$ 75,500	$ 75,500																								$ 75,500		
D3040 Distribution Systems	Furnace	4	Poor	Replace	Immediate	1991	33	18	0	2024	EA	1	$ 11,900	$ 11,900	$ 11,900																		$ 11,900							
D3050 Terminal & Package Units	Air Cooled Condenser - Furnace	4	Poor	Replace	Immediate	1991	33	15	0	2024	EA	1	$ 10,000	$ 10,000	$ 10,000															$ 10,000										
D3040 Distribution Systems	Interior Air Handling Unit - AHU-4	2	Good	Replace	Long Term	2018	6	30	24	2048	EA	1	$ 51,400	$ 51,400																									$ 51,400	
D3050 Terminal & Package Units	Air Cooled Condenser - AHU-4	2	Good	Replace	Long Term	2018	6	15	11	2035	EA	1	$ 25,300	$ 25,300												$ 25,300														
D3010 Energy Supply	Heat Exchanger	2	Good	Replace	Long Term	2018	6	30	24	2048	EA	1	$ 9,400	$ 9,400																									$ 9,400	
D3020 Heat Generating Systems	Glycol Pumps	2	Good	Replace	Medium Term	2017	7	15	9	2033	EA	2	$ 3,800	$ 7,600										$ 7,600															$ 7,600	
D3020 Heat Generating Systems	Glycol Feed Package	2	Good	Replace	Long Term	2021	3	20	17	2041	EA	1	$ 10,600	$ 10,600																		$ 10,600								
D3040 Distribution Systems	Interior Air Handling Unit - AHU-5	4	Poor	Replace	Immediate	1982	42	30	0	2024	EA	1	$ 51,400	$ 51,400	$ 51,400																									
D3050 Terminal & Package Units	Air Cooled Condenser - AHU-5	4	Poor	Replace	Immediate	2004	20	15	0	2024	EA	1	$ 38,100	$ 38,100	$ 38,100															$ 38,100										
D3020 Heat Generating Systems	Heating Distribution Pump - AHU-5	2	Good	Replace	Long Term	2021	3	15	12	2036	EA	1	$ 3,800	$ 3,800													$ 3,800													
D3090 Other HVAC Systems And Equipment	Heat Recovery Ventilator	3	Fair	Replace	Long Term	2018	6	18	12	2036	EA	1	$ 5,300	$ 5,300													$ 5,300													
D3050 Terminal & Package Units	VRF Heat Pump System (5-ton)	3	Fair	Replace	Medium Term	2018	6	15	10	2034	EA	1	$ 32,400	$ 32,400											$ 32,400															$ 32,400
D3050 Terminal & Package Units	Split AC System - Elevator	3	Fair	Replace	Short Term	2013	11	15	4	2028	EA	1	$ 10,400	$ 10,400					$ 10,400															$ 10,400						
D3050 Terminal & Package Units	Split AC System - Box Office	3	Fair	Replace	Short Term	2004	20	15	1	2025	EA	1	$ 8,200	$ 8,200		$ 8,200															$ 8,200									
D3050 Terminal & Package Units	Hydronic Radiators	4	Poor	Replace	Short Term	1973	51	20	2	2026	EA	60	$ 4,100	$ 246,000			$ 246,000																				$ 246,000			
D3050 Terminal & Package Units	Electric Heating Sources	3	Fair	Replace	Medium Term	2013	11	18	7	2031	EA	10	$ 800	$ 8,000								$ 8,000																		$ 8,000
D3040 Distribution Systems	Exhaust Fans - Washrooms	3	Fair	Replace	Short Term	1982	42	20	1	2025	EA	8	$ 1,400	$ 11,200		$ 11,200																				$ 11,200				
D3040 Distribution Systems	Exhaust Fan - Elevator Machine Room	3	Fair	Replace	Immediate	1982	42	20	0	2024	EA	1	$ 1,400	$ 1,400	$ 1,400																				$ 1,400					
D3040 Distribution Systems	Exhaust Fan - Penthouse	3	Fair	Replace	Long Term	2018	6	20	14	2038	EA	1	$ 1,400	$ 1,400															$ 1,400											

D3040 Distribution Systems	Ceiling Fan	3	Fair	Replace	Medium Term	2013	11	20	9	2033	EA	1	$ 1,100	$ 1,100										$ 1,100																
D4010 Sprinklers	Wet Sprinkler System	2	Good	Maintain	Long Term	2016	8	75	25	2049	EA	1	$ 31,900	$ 31,900																										$ 31,900
D4010 Sprinklers	Wet Sprinkler System - Replacement	2	Good	Replace	End of Life	2016	8	75	67	2091	EA	22,135	$ 10	$ 221,400																										
D4020 Standpipe Systems	Fire Hose Cabinet, Recessed, Glass Door	2	Good	Replace	Long Term	2018	6	25	19	2043	EA	9	$ 1,100	$ 9,900																				$ 9,900						
D4030 Fire Protection Systems	Fire Extinguishers, Dry Chem, Portable	3	Fair	Replace	Short Term	2006	18	8	4	2028	EA	22	$ 160	$ 3,500					$ 3,500								$ 3,500								$ 3,500					
D4030 Fire Protection Systems	Fire Protection Specialties	2	Good	Replace	Long Term	2018	6	20	14	2038	Sq. Ft.	22,135	$ 2.50	$ 55,300															$ 55,300											
D5010 Electrical Service & Distribution	Primary Transformer	2	Good	No Action	N/A	2022	2	40	38	2062	EA		$ 56,600	$ -																										
D5010 Electrical Service & Distribution	Switchgear	4	Poor	Replace	Short Term	1982	42	40	1	2025	EA	1	$ 33,200	$ 33,200		$ 33,200																								
D5010 Electrical Service & Distribution	Splitter Electrical Distribution	4	Poor	Replace	Short Term	1982	42	40	1	2025	EA	5	$ 8,700	$ 43,500		$ 43,500																								
D5010 Electrical Service & Distribution	Electrical Delivery - 120/208V Panels - Westinghouse &	4	Poor	Replace	Short Term	1982	42	40	1	2025	EA	3	$ 10,300	$ 30,900		$ 30,900																								
D5010 Electrical Service & Distribution	Electrical Delivery - 120/208V Panels - Eaton	2	Good	Maintain	End of Life	2013	11	40	29	2053	EA	2	$ 10,300	$ 20,600																										
D5010 Electrical Service & Distribution	Electrical Delivery - Stab-Lok Panels	4	Poor	Replace	Immediate	1982	42	40	0	2024	EA	5	$ 4,800	$ 24,000	$ 24,000																									
D5020 Light & Branch Wiring	Theatre Lighting	2	Good	Replace	Long Term	2016	8	20	12	2036	Lump Sum	1	$ 215,000	$ 215,000													$ 215,000													
D5020 Light & Branch Wiring	Lighting Dimming System	3	Fair	Replace	Short Term	1999	25	20	1	2025	Lump Sum	1	$ 15,000	$ 15,000		$ 15,000																				$ 15,000				
D5020 Light & Branch Wiring	Lighting Control System	3	Fair	Replace	Short Term	1999	25	20	1	2025	Lump Sum	1	$ 13,000	$ 13,000		$ 13,000																				$ 13,000				
D5020 Light & Branch Wiring	Interior Fixtures - LED	2	Good	Replace	Long Term	2016	8	20	12	2036	EA	300	$ 550	$ 165,000													$ 165,000													
D5020 Light & Branch Wiring	Exterior Fixtures - LED	2	Good	Replace	Long Term	2016	8	20	12	2036	EA	9	$ 320	$ 2,900													$ 2,900													
D5020 Light & Branch Wiring	Exterior Fixtures - HPS	3	Fair	Replace	Short Term	1999	25	20	1	2025	EA	3	$ 320	$ 1,000		$ 1,000																				$ 1,000				
D5030 Communications & Security	Fire Alarm Control Panel	2	Good	Replace	Long Term	2018	6	20	14	2038	EA	1	$ 22,300	$ 22,300															$ 22,300											
D5030 Communications & Security	Security Alarm System	3	Fair	Replace	Long Term	2016	8	20	12	2036	Lump Sum	1	$ 4,300	$ 4,300													$ 4,300													
D5090 Other Electrical Services	Exit Lighting	3	Fair	Replace	Medium Term	2012	12	20	8	2032	EA	40	$ 170	$ 6,800									$ 6,800																	
D5090 Other Electrical Services	Emergency Lighting, Self-Contained Lamp	3	Fair	Replace	Medium Term	2012	12	10	8	2032	EA	60	$ 170	$ 10,200									$ 10,200										$ 10,200							
E1090 Equipment	Curtain System	3	Fair	Replace	Medium Term	2000	24	20	10	2034	Lump Sum	1	$ 63,800	$ 63,800											$ 63,800															
G2030 Pedestrian Paving	Concrete Walkways	3	Fair	Replace	Long Term	1980	44	40	13	2037	Sq. Ft.	5,000	$ 32	$ 160,000														$ 160,000												
G2030 Pedestrian Paving	Concrete Walkways	4	Poor	Replace	Short Term	1980	44	40	4	2028	Sq. Ft.	2,300	$ 16	$ 36,800					$ 36,800																					
G2030 Pedestrian Paving	Concrete Walkways	4	Poor	Replace	Short Term	1980	44	40	3	2027	Steps	8	$ 480	$ 3,800				$ 3,800																						
G2034 Guardrails & Barriers	Railings - Metal	3	Fair	Replace	Long Term	2013	11	30	19	2043	Ln. Ft.	100	$ 110	$ 11,000																				$ 11,000						
G2034 Guardrails & Barriers	Bollards	2	Good	No Action	End of Life	2021	3	30	27	2051	EA	8	$ 320	$ 2,600																										

