

Property Condition Assessment & Capital Planning



East Elgin Community Complex 531 Talbot St. W., Aylmer, Ontario

Prepared for:
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1 Introduction

1.1 Terms of Reference

IRC Building Sciences Group (IRC) a division of Rimkus Inc., was authorized by GM BluePlan Engineering Limited to perform a Property Condition Assessment & Capital Planning for East Elgin Community Complex property located at 531 Talbot St. W. in Aylmer, Ontario. The property was constructed circa 2004, and houses two hockey arenas, offices and community halls. The Building has a footprint of approximately 80,070 Square Feet (sq.ft.), and a total building area of 98,910 sq.ft. Talbot Street West runs east to west and is located south of the Site's main entrance.

The purpose of the assessment was to evaluate the condition of the primary building components, complete with recommendations for repair and/or replacements within the next 10-year period (Term of analysis).

1.2 Scope of Work

The work was performed in general accordance with IRC proposal# 940 dated June 21, 2023 and GM BluePlan Engineering Limited request for proposal. This work included:

- Review of all drawings and documentation made available to IRC for review.
- Performance of a site review of the buildings' primary components to evaluate the physical condition and standard of components.
- Preparation of Property Condition Assessment report noting general observations and component conditions, together with recommendations for future repair options and associated budgetary costing.
- Develop a 10-year cash flow projection, listing each of the identified components that will require repair, retrofit or replacement.

1.3 Description

Building - Information					
Year Constructed	Building Footprint	No. of Stories	Primary Use	Basement	Balconies
Circa 2004	80,070 sq. ft.	2 (partial)	Sports Arena and Community Hall	No	No

General Description	
Foundation & Exterior Wall Components	<p>Based on the review of the drawings, the Building was constructed with a cast-in-place concrete slab-on-grade (i.e., no basement level) supported on 10" thick cast-in-place concrete foundation walls and 24" wide footings. The superstructure of the Building consisted of a clear span, steel-framed support structure (i.e., tapered beams and columns) supporting steel purlins, standing seam roof structure. The mezzanine levels (partial second floor) at the south-central and seating (bleachers) above the change rooms and washrooms consisted of concrete topped, hollow-core concrete slabs supported on perimeter concrete block masonry walls and steel beams. The low-sloped roofs on the south portion of the Building were supported on open web steel joists, beams and perimeter columns supporting corrugated metal roof decks.</p> <p>The exterior walls are cladded with a combination of split-faced concrete block masonry on the lower portions and prefinished metal cladding on the upper portions of the north, east and west elevations. The exterior wall of the south, southwest and southeast elevation was cladded with brick veneer masonry on the upper portions and split-faced concrete block masonry on the lower portions as well as areas cladded with Exterior Insulation and Finishing System (EIFS) along the roof parapets and on the exterior support columns. A few areas of decorative stone cornice, precast concrete sills and trims were noted on the south and southwest elevations.</p>
Roof Components	<p>As shown on the key plan, there are three roof types/areas, A) The main roof, B) low-sloped roofs, C) Steep-sloped roof, D) Canopy roof atop the main entrance:</p> <p>A) The main roof consists of a sloped, standing seam, metal roof decking installed atop a polyethylene (v.b.) backed, rigid thermal (R-20) insulation tied to steel purlins. This roof is installed atop the arenas.</p>

General Description		
	<p>B) The low-sloped roofs were located on the south, north and southeast portions of the Building. These roofs consisted of loose-laid, ballasted Ethylene Propylene Diene Monomer (EPDM) membrane installed atop a rigid thermal insulation on a near-flat corrugated metal decking.</p> <p>C) The Steep-sloped roof on the south-central portion is similar in construction to the main roof A.</p> <p>D) The roof atop the carport canopy is protected by adhered EPDM installed atop steel decking.</p>	
Windows & Doors	<p>The windows are aluminium framed Insulated Glass (IG) windows installed within punched window openings and are located on the south, elevation. Aluminium IG curtain wall system was also noted at the main entrance on the south elevation.</p> <p>The main doors consist of two sets of aluminium framed, horizontally sliding automatic IG doors, complete with similarly constructed vestibule located on southeast portion of the Building. Entrance to the community centre halls was provided by two sets of aluminium framed, IG swing doors with similarly constructed vestibules located on the southwest elevation.</p>	
Electrical Systems	<p>Electrical power to the building is provided from a pad mounted transformer. This pad mounted transformer serves the main switchboard located in the mechanical/electrical room. The main switchboard is rated at 800 A, 347/600 V and consists of a single cell.</p>	
Mechanical Systems	<p>There are gas-fired/electric rooftop packaged units that provide heating, cooling, and ventilation to the occupied areas of the building. There are gas-fired infrared unit heaters located above the seating area in each rink.</p> <p>The refrigeration room consist of a glycol to ammonia plate and frame heat exchanger, ammonia storage tank, glycol cooling pumps, refrigeration compressors, a condenser pump, and other tanks, heat exchangers, pumps, and controls.</p>	
Passenger Elevator	Yes	Sprinklered
Site Components	Asphalt paving and parking lots, concrete walkways, and loading areas.	

Photographs



Key Plan for Reference
Source: www.google.ca



South elevation



West elevation

Photographs



North elevation



East elevation

2 Methodology

2.1 General

A survey of the building was conducted on June 27, 2023 by IRC/Rimkus staff at which time IRC interviewed and was accompanied by Jamie Benner, Lead Hand within the Building (hereafter referred to as the Site Representative). A subsequent review of the Mechanical Electrical, Fire and Life Safety Systems were carried by Rimkus staff on July 12, 2023.

This report was prepared based on the findings of the visual assessment and includes:

- evaluations of the building components reviewed.
- recommendations for repairs and replacement
- budget estimates, for all rehabilitation work, and
- photographs of typical deficiencies.

2.2 Review Process

The site assessment included for a general visual review of the exterior and interior components, all mechanical and electrical installations and the site components. The review process included:

- Review of the entire building envelope
- A walk around review of roofs where rooftop access is available.
- All common mechanical and electrical equipment and components, and mechanical and electrical components in the commercial units reviewed.
- Review of all Site exterior common elements.

2.3 Limitations of Study

Only the specific information or locations noted in the report have been reviewed. Although every reasonable effort was taken to identify defects, latent and hidden defects may affect the accuracy of this report. No physical or destructive testing and no design calculations have been performed unless indicated elsewhere in this report.

2.4 Code Compliance

During the visual reviews of the buildings and properties, it has been generally determined, “in a global sense”, that compliance with the current laws and regulations governing its operations are correct unless specifically noted. Comments provided are detailed as to the nature of the non-conformance. A full code compliance review was not required as part of the Scope of Work.

2.5 Documentation Provided to IRC

Construction Drawings

- Architectural, Structural, Mechanical and Electrical drawings were available to IRC/Rimkus for review.

2.6 Condition Ratings

The following definitions have been used in the text to describe the condition of each component reviewed:

Good Condition:	No deficiencies or concerns noted. No capital expenditure is anticipated within next 10-years.
Good / Fair Condition:	Reasonable condition as whole; minor deficiencies noted. No capital expenditure is anticipated within next 10-years.
Fair Condition:	Reasonable condition as whole; deterioration and/or damage noted. Capital expenditure is anticipated within 5 – 10 years.
Fair / Poor Condition:	Deterioration and/or damage noted; component is nearing end of service life. Capital expenditure is recommended in 2 – 5 years.
Poor Condition:	Deterioration and/or damage noted; component at end of service life. Capital expenditure is recommended in 0 – 2 years.
Very Poor	Immediate action is recommended to repair or improve the condition and further investigation is recommended.
n/a	Component does not currently exist and installation is recommended for building functionality or as a cost-effective upgrade.

2.7 Priority Rating

To assess the priorities of the **short-term** repairs/replacements required within the next 5 years for the various components at each property, the following ratings from “A” to “E” have been used:

Priority A – Health & Safety

Hazardous conditions which cannot be deferred and which could lead to loss of life or critical or extremely severe injury.

Guideline:

This priority is for those conditions which are extremely hazardous and which, if not corrected, could lead to critical injury or loss of life. The required scope of work will generally be localized and normally include only a portion of a particular building element or building system.

Priority B – Structural Integrity

Conditions that lead to the deterioration of structural elements of a property must be investigated and corrected if necessary. Failure to do so may lead to unsafe, life threatening conditions and will eventually render the building structurally unsound and physically obsolete; incapable of performing the task it was designed to do.

Guideline:

This priority is to be assigned to the rehabilitation of structural building elements which have deteriorated to such an extent that they are no longer structurally sound and are not capable of performing their intended task. Examples such as cracked columns, severe spalling or cracked shear walls, failing shelf angles, corroded structural steel supporting members and decaying wood support members are characteristic of the priority.

Priority C – Code Requirement

All buildings and building systems must be upgraded so that they comply with revision to existing legislation or to the requirements of newly adopted legislation.

Guideline:

This priority is to be assigned to work that is required to ensure that buildings comply with new requirements brought about by changes to applicable existing legislation, such as the Fire Code, or newly adopted legislation. Building elements that have deteriorated to an extent that they no longer comply with existing codes are not assigned this priority.

Priority D – Building Functionality

Replacement required for building components which have a direct and significant impact on the building or operation of the building as a whole – generally limited to the building structure and envelope as well as the primary mechanical and electrical systems. These building components and systems must be maintained in order to protect the value and operational viability of the asset. This work is necessary in order to prevent the building from becoming physically or functionally obsolete.

Guideline:

Certain building systems must be maintained in order to protect the “value” and operational viability of the asset. Accordingly, work that directly and significantly affects the overall performance of a primary building system, or a major part thereof, is assigned this priority.

Priority E – General Upgrades

Upgrades of components that have surpassed their useful service life, that do not have a direct bearing on the safe operation or functionality of the building, i.e. not building envelope components or primary mechanical and electrical systems. Also includes upgrades with either cost-effective or other initiatives that improve the operational efficiency or marketability of the property and which are considered to have a reasonable payback or add non-tangible value.

Guideline:

General replacement of components that have surpassed their useful life but replacement may be deferred without affecting the safe operation and functionality of the property as a whole. Examples include carpets, appliances, asphalt paving and concrete components. This rating is also assigned to components where operating efficiencies and initiatives, and upgrades with a perceived payback may be achieved. Typically energy management, water conservation programs; and/or upgrades to improve non-tangibles such as ‘curb appeal’, aesthetic appearance and marketability of the commercial units and buildings as a whole.

Priority – None

This priority is assigned to components where no significant repairs or replacement is expected within the next 5-year period, or where the component has no significant bearing on the operation or function of the property as a whole.

Guideline:

A projected priority rating of a component beyond a 5-year period cannot be accurately assessed due to the many variables that may affect the condition beyond this period. Variables such as regular maintenance, weather deterioration, general wear and tear, new technologies, changing code requirements etc. Priority ratings should be re-assessed every 5-year period when updates to the Property Condition Assessment are recommended.

Components that are considered to have no significant bearing on the operation or function of the property as a whole, such as furnishings, office equipment, maintenance/storage sheds, benches, general site signage etc. may be assigned this rating.

2.8 Expenditure Type

Recommended

Costs accounted for in the Table of Expenditures account for the quantifiable cost of replacement recommended within the foreseeable future, i.e. next 5-years, based on the condition assessment and the industry norm for typical service life between replacement/upgrades/restoration.

Projected

Costs accounted for in the Table of Expenditures account for the quantifiable cost of replacement or an estimated allowance for components where the replacement date cannot be accurately assessed, i.e. 5-years and beyond, based on the condition assessment and the industry norm for typical service life between replacement/upgrades/restoration.

Allowance

A cash allowance is accounted for in the Table of Expenditures as the costs cannot be accurately measured either due to the work being non-cyclical in repair or replacement, or that the 'quantity' to account for cannot be calculated as a single entity. Examples include partial restoration of concrete components and foundation leak repairs.

Discretionary

Costs are accounted for in the Table of Expenditures for upgrades/replacement of components that are considered to be cost effective or worthwhile; however are not necessary for the continued operation of the building as it currently is. Costs may be omitted or discounted from budgets if deemed not necessary. Examples include application of concrete balcony waterproofing and installation of roof anchors, upgrade of attic insulation and replacement of older 'standard' flush toilets.