APPENDIX B – ASSESSMENT METHODOLOGY

Appendix B Assessment Methodology

Our methodology generally included the following:

- Review existing documentation including drawings, specifications, previous reports, and previous capital expenditures, where made available;
- Interview the property manager and/or maintenance staff to understand the history of past repairs/replacements, and any current performance concerns;
- Complete a single, visual, walk-through inspection of the property to assess the current condition of the building structure, exterior cladding, roofing, mechanical, electrical and plumbing systems, fire protection systems, vertical transportation systems, and exterior site components, where these are applicable. Interior finishes/tenant fit outs were excluded from our review;
- Identify and financially quantify (in present value dollars) an opinion of cost to address immediate safety/Code compliance concerns, deferred maintenance, and or normal life cycle renewal of existing building components over the report term;
- Recommend and provide cost estimates for further investigations, if required, and provide order of magnitude estimates for work that may be required as a result of these investigations. Please note that intrusive observations, destructive testing and quantitative measurements are beyond the scope of this assessment, except where noted herein; and
- Prepare, using our proprietary asset management software, a report that outlines findings, opinions and recommendations, complete with photographs of salient observations and other pertinent information obtained during the review of the site.

The ASTM standard defines a physical deficiency as a conspicuous defect or significant deferred maintenance of a site's material systems, components, or equipment as observed during the site assessor's walkthrough site visit. Included within this definition are material systems, components, or equipment that are approaching, have reached, or have exceeded their typical expected useful life (EUL), or whose remaining useful life (RUL) should not be relied upon in view of actual or effective age, abuse, excessive wear and tear, exposure to the elements, lack of proper or routine maintenance, etc. This definition specifically excludes deficiencies that may be remedied with routine maintenance, miscellaneous minor repairs, normal operating maintenance, etc., and excludes conditions that generally do not constitute a material physical deficiency of the site.

The review of the site was based on a single visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, exterior wall finishes of the on-site building and related structures were visually assessed to check their condition and to identify physical deficiencies where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted, and no samples of building materials were collected to substantiate observations made, or for any other reason. Environmental considerations are specifically excluded from this assessment. The review of the site should not be considered to satisfy the requirements of a Structural Adequacy Assessment according to applicable national or provincial Building Codes.

The review of the mechanical, electrical, and fire protection systems included a visual walk-through assessment to determine the type, age, and visible condition of the components, discussions with the site representative, and review of pertinent maintenance records that were made available. No physical tests were conducted on these systems.

A detailed evaluation of the property's compliance with applicable design and construction codes is not part of the scope of this assessment. It is assumed that the existing building and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes may

be used by BLDG Sci during the assessment as a reference in determining appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by BLDG Sci. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined, and the budgetary items revised to reflect actual expenditures. Not included are items that we have assumed would be addressed as routine, ongoing maintenance at the site.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount **(if applicable)** are generally not included in the PCA cost tables. The exception is deficiency costs relating to life safety or accessibility and these may be included regardless of this cost threshold.

Deviations from the Guide

The major deviations from ASTM E2018-15 for this project were as follows:

- No review to confirm the property meets the municipal/public records for zoning, building, and/or fire & life safety code/regulatory compliance was conducted. It is assumed that at the time of construction the aforementioned were addressed;
- Investigation of whether or not the property resides in a flood plain;
- Verification of number of parking spaces to the zoning requirement; and
- Verification of gross and net usable areas of the site building(s).

The condition report does not include an evaluation (detailed or otherwise) of the site's compliance with current Building/Fire Codes, or with local ordinances, requirements, etc. (including those related to life safety and fire protection). It is assumed that the duty of care exercised by the original design professionals, as well as subsequent inspections (by the appropriate authority having jurisdiction at the time of construction, and any subsequent additions/renovations) have generally resulted in a building that complies with applicable Codes. Code requirements change over time; however, there are generally no requirements for existing buildings to upgrade to comply with these changing requirements.

Accessibility

All of the reasonably accessible areas were examined during the assessment of the property. Our mandate does not include destructive testing, including the opening of roofing systems, wall assemblies, or other enclosures. Our mandate did not include verification or engineering calculations of the building or component design.

Code Compliance

The building's structure, building envelope, roofing system, and site conditions were visually examined, where possible, during a walkthrough inspection. The structural components (columns, bricks, etc.) were randomly inspected to assess the overall condition. Original architectural and structural drawings were not consulted to verify or analyze design loads or design details.

Building Operational Performance

The assessment is not considered an energy audit. BLDG Sci has noted areas where deficiencies occur in thermal or equipment performance.

The windows were examined for deteriorated caulking, gaskets, and broken glazing, as well as for condensation or rust in the air spaces between the glazing panels in the double pane units, which would indicate possible broken thermal seals.

The assessment of the mechanical and electrical systems was strictly visual to determine the type of system, age, and visual condition. The system components were randomly reviewed to assess their overall condition. Operating conditions of the actual equipment were determined through a review of available logbooks, interviews with property contacts and maintenance personnel. No physical testing or intrusive investigative techniques were used.

The building's mechanical and electrical systems were visually reviewed during our inspection. Our inspection was limited to accessible equipment, without review of any drawings or schematics. Equipment was observed in its present operating state. Processes and performance criteria were based on visual assessment only.

Tests were not performed, nor was dismantling of the systems carried out to verify the condition of the interior components of HVAC equipment. Seasonal use should be considered with regards to any comments made about the condition of any HVAC equipment.

Calculations were not made to verify the adequacy of the electrical supply, domestic hot water, or HVAC performance.

It should be noted that the mandate did not include a review of the National Building and Fire Codes or compliance of the property to these codes. Only code issues that were reported, or were readily apparent during the "walkthrough", are indicated in this report.

This report is not intended to address or provide comment on the presence or absence of organic bacterial growth organisms (commonly referred to as mould) through statements, inferences or omissions. All costs for abatement are in addition to the provided costs except as specifically provided.

Environmental Health and Safety

The assessment is not considered a hazardous substance survey. BLDG Sci has not taken note of obvious or suspected environmental issues or the need for physical testing.

Structural Review

The integrity of a structure can be evaluated from a simple visual review of those parts of the structure exposed to view, to a program of sophisticated non-destructive and destructive testing designed to reveal information concerning "as-built" conditions followed by a structural analysis carried out to establish structural adequacy of the existing bearing frame to support applicable service loads. This also may require further investigation to compare the extent of compliance of the structure with the requirements detailed in the relevant edition of the Ontario Building Code. The terms of reference governing BLDG Sci's review of this structure are limited to a visual review of those parts of the structure exposed at the time of our visit. For the purpose of this assessment, our review was visual in nature and other than where may be noted otherwise, completed from floor level. As a result, of this limitation, our review should not be presumed to include confirmation of the presence of welds or fasteners of appropriate size at all connectors and the quality of the workmanship. Throughout any inspection, inferences are often drawn which cannot be confirmed by direct observation. Therefore, we can reduce the number of unforeseen repairs; however, we cannot eliminate them. Consequently, no guarantee or warranty can be offered or implied.

Out-of-Scope Issues

In the same context of the ASTM E 2018-15: "Standard Guide for Property Condition Assessments" (Baseline Property Condition Assessment Process), an Out-of-Scope Issue is defined as "any aspect of the condition of the subject building that cannot be readily ascertained during a walkthrough investigation." Any barriers that prevent or limit the direct and continuous visual observation of a system or item will render the item Out-of-Scope.

Definition of Terms

The following terms and their respective definitions are used to describe the condition of the building systems:

Very Good:	The asset is generally in very good condition, typically new or recently refurbished. No noticeable defects and remaining useful life greater than 10 years.
Good:	The asset is in good condition, performing adequately, and no work is foreseen in the short or medium term other than general preventative maintenance assuming normal use is continued.
Fair:	The asset is in fair condition showing general signs of deterioration which may require attention. Some components exhibit significant deficiencies which require some repairs/maintenance to correct function.
Poor:	The asset is in poor condition and mostly below standard, with many elements approaching the end of their life cycle requiring replacement. Asset is barely functioning with a large portion of the components exhibiting significant deterioration.
Very Poor:	The asset (infrastructure in the system or network) is in unacceptable condition with widespread signs of advanced deterioration. Asset has failed or many components in the system exhibit signs of imminent failure, which is affecting service.
Recommended Work	Work that is required due to code, condition, or immediate health risks to keep the facility operating over the evaluation period of this report. This work is considered to be beyond normal or routine maintenance work or for maintenance procedures that are currently not in force but are strongly recommended to maintain the system under consideration.
Optional Work	Work that is beyond what is required to keep the facility operating and is not required by code or condition. This work is recommended as potential upgrade work for energy savings, aesthetic considerations, or improved building function.
Immediate Work	Immediate work includes work items which are required by code, safety, immediate health risks or work items which, if left unattended, will result in significant deterioration and substantially escalated repair costs or system failure.
Short Term Work (1 year)	Short-term work includes work items that require repair or replacement but may be deferred due to the amount of serviceability or remaining life of the component.

Mid-Term Work (2 to 5 years)	Mid-term work includes work items that require repair or replacement but may be deferred from the short-term due to the amount of serviceability or remaining life of the component.
Long Term Work (6 to 10 years)	Long-term work includes work items that require repair or replacement that are not considered urgent. These repairs usually include replacement of equipment or systems that are nearing the end of their life cycle.

Cost Estimates

The estimated costs associated with the deficiencies and conditions reported herein are presented in the Capital Expenditure Table, included in the appendix. The term "Capital Expenditure," as it pertains to the Capital Expenditure Table, means the cost to replace defective elements of the building or to fully repair the deficient elements within a given building system at a specified point during the investment horizon.

Items that are deemed to be deficient but not significant in terms of importance, cost or their effect on the overall building condition will be considered to lie within the scope of regular building maintenance.

These estimates are intended only for global budgeting purposes; they should be used as a guide only, as costs may vary according to the time of year, quality of materials used, the volume of work, actual observed conditions, etc. Note that the estimates do not include applicable taxes.

The budget costs for remedial work for each specific item have been provided to the best of our ability and will provide an order of magnitude cost for the individual item and the overall possible remedial work. Our experience has shown that the costs that BLDG Sci have provided are appropriate and of reasonable accuracy for the purpose intended. There is a potential for unidentified deficiencies not recorded being present in the building given the limited nature of this review and information provided, given the level of the study undertaken. As a result, our findings and recommendations may be subject to revision as further information concerning existing conditions becomes available, including an update of the cost estimates provided in this report.

It should be noted that the budget cost or reserve costs for any specific item may vary significantly, based on the fact that the schedule or phasing of the future remedial work is unknown at this time. The impact on building operations of this remedial work is unknown at this time, and that no intrusive inspection or detailed design work is included. The cost estimates are preliminary and order of magnitude budget estimates, subject to confirmation by competitive bidding and change as a result of market conditions, contractor availability, business cycles, interest rates, inflation rates, cost of labour, materials, equipment, factors over which the Consultant has no control.

Actual costs for work can only be determined after preparing specifications and tender documents, understanding site restrictions that may impact work, and establishing a construction schedule.

APPENDIX C – LIMITATIONS

Appendix C Limitations

This report has been prepared for the exclusive and sole use of City of Orillia. The report may not be relied upon by any other person or entity without the express written consent of BLDG Sci.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. BLDG Sci accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report. The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for PCA assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. No responsibility is held for the impact of design or construction defects as part of these services, whether or not described in this report. No guarantee or warranty, expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

The recommendations and our opinion of costs associated with these recommendations, as presented in this report, are based on walk-through non-invasive observations of the parts of the building which were readily accessible during our visual review. Conditions may exist that are not as per the general condition of the system being observed and reported in this report. Opinions of costs presented in this report are also based on information received during interviews with operations and maintenance staff. In certain instances, BLDG Sci has been required to assume that the information provided is accurate and cannot be held responsible for incorrect information received during the interview process. Should additional information become available with respect to the condition of the building and/or site elements, BLDG Sci requests that this information be brought to our attention so that we may reassess the conclusions presented herein.

The opinions of costs are intended for global budgeting purposes only. The scope of work and the actual costs of the work recommended can only be determined after a detailed examination of the site element in question, understanding of the site restrictions, understanding of the effects on the ongoing operations of the site/building, definition of the construction schedule, and preparation of tender documents. BLDG Sci expressly waive any responsibilities for the effects of any action taken as a result of these endeavors unless we are specifically advised of prior to, and participate in the action, at which time, our responsibility will be negotiated.

BLDG Sci's opinions and recommendations presented in our reports will be rendered in accordance with generally accepted professional standards and are not to be construed as a warranty or guarantee regarding existing or future physical conditions at the site or regarding compliance of site systems/components and procedures/operations with the various regulating codes, standards, regulations, ordinances, etc.

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DRAWING LIST:

A1 - COVER PAGE
A2.0 - BASEMENT PLAN
A2.1 - GROUND FLOOR PLAN
A2.2 - REAR SECOND FLOOR PLAN
A2.3 - AUDITORIUM LEVEL PLAN
A2.4 - UPPER AUDITORIUM LEVEL PLAN
A2.5 - MECHANICAL ROOM LEVEL PLAN
A3 - SECTION