Operating

Costs are not accounted for in the Table of Expenditures. Expenditures that are considered to be a small capital value under \$1,500 and that may be performed by maintenance staff or by contractors by under general work order. Examples include repair of damaged insect screens and singular replacements such as exterior doors that are not part of the planned expenditures.

Maintenance

Costs are not accounted for in the Table of Expenditures. Minor costs for the day-to-day maintenance of the building that may be completed by maintenance staff. Examples include replacement of bathtub sealants and adjustment of doors.

2.9 Mechanical, Electrical & Fire System Review

The estimated service life and basic remaining life of mechanical and electrical systems may be highly variable due to the quality of equipment, local environment and installation as well as the level of maintenance performed during the life of the equipment.

The remaining life expectancy for each component or system is based upon the industry norms for the equipment; including an assessment of any maintenance information provided by the Client. By using this approach, monies required for replacement or upgrades are identified at the expected time of replacement. Predicting the exact replacement year is very difficult, and actual replacement may be based upon current technologies, energy efficiencies, availability of replacement parts and frequency of repairs rather than failure of the component.

The review process for this Property Condition Assessment does not include for a design review for the adequacy and function of the system for the particular use at this property. It is assumed that the design was to the standards of the day of installation and that the system is considered to meet the needs of the Client unless identified as deficient during interviews. See specific system Observations for details.

3 Executive Summary

3.1 Prioritization Summary

Priority A – Health & Safety

- Areas of tripping hazards were noted on the walkway and curb adjacent to the south elevation and the entrance of the Building.

Priority B – Structural Integrity

- Evidence of movement in the form of gaps within the floor tiles were noted at the mezzanine level. The sub-flooring at the mezzanine level is recommended to be investigated by a Structural Engineer.

Priority C – Code Requirements

- No Code compliance issues were noted during the assessment.

Priority D – Building Functionality

- Areas of deterioration were noted on the exterior wall claddings (i.e., concrete block masonry, EIFS, and brick veneer masonry). Allowances have been carried for repairs of the exterior walls.
- The sealants around the windows were noted to be in poor condition. Replacement of sealants is anticipated within the early portion of the term of analysis.
- Paint on the door frames, lintels, EIFS, and exposed metal beams were noted to be in poor condition. Repainting of the exterior surfaces is anticipated to be required within early portion of the term of analysis.
- The frames of the main entrance doors were noted to have deteriorated due to de-icing salt use. Replacement of the main entrance doors is recommended in the early portion of the term of analysis.
- Sealants on the roofs were noted to be in poor condition and are recommended to be replaced within the early portion of the term of analysis.
- The low-sloped roof systems (Ballasted EPDM and Adhered EPDM) have reached the end of their useful life and are anticipated to be replaced in 1 – 3 years.
- Eavestroughs and downspouts were noted to be in poor condition and are recommended to be replaced in conjunction with the low-sloped roof systems.
- Retractable (folding) partition walls at the community hall have reached the end of their useful life and are recommended to be replaced in 1- 2 years.
- A phased allowance for replacement of interior doors has been carried in 6 – 10 years.
- Guardrails at the interior stairs and at the arena seating areas may need replacement in 6 – 10 years.
- Exposed concrete surfaces throughout the interior areas of the Building were noted to be in need of general repairs, allowance has been carried in year 1.
- Dressing rooms were noted to be dated with deteriorated flooring throughout. Refurbishments are anticipated to be required in 1 – 2 years.
- A replacement allowance for the Laars (DHW) boilers has been carried in the 6 to 10 years.
- The infrared heater may require replacement in 6 – 10 years.
- The RTUs are nearing the end of their useful life, allowances for replacement have been carried within the early to mid-portion of the term.
- Asphalt pavement was noted to be in poor condition throughout the site. Phased replacement allowances have been carried in year 1 – 4.
- Concrete surfaces at the Site were noted to be in need of repairs. An allowance has been carried in year 1.

Priority E – General Upgrades

- An allowance for general upgrades of the interior wall systems have been carried within the latter portion of the term of analysis (i.e., 6 – 10 years).

Priority E – General Upgrades

- Interior stairs were functional however, some accessibility upgrades are needed. Allowance has been carried in latter portion of the term of analysis.
- General upgrades of the seating areas are need within the mid portion of the term of analysis.
- Allowance for general upgrades of the interior finishes (flooring, ceiling and walls) at the community hall have been carried in the latter portion of the term of analysis.
- A contingency allowance has been carried for potential upgrades and major repairs to the plumbing fixtures.
- The HVAC Compressor, incremental unit, and the heat exchanger are original to the building (i.e., 20 years old) and may require upgrades in the latter portion of the term of analysis.
- Fire alarm panel despite being function may require upgrades due to age. Allowance has been carried in 1 – 3 years.
- Allowance for general upgrades of the Site Features have been carried in the mid to latter portion of the term of analysis.

3.2 5-Year Summary Table of Expenditure

Below is a summary table of expenditures expected within the next 5-year period. The costs indicated are future value and account for inflation as outlined in *Section 5*.

Assessment and priority rating for each component cannot be accurately rated beyond a period of approximately five (5) years as the level of deterioration and maintenance within a defined period may have significant impact on the assessed rating. It is recommended that the condition assessment be reviewed each year and updated every five (5) years to re-assess condition and deterioration of each component item and meets the planning needs.


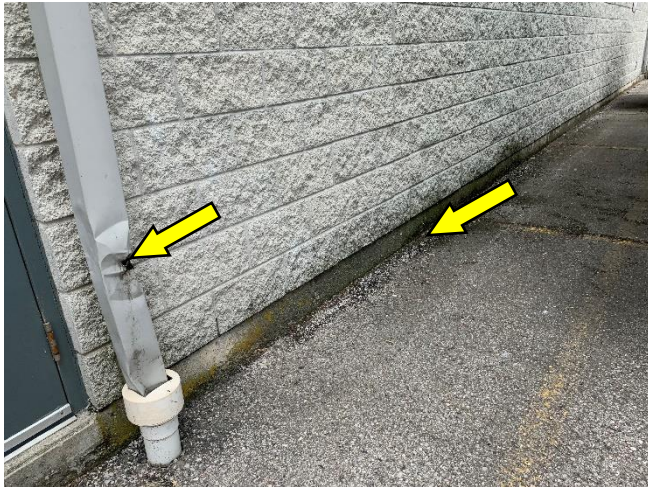
	2023	2024	2025	2026	2027
A Substructure	–	–	–	–	–
B Shell	\$13,500	\$1,000,712	\$20,063	\$20,515	\$64,700
C Interiors	–	\$752,703	–	–	–
D Services	–	\$138,038	–	\$994,198	–
G Building Sitework	\$2,500	\$344,000	\$220,863	\$225,833	\$230,914
Z Planning, Design, Soft Cost & Other Allowances	–	–	\$10,455	–	–
TOTALS	\$20,792	\$2,857,685	\$324,420	\$1,607,069	\$383,649

4 Property Condition Assessment

4.1 A - Substructure

Substructure Component Summary					
Code	Component	Priority Rating	Condition Rating	Expenditure Recommended	Budgetary Cost (2023)
A1010.00	Foundations - Standard Foundations	None	Good / Fair	10 - 20 Years	\$25,000

Observations & Recommendations	
A1010.00	Foundations - Standard Foundations
<ul style="list-style-type: none"> - The concrete structural components include concrete footings and the concrete slab-on-grade. Viewing of the concrete structural components is very limited. - Areas of moisture staining and damage were noted on the exposed exterior edges of the concrete slab-on-grade. - The source of moisture damage on the exterior edges of the concrete slab-on-grade was leakage from the eavestroughs, downpipes and drip edges as well as negative sloping. - The leaking eavestroughs and downspouts are discussed elsewhere in the report. - Consideration must be given to installing cement parging on the exposed edges of the slab-on-grade, which will be considered an upgrade and not included in the BCA. - Site must be regraded during the asphalt replacement cycles to slope away from the Building. This has been discussed in the Site Features section of this report. - Excessive use of de-icing salts also damages the concrete. - Surface damage of concrete slab-on-grade was noted at the Ice Resurfacing room on the north portion which has been discussed in the interior finishes section of the report. 	

Photographs	
 <p>Moisture damage due to negative sloping on the exterior edge of the slab-on-grade.</p>	 <p>A damaged downpipe and moisture stained exterior edge of the slab-on-grade.</p>

End of Substructure Section

4.2 B - Shell

Shell Component Summary					
Code	Component	Priority Rating	Condition Rating	Expenditure Recommended	Budgetary Cost (2023)
B1010.00	Superstructure - Floor Construction	B, D	Poor Good / Fair	0 - 2 Years 10 – 20 Years	\$3,500 \$30,240
B1020.10	Superstructure - Support Framing	B,D	Fair/Poor	0 - 2 Years	\$98,920
B2010.10	Exterior Enclosure - Brick Veneer Masonry	None	Fair	5 - 10 Years	\$107,040
B2010.20	Exterior Enclosure - Exterior Walls - Decorative Stone	None	Fair	5 - 10 Years	\$15,000
B2010.30	Exterior Walls - Concrete Block Masonry	D	Fair	0 - 2 Years	\$38,450
B2010.40	Exterior Walls - Metal Siding	D	Poor Good / Fair	0 - 2 Years 10 - 20 Years	\$10,000 \$285,440
B2010.10	Exterior Walls - Stucco / EIFS	D	Poor	0 - 2 Years	\$219,690
B2010.30	Exterior Enclosure - Soffit Fascia and Metal Trims	D	Good / Fair	10 - 20 Years	\$10,860
B2010.40	Exterior Enclosure - Exterior Walls - Sealants	D	Poor	0 - 2 Years	\$40,000
B2010.50	Exterior Enclosure - Exterior Paint	D	Good / Fair	10 - 20 Years	\$18,310
B2020.00	Exterior Enclosure - Exterior Windows	None	Good / Fair	10 - 20 Years	\$246,600
B2030.00	Exterior Enclosure - Exterior Doors	None	Poor	0 - 2 Years	\$27,000
B2030.20	Exterior Doors - Glazed Doors	D	Poor	0 - 2 Years	\$160,000
B3010.10	Roof Coverings - Standing Seam Metal (Roof A)	D	Poor Good / Fair	0 - 2 Years 10 - 20 Years	30,000 \$3,213,910
B3010.13	Roof Coverings - Prefinished Metal Roofing (Roof B)	None	Good / Fair	10 - 20 Years	\$104,130
B3010.20	Roof Coverings - Low Slope Roofing (Roofs C 1.1 - 1.6)	D	Poor	0 - 2 Years	\$540,510
B3010.21	Roof Coverings - Low Slope Roofing (D)	D	Poor	0 - 2 Years	\$13,530
B3020.00	Roofing - Eavestroughs and Downspouts	D	Poor	0 - 2 Years	\$37,320

Observations & Recommendations
<p>B1010.00 Superstructure - Floor Construction</p> <ul style="list-style-type: none"> - This item accounts for floor decks at the mezzanine level and at the seating/bleachers areas. - The floor decking at the above areas consisted of hollow-core precast concrete supported on steel beams and concrete block walls. - The topside of the floors was finished either with flooring materials or concrete topping, as such the actual condition could not be determined. - At the mezzanine area at a storage room, evidence of movement was noted in the form of gaping floor tiles. - This area is recommended to be investigated further to ensure the movement is localized and has not caused any structural damages.