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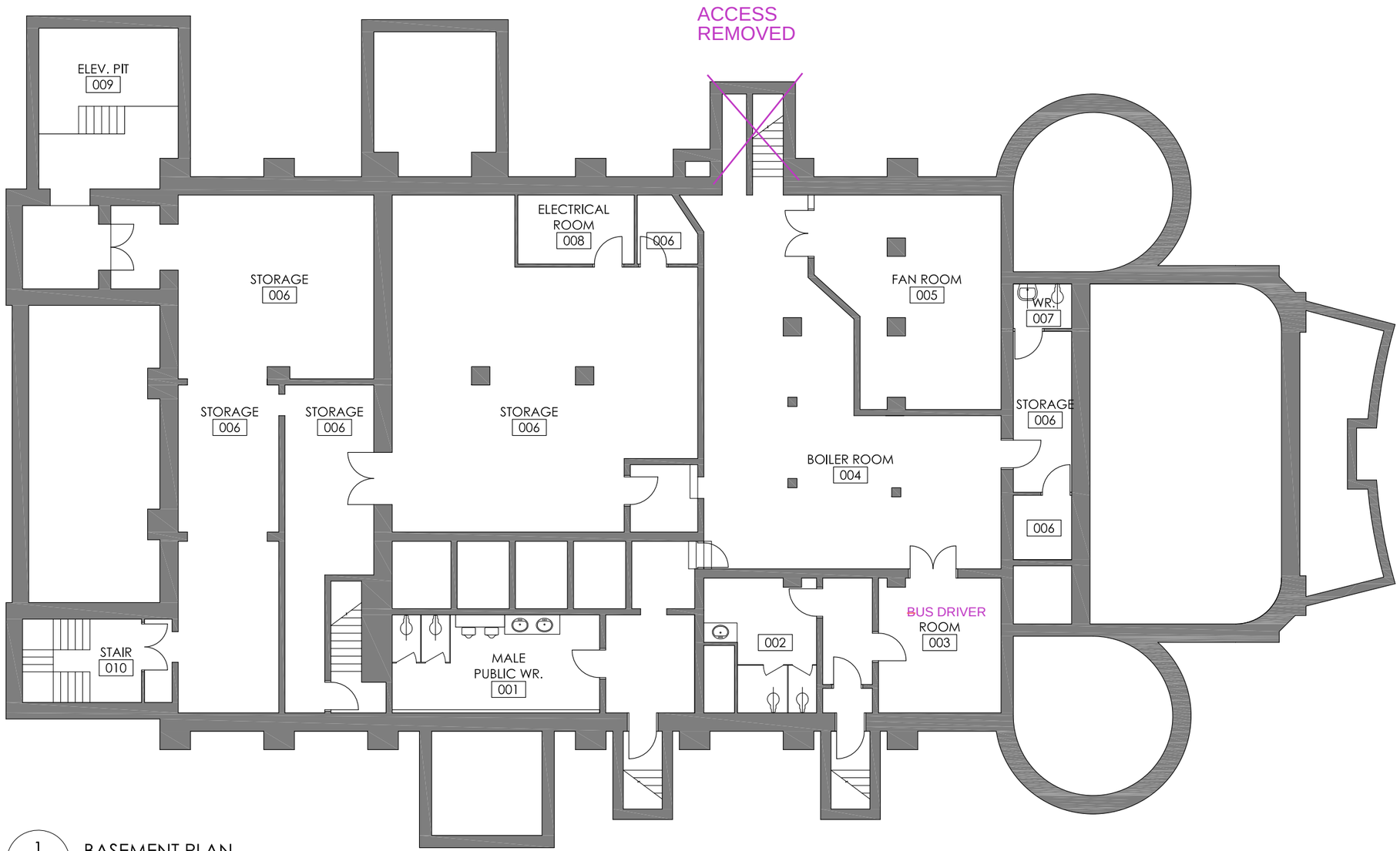

1
A2.0 BASEMENT PLAN

0 1500 3000 7500

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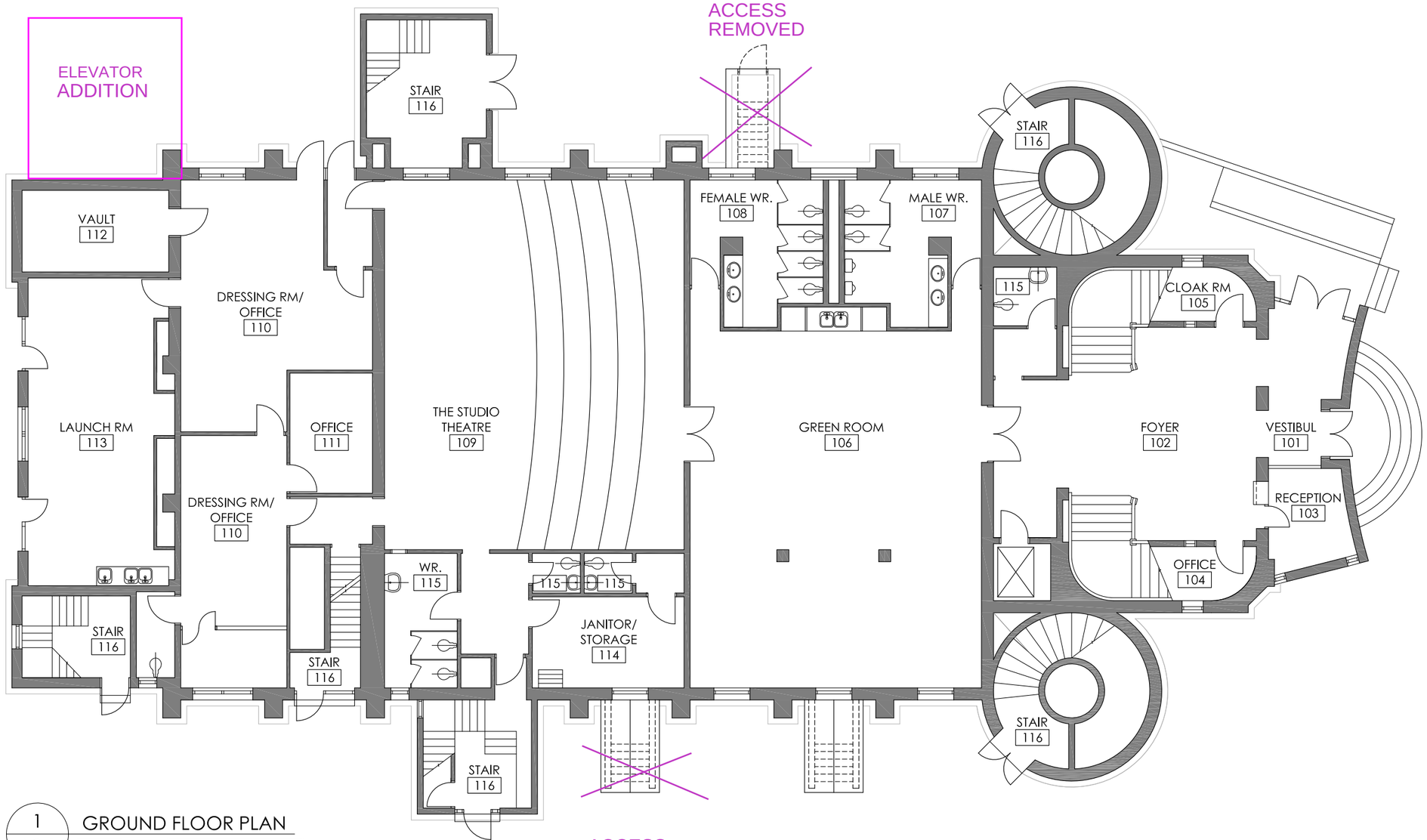

1 / A2.1 GROUND FLOOR PLAN

0 1500 3000 7500mm

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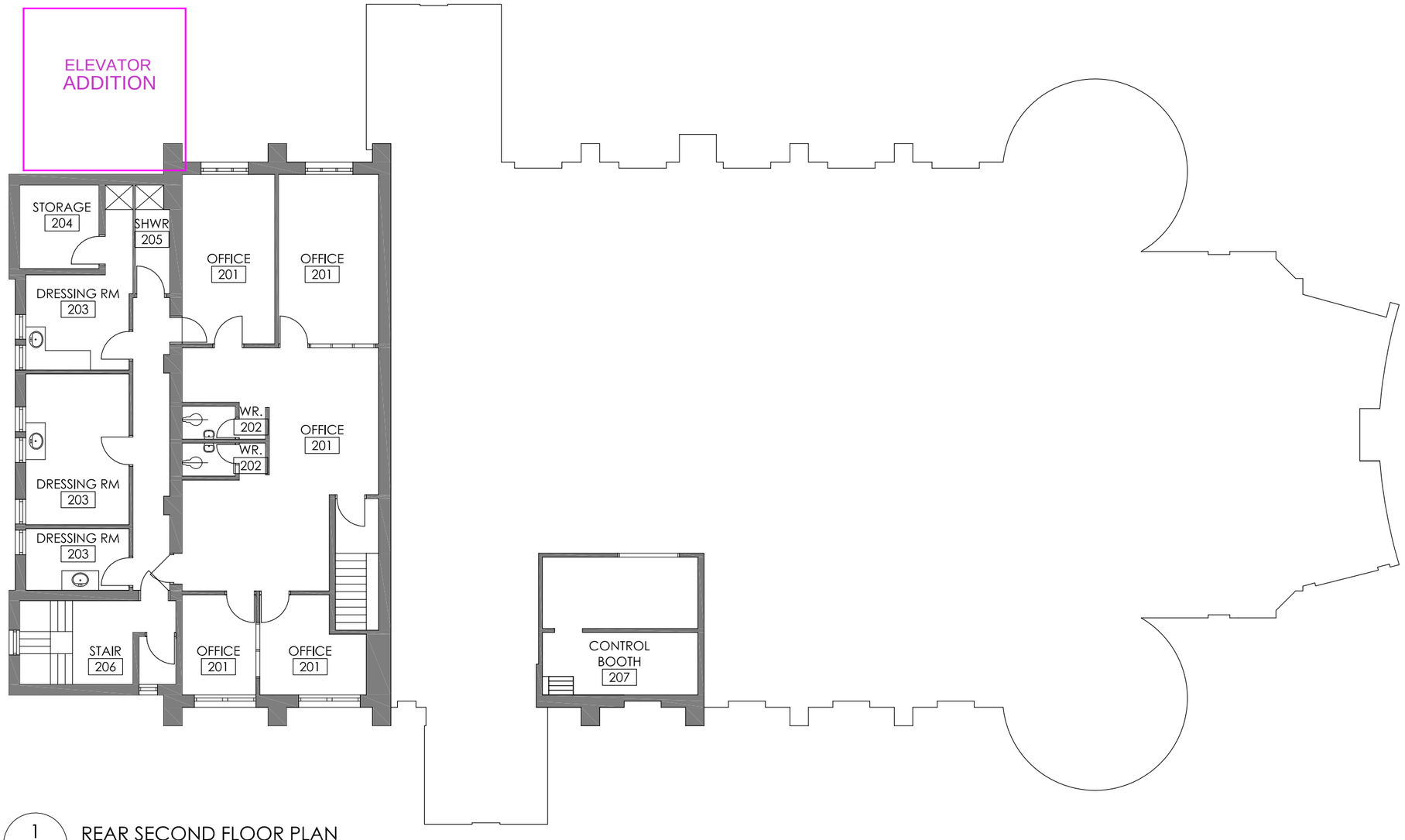

1
A2.2 REAR SECOND FLOOR PLAN

0 1500 3000 7500mm

CLIENT:

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Plot Date: Jul 11, 2013 - 12:28pm By: student2

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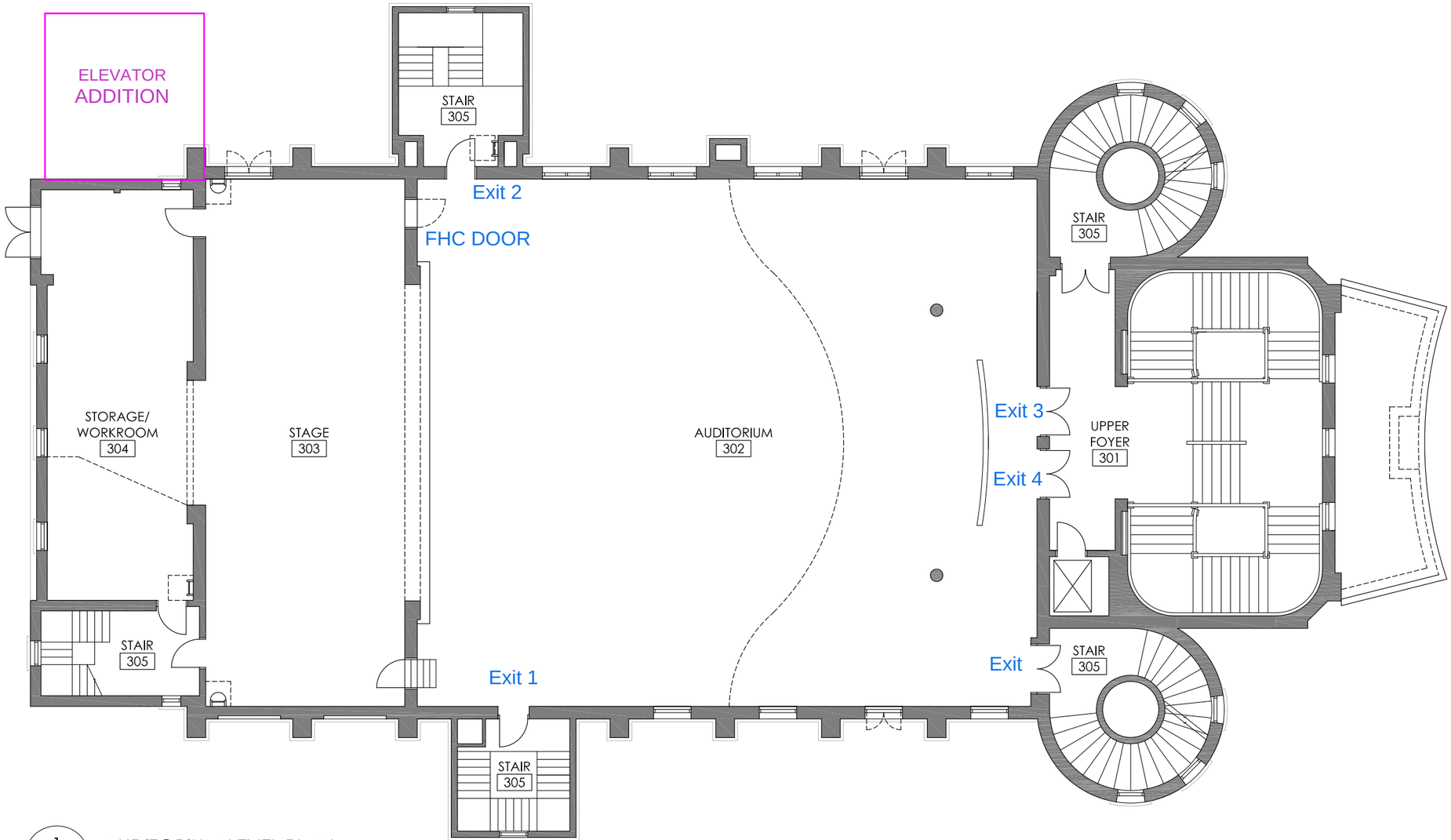

1 / A2.3 AUDITORIUM LEVEL PLAN

0 1500 3000 7500mm

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ORILLIA OPERA HOUSE RENOVATION

20 MISSISSAGA ST. W., ORILLIA, ONTARIO, L3V 3A6

+VG ARCHITECTS
THE VENTIN GROUP LTD

50 Dalhousie Street
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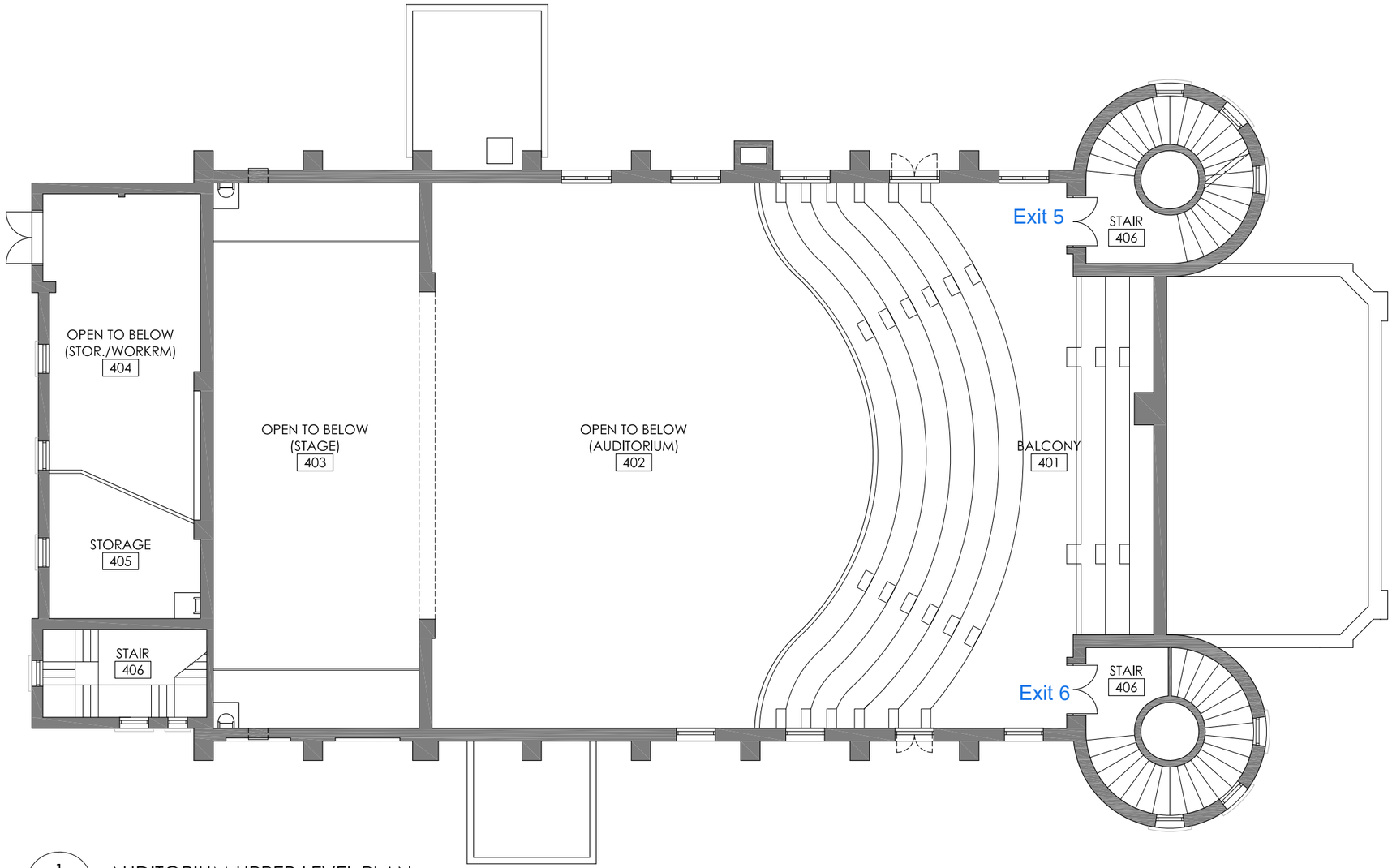
Plot Date: Jul 11, 2013 - 12:29pm By: student2
Filename: K:\TVG-Brantford\Orillia Opera House Restoration Plan-2127\Drawings\Wot-Current\OOH - A2.3 - Auditorium level.dwg