Observations & Recommendations
<ul style="list-style-type: none"> - With the exception of the above, all other areas of the intermediate level flooring were noted to be in fair to good condition. - Assuming general maintenance is performed, and no structural damages are discovered during the in depth assessment of the mezzanine flooring, no other expenditures are anticipated within the term of analysis.
<p>B1020.10 Superstructure - Support Framing</p> <ul style="list-style-type: none"> - This item accounts for roof structural frame (i.e., columns, beams, Open Web Steel Joists and steel purlins) of the Building. - The structural framing components were visible at the arenas and storage rooms of the north portion. - On the south portion the framing was concealed with wall and ceiling finishes. - Over all condition of the structural framing was fair to good. - An area of water damage and surface corrosion was noted on the connection bolts and columns of the Arena B along the west perimeter. - The above-mentioned damage was noted on two columns and appeared to have been caused by roof/wall leaks. - It is recommended that a phased allowance be carried for refinishing/coating of all exposed columns to avoid any structural damages. - We have carried a phased allowance in 6 consecutive phases beginning in year 1. - Assuming the columns and beams are refinished regularly, no other major expenditures are anticipated within the term of analysis.
<p>B2010.10 Exterior Enclosure - Brick Veneer Masonry</p> <ul style="list-style-type: none"> - Areas of brick veneer masonry cladding was noted on the south and southwest elevations of the Building. - There was no visible evidence of settlement or movement of the brick masonry noted during the review. - Areas of moisture staining were noted around the south elevation from rainwater run-off from parapets and drip edges. Left unaddressed, deterioration of the brick masonry may occur. - Improvements to the water management/run-off are required at the various locations where the brick masonry is being saturated. These improvements have been included under the recommendations for the adjoining components, i.e. eavestroughs and downspouts, sealants/Caulking etc. - There appears to be heavy use of snow salts at many entrances especially main entrance. The salts can have an adverse affect on the brick masonry as the salt can crystallize causing spalling. It is recommended to try to eliminate or reduce use of snow-salts around the brick masonry. - Budgetary cost allowance has been allocated for brick veneer cladding repairs within the mid-portion of the term of analysis.
<p>B2010.20 Exterior Enclosure - Exterior Walls - Decorative Stone</p> <ul style="list-style-type: none"> - This item accounts for the decorative precast concrete sill and stone masonry on the south and southwest elevations of the Building. - These items consist of window sills, arches and cornice at the corners of the walls. - The stone masonry units were noted to be fading in colour. - Areas of cacked stone units were noted at the bottom of the wall near the front entrance. - Budgetary allowance has been included for repair of the damaged areas units within the latter portion of the term of analysis. - It is also recommended that these units be power washed regularly as part of general maintenance to remove the contaminants (i.e., salts, acid and bird excretions) from their surfaces in order to preserver the longevity and durability. - Improvements to the water management/run-off are required at the various locations where the stone and concrete is being saturated. These improvements have been included under the recommendations for the adjoining components, i.e. eavestroughs and downspouts, sealants/Caulking etc.
<p>B2010.30 Exterior Walls - Concrete Block Masonry</p> <ul style="list-style-type: none"> - This item accounts of the split-faced concrete block masonry on the lower portions of the wall on all elevations of the Building. - There was no visible evidence of settlement or movement of the block masonry noted during the review. - An impact damaged area was noted on the west elevation of the Building. The damage was reportedly caused by a pickup truck backing into the wall. - Areas of deteriorated mortar joints and efflorescence were also noted on all elevations. - Areas of moisture staining were noted around the Building from rainwater run-off from drip edges, eavestroughs and downspouts. Left unaddressed, deterioration of the block masonry may occur. Improvements to the water

Observations & Recommendations	
	<p>management/run-off are required at the various locations where the block masonry is being saturated. These improvements have been included under the recommendations for the adjoining components, i.e. siding repairs, eavestroughs and downspouts, sealants/Caulking etc.</p> <ul style="list-style-type: none"> - There appears to be heavy use of snow salts at many entrances especially at the main entrances. The salts can have an adverse affect on the block masonry as the salt can crystallize causing spalling. It is recommended to try to eliminate or reduce use of snow-salts around the block masonry. - A budgetary allowance has been allocated for general block masonry repairs, within the early portion of the term of analysis.
B2010.40	<p>Exterior Walls - Metal Siding</p> <ul style="list-style-type: none"> - This item accounts for the prefinished metal siding on the east, west and south elevations. - The metal siding appeared to be in fair to good condition overall. - Areas of impact damage were noted on the north elevation. - Moisture stained areas were noted under the drip edges beneath the siding, in some areas damaged drip edges were also noted during the assessment. - Areas of staining, loose grommets and discolouration were also noted on the north elevation. - A budgetary cost expenditure has been allocated for repair of the drip edges, impact damaged sections as well as a general clean-up of the metal siding in 0 – 1 years. - Full replacement of the siding is anticipated to be required beyond the term of analysis.
B2010.10	<p>Exterior Walls - Stucco / EIFS</p> <ul style="list-style-type: none"> - The crown mouldings along the different levels of the roof lines/exterior of parapets of the south elevation and the carport support systems are finished with Stucco on Expanded Polystyrene insulation, also known as the Exterior Insulated Finishes System (EIFS). - The EIFS is typically used as a preferred cladding on the exterior walls to provide insulation and finish look, however, in this application the insulation factor appears to be redundant as there is no interior heated space behind it. - Along the upper sections above the main entrance areas of water damaged EIFS were noted throughout. - Damaged EIFS/Stucco were also noted on the exterior columns beneath the carport. - The EIFS/Stucco was noted to be in poor condition with moisture damaged areas noted throughout. - Replacement of EIFS/Stucco is recommended within the early portion of the term of analysis. - It is recommended that the work be coordinated with other exterior wall repairs to save on access and mobilization costs. - It is highly recommended that a professional consultant be retained for recladding projects to ensure correct detailing, correct product choice and quality assurance. - A budgetary allowance has been allocated for replacement of the stucco/EIFS in 0 – 1 years.
B2010.30	<p>Exterior Enclosure - Soffit Fascia and Metal Trims</p> <ul style="list-style-type: none"> - This item accounts for replacement of the exterior soffits, fascia and trim at the wall level. - The metal soffits are above the main entrances and the underside of the carport. - The soffits were noted to be in fair to good condition. - Assuming that regular general maintenance is performed, no major expenditures are anticipated within the term of analysis.
B2010.40	<p>Exterior Enclosure - Exterior Walls - Sealants</p> <ul style="list-style-type: none"> - This item accounts for replacement of sealants on exterior building components, such as around window and door frames, along flashings, around wall penetrations, control joints, and along interfaces between different building materials. - The following deficiencies were observed on the existing sealants, where reviewed: <ul style="list-style-type: none"> • Deteriorated and aged sealants with cracks and splits, • De-bonding of sealants from substrates, • Sealants of multiple ages along one continuous length, • Improper sealant profiles, • Discontinuous / missing sealant. - Poor sealants may result in air leakage and poor weather seals. - Most of the perimeter sealants appear to be original to the construction. - The sealants are in poor condition with large splits noted throughout.

Observations & Recommendations	
<ul style="list-style-type: none"> - The horizontal control joints are recessed and it is possible that water can pool in the horizontal joint. These joints should be flush with the concrete block masonry. - It appears that the sealants are original to the Building construction and are well past the expected service life. - Budgetary cost allowance has been allocated for replacement of the exterior sealants. 	
B2010.50	Exterior Enclosure - Exterior Paint
<ul style="list-style-type: none"> - This item accounts for exterior painting of the exterior doors, exterior columns, the Stucco/EIFS cladded crown mouldings and steel lintels above door and windows. - The door hinges and hardware of several common exterior doors were observed to be corroded. - Corroded door frames were also noted throughout. - Any corroded metal substrates should be cleaned and treated, and any spalled concrete substrates should be repaired and allowed to sufficiently cure prior to re-painting. - The steel door frames to some of the common exterior doors were corroded. Painting of the doors and frames is recommended. - The majority of entrance doors are in good condition. Not all entrance doors may need painting as the factory-finished powder coating is still in good/fair condition on many doors. - The doors and lintels at the community centre were noted to have surface corrosion and require painting. - The steel guardrails at the H/C units and community centre were noted to have severe corrosion at the guardrail bases and require painting to extend the service life of the steel. - Painting renewal contributes to extending the service life of exterior building components, in addition to improving the aesthetics of the property. - Budgetary cost allowance has been allocated for painting of all exterior painted components 	
B2020.00	Exterior Enclosure - Exterior Windows
<ul style="list-style-type: none"> - The windows are aluminum framed with Insulated Glass (IG) fixed panels installed within punched openings, on the south elevation of the Building. - Overall condition of majority of the windows were good. <p>A cracked interior panel of a window was noted with the Community Hall, which is anticipated to be replaced. The cost of replacement falls below the threshold value and has been excluded from the assessment.</p> <ul style="list-style-type: none"> - Assuming that the cracked window is replaced, no other major expenditures are anticipated within the term of analysis. - Replacement of window perimeter sealants have been discussed in the section above. 	
B2030.00	Exterior Enclosure - Exterior Doors
<ul style="list-style-type: none"> - This item accounts for the replacement of common solid doors at secondary exit locations. - The doors are hollow-core metal fire-rated doors. - Corroded door frames were noted on the east and west elevations. - Adding weather-stripping or door sweep can provide temporary protection from further water ingress until longer-term waterproofing repair solutions can be completed. - Some of the emergency exit doors at the rear and west elevations of the Building were reportedly difficult to operate. - Budgetary cost expenditure has been allocated for a phased replacement of all doors within the term of analysis (i.e., 2 – 3 doors per year) based on their condition. 	
B2030.20	Exterior Doors - Glazed Doors
<ul style="list-style-type: none"> - This item accounts for the replacement of glazed doors at southeast (main entrance) and southwest (Hall Entrances) locations. - Main entrance doors consist of automatic sliders with similarly constructed vestibules. - Hall entrance doors consist of double swing doors with similarly constructed vestibules. - The aluminum frame at the main entrance doors were noted to have been severely damaged apparently by de-icing salts. - Budgetary cost expenditure has been allocated for a phased replacement of the glazed doors prioritizing the replacement of the two main entrance doors in Year 1 and completing the remaining until year 8 of the term of analysis. - Replacement of the vestibule door can be postponed to the latter portion of the term of analysis. - The life expectancy and replacement of doors depends on the usage. - Door weather-stripping that has worn out should be replaced as part of maintenance / operating budget. 	

Observations & Recommendations	
B3010.10	<p>Roof Coverings - Standing Seam Metal (Roof A)</p> <ul style="list-style-type: none"> - The main roof of the Building (i.e., above the arenas – Roof section A on the Key plan) consist of a sloped (dome-shaped), standing seam, metal roof decking installed atop a polyethylene (v.b.) backed, rigid thermal insulation (R-20) and tied to steel purlins. - The roof was noted to be in fair to good condition. - The useful service life of a standing seam metal roofs typically ranges between 35 to 40 years, depending on the quality of workmanship during the installation and level of maintenance. - The standing seams were noted to be s-locked which does not require to be sealed, however, the joints between different panels and the penetrations were sealed. - The sealants were noted to have deteriorated. - It appears that the bolts and grommets were caulked at the time of original installation, however the caulking has deteriorated. - Replacement of the roof system is anticipated to be required in 15 – 20 years (i.e., beyond the term of analysis), however, the sealants will require replacement in 1 – 3 years. - An allowance has been carried to replace the sealants and to re-caulk the bolts and grommets within the early portion of the term. Also included in this allowance are the sealants of roof Section B discussed in B3010.13 of this report. - Eavestroughs and downspouts provide drainage for the roof systems which have been discussed separately in section B3020.00 of this report.
B3010.13	<p>Roof Coverings - Prefinished Metal Roofing (Roof B)</p> <ul style="list-style-type: none"> - The roof system atop Section B (on the reference Key plan) consisted of a high-sloped, prefinished metal roof system installed atop a steel deck. - Roof B was original to the construction and was noted to be in fair to good condition. - This type of roof system has a typical service life of 35 to 40 years, given that the sealants and isolated damaged fasteners and grommets are replaced regularly. - Sealant replacement has been discussed in the previous section. - Given that regular general maintenance is performed and sealants are replaced, no other expenditures are anticipated within the term of analysis.
B3010.20	<p>Roof Coverings - Low Slope Roofing (Roofs C 1.1 - 1.6)</p> <ul style="list-style-type: none"> - The low slope roofs (Areas C1.1 to C1.6 of the reference Key Plan) consisted of loose laid ballasted EPDM roof membrane systems installed atop rigid thermal insulation on corrugated metal roof decks. - These roofs have reached the end of their useful life and were noted to be in poor condition. - Areas of membrane tenting were noted on the roof perimeters. - Organic growth and ponding water were also noted on these roofs. - Areas of moisture stained ceiling tiles were noted on the interiors which indicates occurrence of roof leaks. - It is highly recommended that a professional consultant be retained for re-roofing projects to ensure correct detailing and quality assurance. - Budgetary cost expenditure has been allocated for replacement of all low slope roofing membrane.
B3010.21	<p>Roof Coverings - Low Slope Roofing (D)</p> <ul style="list-style-type: none"> - This item accounts for the replacement of fully adhered EPDM membrane atop the carport. - The roof is approaching the end of its useful life and is recommended to be replaced in conjunction with roofs C1.1 – 1.6. - Access on to this roof was not provided and it was reviewed visually from the adjacent roof area. - Budgetary cost expenditure has been allocated for replacement of Carport roof (Roof D) in conjunction with roofs C.
B3020.00	<p>Roofing - Eavestroughs and Downspouts</p> <p><u>Eavestroughs & Downspouts</u></p> <ul style="list-style-type: none"> - Evidence of leaking eavestroughs were noted on all elevations of the Building in the form of water staining on the exterior walls. - The downspouts were noted to be disconnected at several allocations around the rear of the Building. - Impact damaged downspouts were also noted during the assessment. - Rainwater run-off onto the brick masonry was noted at several locations around the building – installation of deflectors, drip edges or small sections of eavestrough are recommended to shed the water away from the face of the brick masonry.