1 / A2.4 AUDITORIUM UPPER LEVEL PLAN

0 1500 3000 7500mm

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Plot Date: Jul 11, 2013 - 12:31pm By: student2
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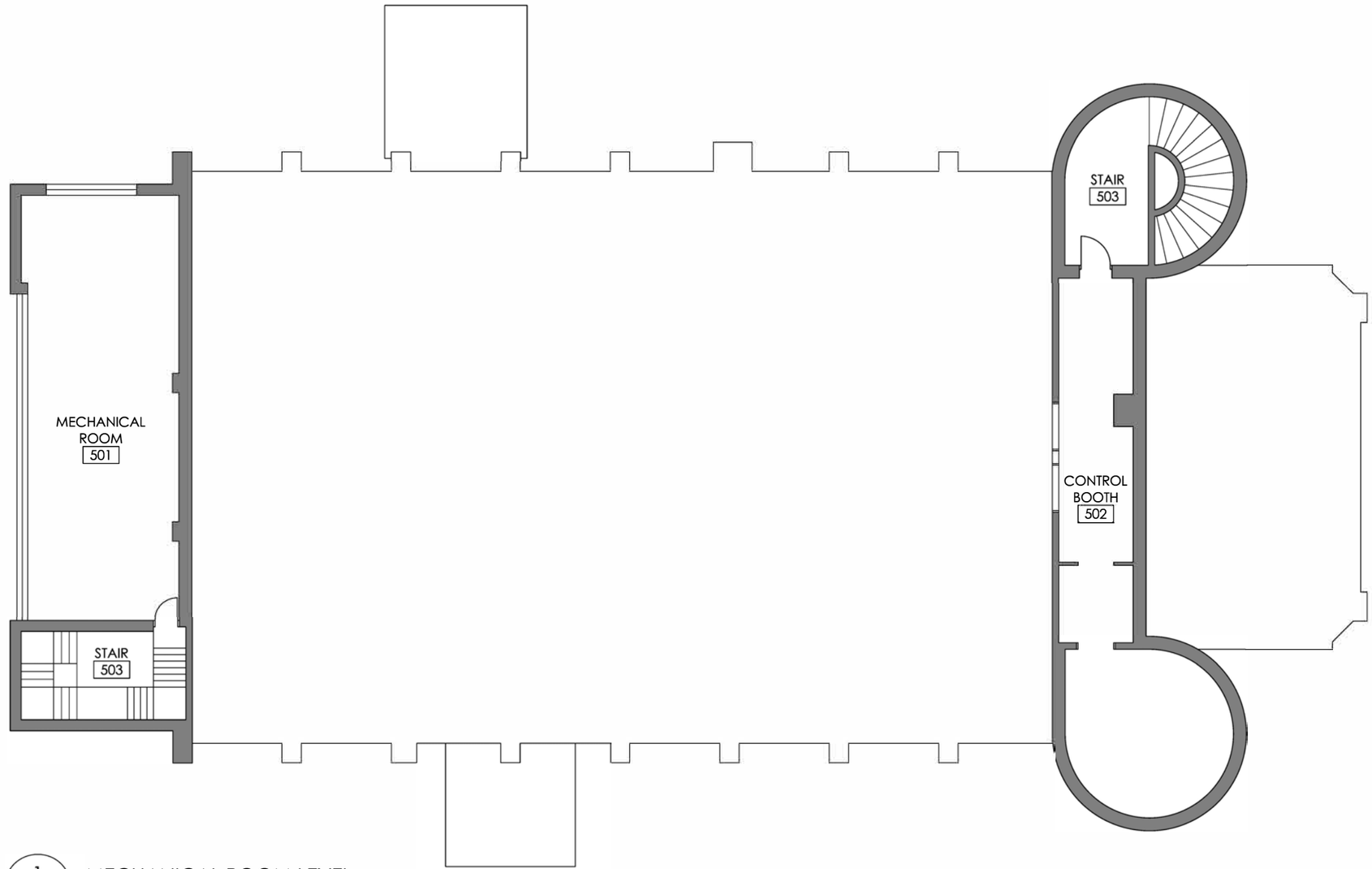

1 / A2.5 MECHANICAL ROOM LEVEL

0 1500 3000 7500mm

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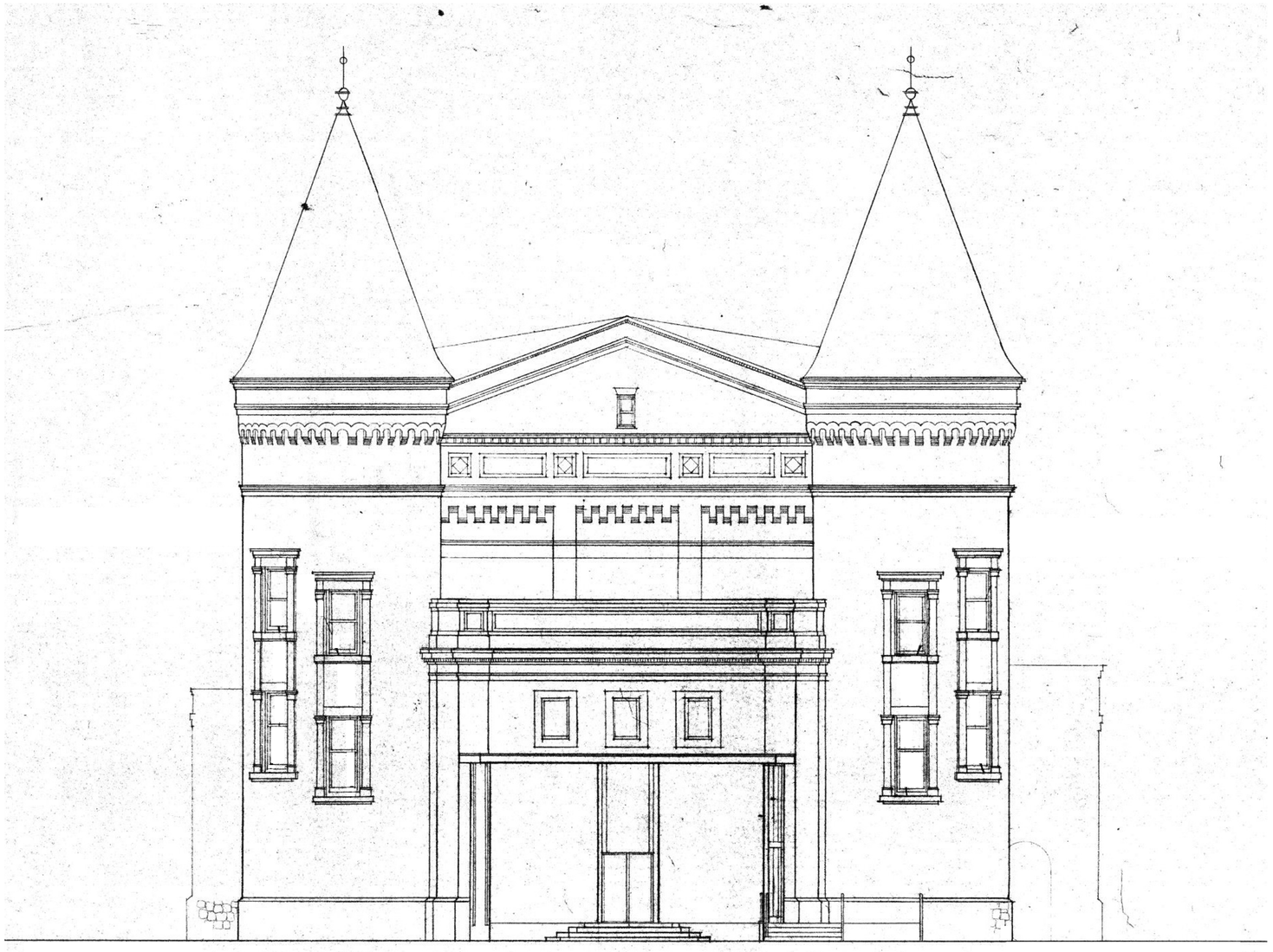
Plot Date: Jul 11, 2013 - 12:52pm By: student2
Filename: K:\TVG-Brantford\Orillia Opera House Restoration Plan-21276\Drawings\Wd Current\OOH - A2.5 - Mechanical room level.dwg