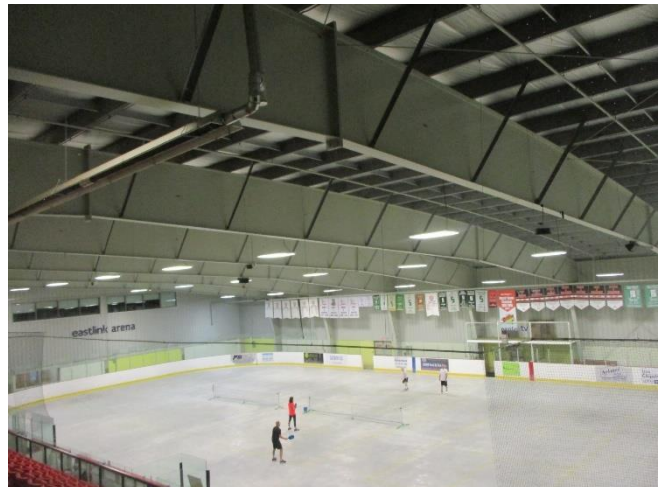
Observations & Recommendations

- A section of eavestrough along the rear of Block A is damaged (bent). The downspout at the rear of #12 is loose. Repairs are recommended to ensure the integrity of the eavestroughs and downspouts.
- Budgetary expenditure has been allocated for replacement of all eavestroughs & downspouts in conjunction with roofs C and D replacement .

Photographs



Gapping floor tiles on the mezzanine indicates movement of the subfloor.



General view of the support framing atop the arenas.



Corrosion noted on the columns.



View of moisture damaged brick masonry on the south elevation.

Photographs



Moisture damage noted on the split-faced concrete block walls.



Impact damage noted on the west elevation. .



Damaged drip edge at the base of the siding causing water run-off on the masonry.



Deteriorated EIFS moulding on the southwest.



Moisture noted damage on concrete ledge and blocks.



Deteriorated sealant at a control joint.

Photographs



Failing and hardened sealants at a window perimeter.



Corroding metal at an exterior soffit.



Exterior view of the main entrance glazing.



Damaged frame of the main entrance door.



Damaged exterior face of the main door framing.



Previously patched main entrance door frame.

Photographs



Roof reference key plan.



General view of the standing seam metal roof (Roof A).



Roof A: Deteriorated sealants at joints.



Roof B: General view of the prefinished metal roof.



Roof C1.1: General view of the ballasted EPDM roof.



Roof C1.1: Severe tenting at the base of the wall.

Photographs



Roof C1.3: Tenting and ponding water.



Roof C1.1: Organic growth on the roof.



Evidenc of roof leak beneath C1.1



Roof D: Ponding water noted atop the roof.

End of Shell Section

4.3 C - Interiors

Interiors Component Summary					
Code	Component	Priority Rating	Condition Rating	Expenditure Recommended	Budgetary Cost (2023)
C1010.00	Interior Construction - Partitions (Folding)	D	Poor	0 - 2 Years	\$124,500
C1010.10	Interior Construction - Partitions Walls (Gyp. Boards)	E	Fair	5 - 10 Years	\$50,000
C1020.00	Interior Construction - Interior Doors	D	Fair	5 - 10 Years	\$90,000
C2010.00	Stairs - Stair Construction and Finishes	E	Fair	5 - 10 Years	\$28,000
C2010.10	Interior Guardrails and Handrails	D	Fair	5 - 10 Years	\$210,000
C3010.00	Arena Finishes - Exposed Concrete Surfaces	D	Poor	0 - 2 Years	\$264,600
C3010.10	Arena Finishes - Seating Area and Bleachers	E	Fair	5 - 10 Years	\$94,500
C3010.20	Arena Finishes - Dasherboards/gates	D	Fair	5 - 10 Years	\$901,000
C3020.00	Interior Finishes - Floor Finishes Common areas	None	Fair	5 - 10 Years	\$110,400
C3020.10	Floor Finishes - Offices	D	Poor	0 - 2 Years	\$45,000
C3020.20	Floor Finishes - Community Hall	E	Fair	5 - 10 Years	\$114,000
C3030.00	Interior Finishes - Ceiling Finishes	E	Poor	0 - 2 Years	\$47,040
C4010.00	Dressing Rooms and Locker Rooms	D	Poor	0 - 2 Years	\$255,000
C4010.10	Common / Public Washrooms	None	Good / Fair	10 - 20 Years	\$105,000
C4010.12	Kitchens / Serveries	None	Good / Fair	10 - 20 Years	\$40,000

Observations & Recommendations

C1010.00 Interior Construction - Partitions (Folding)

- This item accounts for replacement of the retractable and movable partitions at the community Hall partitions.
- The partitions were noted to be in poor condition, and difficult to operate.
- The partitions have surpassed their useful life.
- Budgetary cost expenditure has been allocated for replacement of the retractable partitions in 0 – 2 years.

C1010.10 Interior Construction - Partitions Walls (Gyp. Boards)

- This item accounts for repair/isolated replacement of the interior gypsum board walls of the Building.
- The general condition of the interior walls was noted to be fair.
- This allowance is a contingency and can be used to repair/replace any damage sections of the interior walls if needed.

C1020.00 Interior Construction - Interior Doors

- This item accounts for replacement of interior standard swinging doors, glazed doors, folding doors, fire doors, door frames, door hardware, door painting and staining inside the building.
- Budgetary cost expenditure has been allocated for phased replacements of the doors beginning in year 6.

C2010.00 Stairs - Stair Construction and Finishes

- This item accounts for replacement of interior stair construction, including stair treads, risers, and landings, throughout the Building.
- The stairs were predominantly uniformly coloured. Contrasting coloured nosing are easier to navigate for the elderly and people with limited visions.
- Tactile surfaces will also improve accessibility of the stairs.
- Budgetary cost expenditure has been allocated for repairs/upgrades of the interior stairs.

Observations & Recommendations	
C2010.10	<p>Interior Guardrails and Handrails</p> <ul style="list-style-type: none"> - This item accounts for replacement of interior handrails, guardrails and balustrades on the stairs, mezzanine, and seating areas of the Building. - The guardrails at the mezzanine stairs leading to the front lobby of the Building were noted to be in good condition and do not appear to be original, however, the actual age of these guardrails is unknown. - The guardrails at the arena seating areas are nearing the end of their useful life. - Budgetary cost expenditure has been allocated for replacement of the guardrails at the end of 25-year service life. - Life expectancy of these guardrails can be extended if metal sections are refinished.
C3010.00	<p>Arena Finishes - Exposed Concrete Surfaces</p> <ul style="list-style-type: none"> - This item accounts for repair of the concrete surfaces (slabs and toppings). - Several areas of damaged concrete surfaces were noted on the main level at the north portion of the Building (Re-icing room). - Cracks were noted on the concrete surface of the slab-on-grade floors. - Cracked concrete topping were also noted at the upper seating areas. - Budgetary cost expenditure has been allocated for repairs of all damaged concrete surfaces at the interior of the Building within early portion of the term. - It was noted that on the main floor, sheet vinyl flooring was installed to protect a portion of the concrete slab-on-grade used by the ice re-surf machine. - The sheet vinyl floor for this type of application is a poor choice and will not be able to withstand the stresses created by dry turning of the ice re-surf machine. - Consideration must be given to installing a urethane or an elastomeric based traffic topping on the concrete slab for better protection, this will be considered an upgrade and cost has not been included in this repair budget.
C3010.10	<p>Arena Finishes - Seating Area and Bleachers</p> <ul style="list-style-type: none"> - This item is a contingency allowance for the sectional replacement/repair of seating areas. - This allowance includes repair of the seats, refinishing the isles and painting of the signage. - The items were noted to be in fair condition, as such the repair allowance has been deferred to the mid-portion of the term of analysis.
C3010.20	<p>Arena Finishes - Dasherboards/gates</p> <ul style="list-style-type: none"> - This item accounts for replacement of Dasherboards and gates. - The dasherboards despite being functional at present, are anticipated to require replacement at the end of a 25-year service life. - The dasherboards and gates were reported to be original. - The allowance carried here is for complete replacement of the dasherboards and gates. - It is highly recommended that a specialist design consultant be retained for the replacement of the dasherboards and framing.. - The allowance carried for this item is preliminary and is based on the current type and size of the dasherboards.
C3020.00	<p>Interior Finishes - Floor Finishes Common areas</p> <ul style="list-style-type: none"> - This item accounts for replacement of common flooring such as: <ul style="list-style-type: none"> • Ceramic tile flooring at the main lobby area • Vinyl Composite Tiles (VCT) at the mezzanine area • Skate resistant rubber flooring at the common areas of the arena. • Ceramic tiling at the main entrances - Over all the flooring was noted to be in fair condition. - The rubber flooring at the common areas of the arena was reportedly replaced within the last 5 years. - An area of damaged VCT was noted at the mezzanine area which has been discussed in Section B1010.00 of this report. - Being a public community complex and sports arena building the flooring of the Building is exposed to a lot of foot traffic and usage fatigue. - A cyclical allowance has been carried for replacement of 50% of the common area flooring every 10 years beginning in year 5.

Observations & Recommendations	
C3020.10	<p>Floor Finishes - Offices</p> <ul style="list-style-type: none"> - The carpets in the west offices are original to the construction and is in fair to poor condition. Minor snagging and wear were noted around the furniture areas. - The carpets reviewed were generally worn and stained. We were informed that all carpets remaining are original to the construction. - Budgetary cost expenditure has been allocated for the replacement of carpet in year 1.
C3020.20	<p>Floor Finishes - Community Hall</p> <ul style="list-style-type: none"> - This item accounts for replacement of ceramic floor tiles within the community hall of the Building. - Site Representative reported that the flooring within the community hall was replaced approximately 10 – 12 years ago. - The flooring within the community hall appeared to be in fair to good condition. - Budgetary cost expenditure has been allocated for future replacement of the floor tiles within the community hall.
C3030.00	<p>Interior Finishes - Ceiling Finishes</p> <ul style="list-style-type: none"> - This item accounts for replacement of acoustic ceiling tiles and T-bar grid at the community hall, main lobby, offices and the mezzanine areas of the Building. - Stained and deteriorated ceiling tiles were noted throughout. - Budgetary cost expenditure has been allocated for replacement of approximately 15% of the ceiling tile in year 1. - Ceiling tiles are typically damaged due to roof leaks and replacement cycle must be coordinated with the re-roofing schedules.
C4010.00	<p>Dressing Rooms and Locker Rooms</p> <ul style="list-style-type: none"> - This item accounts for refurbishment of the locker rooms and dressing rooms. - There are 17 locker/dressing room for athletes, coaches and referees. - The locker rooms were noted to be in poor condition with the damaged/deteriorated flooring, fixtures and finishes. - Budgetary cost expenditure has been allocated for refurbishment of lockers/dressing rooms in year 1.
C4010.10	<p>Common / Public Washrooms</p> <ul style="list-style-type: none"> - This item accounts for future renovation of the common area/public washrooms of the Building. - Dressing room/locker room washrooms are excluded from this budget. - The common/public washrooms were noted to be in fair to good condition throughout. - Renovation of the washroom is anticipated to be required after the term of analysis (i.e., in 11 years).
C4010.12	<p>Kitchens / Serveries</p> <ul style="list-style-type: none"> - This item accounts for replacement of interior finishes within the kitchen and serveries. - Kitchen was located at the community hall while the serveries is located at the mezzanine level. - The finishes within the kitchens were noted to be in fair condition. - Refurbishment of the kitchens and serveries are anticipated to be required after the term of analysis.

Photographs



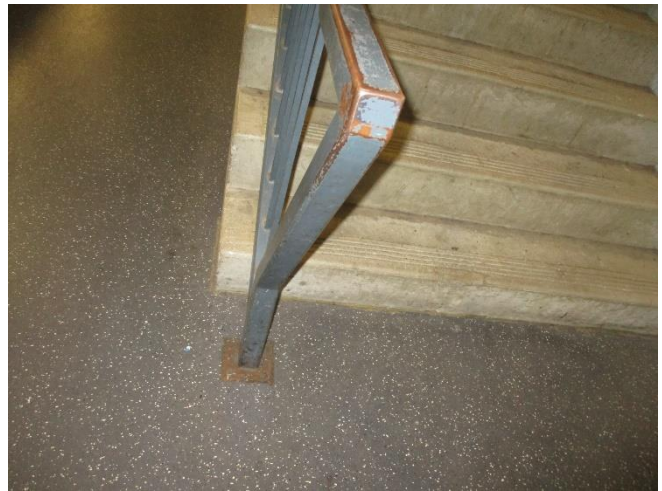
Retractable/folding partition wall at the community hall. .



Interior drywall and doors at the main floor.



Uniformly coloured stairs at the arena.



Corroding/fading guardrails at the stairs.



Stairs from the mezzanine to the main lobby were noted in good condition.

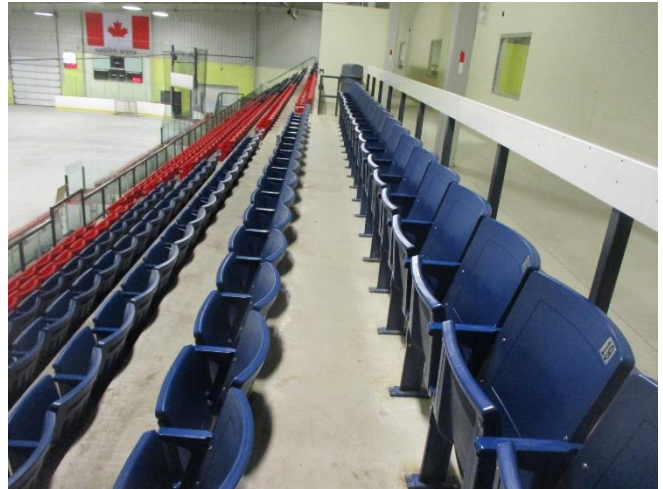


Deteriorated concrete at ice re-surfer room.

Photographs



Cracked concrete topping at the seating area.



General view of the seating area at the arena.



Close-up view of the dasherboard.



General view of the east arena.

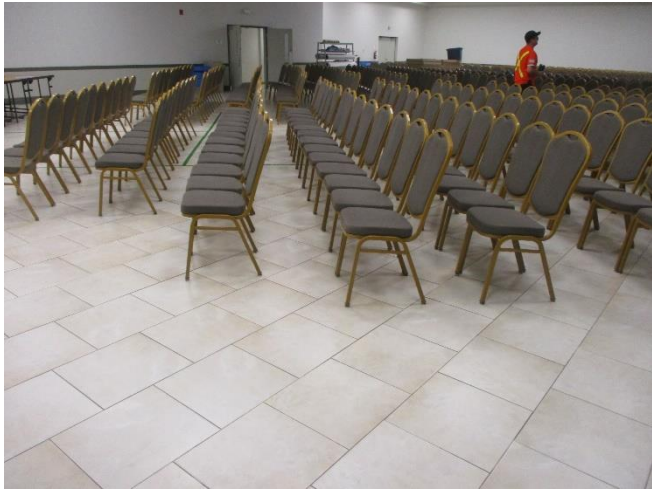


Flooring at the main entrance was in fair condition.



Flooring at the main level.

Photographs



Flooring at the community hall.



Stained ceiling tiles at the community hall.



Deteriorated flooring at a change room.



Finishes within a typical public washroom.



Floors, walls and ceiling finishes at the main level.



Finishes at a serveries on the mezzanine level.

End of Interiors Section

4.4 D - Services

Services Component Summary					
Code	Component	Priority Rating	Condition Rating	Expenditure Recommended	Budgetary Cost (2023)
D1010.10	Elevators & Lifts - Elevator Equipment	None	Good / Fair	10 - 20 Years	\$125,000
D1010.20	Elevators & Lifts - Elevator Cab & Fixtures	None	Good / Fair	10 - 20 Years	\$30,000
D2010.00	Plumbing - Plumbing Fixtures	None	Good / Fair	5 - 10 Years	\$90,000
D2020.00	Plumbing - Domestic Water (DHW) - Boilers	D	Fair	5 - 10 Years	\$150,000
D2030.00	Plumbing Interceptors	D	Fair	5 - 10 Years	\$10,000
D3020.00	HVAC - Infrared Heaters	D	Fair	5 - 10 Years	\$80,000
D3040.00	HVAC Exhaust Fans	None	Poor / Fair	2 - 5 Years	\$25,000
D3050.00	HVAC - Rooftop Units (RTUs) - 5 to 7.5 tons	D	Poor	0 - 2 Years	\$130,000
D3050.01	HVAC - Rooftop Units (RTUs) - 12.5 to 20 tons	D	Fair	5 - 10 Years	\$175,000
D3050.10	HVAC - Incremental Unit	E	Poor	0 - 2 Years	\$5,000
D3090.00	HVAC - Compressor	E	Poor / Fair	2 - 5 Years	\$900,000
D3090.10	HVAC - Ammonia Heat Exchanger	E	Poor / Fair	2 - 5 Years	\$5,000
D3090.20	HVAC - Ammonia Cooling Tower	D	Fair	5 - 10 Years	\$30,000
D3090.30	HVAC - Dehumidification Unit	D	Fair	5 - 10 Years	\$100,000
D3090.40	HVAC - Heating & Cooling Pumps	D	Fair	5 - 10 Years	\$50,000
D5010.00	Electrical - Electrical Service & Distribution Allowance	D	Fair	5 - 10 Years	\$10,000
D5030.90	Communications & Security - Fire Alarm Panel	E	Poor/Fair	0 - 2 Years	\$50,000
D5090.00	Emergency Lighting and Power Systems	None	Good / Fair	10 - 20 Years	\$50,000

Observations & Recommendations			
D1010.10 Elevators & Lifts - Elevator Equipment			
Equipment Data			
Number of Elevators	One (1)	Elevator Type	Passenger
Original Installing Contractor	Otis	Maintaining Contractor	Otis
Capacity	953 Kg (13 Persons)	Speed	0.41 mps (80 fpm)
# Floors Served	Two (2)	# Door Openings	Two (2)
TSSA No.	81046	Type of Operation	2 Stop Collective
Machine Type	Submersible	Drive Type (M-G, VVVF, HYD)	Hydraulic
Type of Entrances	Single slide	Emergency Power	Yes

Observations & Recommendations
<ul style="list-style-type: none"> - Level of maintenance being provided by contractor would be considered good. - Original installation was installed as per Can 3-B44-M85 (1985 Code requirements). - The elevator has surpassed its typical service life, however, was reportedly in functional condition. - Elevators service life can be extended due to its minimal usage. - The TSSA licence tag will expire on May 07, 2024. - No major issues were reported. - Annual maintenance and inspection requirements were current (performed May 2023 by Otis) - Modernization of the elevators is anticipated immediately after the term of analysis (i.e., 11 years).
<p>D1010.20 Elevators & Lifts - Elevator Cab & Fixtures</p> <ul style="list-style-type: none"> - The cab interiors were noted to be in fair condition. - The flooring was reportedly replaced in the past 3 -5 years. - Operation was good and would be considered acceptable. - The cab interiors will reach the end of their useful life immediately after the term of analysis. - Buttons are recommended to be upgraded to Braille Style for accessibility. - Assuming general maintenance is performed no major expenditures are anticipated within the term of analysis.
<p>D2010.00 Plumbing - Plumbing Fixtures</p> <ul style="list-style-type: none"> - Public washroom fixtures consist of counted mounted lavatories with single lever faucets, floor mounted flush valve water closets and wall mounted flush valve urinals in men's washrooms. These fixtures are made from vitreous China. The kitchen areas have wall vitreous mounted hand wash sinks, the pots and soaking sinks are stainless steel and considered process equipment. - The dressing rooms have a lavatory water closet and showers. - The overwhelming majority of the plumbing fixtures are original (circa 2004). The Site Representative did not report any instances with regard to issues of plumbing leaks or other problems. - A contingency allowance is accounted for in the Table of Expenditures to account for potential upgrades and major repairs to the plumbing fixtures.
<p>D2020.00 Plumbing - Domestic Water (DHW) - Boilers</p> <ul style="list-style-type: none"> - Domestic water is fed to the building via a 4" branch off an incoming ~10" service line. This 4" branch served a 3" meter with a valved by-pass to a 'Zurn' backflow preventer (BFP) rated at 3" model: 350 located downstream. There is a 1" Zurn BFP that serves the irrigation line model: 950XL. The 3" premises BFP was last testing in 2021 according to the test tag installed. However, Site Representative, informed us that the BFPs were all tested annually. - Plumbing distribution piping is primarily hidden behind the walls and bulkheads of the building. - Individual sections of plumbing distribution piping can be replaced as required out of the operating budget or with the replacement of plumbing fixtures or equipment. - Domestic hot water DHW within the building is generated primarily by 3 atmospheric gas-fired boilers located in the basement mechanical room. Each boiler is manufactured by Laars, model HH0400CN12CBDCX with an input heating capacity of 399,000 Btu/hr. Each boiler has a circulation pump. These boilers were manufactured in 2004. - The Laars boilers serve 2 'Turbomax' indirect DHW tanks. One Turbomax tank is model 109, while the other tank is model 65. These tanks were installed in 2019 replacing the original units. - Typical service life of these boilers and tanks is 20 years with proper maintenance. - A replacement allowance for the Laars boilers is given in the Table of Expenditures. The replacement boilers will be condensing type due to environmental standards. - DHW for the Zamboni is generated by 4 'John Wood' gas-fired tank type DHW heaters located in the ground floor water room. Each heater model PV75N300 is rated at 72,000 Btu/hr of input heating, 75 US gallons storage, and 80 gallons per hour of recovery capacity. These heaters were installed in 2022.
<p>D2030.00 Plumbing Interceptors</p> <ul style="list-style-type: none"> - Drainage piping is primarily plastic where observed below sinks. - No significant drainage problems were noted or reported. We recommend periodic flushing of the buried drainage lines followed by scoping after every 2 of 3 flushes to help determine the interior condition of the piping. - There are 2 small above floor grease interceptors located in the upper and lower level concession areas. In addition, there is a below the floor grease interceptor in the main kitchen of the Imperial hall. One of the small grease interceptors was replaced in recent years; while the other 2 appear to be original (2004). - We recommend budgeting for the replacement of the original grease interceptors.

Observations & Recommendations

D3020.00 HVAC - Heating Furnaces– Energy Supply

- There is a natural gas service with meter located on the west side of the building.
- There are 2 'Fuel Maker' natural gas compressors for fueling the Zamboni. These units are located on the north side of the building. In addition there is a natural gas fueling line just inside the building. These units appear to be in operating condition.
- This item has been excluded from the cost table as it can be maintained and serviced throughout the term of analysis.

D3020.00 HVAC - Infrared Heaters

- There are gas-fired infrared unit heaters located above the seating area in each rink manufactured by 'Superior Radiant Products' each with an ~30 foot radiant element. There are ~8 infrared units in both rinks. According to Site Representative, the intake duct of the infrared unit heaters in the Blueline rink develop humidity problems in the warmer months.
- There are 2 conventional gas-fired unit heaters located in the "East Link" rink. One of the 2 conventional unit heaters has been locked in the off position due to a leak in its heat exchanger. According to Site Representative, the unit heater has been abandoned with no plans to remove or replace it.
- The infrared and conventional heat exchangers are original. We recommend budgeting to replace the infrared unit heaters. According to Site Representative, the conventional unit heaters are not in use, so we do not have a replacement recommendation for them.