LEGEND & GENERAL NOTES

100% DEEP REPOINTING INCLUDING FACING JOINTS ABOVE OR BELOW REPOINTING TO MATCH EXISTING JOINT PROFILES.

SCOPE OF WORK AREA



1 / A3.1 East Elevation

0 1m 2m 3m (1 : 75)

Revision Schedule

Particular	Date	No.

CLIENT

CITY OF ORILLIA

PROJECT:

22411

ORILLIA OPERA HOUSE

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EAST ELEVATION

A3.1

PLOT DATE: 17-Jun-24 3:46:57 PM

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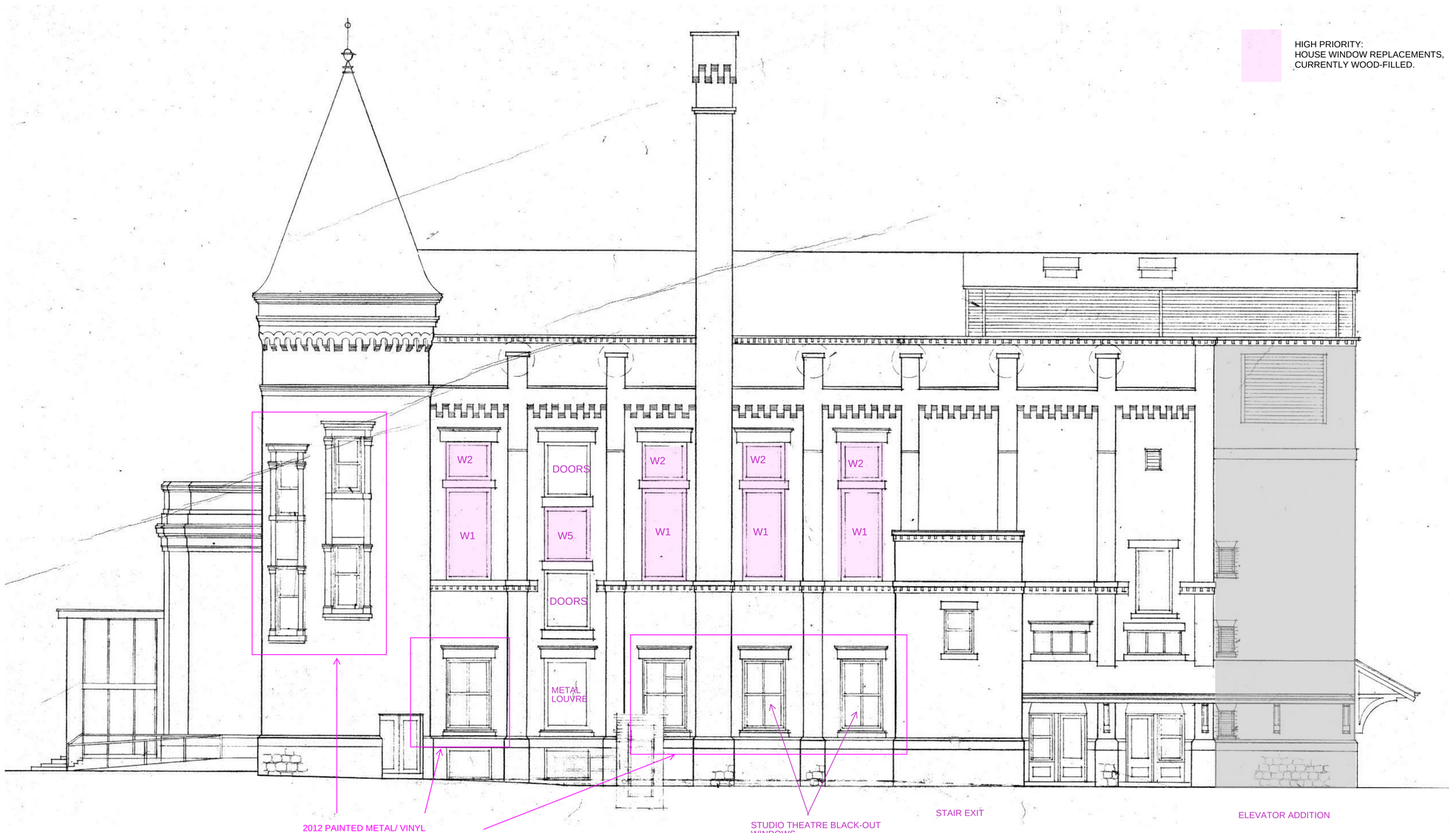
Drawn by : LJ Checked by : Checker Scale : As indicated

LEGEND & GENERAL NOTES

- 100% DEEP REPOINTING INCLUDING FACING JOINTS ABOVE OR BELOW REPOINTING TO MATCH EXISTING JOINT PROFILES.
- CRACK REPAIR IN BRICK UNIT CUT OUT LOOSE MATERIAL, PIN CRACKS AND FILL JOINT AND HOLES FROM PINS IN STONE TO MATCH BRICK COLOR
- REMOVE NAILS & FILL HOLES TO MATCH EX. BRICK.
- REPAIR HOLES, MATCH ITH EXISTING MATERIAL.
- SCOPE OF WORK AREA

HIGH PRIORITY:
HOUSE WINDOW REPLACEMENTS, CURRENTLY WOOD-FILLED.



1 / A3.2 North Elevation

0 1m 2m 3m (1 : 75)

Revision Schedule

Particular	Date	No.