D3040.00 HVAC Exhaust Fans

- On the roofs there are small exhaust fans for washrooms. In addition there are 'Acme Centri Master' upblast fans for the kitchen hoods and the refrigeration room fan. The lower concession kitchen hood is served by a ¾ hp upblast exhaust fan. The refrigerant plant is served by a 1 hp upblast exhaust fan. The upper concession kitchen hood is served by a ¾ hp upblast exhaust fan. In addition there are cabinet fans located in utility rooms.
- Individual small exhaust fans can be replaced out of the operating budget. We recommend budgeting for the replacement of the kitchen and upblast exhaust fans.

D3050 & D3050.01 HVAC - Rooftop Units (RTUs) Packaged and Terminal Units

- There are ~ 12 gas-fired/electric rooftop packaged units that provide heating, cooling, and ventilation to the occupied areas of the building. The following table shows a list of the Rooftop Units (RTUs):

MANUFACTURER	MODEL #	MFG DATE	HEATING INPUT (BTU/HR)	NOMINAL COOLING (TONS)	REFRIGERANT TYPE
Trane (#7)	YSC060AWRHA17D	2004	130,000	5.00	R-22
Trane (#1)	YCD150DWHABA	2004	250,000	12.50	R-22
Trane (#2)	YCD240BWHAJB	2004	400,000	20.00	R-22
Trane (#9)	YSC072AWRHA13D0	2004	150,000	6.00	R-22
Trane (#4)	YSC060AWRHA13D0	2004	120,000	5.00	R-22
Trane (#10)	YSC048AW	2004	120,000	4.00	R-22
Trane (#5)	YCD180BWHAHB	2004	350,000	15.00	R-22
Trane (#3)	YCD150DWHABA	2004	250,000	12.50	R-22
	South East Roof				
Trane (#6)	YSC048AW	2004	120,000	4	R-22
Trane (#8)	YSC090AW	2004	200,000	7.5	R-22
	North Roof				
Trane (#12)	N/A	2004	N/A	N/A	R-22
Aaon (#11)	RK-26-4-E0-31M:WA00GA00F000CX	2004	540,000	~20	R-22

- According to Site Representative, RTU#2 has a venter motor that runs non-stop. The venter motor should only be running during the heating mode.
- Due to age and condition, we recommend budgeting for replacement of the RTUs within the report term.

Observations & Recommendations	
	<ul style="list-style-type: none"> - There is an electrical incremental unit located in dressing room 172 manufactured by Friedrich. This unit appears to be original and at the end of its expected life cycle. Therefore, we recommend budgeting for the replacement of this unit.
D3050.10	HVAC - Incremental Unit
	<ul style="list-style-type: none"> - There is an electrical incremental unit located in dressing room 172 manufactured by Friedrich. - This unit appears to be original and at the end of its expected life cycle. Therefore, we recommend budgeting for the replacement of this unit.
D3090.00, D3090.10, D3090.20, D3090.30, D3090.40	HVAC - All Refrigeration Equipment
	<ul style="list-style-type: none"> - The refrigeration room consist of a glycol to ammonia plate and frame heat exchanger, ammonia storage tank, glycol cooling pumps, refrigeration compressors, a condenser pump, and other tanks, heat exchangers, pumps, and controls. - There are 3 'Frick' screw ammonia compressors models (RXF 39E (x2), & RXF 39H) each rated at 100 hp- located in the refrigeration room. These compressors have logged 56,072, 58,123, and 58,431 hrs of operation respectively. According to Site Representative, the compressors appear to be close to or have surpassed their expected service hours. Therefore, we recommend budgeting for compressor replacement during the report term. - There is an 'Alfa Laval' glycol/ammonia plate and frame heat exchanger (model: MKJ5-BWFD) located in the refrigeration room that is connected to a 'Cimco' Ammonia storage tank. The other side of the heat exchanger was connected to 2 'Armstrong' glycol cooling pumps (model:6x4x10 4030) each rated at 25 hp, 750 USgpm, at 78 ft. of head. The plate and frame heat exchanger has an expected life of 20 years with proper maintenance. We recommend budgeting for the replacement of the heat exchanger during the report term. - The refrigeration system can be manually controlled by a refrigeration plant control panel; however, it is now primarily controlled by a digital control system via a personal computer terminal. - There is an ammonia receiver tank mounted at high level in the refrigeration room that is fed from the cooling tower and cools the oil for the ammonia compressors. - There is an Armstrong condenser pump (model: 5x4x8 4030) rated at 7.5 hp, 340 USgpm, at 35 ft. of head located in the refrigeration room. This pump circulates cooling water to the cooling tower. There is a plastic storage tank that holds the condenser water located within the same room. According to Site Representative, this tank was installed circa 2021. - The underfloor heating system for the ice pads is served by a hot ammonia to hot glycol shell and tube heat exchanger and 2 Armstrong glycol heating pumps located in the refrigeration room. Pump P-3 (model: 4x3x8 4030) is rated at 5 hp, 240 USgpm, at 36 ft. of head, while pump P-4 (model: 3x2.5x 8 4030) rated at 1.5 hp, 175 USgpm, at 20 ft. of head. - On the north roof there is an 'Evapco' closed circuit cooling tower Model: 238B that cools the refrigerant. The cooling tower is served by an 'ABB' variable frequency drive (VFD) in the refrigeration room. This cooling tower has an expected life of 25 years with good maintenance. We recommend budgeting for cooling tower replacement during the report term. - On the upper north roof there is a 'CDI' dehumidification unit labeled "Desiccant 13" (model: DH-148-7.25-DSO SSLOC) rated at 521 MBH of input heating capacity, supply fan rated at 7,250 cfm at 10 hp, and "reactivation fan" rated at 1,618 cfm at 3 hp. This unit has a desiccant wheel and dehumidifies both areas. According to Site Representative, the desiccant wheel chain bearing assembly was repaired in May 2023. This de-humidifier has an expected life cycle of 20 to 25 years with good maintenance. Therefore, we recommend budgeting for the replacement of the de-humidifier during the report term. - The refrigeration room is installed with a Cimco gas detection system. This system consists of a control panel in the refrigeration room vestibule and a refrigeration sensor in the refrigeration room. According to Site Representative, the system was last calibrated in May 2023 by Cimco Refrigeration. - Unless otherwise indicated this equipment is original to the building. - The heating and cooling circulation pumps have an expected life of 25 years. Therefore, we recommend budgeting for the replacement of the pumps during the report term.
D5010.00	Electrical - Electrical Service & Distribution Allowance
	<ul style="list-style-type: none"> - Electrical power to the building is provided from a pad mounted transformer rated at 1,000 kVA and steps down 27,600/15,935 kV to 600/347 V. This pad mounted transformer serves the main switchboard located in the mechanical/electrical room. The 'Federal Pioneer' main switchboard is rated at 800 A, 347/600 V and consists of a single cell. This switchboard serves breakers labeled "Northend, panel PB1, panel PD1, 100 kVAR P.F.C., transformer T1, panel PC1, panel PA1, and elevator." The switchboard is served by an 'Electrotek Ltd.' Power factor correction panel rated at 100 kVAR, 600 V, 3 phase. This P.F.C. panel was manufactured in 2012. - In the same mechanical/electrical room transformer T1 manufactured by Square D is rated at 112.5 kVA stepping down 600 to 120/208 V. This transformer serves panel "SW2" a Federal Pioneer panel board rated at 600 A, 120/208 V. This panel board serves panels "C1, PC2, PA2, PA3, PB2, & C2". - There are 347/600 V and 120/208 V distribution panels located in the mechanical/electrical room and in various areas throughout the building including concession, refrigerant, and storage rooms.

Observations & Recommendations	
	<ul style="list-style-type: none"> - All electrical components observed appear to be in fair to good condition with no significant damage or wear noted. - The electrical circuits are identified by circuit schedules on the electrical panel doors. The circuits were not verified for accuracy or completeness. According to Site Representative, the electrical system was most likely last infrared scanned circa 2018. We recommend infrared scanning of the electrical equipment every 1 or 2 years to locate hot spots and possible loose connections. This procedure can be completed out of the operating budget. - The electrical wiring was installed in EMT or plastic conduits, or behind walls and typically not available for review. However, due to age we do not anticipate significant repair/replacement within the report term. - Electrical equipment of this type has an expected life cycle of 35 to 50 years with good maintenance. We recommend budgeting for an electrical distribution allowance.
D5020.00	<p style="margin: 0;">Electrical - Lighting and Branch Wiring</p> <ul style="list-style-type: none"> - Most lighting is original to the building (circa 2004). Interior lighting consists primarily of T8 fluorescent tube and pot lights. - 2 ft. x 4 ft. 3 or 4 lamp, fluorescent fixtures with prismatic lens light the vestibule, foyer, concession, and Imperial Hall. Pot lighting is located in the upper level blue line room and the Imperial Hall. The rink stands areas are lit by 4 l, 4 ft.-T5 fluorescent, while the ice surface is lit by 10 l, 4 ft., T5 fluorescent. The T5 fluorescent fixtures were installed circa 2013. The stairwells are lit by 2 lamp, 4 ft. T8 tandem in a wire cage. - We noted blue box lighting control panels in the upper floor storage room. According to Site Representative, this is for the rink lighting and assumed to be or the same (2013) vintage. - Most rooms and common areas are controlled by manual light switches. We recommend the consideration of installing occupancy (motion) sensor switches in all storage and utility rooms, or rooms that are infrequently used. - We typically recommend the existing fluorescent fixtures be retrofitted or replaced with energy efficient LED fixtures. However, according to Site Representative such a lighting retrofit is currently being considered. We noted some linear tube lamps are being replaced with their LED equivalents. Lighting fixtures can be replaced individually out of the operating budget as required. - Exterior lighting consisted of wall mounted LED, canopy mounted recessed pot light or surface mounted square light fixtures. Site lighting consist of 30 foot pole mounted 2 head LED fixtures. The LED fixtures were installed in recent years. The older canopy pot or square mounted fixtures can be replaced as required out of the operating budget. - No replacement allowances have been carried for this item within the term of analysis.
D5030.90	<p style="margin: 0;">Communications & Security - Fire Alarm Panel</p> <ul style="list-style-type: none"> - The building is protected by a 'Mircom' fire alarm system (model: Series 1000). The main fire alarm control panel is located in the vestibule. This panel serves pull stations at exit doors, smoke/heat detectors in common areas and utility rooms and monitors the fire suppression system. - We noted that the fire alarm panel, and system was last tested in April 2023, by Platinum Fire Equipment. This system is monitored by an off-site security company. - The fire alarm panel and the majority of the fire alarm system is considered to be original (circa 2004). - The expected service life for the fire alarm panel is 20 years with proper maintenance. Therefore, we recommend budgeting for the replacement of the panel in the short term of the report term. Individual, fire alarm devices can be repaired/replaced out of the operating budget. - The review of the fire alarm and life safety components is visual only for the purposes of this Building Condition Assessment. - The review did not include for any physical testing of the components to verify correct operation. - It is mandatory that the fire alarm system components be reviewed and tested annually. This is considered to be operating expenditure. - Legislation may require upgrades through the Ontario Fire Marshall's office. This would be considered to be an unforeseeable circumstance and thus cannot be factored into the assessment. - There is a CCTV camera system in the building. This system consisted of 20 CCTV cameras. - No problems were noted or reported with the CCTV system. Individual pieces of the system including cameras can be replaced out of the operating budget.
D5090.00	<p style="margin: 0;">Emergency Lighting and Power Systems</p> <ul style="list-style-type: none"> - The building is served by a 'Cummins' diesel-powered enclosed generator set located near the east side of the building. This generator set model: DFCC-57-07637 is rated at 350 kW, 437.5 kVA, 347/600 V, 421 A. This generator set is installed with a subbase diesel tank. - There is a Cummins automatic transfer switch (ATS) located in the mechanical/electrical room that serves the building.

Observations & Recommendations

- The generator set was manufactured in 2005 according to the nameplate on the generator set. The expected life cycle for this generator set is 35 years with good maintenance. Therefore we do not anticipate significant replacement during the term of this report. However, we do recommend budgeting for a maintenance allowance during the report term.

Photographs



General view of the elevator machine serving the Building.



View of the elevator cab entrance serving the Building.



View of water closet.



View of domestic water heating boilers.

Photographs



View of grease intereceptor in concession area.



Exhaust fan on refrigeration room roof



Trane RTU.



Incremental unit in dressing room.



Ammonia heat exchanger.



View of cooling tower.

Photographs



De-humidification unit.



Glycol cooling pumps.



Typical electrical distribution.



Fire alarm control panel.



Enclosed generator set.



Automatic transfer switch.

End of Services Section

4.5 G - Building Sitework

Building Sitework Component Summary					
Code	Component	Priority Rating	Condition Rating	Expenditure Recommended	Budgetary Cost (2023)
G2010.11	Roadways - Asphalt Paving	D	Poor	0 - 2 Years	\$845,000
G2020.00	Site Improvements - Site Features	A E	Poor Fair	Immediate 0 - 2 Years	\$2,500 \$45,000
G2020.21	Concrete Components Curbs, Planters and Pads	D	Poor	0 - 2 Years	\$87,500
G2030.00	Site Improvements - Pedestrian Walkways	D	Poor	0 - 2 Years	\$37,680
G2040.40	Site Signage	None	Good / Fair	10 - 20 Years	\$25,000
G3010.00	Site Mechanical Utilities - Water Supply	None	Good / Fair	20 + Years	\$20,000
G3020.00	Site Mechanical Utilities - Sanitary Sewer	None	Good / Fair	20 + Years	\$15,000
G4020.00	Site Electrical Utilities - Site Lighting	None	Fair	5 - 10 Years	\$60,000

Observations & Recommendations	
G2010.11	<p>Roadways - Asphalt Paving</p> <ul style="list-style-type: none"> - This item accounts for the asphalt paving on the roadways and the parking areas of the Site. - Asphalt paving includes general access roads and parking areas around site. - Majority of the Site asphalt pavement was noted to be in poor condition. - Approximately 20% of the asphalt pavement (i.e., sections of the main roadway and at the central portion of the parking area) appeared to have been resurfaced in the near past, while other areas were noted to be in poor condition. - The degree of settlement, cracking and potholes noted is considered severe. - Asphalt paved roadway adjacent to the east, west and north elevations of the Building was in very poor condition. - The east parking lot was in very poor condition. - Given the size of the site and the fact that some sections have been repaired in the past, a phased replacement is recommended. - Budgetary cost expenditure has been allocated for the replacement of the asphalt paving in 4 consecutive phases. - Given the level of alligator cracking and potholes, sub-base repairs are anticipated in conjunction with asphalt pavement resurfacing.
G2020.00	<p>Site Improvements - Site Features</p> <ul style="list-style-type: none"> - The features which are part of the site are: <ul style="list-style-type: none"> • Entrance slabs • Signage • Bicycle racks • Monuments (Sculptures) • Signage - An uneven surface was noted adjacent to the front entrance slab which is posing a tripping hazard. - This allowance covers the repair of the features on the exterior of the site. - These items are exposed to harsh weather elements and will require timely repairs to stay functional. - The allowance carried here does not have to be used at once, rather it can be considered a contingency and be used on an as-needed basis. - These items are part of the unique architectural features of the Building and are mostly items of intrinsic value, rather than functionality. - The service life of decorative items is heavily dependent on the level of maintenance and desire for upgrades to improve on aesthetics rather than functionality.

Observations & Recommendations	
G2020.21	<p>Concrete Components Curbs, Planters and Pads</p> <ul style="list-style-type: none"> - This item accounts for repair of the curbs, planters, traffic islands and the concrete pad adjacent to the north elevation of the Building. - The concrete curbs were noted to have chips and cracking, most likely due to snow removal. - The concrete pad adjacent to the north elevation of the Building was noted to be in poor condition. - Consideration must be given to installing loading grade concrete at the rear if the area is used by heavy vehicles. - Budgetary cost expenditure has been allocated for the replacement of these concrete components in Year 1.
G2030.00	<p>Site Improvements - Pedestrian Walkways</p> <ul style="list-style-type: none"> - The concrete components for pedestrian at the site include walkways, porch entrance slabs. - Cracked concrete walkways were noted at various location around the Site. The amount of differential settlement across the cracks in the sidewalks was minimal and is not considered to be a potential trip hazard. - Continued review of cracked and settled concrete walkways for potential trip hazards, is required. - Repair of cracked concrete walkways should be considered for overall curb appeal of the property. - An allowance of 20% of the total concrete costs have been accounted for every 20 years based upon the degree of concrete damage noted during the site review.
G2040.40	<p>Site Signage</p> <ul style="list-style-type: none"> - This item accounts for Site signage at the entrance to the property. - The site signage was noted to be functional. - Assuming regular general maintenance is performed no major expenditures are anticipated within the term of analysis. - Replacement of the signage is anticipated beyond the term of analysis.
G3010.00	<p>Site Mechanical Utilities - Water Supply</p> <ul style="list-style-type: none"> - This item accounts for existing domestic water mains and distribution running underground towards the building. - The costs of plumbing work inside the building (e.g., domestic water pipes running within the building) are covered under the D2020.00 Plumbing – Domestic Water Distribution section of this report. - The assessment for this item is based only on visual observation and study of the background documents provided by the Town of Aylmer. No exploratory or destructive method was applied in the assessment, as this was not part of the scope of the report. - No major expenditures are anticipated within the term of analysis.
G3020.00	<p>Site Mechanical Utilities - Sanitary Sewer</p> <ul style="list-style-type: none"> - This item accounts for the sanitary sewer system. - IRC did not receive any report of sanitary sewers and drainage problems on this property. The budgetary cost allowances were estimated based on the overall size and age of the property. - The assessment for this item is based only on visual observation and study of the background documents provided to IRC. No exploratory or destructive method was applied in the assessment, as this was not part of the scope of the report. - Review of the storm and sanitary lines using video scoping may be considered every 5 – 8 years after an initial 25 year period to determine the condition of the lines and any potential problems such as collapsed piping or tree roots. Scoping of the lines is considered to be operating expenditure. - The service life of these components is 30+ years, depending upon the materials used, methods of installation and preventative maintenance to maintain drainage piping and water supply, relating to these components. Refurbishment or replacement is not expected within the first 30-years of operation. - No major expenditures are anticipated within the term of analysis.
G4020.00	<p>Site Electrical Utilities - Site Lighting</p> <ul style="list-style-type: none"> - This item accounts for Site pole lighting. - It was reported by the Site Representative that the light poles are original to the construction of the Site, however, the fixtures have been upgraded to LED. - All other soffit mounted lighting, security flood lights, and including required fixtures and transformers, wiring conduits and duct banks, controls and grounding are anticipated to be repaired/replaced as needed as part of general operations of the Building. - Budgetary cost expenditure has been allocated for replacement of light poles in year 6.

Photographs



View of asphalt pavement on the south central portion of the Site.



Asphalt roadway on the central portion of the Site. .



Deteriorated asphalt pavement on the northeast portion of the Site.



Deteriorated asphalt pavement on the east parking lot of the Site.



Decorative sculpture on the central portion.



Deteriorated concrete pad adjacent to a drive-in door.

Photographs



Typical Site lighting feature.




Pedestrian paving was noted in fair condition.

End of Building Sitework Section

4.6 Z - Planning, Design, Soft Cost & Other Allowances

Planning, Design, Soft Cost & Other Allowances Component Summary					
Code	Component	Priority Rating	Condition Rating	Expenditure Recommended	Budgetary Cost (2023)
Z1010.00	Allowances - Property Condition Assessment	None	Good	5 - 10 Years	\$22,000
Z1020.30	Allowances - Misc. Capital Costs	Various	Poor / Fair	2 - 5 Years	\$10,000

Observations & Recommendations	
<p>Z1010.00 Allowances - Property Condition Assessment</p> <ul style="list-style-type: none"> - No existing Property Condition Assessment & Replacement Reserve Study report was provided to IRC. - This Property Condition Assessment & Replacement Reserve Study was completed by: 	<div style="display: flex; align-items: flex-start;">  <div> <p>IRC Building Sciences Group 4026 Meadowbrook Drive, Suite 131 London, Ontario, N6L 1C7 Tel: (519) 652-5985 Fax: (519) 652-9926 Email: aazeez@rimkus.com</p> </div> <div style="margin-left: 20px;"> <p>Contact: Aimal Azeez</p> </div> </div>
<ul style="list-style-type: none"> - The were completed in accordance with the Request for Proposal as issued by the GM BluePlan Engineering Limited. - The Building Condition Assessment & Capital Reserve Fund was completed in accordance with IRC Proposal 940 dated June 21, 2023. - A brief scope of work for the project included. <ul style="list-style-type: none"> • Review of all drawings and documentation made available to IRC for review. • Performance of a site review of the buildings' primary components to evaluate the physical condition and standard of components. • Preparation of Property Condition Assessment report noting general observations and component conditions, together with recommendations for future repair options and associated budgetary costing. • Develop a 30-year cash flow projection, listing each of the identified components that will require repair, retrofit or replacement. • Identify all financial factors and assumptions used in the cash flow projections. 	

End of Planning, Design, Soft Cost & Other Allowances Section

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5 Capital Expenditures

5.1 Expenditures Calculations

Based on the site review, various repairs are required at the building. Building elements and site components were classified according to [ASTM E1557 – 09 Standard Classification for Building Elements and Related Sitework – UNIFORMAT II](#). Budget costs have been prepared to a Class 3 Estimate as outlined by [Association for the Advancement of Cost Engineering](#) and [ASTM E2516-11 Standard Classification for Cost Estimate Classification System](#). Class 3 estimates are generally prepared to form the basis for budget authorization, appropriation, and/or funding. As such, they typically form the initial control estimate against which all actual costs and resources will be monitored.

Typically the preparation methodology includes:

- (i) *Prepared from measured and priced quantities, all obtained from the project information that is available.*
- (ii) *A significant portion of the estimate may be in the form of allowances*

For an inclusive budget estimate a +30/-15% variance should be allocated to costs provided in the Table of Expenditures for the recommended replacements and upgrades. It must be noted that in preparing the budgets for individual items, it has been assumed that a group of repairs will be completed at the same time. If individual repairs are completed increases should be expected.

The cost of repairs is based upon the deterioration present at the time of the investigation and average unit prices obtained from our experience on similar projects and from estimates using [RS Means CostWorks](#) data. It is important to realize that the prices are not based on tendered specifications, but instead on general approaches and assumed quantities. The actual repair costs will depend on the prices received at the time of tendering and/or the actual quantities removed during the repair contract.

The following assumptions have been made with regard to expenditures calculations:

Tax Rate:

Applicable Tax Rate has been included on capital expenditures. All Tax Rates are subject to provincial tax regulations.

Inflation Rate: 2.25% for the study period.

The inflation rate used for the 10-year study period is 2.25%. This number has been assumed from [Bank of Canada – Consumer Price Index](#). The future level of inflation is unpredictable and may be highly variable. Further assessment of the level of inflation can be completed when updates to the Property Condition Assessment are completed every 5-year period as recommended.

5.1.1 Future Cost Value Method

The future cost value method was also used to illustrate the significance of inflation on the *expenditures*. In this method, the future cost of each element is estimated using the future value formula and estimated inflation rates. It has been assumed that an average construction cost rate of inflation will be in effect over the remaining life of the property.

5.1.2 Professional Fees

Professional fees for the recommended capital replacement and repairs have been accounted for in the Table on the components where engineering and/or third party review is recommended. The degree of engineering and project management that may be involved make it difficult to determine a standard rate for each component. Engineering fees typically range between 3% - 20% depending upon the project and complexity of engineering and also the professional discipline.

Professional fees for components noted with (*) (**) in the Table have been included in the total expenditures at 8% for design and specification, and 7% for review and contract administration – a total addition of 15% on the budget costs.

Professional fees for components noted **only** with (**) in the Table have been included in the total expenditures at 7% for review and contract administration only. It is considered that these components are of a less technical nature where design and specification is not essential; however third party review to ensure an adequate standard of installation/replacement is recommended.

Review and contract administration for general projects for licensed trades such as electricians and plumbers has not been included as this type of work is generally subject to review by other parties such as local authorities.

5.1.3 Predicted Future Costs

The replacement cost for each component identified has been estimated with respect to current day replacement prices, and inflation rates. Variances may be expected in periods of high workload by contractors.