All dimensions and measurements must be checked and verified by the General Contractor

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NORTH ELEVATION

A3.2

PLOT DATE: 17-Jun-24 3:46:59 PM
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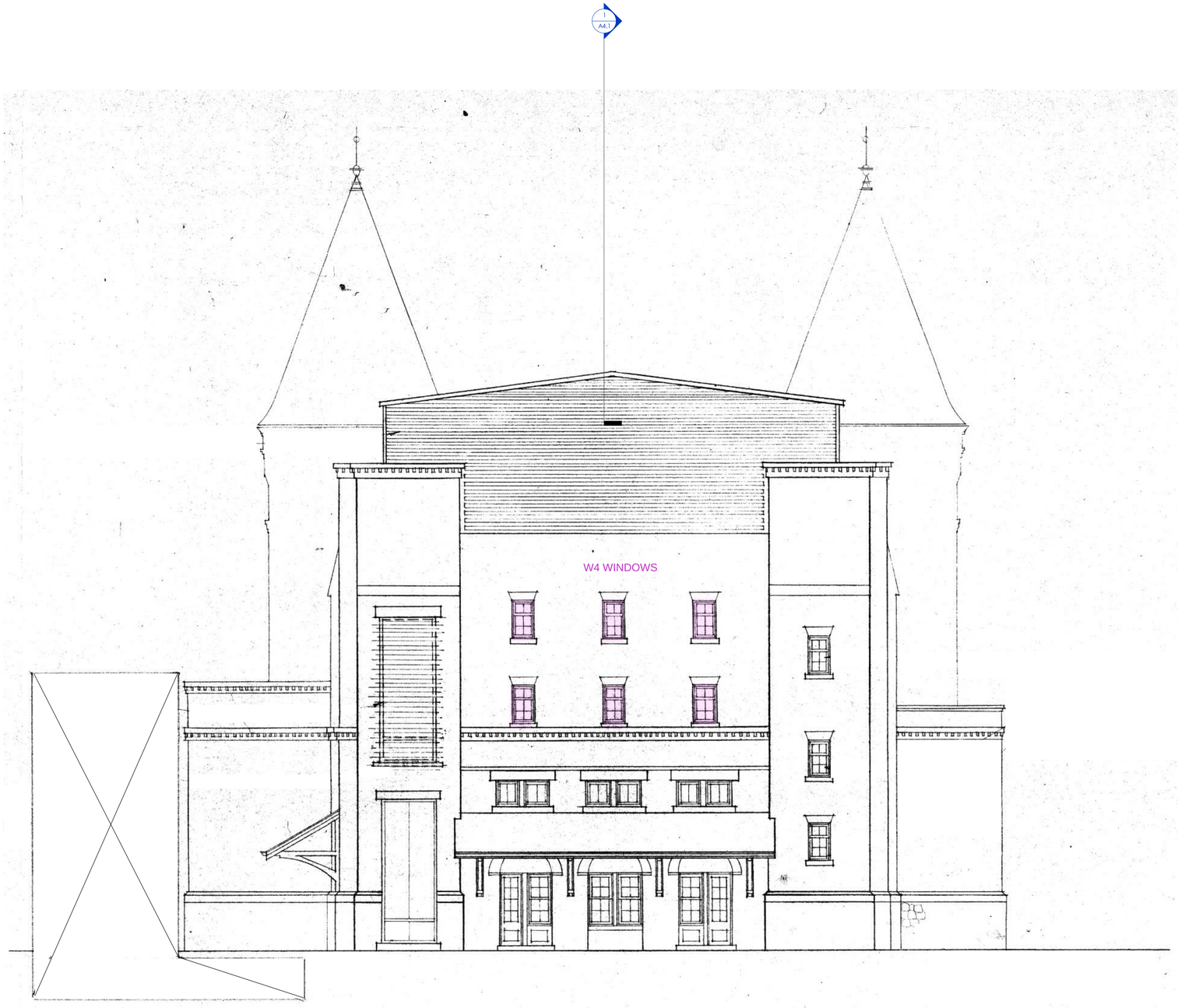

1 / A3.3 West Elevation

0 1m 2m 3m (1 : 75)

LEGEND & GENERAL NOTES

- 100% DEEP REPOINTING INCLUDING FACING JOINTS ABOVE OR BELOW REPOINTING TO MATCH EXISTING JOINT PROFILES.
- CRACK REPAIR IN BRICK UNIT CUT OUT LOOSE MATERIAL, PIN CRACKS AND FILL JOINT AND HOLES FROM PINS IN STONE TO MATCH BRICK COLOR
- REMOVE NAILS & FILL HOLES TO MATCH EX. BRICK.
- FILL HOLES TO MATCH EX. BRICK.
- SCOPE OF WORK AREA

DEFERRED (MEDIUM) PRIORITY:
SOUTH WINDOWS, CURRENTLY WOOD-FILLED.

Revision Schedule

Particular	Date	No.

All dimensions and measurements must be checked and verified by the General Contractor

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WEST ELEVATION

A3.3

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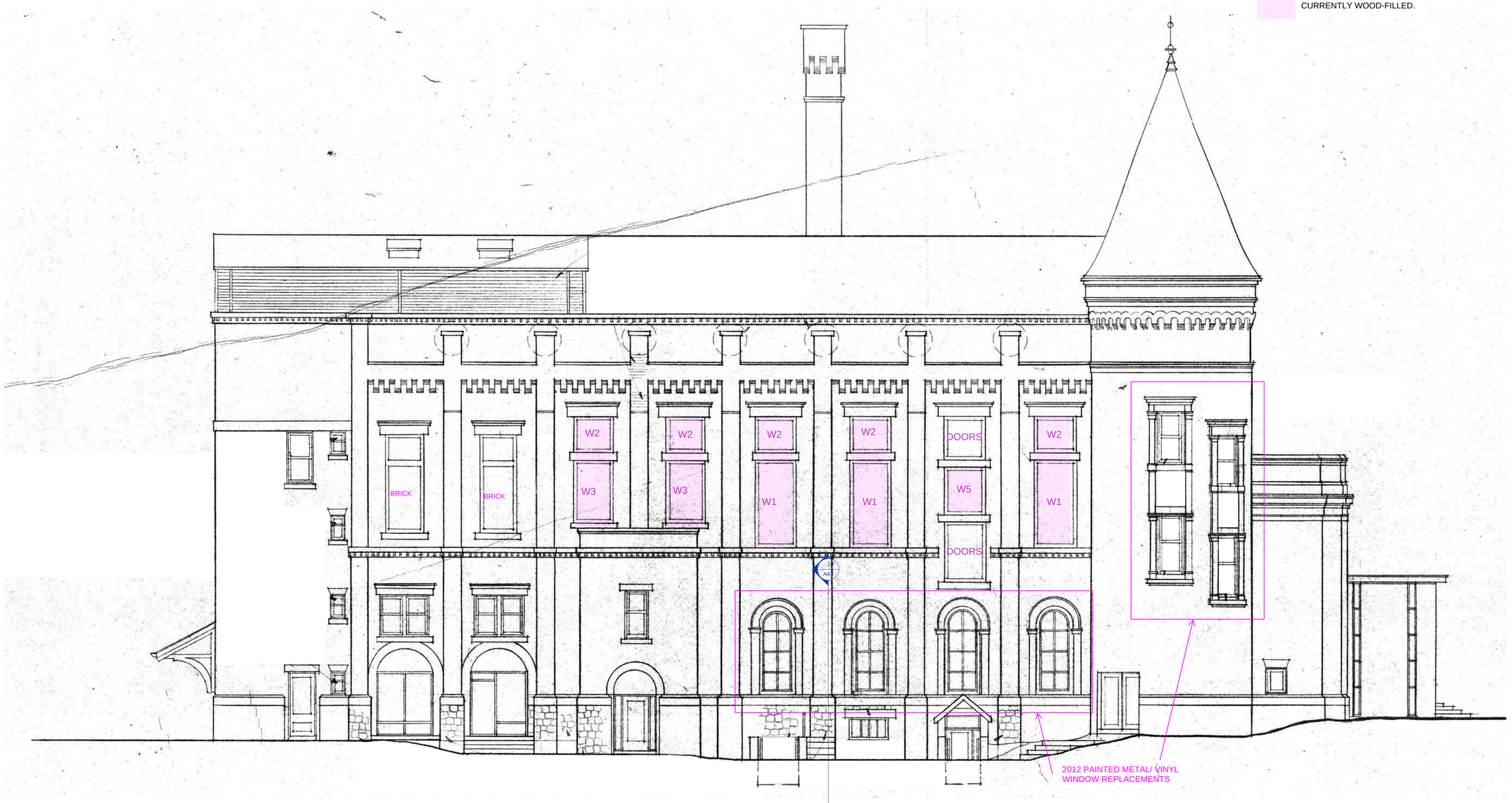
LEGEND & GENERAL NOTES

100% DEEP REPOINTING INCLUDING FACING JOINTS ABOVE OR BELOW REPOINTING TO MATCH EXISTING JOINT PROFILES.

SCOPE OF WORK AREA

HIGH PRIORITY:
HOUSE WINDOW REPLACEMENTS, CURRENTLY WOOD-FILLED.



1 / A3.4 Existing South Elevation

0 1m 2m 3m (1 : 75)

Revision Schedule

Particular	Date	No.

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SOUTH ELEVATION

A3.4

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