The costs allowed in the Table can be highly variable depending upon factors such as:

- Market costs at the time of replacement

- Materials shortages
- Standard of replacement components
- 'Volume' discounts offered by contractors.
- Seasonal prices on projects
- Warranties offered, and
- Contractors' workloads

5.1.4 Capital v Operating/Maintenance Costs

The following items are NOT considered to be capital expenditure items. Costs associated with these items are considered to be an operating expenditure.

- Minor expenditures under a specified reasonable dollar limit established from similar project undertakings (e.g., \$1,500).
- Cost of replacing building components or mechanical services that are still operating and performing satisfactorily and meet all regulatory requirements, even if they are now obsolete and would not meet building regulations and codes for new construction.
- Normal cyclical repairs and maintenance such as rectifying deficiencies from annual reviews or move-outs, replacements of drapes and blinds, replacement of plumbing fittings and controls during regular routine maintenance, repairing fences and re-sod parts of the grounds and other general grounds maintenance.
- Regular preventative maintenance (for example, replacement of equipment parts, furnace filters, torquing of electrical panel connections, replacement of faucet cartridges etc.) to restore the component to an efficient operating condition.
- Costs of replacing capital items that have been damaged or destroyed as a result of deliberate abuse of vandalism. In these cases the cost of replacement from the occupant(s) or from other persons who caused the damage, or through the applicable insurance policy. Where recovery is not possible, these types of replacement expenditures may be charged to the reserve.
- Typical items not included as capital expenditure include office equipment repairs and replacements, door hardware, unit mail boxes, galvanized window wells, unit door bells, replacement floor registers, weather-stripping, screen repairs, handrail securement, blocked drains, termite control, furnace thermocouples, interior painting, carpet cleaning etc.

5.2 Expenditure Table Summary

The estimates in the table, based on an engineered approach, provide a conservative plan for accumulating a reserve for future repairs and replacement. It relies on costs based on the work performed to date, the current state of knowledge of performance of building systems, present technology and on commonly used economic factors.

The 10-year Projected Expenditure Table indicates the projected and recommended expenditures for the 10-year study period. The expenditure totals show Future Cost Value.

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East Elgin Community Complex

531 Talbot St. W., Aylmer, Ontario

10-Year Projected Expenditures

Note: 2023 refers to the Corporations' Fiscal Year starting January 1, 2023 and ending December 31, 2023

Code	Component	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
		1	2	3	4	5	6	7	8	9	
A	Substructure										
A1010.00	Foundations - Standard Foundations (*) (**)										
B	Shell	\$13,500	\$1,000,712	\$20,063	\$20,515	\$64,700	\$141,084	\$84,787	\$3,155	\$51,020	\$3,299
B1010.00	Superstructure - Floor Construction (*) (**)	\$3,500									
B1020.10	Superstructure - Support Framing (*) (**)		\$16,861	\$17,240	\$17,628	\$18,025	\$18,431	\$18,845			
B2010.10	Exterior Enclosure - Brick Veneer Masonry (*) (**)						\$119,636				
B2010.20	Exterior Enclosure - Exterior Walls - Decorative Stone (*) (**)							\$17,142			
B2010.30	Exterior Walls - Concrete Block Masonry (*) (**)		\$39,315								
B2010.40	Exterior Walls - Metal Siding (*) (**)	\$10,000									
B2010.10	Exterior Walls - Stucco / EIFS (*) (**)		\$224,633								
B2010.30	Exterior Enclosure - Soffit Fascia and Metal Trims (*) (**)										
B2010.40	Exterior Enclosure - Exterior Walls - Sealants (*) (**)		\$40,900								
B2010.50	Exterior Enclosure - Exterior Paint										
B2020.00	Exterior Enclosure - Exterior Windows (*) (**)										
B2030.00	Exterior Enclosure - Exterior Doors		\$2,761	\$2,823	\$2,886	\$2,951	\$3,018	\$3,086	\$3,155	\$3,226	\$3,299
B2030.20	Exterior Doors - Glazed Doors (*) (**)		\$40,900			\$43,723		\$45,714		\$47,794	
B3010.10	Roof Coverings - Standing Seam Metal (Roof A) (*) (**)		\$30,676								
B3010.13	Roof Coverings - Prefinished Metal Roofing (Roof B) (*) (**)										
B3010.20	Roof Coverings - Low Slope Roofing (Roofs C 1.1 - 1.6) (*) (**)		\$552,671								
B3010.21	Roof Coverings - Low Slope Roofing (D) (*) (**)		\$13,834								
B3020.00	Roofing - Eavestroughs and Downspouts		\$38,160								
C	Interiors		\$752,703				\$229,012	\$797,121	\$595,371	\$146,964	\$10,995
C1010.00	Interior Construction - Partitions (Folding)		\$127,301								
C1010.10	Interior Construction - Partitions Walls (Gyp. Boards)								\$58,427		
C1020.00	Interior Construction - Interior Doors							\$10,285	\$10,517	\$10,753	\$10,995
C2010.00	Stairs - Stair Construction and Finishes							\$31,999			
C2010.10	Interior Guardrails and Handrails							\$239,993			
C3010.00	Arena Finishes - Exposed Concrete Surfaces		\$270,554								
C3010.10	Arena Finishes - Seating Area and Bleachers						\$105,621				
C3010.20	Arena Finishes - Dasherboards/gates (*) (**)							\$514,843	\$526,427		
C3020.00	Interior Finishes - Floor Finishes Common areas						\$123,392				
C3020.10	Floor Finishes - Offices		\$46,013								
C3020.20	Floor Finishes - Community Hall									\$136,211	
C3030.00	Interior Finishes - Ceiling Finishes		\$48,098								
C4010.00	Dressing Rooms and Locker Rooms (*) (**)		\$260,738								
C4010.10	Common / Public Washrooms (*) (**)										
C4010.12	Kitchens / Serveries (*) (**)										
D	Services		\$189,163		\$994,198		\$145,298	\$519,986		\$119,483	\$12,217
D1010.10	Elevators & Lifts - Elevator Equipment (*) (**)										
D1010.20	Elevators & Lifts - Elevator Cab & Fixtures (*) (**)										
D2010.00	Plumbing - Plumbing Fixtures (*) (**)							\$102,854			
D2020.00	Plumbing - Domestic Water (DHW) - Boilers (*) (**)							\$171,424			
D2030.00	Plumbing Interceptors							\$11,428			
D3020.00	HVAC - Infrared Heaters						\$89,414				
D3040.00	HVAC Exhaust Fans				\$26,726						
D3050.00	HVAC - Rooftop Units (RTUs) - 5 to 7.5 tons		\$132,925								
D3050.01	HVAC - Rooftop Units (RTUs) - 12.5 to 20 tons (*) (**)							\$199,994			
D3050.10	HVAC - Incremental Unit		\$5,113								
D3090.00	HVAC - Compressor (*) (**)				\$962,127						
D3090.10	HVAC - Ammonia Heat Exchanger (*) (**)				\$5,345						
D3090.20	HVAC - Ammonia Cooling Tower							\$34,285			
D3090.30	HVAC - Dehumidification Unit (*) (**)									\$119,483	
D3090.40	HVAC - Heating & Cooling Pumps						\$55,884				
D5010.00	Electrical - Electrical Service & Distribution Allowance (*) (**)										\$12,217
D5030.90	Communications & Security - Fire Alarm Panel (*) (**)		\$51,125								
D5090.00	Emergency Lighting and Power Systems (*) (**)										
G	Building Sitework	\$2,500	\$344,000	\$220,863	\$225,833	\$230,914		\$119,997			
G2010.11	Roadways - Asphalt Paving (*) (**)		\$216,003	\$220,863	\$225,833	\$230,914					
G2020.00	Site Improvements - Site Features (*) (**)	\$2,500						\$51,427			
G2020.21	Concrete Components - Curbs, Planters and Pads (*) (**)		\$89,469								
G2030.00	Site Improvements - Pedestrian Walkways (*) (**)		\$38,528								
G2040.40	Site Signage										
G3010.00	Site Mechanical Utilities - Water Supply										
G3020.00	Site Mechanical Utilities - Sanitary Sewer										
G4020.00	Site Electrical Utilities - Site Lighting (*) (**)							\$68,570			
Z	Planning, Design, Soft Cost & Other Allowances			\$10,455			\$24,589		\$11,685		



East Elgin Community Complex

531 Talbot St. W., Aylmer, Ontario

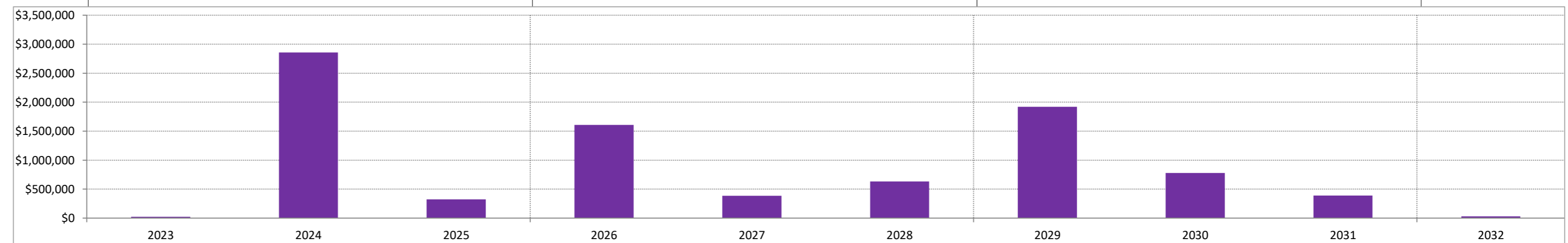
10-Year Projected Expenditures

Note: 2023 refers to the Corporations' Fiscal Year starting January 1, 2023 and ending December 31, 2023

Code	Component	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
			1	2	3	4	5	6	7	8	9
Z1010.00	Allowances - Property Condition Assessment						\$24,589				
Z1020.30	Allowances - Misc. Capital Costs			\$10,455					\$11,685		
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
LINE C	COMPOUND INFLATION RATE	1.000%	1.023%	1.046%	1.069%	1.093%	1.118%	1.143%	1.169%	1.195%	1.222%
LINE D	EXPENDITURE - FUTURE COST VALUE	\$16,000	\$2,286,577	\$251,382	\$1,240,545	\$295,613	\$539,984	\$1,521,890	\$610,211	\$317,468	\$26,511
LINE E	HST @ 13% (PST @ 8% + GST @ 5%)	\$2,392	\$328,760	\$37,323	\$184,884	\$44,137	\$72,890	\$221,067	\$89,593	\$44,533	\$3,574
LINE L	TOTAL EXPENDITURE - FUTURE COST VALUE	\$20,792	\$2,857,685	\$324,420	\$1,607,069	\$383,649	\$633,584	\$1,921,579	\$778,768	\$387,092	\$31,062

Chart 1
Table of Annual Expenditures

* Engineering Design Fees applied to this component @ 8%



6 Limitations

IRC prepared this report solely for the client named. The responsibilities of IRC are as described in the Terms of Reference and The Scope of Work. The material in this report reflects the opinion of IRC at the time of preparation and within the terms of reference as agreed. Any use, which a Third Party makes of this report, or any reliance on decisions based on it, are the responsibility of such Third Parties.

IRC does warrant the accuracy of the identified information provided to IRC at the time of the report preparation. Unless provided in writing, but not limited to, mistakes, contacts, insufficient information or certification of such information is not the responsibility of IRC.

Only the specific information or locations noted in the report have been reviewed. Although every reasonable effort was taken to identify defects, latent and hidden defects may affect the accuracy of this report. No physical or destructive testing and no design calculations have been performed unless indicated elsewhere in this report.

The assessment provided is based on visually observed defects at a limited number of locations and our experience with similar types of buildings. Deficiencies may exist at other areas not referenced in this report or that are not visually apparent given the level of evaluation. No responsibility is therefore assumed concerning these matters, or for failure to carry out technical or engineering techniques which would be required to discover any inherent or hidden conditions of the property since such an investigation was not included in the scope of work.

We trust that the above is satisfactory for your purposes. If you have any questions or comments concerning the above please do not hesitate to contact our office.

Yours very truly,

IRC Building Sciences Group



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